Ex 131 830139

Comments on Comparable Properties Referenced in a Report by Ross Glanville & Associates Ltd. Dated July 1991 Entitled

'A Valuation of the Sherwood Gold Mine Property'

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SUMMARY

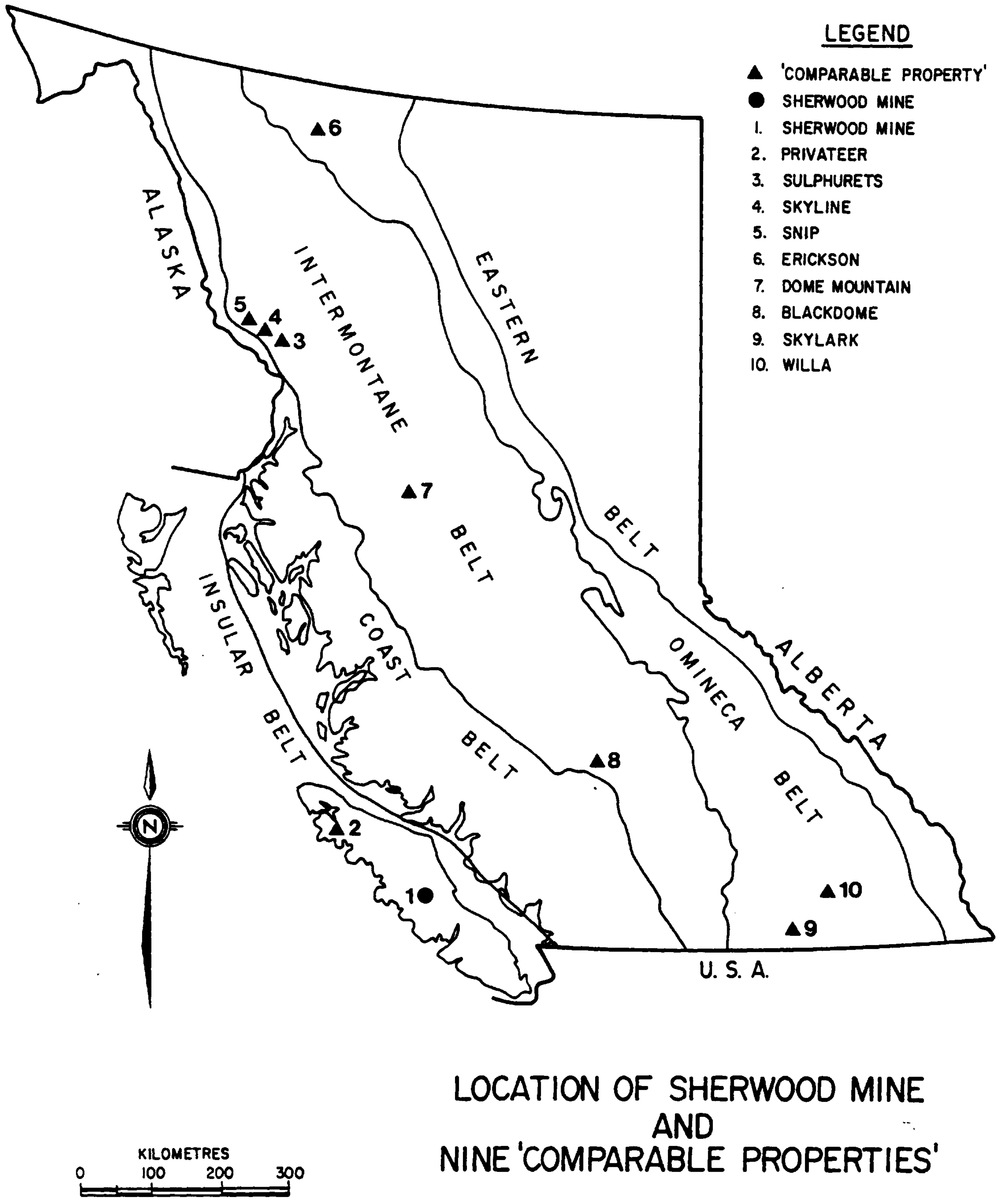
This report has been prepared by the writer at the request of the Ministry of Attorney General for the Province of British Columbia in order to provide comments on a selected portion of a report prepared by Ross Glanville & Associates Ltd. ("Glanville") in July, 1991 entitled *"A Valuation of the Sherwood Gold Mine Property, July 1991"*.

In evaluating the nine so-called 'comparable properties' to the Sherwood Gold Mine Property from a geological viewpoint, the writer has considered the broad geological environment within which the deposits on the nine properties occur; their type classification; host rocks; wall-rock alteration; average vein widths and number of known veins, including those from which production has been derived and associated recoverable metals. The diagnostic surveys employed in exploring the deposits and the type of physical work completed in evaluating deposits in the development phase has also been reviewed. Finally, ore reserves have been compared in addition to exploretion and development costs and other production statistics. Within this area of comparison, the critical cost of exploration and development per ounce of gold equivalent has been addressed.

The review by the writer differs from that completed by Glanville which focuaes on the 'market capitalization of companies owning interests in comparable properties' and the grade of gold in reserves without considering related tons.

Although several of the crireria reviewed by the writer are similar to all properties and in that respect may not be considered relevant, they have been compared to show their inclusion in the study.

Of the criteria considered by the writer, the major differences between the so-called 'comparable properties' and the Sherwood Gold property are the following:



LOCATION OF SHERWOOD MINE AND NINE 'COMPARABLE PROPERTIES'

FIGURE 1

DEPOSIT TYPE BY TECTONIC BELT
IN BRITISH COLUMBIA

"Stacked Deck"

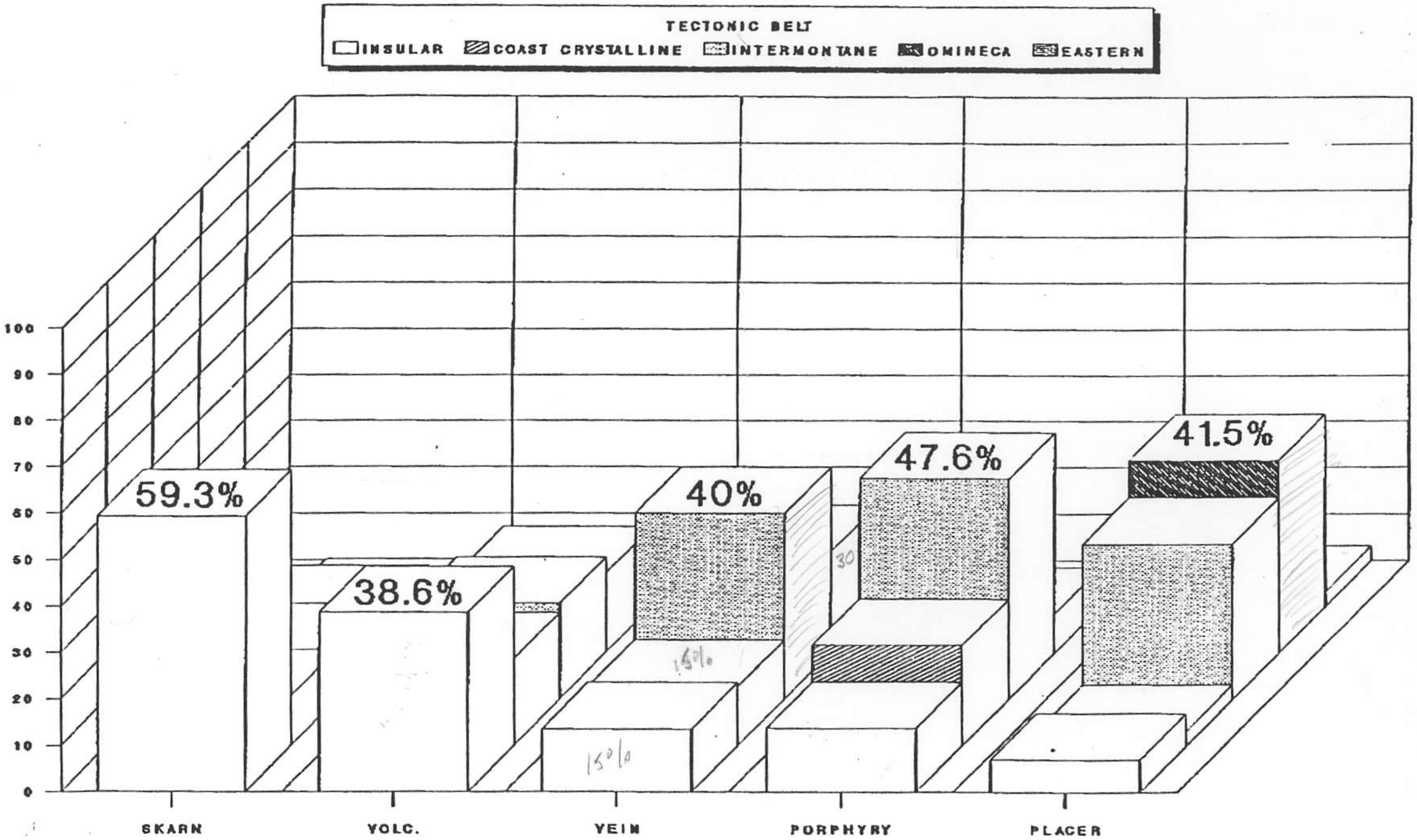


Figure 2

GSB 08/91

	Comparable	Non-Comparable
Geological belts	Privateer Mine	Eight other properties
Exploration period (years)	Privateer Mine Skyline	Seven other properties
Min. expl. over 45 years ago	Privateer Mine	Eight other properties
Average vein width	Privateer Mine Skylark	Seven other properties
Number of known veins	-	Nine properties
Associated recoverable metals	Erickson Blackdome Dome Mountain Snip Privateer	Skyline Sulphurets Willa Skylark
Pre-production/current reserves (ounces gold equivalent). Comparables less than 40,000 oz, non-comparable more than 120,000 oz	Erickson Privateer (?) Skylark	Five other properties (*) Check these figures.

Certain other criteria reviewed by the writer but not comparable in the above tabulation because of lack of data are the exploration and development costs per ounce of gold equivalent. The writer has addressed this critical factor in some detail and concludes that for narrow auriferous vein deposits such as the Sherwood Mine, an allowance of not less than $100 per ounce gold equivalent should be included in budgets. Of the properties reviewed, only two properties have recorded costs under $50 per ounce (Dome Mountain and Snip) and the costs per ounce gold for Dome Mountain are estimated at exploration and development costs which may be higher.

In addition to the above, analogies have been made by various workers including the writer to the similarity of the Zeballos Camp, containing the Privateer Mine, and the Bedwell River

Camp, containing the Sherwood Gold Mine property. The writer had provided a comparison of the two camps based on available data which may serve to account for the apparent relative superiority of the auriferous veins in the Zeballos Camp.

In summary, for the many reasons stated in this review, none of the properties are comparable to the geologic setting of the Sherwood Mine even though there are isolated similarities. The only directly comparable properties in the opinion of the writer are the 15 other auriferous vein deposits lying within the Bedwell River Camp, as described in his October 17, 1990 report on the Sherwood Gold Mine property.

INTRODUCTION

This report has been prepared by the writer at the request of the Ministry of Attorney General for the Province of British Columbia in order to provide comments on a selected portion of a report prepared by Ross Glanville & Associates Ltd. ("Glanville") in July, 1991 entitled *'A Valuation of the Sherwood Gold Mine Property, July 1991'*.

In commenting on the nine so-called 'comparable properties' selected by Glanville, the writer has reviewed the reports, papers, articles, and other documents listed in the references and he has benefited from discussions with management and others familiar with the properties cited. Telephone or personal interviews were held with 20 individuals for this purpose during September 4 to 25, 1991.

In evaluating the nine so-called 'comparable properties' to the Sherwood Gold Mine Property from a geological viewpoint, the writer has considered the broad geological environment within which the deposits on the nine properties occur; their type classification; host rocks; wall-rock alteration; average vein widths and number of known veins, including those from which production has been derived and associated recoverable metals. The diagnostic surveys employed in exploring the deposits and the type of physical work completed in evaluating deposits in the development phase has also been reviewed. Finally, ore reserves have been compared in addition to exploration and development costs and other production statistics. Within this area of comparison, the critical cost of exploration and development per ounce of gold equivalent has been addressed.

Although several of the criteria reviewed are similar for all properties and in that respect may not be considered relevant they have been compared to reflect their inclusion in the study.

Included in the appendix are notes by the writer on the Erickson Mine and the Privateer Mine, two of the comparable properties. The early production history of the Erickson Mine is considered of particular interest and its production from seven separate veins is unique within the properties reviewed. The Privateer Mine reference is provided to illustrate the many similarities and several differences in the setting between the Zeballos Camp in which the former producer occurs, and the Bedwell River Camp, which contains the Sherwood Gold Mine property.

COMPARABLE PROPERTIES

In discussing 'Ore Reserves', the Glanville Report notes that *"in any valuation of a gold mining property at the stage of the Sherwood Mine Property, it is important to understand the known ore reserves to obtain an indication of the tenor of the grades. However, it is even more important to make estimations or projections of expected ore reserves based on known information and experience at other mining properties"*.

All mineral deposits are unique. Many have similarities, but the successful development of a prospect into a profitable mining operation is dependent on multiple conditions, of which grade is an important factor, but only one of the considerations. Although analogies may be drawn with other properties for guidance purposes, great care must be taken in the use of comparative data. Ultimately, the mineral deposit being explored and evaluated must stand on its own merits, and any projections made based on neighbouring properties can be used only as a general guide.

In selecting 'comparable properties', the Glanville report states that *"there are often enough similarities between properties to provide a reasonable range of values Some of the criteria utilized to determine comparables are summarized below:*

1. *only gold properties;*
2. *gold properties located in British Columbia;*
3. *only underground gold mines or potential underground gold mines;*
4. *gold properties explored or developed within a few years prior November 25, 1988;*

5. *gold properties that have produced, or would produce, at a mining rate similar to that expected for Sherwood".*

The summary statement (on page 64 of the Glanville report) adds a sixth criterion as follows:

"6. All were owned by companies listed on stock exchanges, so information was available regarding the market's indication of value."

As will be evident to any reader of the Glanville report, the attributed comparable characteristics focus on 'market capitalization', rather than the multiplicity of geologic, physiographic, environmental, and socio-economic factors which are required, any one of which if significant and detrimental can influence the objective of a successful venture.

The writer has reviewed the nine properties designated as 'comparable properties' in the Glanville report, and he has attempted to provide sufficient background to the geologic setting, current or pre-production reserves, operating experience for those properties which reached and/or completed an operating mode. In this report, he initially focuses on the geological and exploration criteria recognized and utilized at each property, through the development of ore reserves which lead to production or which are still being explored.

In commenting on the mine properties cited as 'comparables' in the Glanville report, the writer has prepared a tabulation of the geological and exploration criteria of the 'comparable deposits' in the Glanville report and a report prepared by Fluor Daniel Wright ("Wright") (Table 1) For purposes of comparison the table utilizes symbols rather than specifically recorded data. Summary comments are provided in the following section on the criteria used and comparisons with the Sherwood Gold Mine property.

Table 2 provides data for each of the nine comparable properties and the Sherwood Gold Mine property in the year during which gold mineralization was discovered on the properties, the exploration and development periods, the date of production decision for each of the mines which have produced or are preparing for production, the pre-production reserve in ounces of gold equivalent using factors of 80 ounces for silver and 300 pounds for copper, and the production period.

Table 3 indicates the deposits which were mined at producing properties, the tons milled, recovered grades, ounces of gold and silver or pounds of copper produced, exploration and development costs, other capital costs, exploration and development cost per ounce of gold equivalent in pre-production reserves, operating cost per ounce and average mill throughput in tons per day using actual data where available or assuming a 350-day milling period per year.

Table 4 provides data on the tons and grade of recent reserves at the various properties, the ounces of gold or silver or pounds of copper in reserve, the classification of the reserve and the source of data cited.

GEOLOGICAL AND EXPLORATION CRITERIA

Geological Belts

Figure 1 shows the location of the Sherwood Gold Mine property and the nine comparable properties cited in the Glanville report. Also shown are the five major tectonic belts in British Columbia within which the properties lie. This information is also shown in Table 1 and shows that of the comparable properties cited in the Glanville report, only the Privateer Mine of the Zeballos Camp, situated about 75 miles northwest of the Sherwood Mine, lies within the Insular Belt containing the Sherwood Mine. Of interest is the dominance of the Intermontane Belt which contains five of the nine properties, followed by the Omineca Belt with three properties (see also Figure 2).

Of general interest are the locations within the five tectonic belts of all documented mineral deposits and occurrences in the Minfile database of the B.C. Ministry of Energy Mines & Petroleum Resources Geologic Survey Branch. Figure 2 shows the status by deposit type of 10,524 documented deposits and occurrences as of September 18, 1991 and indicates that 40% of vein type deposits occur within the Intermontane belt, compared with about 23% in the Omineca belt, and about 15% in each of the Insular and Coast belts.

Deposit Classification

Vein deposits through 1987 have accounted for 13.4 million ounces (65%) of British Columbia's total gold production from 1894-1987. Precious metal enriched ("PME") skarns have accounted for about 16%. The auriferous vein deposits are classified as either epithermal or mesothermal in origin.

Epithermal veins deposits tend to be related to late structural events during high-level and subaerial magmatic activity. Hydrothermal solutions of meteoric derivation are postulated to have circulated at shallow depths, with veins formed at relatively low temperatures (50 to 200 degrees C) and at depths normally within 1,000 metres of surface.

Mesothermal vein deposits are related to both northwesterly trending transcurrent structures and northeasterly trending transverse structural zones that can be traced eastward from the Canadian Shield westward in the Cordillera. The deposits are structurally controlled, multiple, massive to ribboned quartz-vein systems with considerable lateral and vertical extent. Mesothermal veins are formed at higher temperatures (200-300°C) and greater depth of formation 1-5 kilometres) (Schroeter et al, 1989).

From an exploration and development viewpoint differences between the two types include the relatively restricted vertical extent of ore in epithermal veins to intervals of 100-1,000 metres with average vertical range of about 350 metres. (At the Blackdome property, 80 percent of the known stopes were located between the 1870-1990 metre elevations, i.e. a vertical range of 120 metres). In addition, epithermal veins commonly have relatively high silver to gold ratios although there are exceptions.

Of the referenced deposits, only two are classified as epithermal (Blackdome, Sulphurets) although Sulphurets also contains reported epithermal and PME skarn deposits. In British Columbia, the following statistics have been recorded for the three classification types by Schroeter et al (1989) through 1987.

Type	No. Deposits	Production (oz Au)	No. Deposits	Reserves (oz Au)
Epithermal vein	8	1,960,793	12	3,714,456
Mesothermal vein	88	11,456,118	68	8,374,379
Skarn	14	3,277,395	7	1,812,161

Sherwood = Mesothermal.

Host Rocks

Auriferous veins are located in diverse host rock assemblages on a world-wide basis and as shown in the appropriate column in Table 1. Eight of the nine referenced deposits are related partly to volcanic host rocks, the exception being the Snip. In addition, intrusive rocks are important hosts.

In the Zeballos Camp which contains the Privateer Mine, there is a strong correlation between the northwest nose of the Zeballos quartz-diorite stock Although promising veins have been found, no producing mines have been developed elsewhere in the area and the distribution suggests that the nose of the quartz diorite stock was the locus of structural deformation and gold mineralization within the camp (Stevenson, 1950).

Sedimentary rocks are also important hosts in all three deposits in the Iskut River area of northwestern B.C. (Skyline, Snip, Sulphurets), in addition to Dome Mountain near Smithers. The Sherwood Mine is not associated with known sedimentary rocks. ? !

Ex. 41 – p. 33 – 3rd para.

Ex. 41

SARGENT REFERENCE.

Mineralization and Wallrock Alteration

?!

Wallrock alteration at the Sherwood Mine is not intense and is classified as propylitic by the writer with silica, carbonate, and epidote being common alteration products within veins and in nearby wallrock. The only other deposit recording similar alteration products is the Willa which differs strongly from the Sherwood Mine in its mineralogical characteristics, grade of reserves, and number of known veins exceeding a width of one metre

What about Sherwood vein?

Alteration in the Zeballos Camp has occurred along the veins in all rocks cut by the veins and is most intense where the wallrock is granodiorite or quartz diorite. Traverses in the area northeast of the Sherwood Mine shows relatively unaltered intrusive rocks at the immediate contact with narrow veins, e.g. Mac 5 vein. At the Zeballos Camp, granodiorite and quartz diorite either adjacent to the veins or as the crushed material in the vein shears, have been altered to a silvery white rock, with plagioclase completely sericitized and biotite and hornblende destroyed.

At Erickson, silicification, carbonatization, and pyritization are intense with carbonate alteration extending outward from veins for up to 40 metres with 1-15 metres being more common when host rocks are volcanics. Several areas of intense silicification 30-50 metres thick are associated with major quartz veins (see notes in Appendix on Erickson Mine).

– Like Sherwood?

At Blackdome silicification is most intense within 1 metre of the fault zones. Propylitic alteration characterized by fine- to medium-grained epidote, chlorite, calcite, chalcopyrite, and pyrite fracture-fillings is widespread and can occur as much as 50 metres from the veins (Stryhas and McCormack, 1990).

At Skyline, the alteration envelopes around the veins comprise massive grey potassium-feldspar and light green sericite in the vein walls, grading outward to biotite and chlorite. The veins are also flanked by a distinctive zone of 1-2 cm thick quartz pyrite stringers lying parallel to the vein, which give way to disseminated pyrite in weakly altered host rocks. Epidote alteration is common in the vicinity of the deposit, is post deformation, and is transgressive across lithologic boundaries. It occurs where an abundance of calcite permits the formation of epidote, rarely even in feldspar porphyry units (Yeager, Metcalfe, 1990).

At Dome Mountain, intensity of wallrock alteration is variable and is most intense as sericitic alteration near the Forks, Boulder Creek, and Cabin veins but almost non-existent near the Free Gold veins (MacIntyre, 1985). A lime green mica is common within the most intensely altered zones. Originally believed to be fuchsite or mariposite (recorded also at Erickson Mine), it has recently been identified as a green variety of sericite (BCEMPR, Geol. Surv. Branch, Paper 1987-1). An apple green mica has also been noted as a diagnostic alteration project in the vicinity of the Privateer Mine deposits (Stevenson, 1950).

No Elaboration.

At the Snip property, the Twin Zone is a 0.5-10 metre thick shear-vein composed of quartz, carbonate with biotite-chlorite altered bands bounded by pyritic to non-pyritic fault gouge. Pyrite averages 13% and other sulphide minerals include pyrrhotite, chalcopyrite, sphalerite, galena, arsenopyrite, with minor molybdenite locally. Other common minerals are magnetite and ilmenite. Hydrothermal alteration in the vicinity of the Twin Zone and other veins may have been overprinted by hornfels alteration related to a nearby orthoclase-porphyry stock.

Like Sherwood?

At Sulphurets, structurally controlled, epithermal silver-gold-base metal veins occur mainly in massive intermediate volcanic or intrusive rocks within a 1 kilometre wide area of intense sericite dominant alteration. Over 20 mineralized zones have been identified on the Sulphurets property, with the greatest emphasis being given currently to the West Zone which comprises a complex vein system up to 40 metres thick containing up to 60% vein material. The West Zone is associated with pervasive sericite-silica-pyrite alteration (Newhawk Gold Mines Stage I Report - Sulphurets Property, 1989).

The Willa property includes an alkali copper-gold system with low silver values containing three separate zones hosted by volcanic and intrusive rocks. Mineralization consists of chalcopyrite, pyrite, and pyrrhotite in a gangue of minor quartz, calcite, and associated propylitic alteration comprised of actinolite, epidote, chlorite, and anyhdrite (Northair Mines Ltd. Exec. Summ., 1988).

Although four principal deposits have been exposed at the Skylark property, production during 1988 was restricted to the 'H' Zone described as remarkable in its grade continuity and structural simplicity being essentially planar for 700 feet of strike length and 300 feet of dip length. Mineralization in the zone consists of pyrite, hematite, sphalerite, galena, chalcopyrite, and native silver with traces of tellurium in assays suggesting the presence of sylvanite. The zone contains moderate quartz within a narrow zone of high intensity chlorite and clay (kaolin?) alteration (Taylor, 1986).

Not Necessarily So!

In summary, the alteration at the Sherwood Mine appears in general to be less intense than that reported at the reference properties, in which both the Willa and Skylark also appear relatively weak, but differ significantly from the Sherwood Mine in mineralogy and resulting average reserve grades, i.e. Skylark (0.08 oz Au/t; 20.0 oz Ag/t), Willa (0.171 oz Au/t; 0.86% Cu).

Bidwell properties.

Number of Known Veins

22nd - Ex. 47.

The number of known veins at the 'comparable properties' are indicated in Table 1 and these have been designated in ranges for graphical comparison. Also shown are the total number of known veins in open circles and those from which production has been derived in solid circles. In order to eliminate the extremely narrow veins of 1-3 inches which have been recorded, but which are not expected to be of economic significance, only veins exceeding 0.1 metres in average width are referenced.

Quite obviously the number of known veins of significant width on a property increases the potential for discovery of mineral deposits of possible economic interest. The Erickson Mine derived production from seven veins, one of which totalled about 150,000 tons of 0.5 ounce gold/ton grade, i.e. 75,000 ounces.

Of the referenced properties, all contain more than two known veins considered of potential exploration interest which exceed a width of 0.1 metre. Seven of the 'comparable properties' contain three or more veins exceeding a width of one metre, the exceptions being the Privateer Mine and Skylark, which as previously discussed under the preceding section, are considered marginal to uneconomic under current economic conditions.

In summary, only the Sherwood Gold Mine property contains one known vein exceeding 0.1 metre in average width and, on this basis, is not comparable with the nine referenced properties. * "KNOWN" Reflection of Previous Work.

Average Vein Width

The average vein width in any underground mining operation considered of potential economic interest and its average grade across that width are undoubtedly the two most important criteria bearing on the potential viability of any deposit, including auriferous deposits. As previously noted, the Glanville report stresses grade in its 'comparable properties' without providing consideration to reserve tonnage at the grades compared.

Table 1 indicates that only the Privateer Mine and the Skylark property contain veins averaging less than one metre in width - similar to the known shoot in the Sherwood vein. (*) As shown all other deposits contain veins from which production has been derived or is contemplated which range from 1.5 metres to in excess of 3 metres in width, the overall weighted average width being 2.1 metres. SNIP - 0,5 m. ←

The average vein width is critical to the success of any potential mining operation from many aspects. The wider the vein, the lower the exploration and development cost per ton indicated, and the lower the amount of potential wallrock dilution during mining. As an example, from the references cited, the widest vein from which production has been derived is the Twin Zone at the Snip property which ranges from 1-8 metres in thickness and averages between 2-3 metres in thickness. It has the highest average grade over a mineable width of the referenced deposits, i.e. 870,000 tons measured and indicated at 0.85 ounces gold/ton. Its exploration and development cost per ounce gold equivalent is $16 compared with an estimated cost of $100 per ounce gold equivalent (by the writer from reference data) for veins such as the Sherwood Vein with average widths in the 0.5 metres range, or less.

Little information is available for the exploration and development costs at the Erickson property and the Privateer Mine. Early production at the Erickson Mine was derived from the Jennie Vein which ranged from 1-3 metres in width with pre-production reserves in 1978 totalling about 21,500 tons proven and possible at an approximate grade of 0.8 oz gold/ton. In the first year of production (1979), the Jennie Vein produced 18,500 oz gold from 31,845 tons mined (0.61 oz Au/ton).

In the early years of its operation, with little advanced exploration, there was never more than three months of production reserves in sight. More recent exploration emphasis by Total Energold has focused on attempting to develop new reserves with the object of re-activating the operation which was suspended in 1988. In 1990-1, the Bain Vein was explored and found to average about 1.5 metres in thickness. About 25,000 ounces of gold were delineated from ore grading 0.6 oz gold/ton for about $2 million, i.e. $80/ounce (P. Jamat, Chief Geologist, Total Energold - pers. communication, Sept. 23, 1991).

Of the referenced properties, the following information is available on the average widths of producing veins for the Privateer and Skylark veins.

Privateer	Width (ins.)	Avg. Width (ins.)
No. 1 Vein	6 - 11	11
No. 2 Vein	2 - 14	8
No. 3 Vein	2 - 4	N/A

Skylark	Width (ins.)	Avg. Width (ins.)
"H" Zone	1 - 6	N/A

Stevenson.

No data are available to the writer on the average width of stoping at the Privateer Mine, however, Plate II in Sherwood (1950) shows a shrinkage stope 2.5 feet wide on No. 2 Vein. Some indication of the average grade in the undiluted veins can be gained by taking the average grade of the 285,771 tons mined from the property at a grade of 0.54 oz gold/ton assuming an average width of say 10 inches and an average stoping width of 30 inches, i.e. 1.62 oz gold/ton. Assuming a current mining width of five feet, the diluted grade would be 0.27 ounces gold per ton, considered marginal at best based on recent auriferous vein operations or potential operations of similar scale in Western Canada.

Why?

Mechanized Equip't - 1 metre? - Yes - Dome Mine.

As noted in footnote No. 10 on Table 3, mining during 1988 on "H" Zone was discontinued after 12 months following continued operating losses (verbal comm. - T.J. Adamson, President, Athena Gold Corporation).

Skylark

With so much exploration emphasis and cost normally being directed towards diamond drilling of vein deposits, there is a direct cost relationship in terms of cost per ton indicated and the average width of intercepts in diamond drill holes.

In summary, of the nine 'comparable properties' selected in the Glanville report, only the Skylark "H" Zone deposit and the Privateer Mine are less than 0.5 metres in average width and thus comparable to the Sherwood Vein. All other principal veins and other comparable properties range in width from 1.5 to 4.0 metres, the overall average weighted widths for pre-production and/or current reserves being 2.1 metres for the nine 'comparable properties'.

even Blackdome & Snip have lower width ranges.

Associated Recoverable Metals

Table 1 reveals significant differences in associated metal contents for five of the nine so-called comparable deposits based on production statistics or pre-production/current reserves. For purposes of comparison, the actual data are summarized as follows:

	Pre-Production/Current Reserve				Production			
						Recovered Grade		
Property	Tons[1]	Au oz/t	Ag oz/t	Cu %	Tons Milled	Au oz/t	Ag oz/t	Cu %
Sherwood	30,510	0.653	1.13					
Erickson	21,500	0.79			572,411	0.42	0.32	
Blackdome	222,900	0.66			369,131	0.64	2.06	
Skyline	745,000	0.612			207,058	0.474	0.633	0.504
Dome Mt.	325,000	0.355	2.34					
Snip	1,040,000	0.834						
Sulphurets	826,400	0.449	18.9					
Privateer	N/A	N/A	N/A		153,332[2]	1.01[2]		
Willa	560,838	0.171	-	0.86				
Skylark	116,300	0.08	20.0		26,876	0.06	10.3	

(1) Includes all ore reserve categories
(2) Tons milled hand-sorted from 285,771 tons mined grading 0.54 oz Au/ton

As shown **Skyline** differs in the presence of a significant copper credit grading 0.504%. **Dome Mountain** has an Au:Ag ratio of 1:6.6 compared with 1:1.7 at Sherwood. **Sulphurets** has an Au:Ag ratio of 1:42. **Willa** has an average gold grade only about one-third of the Sherwood Mine and a significant copper content of 0.86%. **Skylark** has a very low gold content, being about one-eighth that of the Sherwood Mine and an average Au:Ag ratio of 1:25.

Diagnostic Surveys

Inclusion of a section on surveys which have been completed and which have shown to be of assistance in defining target areas for further exploration may be questioned, although not by explorationists, in reviewing comparable property criteria. The data are relevant as they reflect characteristics of mineralized deposits which are detectable within certain limits concerning their geological, geophysical, geochemical, and physiographic characteristics. Surveys of the types discussed are uniformly completed in current times in exploring auriferous vein deposits, whereas fifty or more years ago most exploration relied upon prospecting followed up by trenching and/or diamond drilling and underground exploration.

Prospecting - As noted in Table 2, footnote (1), the initial auriferous vein deposits recognized at each property were discovered by prospecting, two of them prior to 1900. The Glanville report notes as one of its criteria (No. 4) that the 'comparable properties' cited were all *'gold properties explored or developed within a few years prior to November 25, 1988.'* The relevance of this criterion is not apparent as the exploration periods shown in Table 2 record exploration dating back over 50 years for six of the nine comparable properties in addition to that completed at the Sherwood Mine.

→ Being Worked on is what is meant !

Geological - Although the degree to which geological surveys have been helpful in discovering new veins has not been ascertained by the writer, all the comparable deposits have recorded geological mapping with the exception of the Sherwood Gold Mine property. Based on the data reviewed for the comparable properties, it is evident that the detailed geological surveys have served to provide a framework for determining geological controls for mineralization and at certain properties, e.g. Erickson target areas were partly defined by geological mapping.

Geophysical - The writer has not completed a search of assessment work filings to determine whether additional geophysical surveys to those shown in Table 1 have been completed at the properties. Electromagnetic surveys were useful at Blackdome and Skyline, magnetic surveys at Erickson, and induced polarization surveys at Skyline.

VMS – better for geophysics

Geochemical - Only the Sherwood Gold Mine property and possibly the Privateer Mine have not had geochemical surveys undertaken,. As shown in Table 1, soil or rock surveys have provided data contributing directly to definition of target areas for gold-silver mineralization.

Physical Pre-Production Work

Privateer ?

As shown in Table 1, the type of physical work completed in virtually all properties is similar, as would be expected except in extremely covered drift-areas where trenching could not reach bedrock. Only the Sherwood Gold Mine property has not had any diamond drilling completed. Some reverse-circulation drilling was completed at the Skylark property in addition to diamond drilling.

Ore Reserves

As shown in Table 1 diagrammatically there is a considerable variation in the tonnage, grade and contained ounces of gold and silver in the ore reserves calculated for the nine 'comparable properties' and the Sherwood Gold Mine property. This is reflected in the incremental nature of ranges selected for comparison purposes with reserve tonnages from less than 50,000 tonnes (Sherwood) to in excess of 700,000 tonnes (Snip); grades for reserve tonnages ranging from less than 10 gms per tonne gold equivalent (Willa, Skylark) to in excess of 30 gms per tonne (Snip); and contained ounces of gold equivalent ranging from less than 30,000 ounces to in excess of 500,000 ounces (Snip, Sulphurets).

As shown in Table 4, the classification of reserves shown is also highly variable ranging from possible (inferred) to proven (measured), including some geological inventory shown separately.

In the preceding section covering 'Associated Recoverable Metals', the writer has shown tons and grade of pre-production or current reserves, i.e. five of the properties have been in production in the past (Erickson, Blackdome, Skyline, Privateer, and Skylark), two commenced production in 1991 (Snip, Dome Mountain), and three have developed reserves not considered currently economic (Sherwood, Sulphurets, and Willa).

Pre-production or current ounces of gold equivalent for each property are shown in Table 2 with current probable and possible reserves considered reasonable by the writer for the Sherwood Gold Mine property. Excluded are data on the Privateer Mine which, like the Erickson Mine, essentially progressed from a development base with little previous exploration into production. Prior to 1940, this was common practice in the mining industry with shafts or adits driven into prospects at an early stage for exploration and development purposes. Many producing properties were never diamond drilled. With the development of geochemical and geophysical technology, modern day practice generally involves a period of surface exploration including geological mapping, geophysical and geochemical surveys followed by wide-spaced drilling of target areas. If successful, and mineralization of economic interest is discovered by drilling, more intense drilling generally precedes underground investigations.

The **Twin Zone** deposit at the **Snip** property was initially drill tested at 100 metre drill hole spacing. The second half of the 1987 program concentrated on detailing the zone at 50 metre centres over a strike length of 800 metres and from 150-250 metres down dip. More recently it has been found necessary to complete drilling at 25 metre centres for grade control purposes. Through 1988, a total of 109 surface holes aggregating 22,405.6 metres and 147 underground holes aggregating 11,275.0 metres had been drilled in investigating the deposit prior to a production decision.

As reported under 'Average Vein Widths', Total Energold's 1990-1 exploration of the newly discovered **Bain Vein** at the **Erickson** property involved drilling at 25 metre centres and Mr. Jamat, Chief Geologist considers that drilling at 12.5 metre centres may be required before the reserve can be considered proven.

As noted in Table 1, all of the properties have been partly investigated from underground openings prior to a production decision with the exception of Skylark which, as noted, suspended operations after one year of production.

PRODUCTION AND COST CRITERIA

Production statistics are shown as they provide positive data with which pre-production assumptions may be compared. Included with the statistics are relevant data concerning the exploration and development costs related to both operating and non-operating properties and operating costs for operating properties. The data on exploration and development costs derived from this study of the nine 'comparable properties' are particularly significant as they reveal wide ranges in the costs per ounce of gold equivalent of pre-production reserves which indicate the potential economic advantage of exploring thick veins over very narrow veins. The study supports an exploration and development cost of at least $100 per ounce for very narrow (i.e. less than one-third metre) deposits. — How Calculated

Production Period

As shown in Table 2, six of the nine 'comparable deposits' were in production over a period between 1979-present and overlapped production in the four-year period 1988-present. Only the Privateer Mine was an 'ancient' producer having terminated production over 40 years ago in 1948. Only one property (Erickson) had the benefit of the record high gold and silver prices in the early part of the 1980's which came at a particular critical time in the company's history as the ounces of gold and silver produced in 1981 were the lowest in the ten-year production period.

Exploration and Development Costs Per Ounce Gold Equivalent

Table 3 shows exploration and development costs for eight of the nine 'comparable properties'. Only data for the Privateer Mine are not available and as discussed under 'Reserves', the mine was developed into production with little previous exploration work. The No. 1 Vein was discovered in 1936 and the vein was opened by stripping and open-cuts and several tons of high-grade ore were shipped to Tacoma from these workings. In 1937, a total of 422 tons were mined from which 2,805 ounces of gold (6.64 oz/ton) and 1,288 ounces of silver (3.05 oz/ton) were recovered.

As shown, exploration and development costs, partly estimated, ranged from less than $1 million to over $37 million in actual dollars. More meaningfully, they ranged from $16 to $78 per ounce gold equivalent in pre-production ore reserves. Although the cost of exploration and development per ounce of gold equivalent reserves discovered for the expenditures incurred can be related to many factors, the review of the 'comparable properties' by the writer suggests a partial relationship between the average width of the vein or veins explored based on the cost trend of the Snip, Dome Mountain, Blackdome, Erickson, and Skyline properties. However, the Sulphurets and Willa properties show a higher cost per ounce gold equivalent than would be expected and the Skylark, a lower cost. The high cost attributed to the Sulphurets property can partly be explained by the fact that it is in a remote location and the exploration and development costs included investigations at ten other deposits on the property. The remoteness factor can add 25-50 percent to equivalent exploration completed in accessible areas because of the high transportation, mobilization, and operating costs involved in remote areas.

Without attempting to apply cost deflators to the exploration and development costs to bring them to a common date, exploration and development costs for the eight properties total about $107.3 million and the pre-production gold equivalent ounces total 2,330,000 indicating an average weighted cost of $47 per ounce gold equivalent for gold deposits having an average weighted width of 2.1 metres. — Over weighted on Willa —

WRONG!

LIES & STATISTICS!

GRADE IS MOST IMPORTANT!

A considerable portion of exploration and development costs in more advanced auriferous vein projects are attributable to diamond drilling and drifting. Considering the average cost of $47 per ounce for deposits averaging about two metres in width, those deposits of less than 0.5 metres in width will require considerably more drilling and drifting to produce the equivalent ounces of gold equivalent in reserves, unless their average values are at least four-fold. Such is not the case for the Skylark which averages less than 0.2 metres in width and probably accounts for its failure to meet operating costs during its year of production.

BARR'S FIGURES re Sherwood oz vs COSTS to DATE.

In summary, based on the results of this review, the writer believes that as a conservative estimate, an allowance of no less than $100 per ounce gold equivalent to be developed in reserves should be provided in budgets for exploration and development of such narrow vein deposits.

Sherwood - U/G Work - (today's $) = $1M
Barr Anticipates 20378 oz Au equiv. = $49/oz.

Pre-Production and other Capital Costs

The data are recorded to show the range of pre-production and other capital costs which applied to the producing 'comparable properties'. The low to absent pre-production capital costs shown for the Erickson, Dome Mountain, and Skylark deposits are attributable to purchase of a second-hand mill, reportedly for about $150,000 for the Erickson Mine, and availability of development headings. Capital cost data were not obtained by the writer for Dome Mountain or Skylark; however, both properties initiated production using custom milling, i.e., about 100 tons per day being shipped by Skylark to the Dankoe mill and 300 tons per day being currently mined at Dome Mountain with shipments being made to the Equity Silver mill.

PREMIER (Harlan Meade - Nov 29/91)
(Westmin)

Operating Cost Per Ounce Gold Equivalent

As shown, partly on estimated data, operating costs at the six producing properties for which information is available, range from $250-$340 per ounce gold equivalent. The highest costs, at Erickson ($319 per ounce) and Skylark ($340 per ounce) account for the shutdowns of the operations within one to two years of start-up in 1988.

Average Mill Throughput

As shown in Table 3, the mill throughput in tons per day for actual producing operations with mills (five) and those using custom mills (two) has ranged from 70-400 tons per day, again indicating almost a six-fold variation, compared with one of the comparable criteria provided by the Glanville Report, i.e., No. 5 which stated:

> *"gold properties that have produced, or would produce, at a mining rate similar to that expected for Sherwood".*

In the case studies provided by the Glanville Report, the base-case (Case A) assumed a mining (and milling) rate of 70,000 tonnes per year, equivalent to approximately 200 tonnes per day (220 tons per day).

In summary, the actual mill throughput ranges of the so-called 'comparable properties' that have produced or for which production was contemplated ranged from 30-180 percent of that contemplated for the Sherwood Mine in the base-case (Case A).

N/A!

PRINCIPAL DIFFERENCES BETWEEN SHERWOOD MINE PROPERTY AND 'COMPARABLE PROPERTIES'

The foregoing report has reviewed in considerable detail the differences between the Sherwood Gold Mine Property and the so-called 'comparable properties'. The principal differences are summarized in the following section by property.

Erickson – Discovery dates? – how intermittent Any Bearing? ?!

- Forty years of intermittent exploration compared to seven at Sherwood. → 1939, 40, 41, 42, 43, 45, 46 – 7.

- Resulting profitable operation followed by significant operating losses when mill rebuilt at double efficient rate. – COMPARISON ? – CONT'D EXPLORATION AFTER START OF PRODUCTION

- Operation based on production from seven veins on property containing more than 20 known veins (actually 56 veins) considered of possible interest.

- Reserves developed from which production derived were an order of magnitude more than those reasonably expected from Sherwood.

- Width of production veins on average were about five times the average of the Sherwood Mine Vein.

- Historical production rate 50 percent greater than projected for Erickson, albeit with only ten percent indicated probable reserve.

Blackdome

- Thirty years of intermittent exploration compared to seven at Sherwood.

- Resulting profitable operation based on about 150 percent of pre-production reserves indicated.

- Operation based on production principally from two veins (90 percent) of 20 known veins considered of possible interest.

- Pre-production reserves from which production derived were about eight times those currently indicated at Sherwood.

WRONG!

- Width of projected veins on average were about five times the average of the Sherwood Mine vein.

0,3-2m.

Skyline

- Pre-production exploration and development costs of about $30 million, mostly over a ten-year period probably exceed comparable costs at Sherwood in the early 1940's by more than an order of magnitude with pre-production ounces of gold equivalent being 23 times those currently indicated at Sherwood.

- Skyline operated for two years principally from two veins averaging 1.5 metres in width at a diluted grade about 50 percent more than that indicated for the Sherwood vein. The operation was shutdown after two years as uneconomic at the grades mined.

- Skyline mineralization includes a 0.5 percent copper credit not present at Sherwood.

Dome Mountain

- Average vein width of the Boulder Zone, currently being mined, is about 2.5 metres or six times the average width of the Sherwood vein.

- The property contains more than 20 known veins considered of exploration interest. ? DOUBT THIS !

- Pre-production reserves in ounces of gold equivalent were almost six times those currently indicated at Sherwood and these have recently been increased to provide an eight-fold difference.

Snip

- The Twin Zone at Snip contained pre-production reserves of 1,040,000 tons grading 0.834 ounces gold per ton (867,500 ozs. gold) or 43 times the gold equivalent reserve currently indicated at Sherwood.

- The Twin Zone deposit has an average width of about 2.5 metres and varies in width from 1-10 metres, or about six times greater than the Sherwood Vein. 0.5

- Although the pre-production decision was based on the reserves in the Twin Zone, there are at least three other veins of potential economic significance known on the property.

Sulphurets

- Pre-production exploration and development costs conservatively estimated at $40 million based on expenditures since 1980. These have indicated reserves in one of 20 known multi-metal deposits on the property which contains 566,000 ounces of gold equivalent. The cost per ounce of gold equivalent at $70 attributed to the West Zone is too high by an unknown amount because of exploration undertaken on many of the other deposits, all of which are considered to have excellent exploration potential. It is also affected by its remote location. The ounces of gold equivalent indicated on the West Zone are 28 times higher than those currently indicated at the Sherwood Vein.

- The West Zone consists of at least three adjacent parallel zones, each averaging 2-3 metres in width.

- The gold-silver ratio in the West Zone is 1:42 compared with Sherwood's 1:1.7

- In its geological setting, the property bears no comparative relationship to the Sherwood property.

Privateer

- The Privateer Mine is the only one of the so-called 'comparative properties' remotely comparable in its geological setting to that of the Sherwood Mine. However, there are many significant differences which have been summarized by the writer in the appendix.

- Most significant, the No. 1 Vein of the Privateer Mine, which was the most productive vein in the Zeballos camp, contained mineable mineralization through a continuous strike length of 1,450 feet, a vertical range of about 720 feet and an average width of about 11 inches (see Figure 2 in Appendix write-up).

The No. 2 Vein, being the second most productive vein on the property and situated about 260 feet north of the No. 1 Vein, contained workings within a continuous strike length of about 300 feet, through a depth of 500 feet and across a width averaging 8 inches.

Collectively, the No. 1 and No. 2 veins accounted for 90% of the gold production at the mine totalling 154,381 ounces, representing about 60% of the total output from the Zeballos Camp.

- Data provided by Wright Engineers Ltd. in its break-even analysis indicates that the property would be sub-marginal in the current economic climate.

Willa

Out

- The Willa deposit contains four known auriferous zones of which the West Zone is the most significant, although all are similar mineralogically. The zones differ from the Sherwood deposit in their principal metallic grades, the average being 0.17 ounces gold per ton and 0.86% copper.

- Although the property contains 128,000 ounces of gold equivalent reserves, the deposits are not considered economic and no exploration work is planned at Present.

Skylark

Out

- Like the Willa, the Skylark differs significantly from the Sherwood Mine in its mineralogy and geologic setting. The "H" Zone has average contents of 0.08 ounces gold per ton and 20.0 ounces silver per ton, or a gold to silver ratio of 1:25.

- The property was placed into production in 1988, but terminated production after 12 months because of continued operating losses.

CONCLUSIONS

In summary, for the many reasons stated in this review, none of the properties are comparable to the geologic setting of the Sherwood Mine, even though there are isolated similarities. The only directly comparable properties, in the opinion of the writer, are the fifteen other auriferous vein deposits lying within the Bedwell River Camp, as described in his October 17, 1990 report on the Sherwood Gold Mine PRoperty, and which are based on information contained in reports by Sargent (1940) and Sargent (1941).

Respectfully submitted,

D.A. Barr, P.Eng.

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CERTIFICATE

I, **David A. Barr**, do hereby certify:

1. I am a Consulting Geological Engineer with offices at 1334 Camridge Place, West Vancouver, British Columbia.

2. That I graduated in Mining Geology from the University of Toronto in 1950 with a Bachelor of Applied Science degree.

3. That I am a registered Professional Engineer in the Association of Professional Engineers of British Columbia.

4. That I have practised my profession for over 40 years.

5. That I have no direct, indirect or contingent interest in the mineral claims in the Sherwood Mines Limited's property, nor in the securities of Casamiro Resources Corporation, Sherwood Mines Limited (N.P.L.), and Cinta Resources Corp., or any of their affiliates, nor do I expect to receive any such interest.

6. That this report dated September 21, 1991 is based on a study of reference material provided by the British Columbia Ministry of Attorney General and other reports and publications as referenced. On site examinations of the Sherwood Gold Mine Property were made on October 2, 1990, August 2, 1991, and September 2, 1991.

7. That I consent to the use of this report dated September 26, 1991 as required by the British Columbia Ministry of Attorney General.

Vancouver, British Columbia
September 26, 1991

D.A.Barr, P.Eng.

APPENDIX A

TABLES 1 TO 4

TABLE No 1
GEOLOGICAL, EXPLORATION AND PRODUCTION CRITERIA OF NINE 'COMPARABLE PROPERTIES' AND THE SHERWOOD GOLD MINE PROPERTY, B.C.

DEPOSIT	GEOLOGICAL BELT: INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	DEPOSIT CLSFTN.: MESOTHERMAL	EPITHERMAL	PME SKARN	HOST ROCK: VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN	WALL-ROCK ALTERATION: SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE
SHERWOOD	X					X			X		X					x	X		X
ERICKSON				X		X			X			X		X	X			X	
BLACKDOME			X				X		X					X		X			X
SKYLINE			X			X			X	X						X			
DOME MT.			X			X			X	X	X			X	X			X	X
SNIP			X			X				X				X	X				
SULPHURETS			X			X	X	(3) X	X	X	X			X					X
PRIVATEER	X					X		X	X		X			X	X			X	
WILLA				X					X		X						X		
SKYLARK				X				X	X		X	X		X	X				

DEPOSIT	AVG. VEIN WIDTH (>0.1 Metres): < 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	NUMBER OF KNOWN VEINS ○ PROD. VEINS ●: 1	2-3	4-8	9-19	> 20	ASSOCIATED RECOVERABLE METALS: SILVER gms/tonne	COPPER (%)	DIAGNOSTIC ◐ SURVEYS: GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	PHYSICAL PRE-PROD. WORK: TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS
SHERWOOD	○				○					34.0								X			X
ERICKSON		●					●		○	9.6		◐	◐	◐	○		◐	X	X		X
BLACKDOME		●				●			○	88.5		○	○	○			◐	X	X		X
SKYLINE		●					●			22.0	0.52	○		◐	◐		◐	X	X		X
DOME MT.		○							○	80.3		○					○	X	X		X
SNIP			○		●							○				○	◐	X	X		X
SULPHURETS			○						○	650.0		○					◐	X	X		X
PRIVATEER	○●					● (2)				13.4		○						X	X		X
WILLA				○		○				13.4	0.86	○					◐	X	X		X
SKYLARK	(7) ●				●		○			685.0		○	○	○			○	X	X	X	X

DEPOSIT	PRODUCTION ● RESERVES ○ — TONNES ('000s): < 50	50-100	100-300	300-500	500-700	> 700	GRADE g/t: < 10	10-20	20-30	30-40	> 40	OUNCES ('000s): < 30	30-60	60-120	120-200	> 200
SHERWOOD	○							○				○				
ERICKSON			○		●			●	○							●
BLACKDOME				●					●						●	
SKYLINE			●					●						●		
DOME MT.				○				○						○		
SNIP		(5) ●				○			●	(5) ○			(5) ●			○
SULPHURETS				(6) ○				(6) ○						(6) ○		
PRIVATEER			(1) ○●				(1) ○●						○		(1) ●	
WILLA				○			○							○		
SKYLARK	●							●				●				

FOOTNOTES:
1) THE PRIVATEER PRODUCED 154,381 OUNCESOF GOLD FROM 285,771 TONS MINED (0.54 oz. Au/TON) BEING 54% OF ZEBALLOS CAMP PRODUCTION
2) THREE PRODUCTIVE VEINS OF WHICH ONLY ONE AVERAGED MORE THAN 17gms. GOLD/TONNE ONLY 153,332 TONS OF HAND-SORTED ORE WERE MILLED GRADING 1.01 oz. Au/TON.
3) INCLUDES AURIFEROUS SKARNS , ie. PME SKARNS
4) INCLUDES GREEN SERICITE, GREEN MICA, MARIPOSITE, FUSCHITE.
5) FIVE MONTHS OF PRODUCTION IN 1991
6) WEST ZONE ONLY
7) MAXIMUM REPORTED WIDTH OF "H" ZONE IS 30 INCHES, AND AVERAGE IS LESS THAN 6 INCHES

TO ACCOMPANY REPORT BY D.A. BARR, P.ENG., SEPT.26/1991

TABLE No 1

WRIGHT ENGINEERS LIMITED
VANCOUVER — CANADA
JB
D 1947 200

TABLE 2

Summary of Periods of Discovery, Exploration, Development & Production for Nine 'Comparable Properties' and Sherwood Gold Mine Property

Deposit	Discovery[1] Year	Exploration Period	Development Period	Pre-Prod. oz Au Equiv.[3]	Production Decision	Production Period
Sherwood	1938	1938-45	1945, 1985-7[2]	20,000		
Erickson	1934-5	1934-7, 1960's, 1975-6	1977-8	17,000[8]	1978	1979-88
Blackdome	1947	1950's-70's; 1977-84	1984-5	162,000	1985	May 86-Dec. 90
Skyline (Reg)	1980	1980-85	1986-7	456,000	1987	Aug. 88-Sept. 90
Dome Mountain	1914	1914-24; 32-40; 51; 67-69; 72-73; 79-88[4]	1988-90	165,000	1991	Sept. 91 (est.)
Snip	1964	1964-5; 1980; 1982-6	1987-9	817,800	1990	Jan. 91
Sulphurets	1959	1960-70; 74-5;	1980-90	566,000	[5]	
Privateer	1934[6]	1934-7	[6]	N/A	1937	1934-48
Willa	1893	Intermittent 1893-1978; 1979-88		128,000	[7]	
Skylark	1897	Intermittent to 1940; 1968; 1979-80; 1984-5	1986-7	38,300	1987	Jan.-Dec. 88[8]

Footnotes:

(1) Year of discovery of gold on present property.
(2) Rehabilitation/development program which failed to meet objectives following expenditures of about $600,000.
(3) Au equivalent: Ag at 80 oz/oz Au, Cu at 300 lbs/oz Au.
(4) Bulk shipments and/or production of 5,862 tons to produce 387 oz Au and 663 oz Ag reported in 1938 and 1940.
(5) Newhawk Gold Mines Ltd. (60%) and Granduc Mines Ltd. (40%) have spent over $30 M in exploration on property since 1985. Considerable exploration work was carried out in earlier years conservatively to total about $40 million in actual dollars. The joint venture partners consider that current metal prices preclude a production decision at this time.
(6) Earliest date referenced for small crude ore shipments (1934). Mining developed as levels developed. Milling commenced in 1938 with 25-48% of ore mined being hand sorted to waste before milling.
(7) No work planned at present.
(8) Mining on "H" Zone during 1988 resulted in shipments of 26,826 tons to the Dankoe mill, situated about 75 miles to the west of the Willa property. The operation was shut down in April, 1990 following continued operating losses.

TABLE 3

Exploration, Development, Capital Costs & Production Statistics for Nine 'Comparable Properties'

				Recovered Grade			Metal Production			Costs ($)					
Property	Veins Mined	Prod. Period	Tons Milled	Au oz/t	Ag oz/t	Cu %	Au (oz)	Ag (oz)	Cu (lbs)	Expl. & Dev.	Pre-Prod. Cap.	Other Cap.	Expl. & Dev./ oz Au Equiv.	Oper./ oz Au Equiv.	Mill Rate Tons/ Day
Erickson	Jennie, Maura, Vollaug, Allison, Eileen, Eileen Extension, Bear	1979-88[1]	572,411	0.42	0.32		226,900	167,054		<1,000,000[2]	2,000,000[2]		60	300	172
Blackdome	No. 1, No. 2, No. 18[3]	1986-90	369,131	0.64	2.06		223,593[3]	759,832[3]		8,764,000	10,804,000	6,278,000	54	304.38	230
Skyline	Stonehouse	1988-90[4]	207,058	0.474	0.633	0.504	86,000	131,030	2,229,000	30,650,000[4]	9,363,000[4]		67	319[4]	323
Dome Mtn.	Boulder Zone[5]	1991								5,000,000[5]			40	250[5]	250[5]
Snip	Twin Zone	1991[6]					40,000[6]			13,000,000[6]	65,000,000[6]		16		397
Sulphurets										37,000,000[7]	42,700,000[7]		70	265[7]	350[7]
Privateer[8]	No. 1, No. 2, No. 3	1934-48	153,332	1.01			154,381			N/A	N/A	N/A	N/A	N/A	70
Willa[9]										10,000,000			78		
Skylark[10]	"H" Zone	1988	26,876	0.06	10.30		1,526	277,266		1,900,000			50	340	75

Footnotes:

(1) Production suspended in 1988 as available reserves were not economic (see Table 4 which includes reserves discovered since 1988 and various blocks, pillars remaining from previous mining, none of which are considered currently economic). Previous production was carried out on Vollaug Vein by Plaza Resources in 1981-3 by open-pit mining method with 18,000 tons milled at a recovered grade of 0.33 oz Au/ton.

(2) Estimate by P. Jamat, Chief Geologist, Total Energold Corp., September, 1991.

(3) The No. 1 and No. 2 veins produced 90% of ore mined (Stryhas, McCormack, 1990). Metal produced (233,072 oz Au equivalent at 80:1, Ag:Au) compares with 162,000 oz Au equivalent in pre-production reserves shown in Table 2, i.e., 144% of pre-production metal reserve.

(4) Production from August 1988 to September 1990 when operations suspended as available reserves were not economic. Operating cost/oz Au equivalent based on 1990 costs @ U.S. $266/oz. Gold recovery averaged 90% in 1990. Statistics based on write-offs reported in 1990 Ann. Rpt. which stated that *"the decision to suspend mining operations of the Stonehouse deposit was directly related to the Company's inability to continue to develop new reserves with ore grades that would be economic at existing gold prices."* Current exploration at the property is being carried out under an agreement with Placer Dome Inc. which provides for Placer Dome earning a 60% interest in the property by purchasing 500,000 flow through shares of Skyline for $500,000 to fund 1990 exploration and to spend a further $3.5 million in exploration over the next three years.

(5) Estimate based on Habsburg Resources cash flow estimate at U.S. $350/oz Au and U.S. $3.50/oz Ag, a recovered grade of 0.36 oz Au/ton, and exchange rate of 0.86; mining and milling 108,000 tons in 1992 at an operating cost of $89/ton (including general and administration costs, trucking and royalties); milling at Equity Silver mill (Northern Miner, July 1, 1991). The first ore shipments from the upper part of the Boulder Zone (Table 4) were shipped to the mill in mid-September, 1991. Expenditures by Canadian United total $2.6 million; Noranda and Total Energold estimated at $2.4 million; Habsburg not known, all of which are related to Boulder Zone. Other sources claim expenditures totalling $10 million, which include acquisition and legal costs.

TABLE 3 (Cont'd.)

Exploration, Development, Capital Costs & Production Statistics for Nine 'Comparable Properties'

Footnotes (cont'd.):

(6) Milling commenced in January, 1991 with mill rated at 330 tons per day. Production of 40,000 oz based on five-month period to July, 1991 with mill operating at almost 400 tons per day (Northern Miner, August 5, 1991).

(7) Newhawk Gold Mines Ltd. (60%) and Granduc Mines Ltd. (40%) have spent $30 M in exploration on property since 1985. Considerable exploration work was carried out in earlier years conservatively estimated at about $7,000,000 in actual dollars. E & D costs/oz based on $40 million current dollars spent to date. Estimated costs shown are based on a feasibility study completed by Corona Corporation in conjunction with Fluor Daniel Wright Engineers Ltd. and senior personnel of Newhawk and Granduc and based on a previous study by Watts, Griffs, McOuat Limited in 1990. An economic review based on U.S. $400/oz for gold and U.S. $5.00/oz for silver shows a 6.7% pre-tax discounted cash flow rate-of-return. The joint venture partners consider that current metal prices /preclude a production decision at this time.

(8) Most of the production was derived from the No. 1 Vein and the balance from the No. 2 with only a minor amount from the No. 3. The No. 1 Vein workings extended for a strike length of 1,450 feet and through a depth up to a maximum of about 1,000 feet. The No. 1 Vein width ranged from a fraction of an inch to a maximum of 4 feet, usually ranging from 6-11 inches in width with the average being about 11 inches. The earliest date referenced for small crude ore shipments was 1934. Milling commenced in 1938 with 25-48% of ore mined being sorted to waste before milling. Total production data indicate 288,771 tons mined at 0.54 oz Au/ton with sorting to produce 153,332 tons milled grading 1.01 oz Au/ton. Mill throughput was extremely variable ranging from 13,000 to 30,000 tons/year (Stevenson, 1950).

(9) The Willa Project is a joint venture between Northair Mines Ltd. (78%) and BP Canada/Rio Algom (22%). No further work planned (Canadian Mines Handbook, 1990-1). Exploration expenses since 1980 are estimated at about $10,000,000 (F. Hewett, Northair Mines, pers. comm.).

(10) Mining on "H" Zone during 1988 resulted in shipments of 26,876 tons to the Dankoe mill, situated about 75 miles th the west, with recovery of 277,266 oz Ag (10.30 oz/ton) and 1,526 oz Au (0.06 oz/t) compared with pre-production reserves averaging 20.0 oz Ag/ton and 0.08 oz Au/ton. Average mill rate is based on shipments to Dankoe mill. The "H" Vein ranges from 1-6 inches in width with values diluted to a 50-feet mining width. The operation was shut down in April, 1990 following continued operating losses. Exploration and development costs since 1984 were shared 50/50 with Viscount Resources Ltd.

TABLE 4

Ore Reserves for Nine 'Comparable Properties'

Property	Deposits	Tons	Au oz/t	Ag oz/t	Cu %	Au ozs	Ag/Cu oz/lb	Reserve Category	Date	Data Source
Erickson	Various blocks, pillars[1]	79,560	0.286			22,700		Proven-probable inventory	Jan. 31/89	Total Energold Corp.
	Bain Vein	99,655	0.509			50,700		Potential mineral resource	Jan. 31/89	Total Energold Corp.
	Bain Vein Extension	50,000	0.500			25,000		Potential mineral resource	Jan. 31/89	Total Energold Corp.
	Michelle High-grade	24,337	1.019			25,000		Potential mineral resource	Jan. 31/89	Total Energold Corp.
	Parallel Structure	50,000	0.500			25,000		Potential mineral resource	Jan. 31/89	Total Energold Corp.
Blackdome		10,417	0.29			3,000		Drill-indicated inventory	Aug./90	Blackdome Mining Corp.
Skyline	Stonehouse	745,000	0.612						1985	CM Handbook 1987-8
	Stonehouse Zone	56,000	0.66					Broken	Dec. 31/88	CM Handbook 1989-90
	Stonehouse Zone	49,000	0.93					Proven	Dec. 31/88	CM Handbook 1989-90
	Stonehouse Zone	86,000	0.69					Probable	Dec. 31/88	CM Handbook 1989-90
	Stonehouse Zone	495,000	0.50					Possible	Dec. 31/88	CM Handbook 1989-90
Dome Mtn.	Boulder Zone	325,000	0.355	2.34		115,000	758,160	Mineable	1988	CM Handbook 1990-1
	Boulder Zone (additional)	100,000	0.56			56,000		Drill-indicated undiluted	1991	Northern Miner, July 1/91
Snip	Twin Zone	870,000	0.85			739,500		Measured, indicated		Cominco Ltd. 1990 Ann. Rpt.
		170,000	0.75			127,500		Inferred		Cominco Ltd. 1990 Ann. Rpt.
Sulphurets	West Zone	304,044	0.387	26.19		117,665	7,363,000	Measured, indicated		Newhawk Gold Mines.
		550,028	0.335	21.15		124,260	11,633,000	Inferred		Stage I. Rpt. Jan./89
		826,400	0.449	18.9		370,870	15,611,400			Newhawk Ann. Rpt. 90
Privateer	(New Privateer)	135,000	0.5							CM Handbook 1990-1
Willa	West Zone	456,727	0.173		0.91	79,014	8,312,431	Drill proven	1988	Northair Mines Rpt. 88
	East Zone	44,111	0.185		0.74	8,160	652,842	Drill proven		Northair Mines Rpt. 88
	Main Zone	45,000	0.150		0.57	6,750	513,000	Probable		Northair Mines Rpt. 88
	Main Zone	15,000	0.150		0.57	2,250	171,000	Possible		Northair Mines Rpt. 88
Skylark	"H" Zone	116,300[2]	0.08[2]	20.00[2]		9,304	2,326,000	Drill-indicated, possible		Skylark Corp.

Footnotes:
(1) None considered currently economic.
(2) Tons and grade estimated at diluted width of 5.0 feet.

APPENDIX B

NOTES ON:

ERICKSON MINE (PART I)
PRIVATEER MINE (PART II)

ERICKSON MINE

Introduction

The following summary information has been prepared by D.A. Barr on September 7, 1991 from reports cited in the reference section to this report and from verbal data provided by R. Somerville, former Chief Mine Geologist at the Erickson Mine.

Pre-Production History

In 1872, placer gold was discovered in the Dease Lake area. From 1874-1895 almost 65,000 ounces of gold were reportedly recovered from the creeks. Hydraulic and limited dragline operations occurred in the 1920's and 1930's but by 1935 production had declined to about 300 ounces per year.

The first lode claims were staked in 1934 and by 1935 most of the known showings had been discovered including the Vollaug Vein on Table Mountain. Exploration included diamond drilling by Cominco in 1937 and Hannah Mining in the 1960's. Little additional work was done until Erickson initiated its activities in the 1970's. In 1976, Nu-Energy Development Corp. acquired an interest in the Jennie Claims and high-grade gold was intersected in diamond drilling on the Jennie vein. Drifting commenced in the late fall of 1977 and by early 1978, about 9,000 tons of proven and 12,500 tons of possible ore had been indicated by drilling and drifting.

In March 1978, Nu-Energy increased its share in the property to 50 percent and in September 1978, a financing of $1.5 million was obtained from the Royal Bank of Canada to place the property in production. A second-hand 100-tpd mill was acquired from Silver Standard Mines. Milling commenced on December 22, 1978 with full production achieved by April 1, 1979.

Production History

> *"From December 1978 to October 1981, all of the ore milled came from the Jennie vein. In mid October of 1981, the first ore from the newly discovered Maura vein above the 28 level was milled. The 21 level portal was collared in November of 1981 and intersected the Maura vein in April of 1982. While enroute, this crosscut intersected several smaller structures, the Dease, Goldy, McDame and Bear Veins. Development on these veins was undertaken concurrently with crosscutting. Beginning in July of 1982, crosscuts were initiated on both the 21 and 28 levels to intersect the Alison vein located in the footwall of the Maura vein. In the fall of 1982, a decision was made to upgrade the milling capacity to provide a minimum capacity of 5,000 tons per month.. In December of 1982, Erickson acquired the nearby Elan property by option agreement. During the first six months of 1983, the newly expanded mill processed ore primarily from the Maura, Alison and Bear veins. The last six months of 1983 were eventful. Erickson acquired the Plaza Resources ground on Table Mountain including the 8,300 ton stockpile. During this*

period, drifting was begun on the Vollaug vein from the Troutline Portal on Table Mountain. In addition, a new portal was established on the 14 level (1,140 metre elevation) and a crosscut was driven to the Caitlin vein on the 39 level. In early 1984, the Kelly vein was intersected on the 14 level enroute to the Bear vein. From July through December, 1984, development was continued on the Vollaug and Maura veins, a crosscut intersected the Patricia vein on the 28 level and the 14 level crosscut was restarted after a brief shutdown period. At this time, the Cusac property was acquired through option agreement although no exploration programme was undertaken. In the summer of 1984, several exciting gold soil anomalies were outlined an the Elan property. In early 1985, underground work was predominantly restricted to driving the 14 level which continued antil June, 1985. From June until November, 1985, the Bear vein was stoped between the 14 and 21 levels. The 1985 exploration program began with a trenching program on the soil anomalies on the Elan, and resulted in the discovery of a gold/silver bearing vein named the Lucky Vein. A vigorous trenching and drilling program at Cusac led to the Eileen vein discovery in August and plans were immediately made for an exploration decline to intersect the vein. A haul road was constructed to the Eileen portal at Cusac in October and the decline was collared in the same month.

The Erickson mill was shut down on November 23, 1985 to upgrade the crushing section and to generally modernize the old mill. The mill was to resume operation on February 14, 1986. However, 22 days before the mill was to resume operation, it was completely destroyed by fire." (Somerville, Boronowski and Dussell, 1989).

Production resumed in October, 1986. In April, 1987, Total Compagnie Francais des Petroles of France held a 59.1 percent interest in Total Erickson Resources Ltd. following a name change from Erickson Gold Mines Ltd. in February, 1986. The operations were suspended in October, 1988 when the known economic reserves were depleted. Exploration programs in 1985-1989 resulted in the discovery of several new veins, however, operations have not resumed to date.

Remaining reserves (proven-probable Inventory Reserves) at January 31, 1989 were estimated to be 79,560 tons grading .286 opt Au in numerous small blocks and unrecovered pillars, none of which are currently economic.

A summary of annual production is given in the table below.

Historical Production

				Grade		Recovery	
Year	Tons	Oz Au	Oz Ag	Au	Ag	Au	Ag
1979	31,845	18,500	18,717	0.61	0.67	0.95	0.88
1980	32,189	17,536	19,651	0.57	0.71	0.96	0.86
1981	38,245	13,539	6,650	0.37	0.21	0.96	0.83
1982	38,724	20,984	16,790	0.57	0.52	0.95	0.83
1983	69,497	34,099	26,868	0.52	0.45	0.94	0.86
1984	91,483	25,061	15,292	0.31	0.22	0.88	0.76
1985	68,835	19,363	15,461	0.31	0.26	0.91	0.86
1986	27,167	24,262	8.092	0.94	0.36	0.95	0.83
1987	95,179	36,847	18,137	0.42	0.20	0.92	0.95
1988	79,247	16,709	21,396	0.22	*N/A	0.96	*N/A
Total	572,411	226,900	167,054	0.42		0.93	

* Grade inferred from production and tails samples during 1988.
Tails not sampled for silver. Overall historic recovered grade was 0.398 gold per ton and 0.276 oz silver per ton.

Geology and Mineral Deposits

Regional Geology

Gold-quartz vein orebodies in the Erickson Camp are hosted within the middle division of the Sylvester Group Allochthon which is comprised of litho-tectonic slices that range in age from Late Mississippian to Triassic. The basal member consists primarily of argillite, chert, sandstone, diabase/diorite sills, and minor exhalites. The middle member consists of a set of basalt-diabase-sediment packages and ultramafite-gabbro amphibolite slices. The uppermost division is characterized mainly by intermediate volcanic rocks, shallow water limestones, with chert interbeds, and a zoned hornblende gabbro to granodiorite pluton. Although both the upper and middle divisions occur on the Erickson property, gold mineralization is restricted to the middle division which is separated by major thrust contacts from the other divisions.

The Sylvester Group Allochthon extends northwesterly for about 200 kilometres to the Yukon/B.C. border and across a width of 20-40 kilometres. The Erickson Gold Camp is confined to a predominantly volcanic sequence on its western margin.

Local Geology

All the ore zones in the main mine are located within a shallow, open, northwesterly trending synclinal basin which has been cross-folded along two westerly and northwesterly striking fold axes. North dipping veins lie on the southern limb and south dipping veins lie on the north limb.

Structural Controls of Mineralization

The two types of ore-bearing veins that occur on the Erickson property have been termed *"Vollaug style"* or *"vertical veins"*. The Vollaug style is a shear hosted vein located between capping argillite and underlying listwanite in a shallowly (30°) north dipping thrust zone. The vertical veins are almost exclusively hosted in shears in greenschist altered volcanic or intrusive (?) rocks. These veins are commonly oriented east-west as noted above.

A control to the gold mineralization appears to be proximity to the Erickson Creek Fault Zone which trends northerly through the property for over 20 kilometres. In addition, the veins are proximal to the overlying capping listwanite/argillite sequence which lies to the west near the Erickson Creek Fault Zone.

Over 20 separate gold-bearing veins have been located through the 17-kilometre length of the property. Most of these occur to the west of the Erickson Creek Fault Zone; however, several important veins occur to the east, including the Vollaug Vein.

The Vollaug Vein normally occurs at the contact between hanging wall graphitic argillites and footwall metasomatized serpentinites (listwanite). The listwanites are underlain by metabasaltic flows and interbedded cherts. The vein strikes easterly and dips between 25-40° to the north. Ore shoots in the Vollaug mine trend W-NW, coincident with a stretch lineation.

Quartz Vein Mineralization

"Vertical veins" share many common characteristics:

(1) Host rocks: mostly greenschist facies metamorphosed mafic volcanics and intrusives (?). At the Cusac Mine, the vein does not host ore grade gold mineralization when passing through a chert horizon.

(2) Shear zones: most veins can be classified as shear zone hosted deposits.

(3) Capping rock: intensive dolomite, silica, and chrome mica alteration resulting from the conversion of ultramafics to listwanite has been used to detect underlying hydrothermal activity and occasionally quartz veining in the underlying volcanics.

(4) There appears to be multiple events of quartz emplacement represented by brecciation and re-sealing of the quartz vein.

(5) Sulfides: this provides a crude correlation with gold mineralization. Sulfides associated with gold mineralization in decreasing abundance are pyrite, tetrahedrite, sphalerite, chalcopyrite, galena, arsenopyrite, and pyrrhotite.

(6) Late faults: the association of enhanced gold values proximal to late brittle faults has been observed in the Main, Cusac, Vollaug, and Finlayson mines.

(7) Ground preparation: there appears to be zones or areas where emplacement of quartz veining is dependent on a weakness that governed the emplacement of the shear-hosted vein. Many of the shear zones are emplaced along contacts.

(8) Mariposite-fuchsite association: as in many other gold mines, these muscovite varieties are commonly associated with ore deposits.

(9) Carbonatization, pyritization, and silicification: the epigenetic hydrothermal alteration which appears to be most closely associated with the auriferous quartz veins is carbonate alteration which forms envelopes around quartz, quartz-graphite, and layered dolomite veins. The carbonate alteration envelope can extend outward for up to 40 metres although 1-15 metre is more common when the host rocks are volcanics. The individual envelopes are usually divisible into an outer carbonate zone and an inner carbon zone. Several areas of intense silicification 30-50 metres thick are associated with major quartz veins.

Ore-bearing Veins

In order to provide some guidance as to the relative importance of the 57 gold-bearing veins discovered to date on the property, the accompanying table indicates approximate dimensions of the six veins from which production has been derived. The data are based on verbal information provided on September 4. 1991 by Mr. R. Somerville, former Chief Mine Geologist.

Vein	Width (metres)	Tons Mined (000's)	Approx. Grade (Au oz/t)
Jennie	1-3	100	0.5
Maura	1-8	150	0.5
Vollaug(1)	1-3	100	0.3
Alison	1-3	50	0.5
Eileen	0.5-2	100	0.8
Eileen Ext.	2	-	
Bear	1	40	0.6
		540(2)	0.525(2)

(1) Plaza Resources mined about 50,000 tons from Vollaug Vein in an open pit.
(2) As noted in a table under 'Production History', the actual production records indicate 572,411 tons milled at a recovered grade of 0.42 oz gold/ton.

PRIVATEER MINE

Notes by D.A. Barr September 9, 1991 to accompany references in report by the writer entitled "Comments on Comparable Properties referenced in a report by Ross Glanville & Associates Ltd. dated July 1991, entitled *'A Valuation of the Sherwood Gold Mine Property'*

Foreword

The 16 gold-bearing deposits in the Bedwell River area referenced in Barr (1990) have similar geological settings and mineralization controls, based on the information provided by Sargent (1940) and Sargent (1941). Several workers, including the writer, have also noted analogies between the auriferous vein deposits in the Zeballos camp, situated about 70 miles northwest of the Bedwell River area, and the Bedwell River auriferous deposits.

The writer has attempted to list the principal differences between these camps based on references available for the Zeballos Camp in Stephenson (1948) and Stephenson (1950), portions of which are appended. The comparison includes the following differences, which may serve to account for the apparent relative superiority of the auriferous veins in the Zeballos Camp (see accompanying Figures 1-3).

	Zeballos Camp	Bedwell River Camp
No. of recorded auriferous properties	35	16
Area of contained properties (sq. miles)	14	35
No. of producing auriferous properties	18[(1)]	2
Area of producing auriferous properties (sq. miles)	5	0.5
No. of significant producing properties[(2)]	3	-
Area of significant producing properties (sq. miles)	1	-
Recorded gold prod. from auriferous properties (oz)	276,067	11,500
Recorded silver prod. from auriferous properties (oz)	120,140	6,960
Host rocks, all properties (Figure 1)	Volcanics, skarn, granitic rocks,	Volcanics, granitic rocks
Host rocks, significant producing properties	Volcanics, sediments Skarn, granitic rocks	-
Quartz vein emplacement control	Fault-fissures sheeted zones	Shears, contacts, sheeted zones
Trend of controlling fractures	N60°E + Easterly ? actually 020	N20°E, N65°E

	Zeballos Camp	Bedwell River Camp
Vein type:	Quartz, minor calcite Banded, comb. texture	Quartz, minor calcite Banded, comb. texture
Sulfide minerals in veins in order of abundance	Pyrite, sphalerite, arsenopyrite, chalcopyrite, galena, pyrrhotite	Pyrite, sphalerite, chalcopyrite, galena. Minor pyrrhotite, marcasite. Rare arsenopyrite.
Abundance of sulfides in veins	High (10-50%)	Low
Visible gold	Frequent	Rare
Wallrock gold contents	Not of economic importance.	Not known to be of economic significance.
Maximum strike length of mineralized shoots	1,450' (Privateer)	260' (Sherwood)
Maximum vertical range of mineralized shoots	720' (Privateer)	400' (Sherwood "probable ore")
Maximum width of veins	4' (Privateer)	4' (Sherwood)

Footnotes

(1) Privateer Mine produced 154,381 oz Au (56% total camp)
(2) Properties considered profitable based on payment of dividends (Barr, 1990, p.15)

Production and Reserves:

In considering the historic production record of the Zeballos Camp properties, it is significant that only three producers (Privateer Mine, Spud Valley, Mt. Zeballos) paid dividends from operations principally in 1940-41. Of these, $1.9 million of a total of $2.2 million were paid from the operation of the Privateer Mine.

Not generally recognized in the current production climate are the conditions under which these operations were carried out in very narrow auriferous vein deposits, requiring hand sorting of mined ore to provide a mill feed with a recovered grade averaging about 200% of the mined product; conditions which would not be affordable in the current economic climate. A description is provided in the following section from Stephenson (1950).

Production

"A summary of the gold produced in the Zeballos camp is given in the table on page 15. This table gives the number of ounces of gold produced each year at individual mines, the total for each mine, and the production in each year for the whole camp.

The total production of gold amounts to 287,811 ounces and the total silver to 124,700 ounces. The total quantity of ore mined in the camp amounted to approximately 651,000 tons. The quantity milled amounted to approximately 370,750 tons and the remainder, except for a small quantity of crude ore shipped to the smelter, was sorted out as waste. The over-all grade for the camp was approximately 0.44 ounces of gold per ton mined; or, based on a yield of 280,623 ounces from the ore milled, an average of 0.75 ounces of gold per ton milled.

The over-all grade of 0.44 ounce of gold per ton mined is not truly representative of the Zeballos ore because the vein matter prior to dilution in mining was much higher than this. The veins were much narrower than the usual stoping widths and in places were accompanied by highly sheared wallrock. Both cut-and-fill and shrinkage methods were used in stoping (Plate II). With the latter it was necessary to mine a considerable tonnage of waste rock with the vein matter, which reduced the grade of ore. It should also be noted that at Privateer, the largest producer and responsible for nearly half the total production of the camp, the average grade based on a total production of 154,381 ounces of gold from 285,771 tons mine and 153,332 tons milled was 0.54 ounce of gold per ton mined and 1.01 ounces of gold per ton milled.

Most of the gold ores in the Zeballos camp contain the lead sulphide, galena. The lead content of mine-run ore generally was less than 1 per cent and much of the lead was not recovered in milling. Except for the shipments from the King Midas and the Golden Gate properties, the raw ore and concentrates shipped to the Tacoma smelter from the Zeballos camp usually contained some lead. However, as the shipments were all made to a copper smelter, no payment was made for the lead." (Stephenson, 1950).

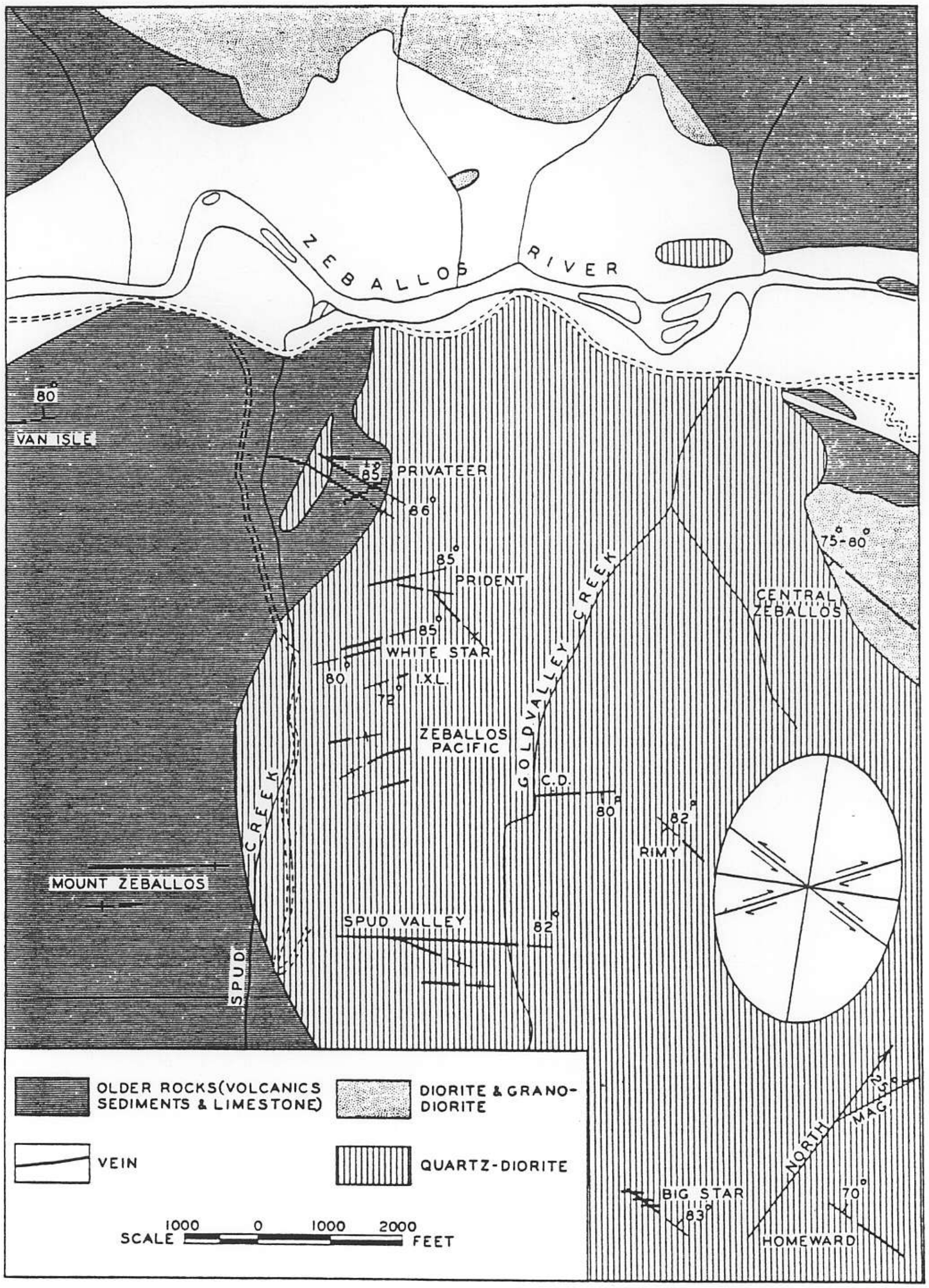
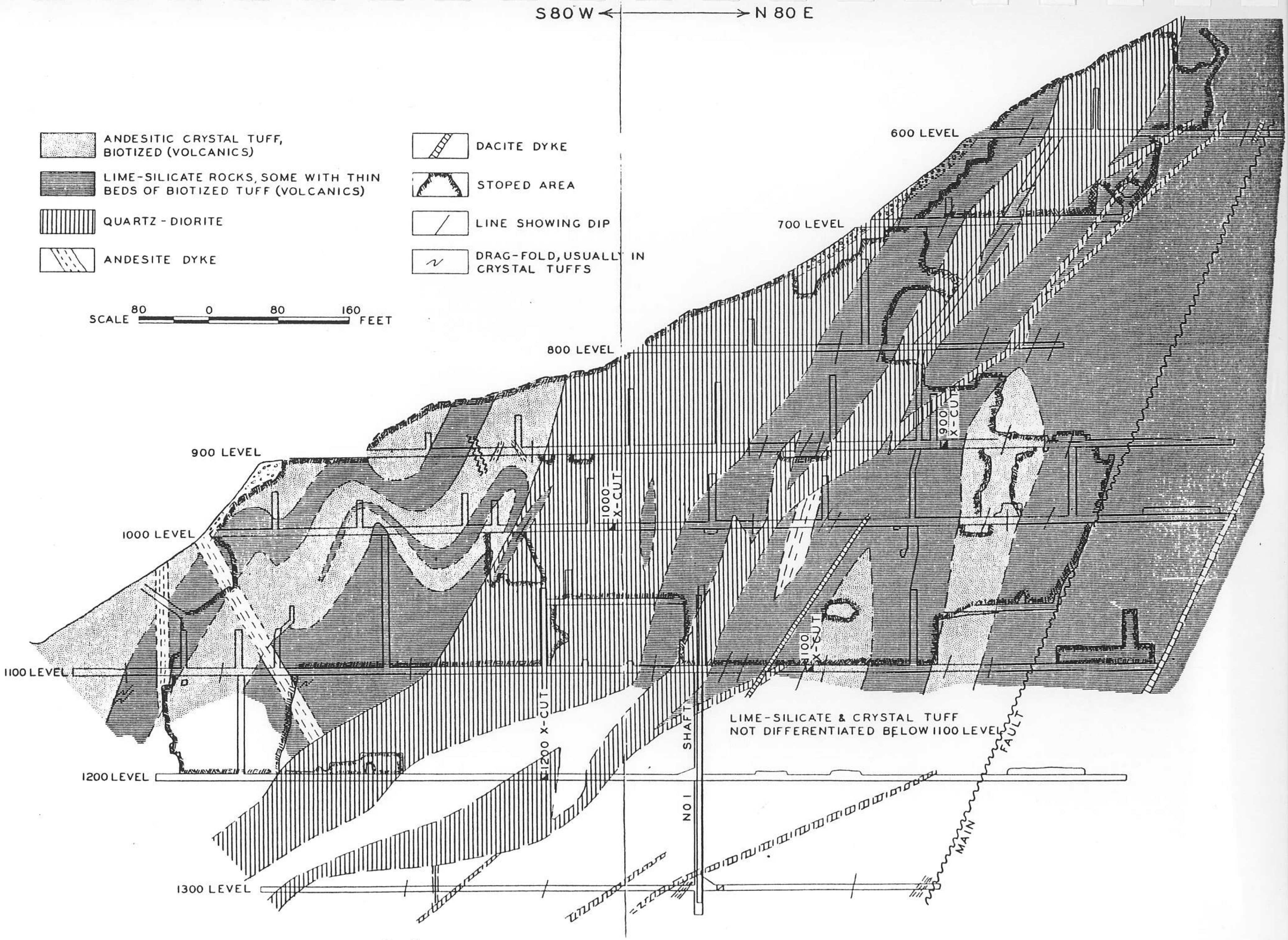


Fig. 3. Fracture pattern of the veins within the producing area of the Zeballos mining camp.

Figure 1. Location of principal producing properties in the Zeballos Camp. (Stevenson 1950)


S80W
N 80 E
ANDESITIC CRYSTAL TUFF, BIOTIZED (VOLCANICS)
LIME-SILICATE ROCKS, SOME WITH THIN BEDS OF BIOTIZED TUFF (VOLCANICS)
QUARTZ - DIORITE
ANDESITE DYKE
DACITE DYKE
STOPED AREA
LINE SHOWING DIP
DRAG-FOLD, USUALLY IN CRYSTAL TUFFS
SCALE 80 0 80 160 FEET
600 LEVEL
700 LEVEL
800 LEVEL
900 LEVEL
1000 LEVEL
1100 LEVEL
1200 LEVEL
1300 LEVEL
900 X-CUT
1000 X-CUT
100 X-CUT
1200 X-CUT
NO 1 SHAFT
LIME-SILICATE & CRYSTAL TUFF NOT DIFFERENTIATED BELOW 1100 LEVEL
MAIN FAULT

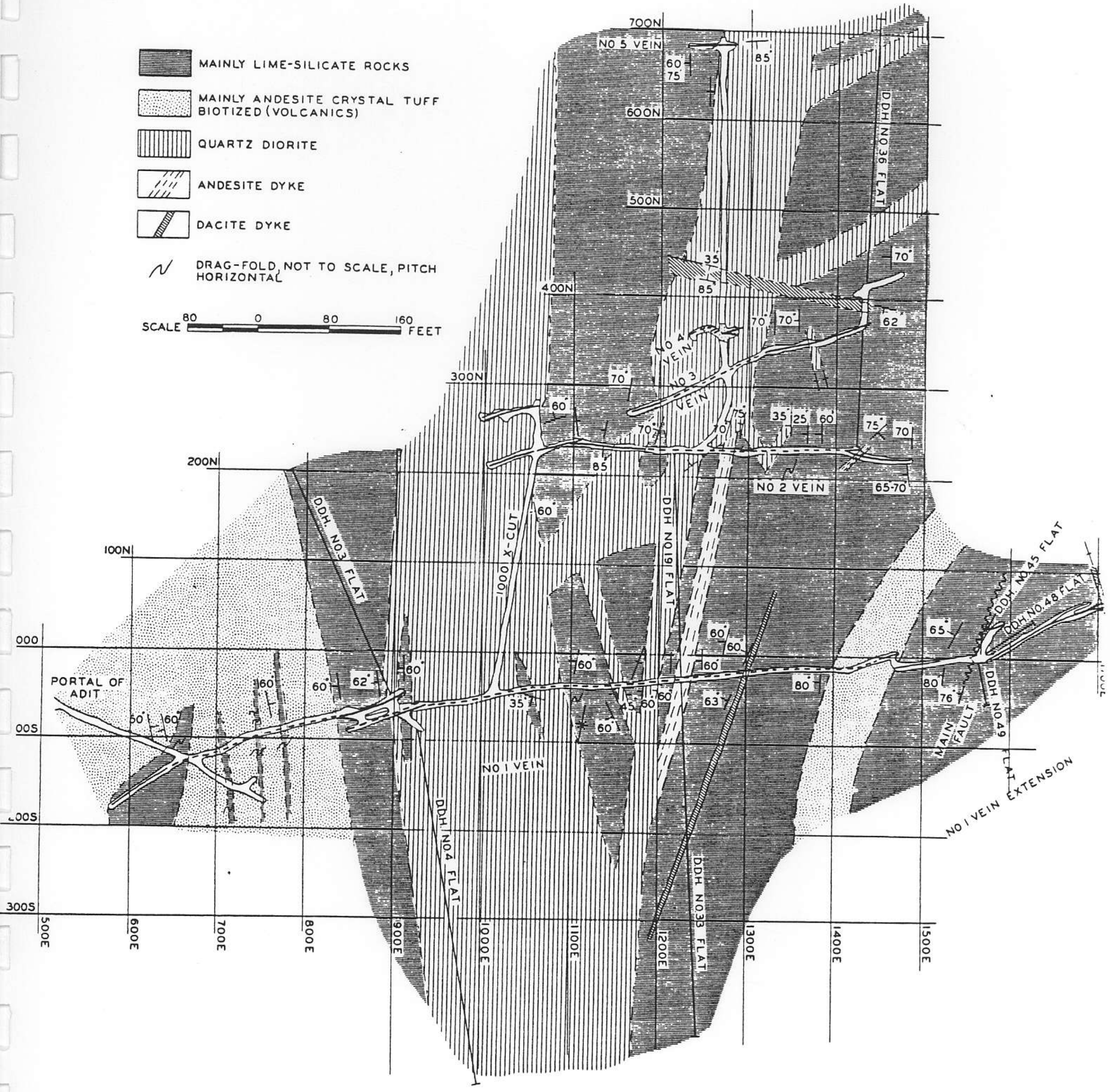
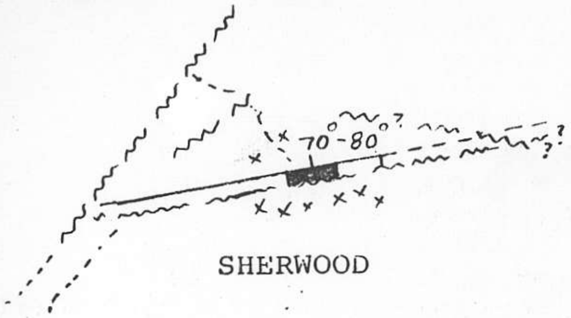


FIG. 9 PRIVATEER. GEOLOGICAL PLAN OF THE 1000 LEVEL.

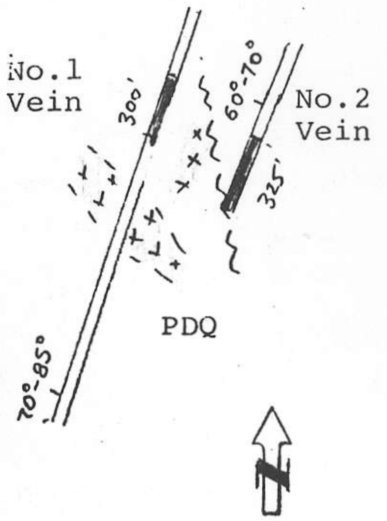
Figure 3. As shown above from Stevenson (1950)

(1)

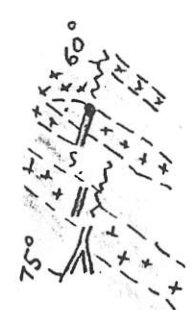


SHERWOOD

Max. known vein length: 1,350'; vert. depth: 730' ; width: 43"
Max. xxxxx/est. shoot length: 254' ; vert. depth: 400'
Avg. shoot width/vein: 18"/Sherwood ;
Best assay results: 185' @ 1.26 oz Au/ton/30" (No.1 Level)
254' @ 1.36 oz Au/ton/15" (No.3 Level)
Past production: 22 tons @ 3.25 oz Au/ton
Ore reserves: 24,035 tons @ 0.69 oz Au/ton
Source : 'Probable' est. (uncut) diluted to 1.0 m, Barr (Oct. 17, 1990)
Ounces gold in reserve: 16,584



Max. known vein length: 2,300'; vert. depth: 775' ; width: 24"
Max. xxxxx/est. shoot length: 340' ; vert. depth: N/A
Avg. shoot width/vein: 12" (No.1) ; 13" (No.2)
Best assay results: 177' @ 1.09 oz Au/ton/12" (No.1 Vein)
340' @ 0.83 oz Au/ton/13" (No.2 Vein)
Past production: None
Ore reserves: N/A
Source : Best assays - Pioneer Gold Mines Ann Rept, 1941
Ounces gold in reserve:



DELLA

Max. known vein length: 160' ; vert. depth: 50' ; width: 16"
Max. known/est. shoot length: N/A ; vert. depth: N/A
Avg. shoot width/vein: N/A ;
Best assay results: 12" @ 1.30 oz Au/ton
12" @ 1.43 oz Au/ton
Past production: 5.5 tons @ 7.8 oz Au/ton
Ore reserves: N/A
Source :
Ounces gold in reserve:

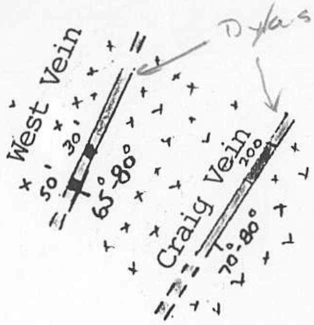
Intrusive rocks
Volcanics, minor sediments
Dyke with vein material
Vein in shear zone
Well-mineralized gold-bearing section
Shear, fault

Data by D.A. Barr, P.Eng., Nov. 21, 1991, based pricipally on information contained in B.C. Dept. of Mines Bull. No.8 (1940) & Bull. No.13 (1941) by H. Sargent

0 500 1000 2000
Scale in feet

GEOLOGICAL SKETCHES OF MINERAL DEPOSITS
BEDWELL RIVER AREA

(2)

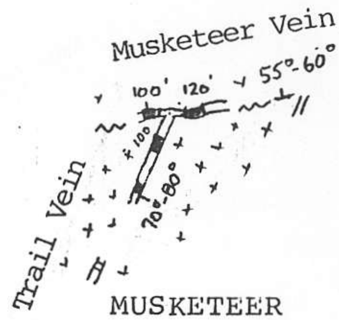


BUCCANEER

Max. known vein length: 1,250'; vert. depth: 500'; width: 21"
Max. ~~known~~/est. shoot length: 200' ; vert. depth: 450'
Avg. shoot width/vein: 4" -12" ;
Best assay results: 440' @ 0.63 oz Au/ton @ 36" (1939) ! DILUTED !

Past production: 5,500 tons @ 0.71 oz Au/ton (3,908 oz Au)
Ore reserves: N/A
Source :

Ounces gold in reserve:



MUSKETEER

Max. known vein length: 1,300'; vert. depth: 600'; width: 12"
Max. known/~~est~~. shoot length: 150' ; vert. depth: 450'
Avg. shoot width/vein: 4"-12" ;
Best assay results: 169' @ 1.15 oz Au/ton @ 10.0" (Trail Vein)

Past production: 10,607 tons @ 0.29 oz Au/ton (3,052 oz Au)
Ore reserves: 19,970 tons @ 0.33 oz Au/ton (1942)
Source : The Northern Miner, Nov. 28, 1974

Ounces gold in reserve: 6,590

→ Mined, then sorted for milling? CHECK.

YOU

Max. known vein length: 550'; vert. depth: 100'; width: 27"
Max. ~~known~~/est. shoot length: 65' ; vert. depth: N/A
Avg. shoot width/vein: 9.5" ;
Best assay results: 65' @ 2.15 oz Au/ton @ 9.5"

Past production: Stoping for 20' length - no records
Ore reserves: N/A
Source :

Ounces gold in reserve:

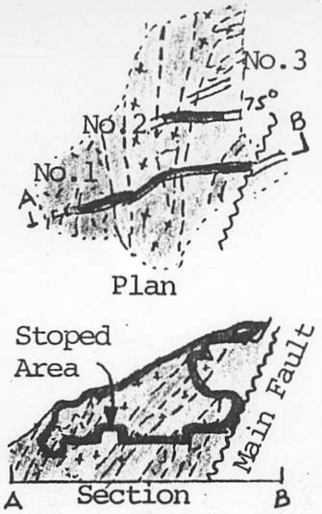
Intrusive rocks
Volcanics, minor sediments
Dyke with vein material
Vein in shear zone
Well-mineralized gold-bearing section
Shear, fault

Data by D.A. Barr, P.Eng., Nov. 21, 1991, based pricipally on information contained in B.C. Dept. of Mines Bull. No.8 (1940) & Bull. No.13 (1941) by H. Sargent

0 500 1000 2000
Scale in feet

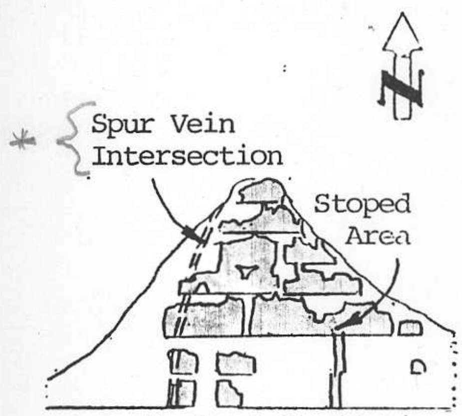
GEOLOGICAL SKETCHES OF MINERAL DEPOSITS
BEDWELL RIVER AREA

(3)



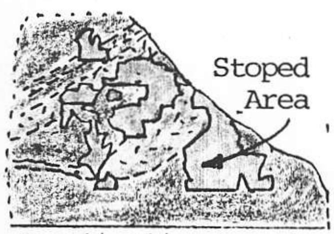
PRIVATEER

Max. known vein length: 1500' ;vert. depth: 1000'; width: 48"
Max. shoot length: 1450' ;vert. depth: 840'
Shoot width: No.1 Vein 1/8"-48", avg. 11"
No.2 Vein 2"-14", avg. 8"
No.3 Vein 2"-4", avg. 3"
Past production: 1934-44; 46-53; 75
Tons mined: 311,218 @ 0.54 oz Au/ton
Tons milled: 161,817 @ 1.05 oz Au/ton (recovered grade)
Recovered: 170,440 oz Au; 69,452 oz Ag
Ore reserves: 135,000 tons @ 0.5 oz Au/ton
Source: New Privateer Ltd., Canadian Mines Handbook 1990-1
Ounces gold in reserve: 67,500



Longitudinal Projection
Goldfield Vein
X SPUD VALLEY
(WRIGHT'S)

Max. known vein length: 2500' ; vert. depth: 1400'; width: 16"
Max. shoot length: 1300' ;vert. depth: 1150'
Shoot width: Goldfield Vein 6"-8"
Spur Vein 6"
Roper Vein 2"
Past production: 1936-42; 51
Tons mined: 210,245 @ 0.26 (Goldfield 70,000 @ 0.34 oz Au/ton; Spur 26,000 @ 0.28 oz Au/ton; Roper 10,000)
Tons milled: 105,711 tons @ 0.51 oz Au/ton (recovered grade)
Recovered: 54,105 oz Au; 18,494 oz Ag
Ore reserves: 247,078 tons @ 0.41 oz Au/ton
Source: McAdam Resources Inc. Canadian Mines Handbook 1989-90
Ounces gold in reserves: 101,300
→ WRONG!



Longitudinal Section
Mt. Zeballos Vein
MOUNT ZEBALLOS

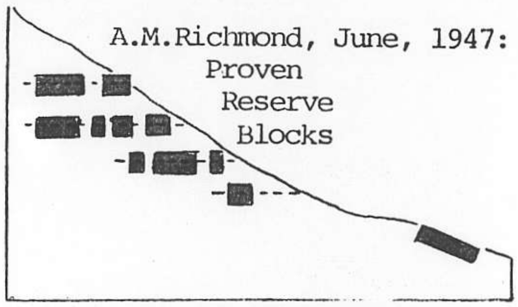
Max. known vein length: 1500' ;vert. depth: 1100';width: 24"
Max. shoot length: 1100' ;vert. depth: 800'
Shoot width: Mt. Zeballos 1/8"-24", avg. 2"-3"
Past production: 1939-42; 44
Tons mined: 81,866 @ 0.37 oz Au/ton
Tons milled: 56,813 @ 0.54 oz Au/ton (recovered grade)
Recovered: 30,433 oz Au; 14,288 oz Ag
Ore reserves: Not known

- Intrusive rocks
- Skarn
- Mainly volcanic flows
- Volcanic tuff
- Vein
- Well-mineralized gold-bearing section
- Fault

Data by D.A. Barr, P.Eng., Nov. 23, 1991, based principally on information contained in B.C. Dept. of Mines Bull. No.27 (1950) by J.S. Stevenson and B.C. Minfile.

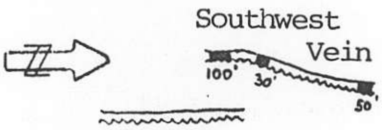
0 500 1000 2000
Scale in feet

GEOLOGICAL SKETCHES OF PAST GOLD PRODUCERS
ZEBALLOS AREA

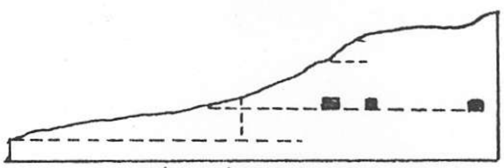


Longitudinal Projection
Fandora Vein A
FANDORA - WEL

Max. known vein length: 3000' :vert. depth: 1100'; width: 21"
Max. est. shoot length: 250-700';vert. depth: 600'
Production: 1960-64
Tons mined: 1072 @ 1.37 oz Au/ton (recovered grade)
Recovered: 1468 oz Au
Ore reserves: (1) 76,060 tons @ 0.453 oz Au/ton
Source: Privateer Mines Ltd., June 1947
(2) 200,000 tons @ 0.3 oz Au/ton,containing
(3) 9,000 tons @ 2.3 oz Au/ton
Source: R.H.Seraphim, in Geo. Cross News Letter, Oct. 12,1984.
(4) 39,200 tons @ 0.44 oz Au/ton(uncut), 0.40 oz Au/ton (cut)
Source: TRM Engineering Ltd. per Wright Engineers Ltd. Report dated Oct. 17, 1990.
Known veins: 5

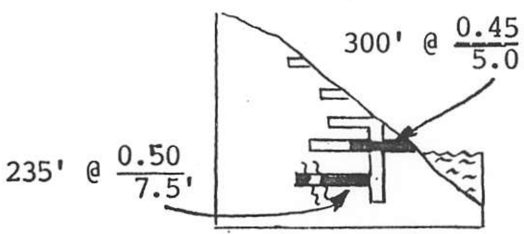


Bullion Vein
Plan



Longitudinal Projection
Bullion & Southwest Veins
workings
GEORGIA RIVER (WEL)

Max known vein length: 2950' ;vert. depth: 1180'; width: 10 ft.
Max. est shoot length: N/A (850' based on drilling)
Production: 1937
Tons mined: 500 @ 0.66 oz Au/ton (recovered grade)
Tons shipped: Assumed as above
Recovered: 329 oz Au
Ore reserves: (1) 321,067 tons @ 0.839 oz Au/ton
Source: E.R. Kruchkowski, P. Geol., filing statement, VSE for Avatar Resouce Corp., Sep. 19/89 (Drill-indicated reserves).
(2) 44,400 tons @ 0.44 oz Au/ton
Source: TRM Engineering Ltd. per Wright Engineers Ltd. Report dated Oct. 17, 1990.
Known veins: 16

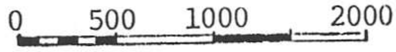


Longitudinal Projection
ALEXANDRIA (WEL)

Max. known vein length: 1000'; vert. depth: 800'; width: 13 ft.
Max. known shoot length: 300' ; vert depth: 300'
Production: 1939-40
Tons mined: 1867
Tons shipped: Assumed as above
Recovered: 715 oz Au
Ore reserves: (1) 15,000 tons @ 0.30 oz Au/ton (1934)
Source: B.C. Min. Mines Rept. 1934, p.F 8
(2) 19,299 tons @ 0.306 oz Au/ton (1980)
Source: G.A. Noel, P. Eng.in Statement of Material Facts 57/81, Corpac Minerals Ltd. from B.C. Minfile
(3) 27,000 tons @ 0.342 oz Au/ton.
Source: TRM Engineering Ltd. per Wright Engineers Ltd. Report dated Oct. 17, 1990
Known veins: 8

Vein in shear zone
Well-mineralized gold-bearing section
Fault
0.50 / 7.5' — Assay : Au az/ton / Width sampled
Drift, shaft

Data by D.A. Barr, P. Eng., Nov. 27, 1991, based principally on information contained in sources listed above.



Scale in feet

GEOLOGICAL SKETCHES OF COMPARABLE MINING PROPERTIES
WRIGHT ENGINEERS LIMITED REPORT, APPENDIX IV, OCTOBER 17,1990
'MARKET VALUATION OF THE SHERWOOD MINING CLAIMS'

SHERWOOD GOLD MINE PROPERTY, B.C.

PRODUCTION ● RESERVES ○ — DIAGNOSTIC ◐

DEPOSIT	GEOLOGICAL BELT: INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	DEPOSIT CLSFTN.: MESOTHERMAL	EPITHERMAL	PME SKARN	HOST ROCK: VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN
SHERWOOD	X					X			X	X	X		
ERICKSON				X		X			X			X	
BLACKDOME			X				X		X				
SKYLINE			X			X			X	X			
DOME MT.			X			X			X	X	X		
SNIP			X			X				X			
SULPHURETS			X			X	X	X (3)	X	X	X		
PRIVATEER	X					X		X	X		X		
WILLA				X					X		X		
SKYLARK				X				X	X		X	X	

DEPOSIT	WALL-ROCK ALTERATION: SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE	AVG. VEIN WIDTH (>0.1 Metres): < 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	NUMBER OF KNOWN VEINS ○ PROD. VEINS ●: 1	2-3	4-8	9-19	> 20
SHERWOOD	X	X		X		X	○				○				
ERICKSON	X	X			X			●					●		○
BLACKDOME	X		X			X		●				●			○
SKYLINE			X					●					●		
DOME MT.	X	X			X	X		○			●				○
SNIP	X	X							○		●	○			
SULPHURETS	X					X			○						○
PRIVATEER	X	X			X		○●					● (2)			
WILLA				X						○		○			
SKYLARK	X	X					● (7)				●		○		

DEPOSIT	ASSOCIATED RECOVERABLE METALS: SILVER gms/tonne	COPPER (%)	DIAGNOSTIC SURVEYS: GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	PHYSICAL PRE-PROD. WORK: TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS
SHERWOOD	34.0								X			X
ERICKSON	9.6		◐	◐	◐	○		◐	X	X		X
BLACKDOME	88.5		○	○	○			◐	X	X		X
SKYLINE	22.0	0.52	○		◐	◐		◐	X	X		X
DOME MT.	80.3		○					○	X	X		X
SNIP			○				○	◐	X	X		X
SULPHURETS	650.0		○					◐	X	X		X
PRIVATEER	13.4		○						X	X		X
WILLA	13.4	0.86	○					◐	X	X		X
SKYLARK	685.0		○	○	○			○	X	X	X	X

DEPOSIT	TONNES ('000s): < 50	50-100	100-300	300-500	500-700	> 700	GRADE Au. g/t: < 10	10-20	20-30	30-40	> 40	OUNCES Au. ('000s): < 30	30-60	60-120	120-200	> 200
SHERWOOD	○							○			(X)	○				
ERICKSON			○		●			●	○				○			●
BLACKDOME				●					●						●	
SKYLINE			●					●						●		
DOME MT.				○				○						○		
SNIP		● (5)				○			●	○ (5)			● (5)			○
SULPHURETS				○ (6)				○ (6)						○ (6)		
PRIVATEER			○● (1)				○● (1)						○		● (1)	
WILLA				○			○							○		
SKYLARK	●							●				●				

Out!

FOOTNOTES:
1) THE PRIVATEER PRODUCED 154,381 OUNCESOF GOLD FROM 285,771 TONS MINED (0.54 oz. Au/TON) BEING 54% OF ZEBALLOS CAMP PRODUCTION
2) THREE PRODUCTIVE VEINS OF WHICH ONLY ONE AVERAGED MORE THAN 17gms. GOLD/TONNE
ONLY 153,332 TONS OF HAND-SORTED ORE WERE MILLED GRADING 1.01 oz. Au/TON.
3) INCLUDES AURIFEROUS SKARNS , ie. PME SKARNS
4) INCLUDES GREEN SERICITE, GREEN MICA, MARIPOSITE, FUSCHITE.
5) FIVE MONTHS OF PRODUCTION IN 1991
6) WEST ZONE ONLY
7) MAXIMUM REPORTED WIDTH OF "H" ZONE IS 30 INCHES, AND AVERAGE IS LESS THAN 6 INCHES

TO ACCOMPANY REPORT BY D.A. BARR, P.ENG., SEPT.26/1991

TABLE No 1

JB

WRIGHT ENGINEERS LIMITED
VANCOUVER CANADA
D1947200

Ex. 129—

TABLE No 1 (a)

GEOLOGICAL, EXPLORATION AND PRODUCTION CRITERIA OF FOUR COMPARABLE PROPERTIES TO THE SHERWOOD GOLD MINE PROPERTY CITED IN WRIGHT ENGINEERS REPORT

DEPOSIT	GEOLOGICAL BELT					DEPOSIT CLSFTN.			HOST ROCK					WALL-ROCK ALTERATION						AVG. VEIN WIDTH (>0.1 Metres)				NUMBER OF KNOWN VEINS ○ PROD. VEINS ●					ASSOCIATED RECOVERABLE METALS		DIAGNOSTIC ● SURVEYS						PHYSICAL PRE-PROD. WORK				PRODUCTION ● RESERVES ○ TONNES ('000s)						GRADE Au. g/t					OUNCES Au. ('000s)				
	INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	MESOTHERMAL	EPITHERMAL	PME SKARN	VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN	SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE	< 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	1	2-3	4-8	9-19	> 20	SILVER gms/tonne	COPPER (%)	GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS	< 50	50-100	100-300	300-500	500-700	> 700	< 10	10-20	20-30	30-40	> 40	< 30	30-60	60-120	120-200	> 200
FANDORA (1)	X								X											●○				●		○			15								X			X	●○							○			●	●○				
GEORGIA RIVER (2)		X							X	X	X										○						○		19	0.1							X	X		X	●○							○	●			●○				
ALEXANDRIA (3)		X								X											○					○			24		○	○	○			○		X		X	●○							○●				●○				
SPUD VALLEY (4)	X					X					X									●○					●○				3								X	X		X		●					●						●			

FOOTNOTES:

(1) BETWEEN 1960-64 FANDORA PRODUCED 734 oz. Au. AND 103 oz. Ag. FROM 930 TONS MILLED,.
PROJECT UNSUCCESSFUL DUE MAINLY TO INADEQUATE RESERVES OF ORE OF SUITABLE GRADE.
PROBABLE RESERVES 38,100 TONNES CONTAINING 18,475 oz. Au., 16,800 oz. Ag. (42,000 TON AT 0.42 oz. Au/TON)
POTENTIAL RESERVES ARE 181,437 TONNES AT 10.28 g. Au/TONNE (200,000 TONS AT 0.3 oz. Au/TON

(2) RESERVES 44,900 TONS AVG. 0.45 oz. Au/TON; 0.57 oz. Ag/TON (BCDM MAP 64) OR
120,037 TON AVG. 0.55 oz. Au/TON (BCMRD OF 1989-22), MAXIMUM WIDTH OF 40' IN MAIN VEIN

(3) RESERVES OF 24,495 TONNES GRADING 9.98g. Au/TONNE REPORTED. PRODUCTION IN 1940 TOTALLED 1,695 TONNES
AVG. 13.1g. Au/TONNE, 24.0g. Ag/TONNE. EIGHT SIGNIFICANT VEINS 2 TO 11 FEET WIDE DESCRIBED.
(GEORGE CROSS NEWSLETTER, SEPT. 2, 1983)

(4) SPUD VALLEY PRODUCED 54,039 oz. Au. AND 18,476 oz. Ag. FROM 105,687 TONS MILLED FOLLOWING
HAND-SORTING FROM 186,698 TONS MINED
GOLDFIELD VEIN AVERAGED 6-8' WIDTH; SPUR VEIN AVERAGED LESS THAN 6' WIDTH; ROPER VEIN AVERAGED 2' WIDE.
GOLDFIELD VEIN PRODUCED 70,000 TON AVG. 0.34 oz/TON Au.
RESERVES 49,895 TONNES AT 4.66g. Au/TONNE

ADDENDUM TO REPORT BY D.A. BARR, P.ENG., SEPT.26/1991

TABLE No 1 (a)

WRIGHT ENGINEERS LIMITED VANCOUVER CANADA

JB

D 1947 200

TABLE-1

(DATA PRINCIPALLY FROM SARGENT 1940 AND 1941)

DEPOSIT	GEOLOGICAL BELT: INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	DEPOSIT CLSFTN.: MESOTHERMAL	EPITHERMAL	PME SKARN	HOST ROCK: VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN	WALL-ROCK ALTERATION: SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE
SHERWOOD *	X					X			X		X						X		
PROSPER	X					X			X				X						
SEATTLE	X					X			X				X						
AVON	X					X			X	X	X		X						
NOBLE, NOBLE B*	X					X			X										
OK *	X					X					X								
MUSKETEER (1) *	X					X					X								
BUCCANEER (2)*	X					X					X								
YOU *	X					X					X								
CASINO *	X					X					X								
TROPHY	X					X					X								
THUNDERBIRD	X					X					X								
DELLA *	X					X			X	X	X								
PDQ *	X					X			X		X								
GALENA	X					X			X										
JOKER	X					X													

DEPOSIT	AVG. VEIN WIDTH (>0.1 Metres): < 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	NUMBER OF KNOWN VEINS ○ PROD. VEINS ●: 1	2-3	4-8	9-19	> 20	ASSOCIATED RECOVERABLE METALS: SILVER gms/tonne	COPPER (%)
SHERWOOD *	o				o					34.0	
PROSPER	o				o					49	
SEATTLE	o				o					Tr	
AVON	o					O				Tr	
NOBLE, NOBLE B*	o					O				15	
OK *	o				o					185	
MUSKETEER (1) *	o						O			12	
BUCCANEER (2)*	o					O				7	
YOU *	o				o					70	
CASINO *	o					O				Tr	
TROPHY	o				o					8	
THUNDERBIRD	o					O				Tr	
DELLA *	o					O				4	
PDQ *	o					O				117	
GALENA											
JOKER											

DEPOSIT	DIAGNOSTIC ● SURVEYS: GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	PHYSICAL PRE-PROD. WORK: TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS
SHERWOOD *							X			X
PROSPER							X			X
SEATTLE							X			
AVON							X			
NOBLE, NOBLE B*							X			
OK *							X			
MUSKETEER (1) *							X	X		X
BUCCANEER (2)*							X			X
YOU *							X			
CASINO *							X			
TROPHY							X			
THUNDERBIRD							X			
DELLA *							X			X
PDQ *							X			X
GALENA							X			X
JOKER										

DEPOSIT	PRODUCTION ● RESERVES ○ — TONNES ('000s): < 50	50-100	100-300	300-500	500-700	> 700	GRADE Au. g/t: < 10	10-20	20-30	30-40	> 40	OUNCES Au ('000s): < 30	30-60	60-120	120-200	> 200
SHERWOOD *	o							o	BARR ESTIMATE			o				
PROSPER	o							o				o				
SEATTLE	o						o					o				
AVON	o							O				o				
NOBLE, NOBLE B*	o								O			o				
OK *	o							O				o				
MUSKETEER (1) *	o●							O	●			o●				
BUCCANEER (2)*	o●							O	●			o●				
YOU *	o										O	o				
CASINO *	o										O	o				
TROPHY	o							O				o				
THUNDERBIRD	o						(3)					o				
DELLA *	o							o				o				
PDQ *	o										O	o				
GALENA												o				
JOKER												o				

(1) MUSKETEER PRODUCED 3,052 oz. Au AND 1,736 oz. Ag FROM 5,000 TONS MILLED. AVERAGE SILVER CONTENT SHOWN IN TABLE IS BASED ON PRODUCTION

(2) BUCCANEER PRODUCED 3,908 oz. Au. AND 1,258 oz. Ag. FROM 6,500 TONS MILLED AVERAGE SILVER CONTENT SHOWN IN TABLE IS BASED ON PRODUCTION

(3) OF 4 SAMPLES TAKEN THE GRADE IS LESS THAN 3gms Au/TON (0.1 oz. Au/TON), TRACE IN Ag.

ADDENDUM TO REPORT BY D.A. BARR, P.ENG., SEPT.26/1991

TABLE No 1 (b)

JB	FOR REPORT		1	
JB	FOR REPORT		2	GENERAL REVISION

CAD No. TABLE-2.DGN

WRIGHT ENGINEERS LIMITED VANCOUVER CANADA

D 1947200 2

DEPOSIT	GEOLOGICAL BELT					DEPOSIT CLSFTN.			HOST ROCK					WALL-ROCK ALTERATION						AVG. VEIN WIDTH (>0.1 Metres)				NUMBER OF KNOWN VEINS ○ PROD. VEINS ●				
	INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	MESOTHERMAL	EPITHERMAL	PME SKARN	VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN	SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE	< 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	1	2-3	4-8	9-19	> 20
SHERWOOD	X					X			X		X						X			○				○				
ERICKSON				X		X			X			X		X	X			X			●					●		○
BLACKDOME			X				X		X					X		X			X		●				●			○
SKYLINE			X			X			X	X						X					●					●		
DOME MT.			X			X			X	X	X			X	X			X	X		○							○
SNIP			X			X				X				X	X							○		●				
SULPHURETS			X			X	X	X (3)	X	X	X			X					X			○						○
PRIVATEER	X					X		X	X		X			X	X			X		○●					(2) ●			
WILLA				X					X		X						X						○		○			
SKYLARK				X				X	X		X	X		X	X					(7) ●				●		○		

DEPOSIT	ASSOCIATED RECOVERABLE METALS		DIAGNOSTIC ◐ SURVEYS						PHYSICAL PRE-PROD. WORK				PRODUCTION ● RESERVES ○ TONNES ('000s)						GRADE Au. g/t					OUNCES Au. ('000s)				
	SILVER gms/tonne	COPPER (%)	GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS	< 50	50-100	100-300	300-500	500-700	> 700	< 10	10-20	20-30	30-40	> 40	< 30	30-60	60-120	120-200	> 200
SHERWOOD	34.0								X			X	○							○				○				
ERICKSON	9.6		◐	◐	◐	○		◐	X	X		X			○		●			●	○				○			●
BLACKDOME	88.5		○	○	○			◐	X	X		X				●					●						●	
SKYLINE	22.0	0.52	○		◐	◐		◐	X	X		X			●					●						●		
DOME MT.	80.3		○					○	X	X		X				○				○						○		
SNIP			○				○	◐	X	X		X		(5) ●				○			●	(5) ○			(5) ●			○
SULPHURETS	650.0		○					◐	X	X		X				(6) ○				(6) ○						(6) ○		
PRIVATEER	13.4		○						X	X		X			(1) ○●				(1) ○●						○		(1) ●	
WILLA	13.4	0.86	○					◐	X	X		X				○			○							○		
SKYLARK	685.0		○	○	○			○	X	X	X	X	●							●				●				

TABLE No 1 (a)
GEOLOGICAL, EXPLORATION AND PRODUCTION CRITERIA OF NINE
COMPARABLE PROPERTIES AND THE SHERWOOD GOLD MINE PROPERTY CITED IN WRIGHT ENGINEERS REPORT

DEPOSIT	INSULAR	COAST	INTERMONTANE	OMINECA	EASTERN	MESOTHERMAL	EPITHERMAL	PME SKARN	VOLCANIC	SEDIMENTARY	INTRUSIVE	ULTRAMAFIC	SKARN	SILICA	CARBONATE	POTASSIC	PROPYLITIC	GREEN MICA (4)	SERICITE	< 1 METRE	1-2 METRES	2-3 METRES	> 3 METRES	1	2-3	4-8	9-19	> 20
FANDORA (1)	X								X											●○				●		○		
GEORGIA RIVER (2)		X							X	X	X										○						○	
ALEXANDRIA (3)		X								X											○					○		
SPUD VALLEY (4)	X					X					X									●○					●○			

DEPOSIT	SILVER gms/tonne	COPPER (%)	GEOLOGICAL	MAGNETIC	EM	IP	STREAM SED	SOIL/ROCK	TRENCHING	DIAMOND DRILLING	ROT/PERC DRILLING	U/G WORKINGS	< 50	50-100	100-300	300-500	500-700	> 700	< 10	10-20	20-30	30-40	> 40	< 30	30-60	60-120	120-200	> 200
FANDORA (1)	15								X			X	●○							○			●	●○				
GEORGIA RIVER (2)	19	0.1							X	X		X	●○							○	●			●○				
ALEXANDRIA (3)	24		○	○	○			○		X		X	●○							○●				●○				
SPUD VALLEY (4)	3								X	X		X		●					●						●			

NOTE:
SEE FOOTNOTES FOR TABLE No 1 AND TABLE No 1 (a) ON APPENDIX

ADDENDUM TO REPORT BY
D.A. BARR, P.ENG., SEPT.26/1991

TABLE No 1 AND
TABLE No 1 (a)

JB

WRIGHT ENGINEERS LIMITED
VANCOUVER CANADA

D1947200

PLOTTED 08 OCT 1991

TABLE No 1

FOOTNOTES:

1) THE PRIVATEER PRODUCED 154,381 OUNCESOF GOLD FROM 285,771 TONS MINED (0.54 oz. Au/TON) BEING 54% OF ZEBALLOS CAMP PRODUCTION
2) THREE PRODUCTIVE VEINS OF WHICH ONLY ONE AVERAGED MORE THAN 17gms. GOLD/TONNE
   ONLY 153,332 TONS OF HAND-SORTED ORE WERE MILLED GRADING 1.01 oz. Au/TON.
3) INCLUDES AURIFEROUS SKARNS , ie. PME SKARNS
4) INCLUDES GREEN SERICITE, GREEN MICA, MARIPOSITE, FUSCHITE.
5) FIVE MONTHS OF PRODUCTION IN 1991
6) WEST ZONE ONLY
7) MAXIMUM REPORTED WIDTH OF "H" ZONE IS 30 INCHES, AND AVERAGE IS LESS THAN 6 INCHES

TABLE No 1 (a)

FOOTNOTES:

(1) BETWEEN 1960-64 FANDORA PRODUCED 734 oz. Au. AND 103 oz. Ag. FROM 930 TONS MILLED,.
    PROJECT UNSUCCESSFUL DUE MAINLY TO INADEQUATE RESERVES OF ORE OF SUITABLE GRADE.
    PROBABLE RESERVES 38,100 TONNES CONTAINING 18,475 oz. Au., 16,800 oz. Ag. (42,000 TON AT 0.42 oz. Au/TON)
    POTENTIAL RESERVES ARE 181,437 TONNES AT 10.28 g. Au/TONNE (200,000 TONS AT 0.3 oz. Au/TON
(2) RESERVES 44,900 TONS AVG. 0.45 oz. Au/TON; 0.57 oz. Ag/TON (BCDM MAP 64) OR
    120,037 TON AVG. 0.55 oz. Au/TON (BCMRD OF 1989-22), MAXIMUM WIDTH OF 40' IN MAIN VEIN
(3) RESERVES OF 24,495 TONNES GRADING 9.98g. Au/TONNE REPORTED. PRODUCTION IN 1940 TOTALLED 1,695 TONNES
    AVG. 13.1g. Au/TONNE, 24.0g. Ag/TONNE. EIGHT SIGNIFICANT VEINS 2 TO 11 FEET WIDE DESCRIBED.
    (GEORGE CROSS NEWSLETTER, SEPT. 2, 1983)
(4) SPUD VALLEY PRODUCED 54,039 oz. Au. AND 18,476 oz. Ag. FROM 105,687 TONS MILLED FOLLOWING
    HAND-SORTING FROM 186,698 TONS MINED
    GOLDFIELD VEIN AVERAGED 6-8" WIDTH; SPUR VEIN AVERAGED LESS THAN 6" WIDTH; ROPER VEIN AVERAGED 2" WIDE.
    GOLDFIELD VEIN PRODUCED 70,000 TON AVG. 0.34 oz/TON Au.
    RESERVES 49,895 TONNES AT 4.66g. Au/TONNE

ADDENDUM TO REPORT BY
D.A. BARR, P.ENG., SEPT.26/1991

APPENDIX FOR
TABLE No 1 AND
TABLE No 1(a)