ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Technical Report on the Zeballos Gold Project

TOTAL COST: $9,713.11

AUTHOR(S):Brian Simmons P.Eng.
SIGNATURE(S): BGS

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):None
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 4878746 on June 24, 2011

YEAR OF WORK: 2011

PROPERTY NAME: Zeballos Gold Project

CLAIM NAME(S) (on which work was done):

Golden Gate Tenure 689765

Golden Gate 5 Tenure 706564

COMMODITIES SOUGHT: Au, Ag, Cu

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:
092L 005, 092L 006, 092E 002, 092E 023
MINING DIVISION: Alberni
NTS / BCGS: 092E, 092L
LATITUDE: 50° 00’ 09" N
LONGITUDE: 126° 49’ 55" W (at centre of work)
UTM Zone: 09 EASTING: 655364 NORTHING: 5541161

OWNER(S): North Bay Resources Inc.

MAILING ADDRESS:
PO Box 162, Skippack, Pennsylvania,
USA, 19474

OPERATOR(S) [who paid for the work]:
North Bay Resources Inc.
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PO Box 162, Skippack, Pennsylvania,
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REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)
Tertiary Volcanics, Catface Intrusions, Epithermal, Quartz Veins, pyrrhotite, pyrite, Bonanza Volcanics, skarn, replacement, massive, actinolite altered limestone, pyrrhotite,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Assessment Reports : 4819, 5079, 9981, 12573, 12863, 12772

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for …)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)		Tenure 689765 Tenure 706564	$4713.11
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
NI 43-101 Report			$5000.00
		TOTAL COST	$9713.11

TECHNICAL REPORT

On the

Zeballos Gold Project

Alberni Mining Division, British Columbia, Canada
Map Numbers 092E, 092L
UTM Zone 09 (NAD83)
Northing 5541161
Easting 655364

For

NORTH BAY RESOURCES INC.
PO Box 162
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USA
19474

by

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May 25, 2011

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SUMMARY

The Zeballos Gold Project mineral claims are located in the Alberni Mining Division of British Columbia Canada (Figure 1). The seven mineral claims are contiguous (Figure 2) and total an area of 1225.3 hectares.

North Bay Resources Inc. owns 100% of the Zeballos Gold mineral claims. Underlying much of the northern portion of the Zeballos Gold mineral claims are older crown granted mineral claims. This report focuses on the southern portion of the Zeballos Gold mineral claims that have no underlying crown granted mineral claims. This includes the Tagore, Golden Gate and Beano past gold producers. The crown grants covering the Answer Prospect have reverted.

The Zeballos area has a history of lode gold production from the Zeballos Gold Camp and iron production from the Ford magnetite deposit (Figure 2). The Zeballos Gold Project is in close proximity to the Zeballos coast intrusive. This intrusive contact area has a high potential for a mineral deposits.

In the 1940's the Beano workings produced a high grade gold pyrrhotite skarn ore. Diamond drilling of the Beano workings in 1983 showed the gold pyrrhotite lens did not extend to depth. Soil sampling in 1989 (Figure 6) identified a gold anomaly to the west of the Beano workings.

A second gold anomaly was found at the headwaters of the Golden Gate and Hidden Valley creeks. Three soil sampling programs (Figures 3, 4, 6) confirm these results. A VLF-EM survey (Figure 5) conducted in the same soil anomalous area shows a strong conductor with a northwest strike. The Geology Map of the Zeballos Mining Camp by Stevenson (Figure 8) shows this gold anomalous area as unmapped. A band of limestone/volcanic rock from the Beano showings strikes northwesterly towards this anomalous area. Stevenson maps this

limestone/volcanic structure again just north of the Golden Portal. It is possible that the band of auriferous limestone extends northwest from the Beano workings through this area. It is also possible that this is an epithermal gold quartz structure similar to the Zeballos gold camp.

The author believes both of these gold anomalous areas warrant further mineral exploration.

In the qualified person's opinion the Zeballos Gold Project is sufficient to merit a Phase 1 exploration program. The mineral exploration program will focus on trenching and geological mapping of two gold anomalous areas. The prime target is at the headwaters of the Golden Gate and Hidden Valley creeks. A secondary target area is the gold soil anomaly west of the existing Beano workings. The mineral exploration program would consist of trenching, geological mapping and sampling. The Phase 1 exploration program is estimated to cost $105,000 Canadian.

Contingent upon favorable results from the Phase 1 work program, a Phase 2 mineral exploration program would include diamond drilling.

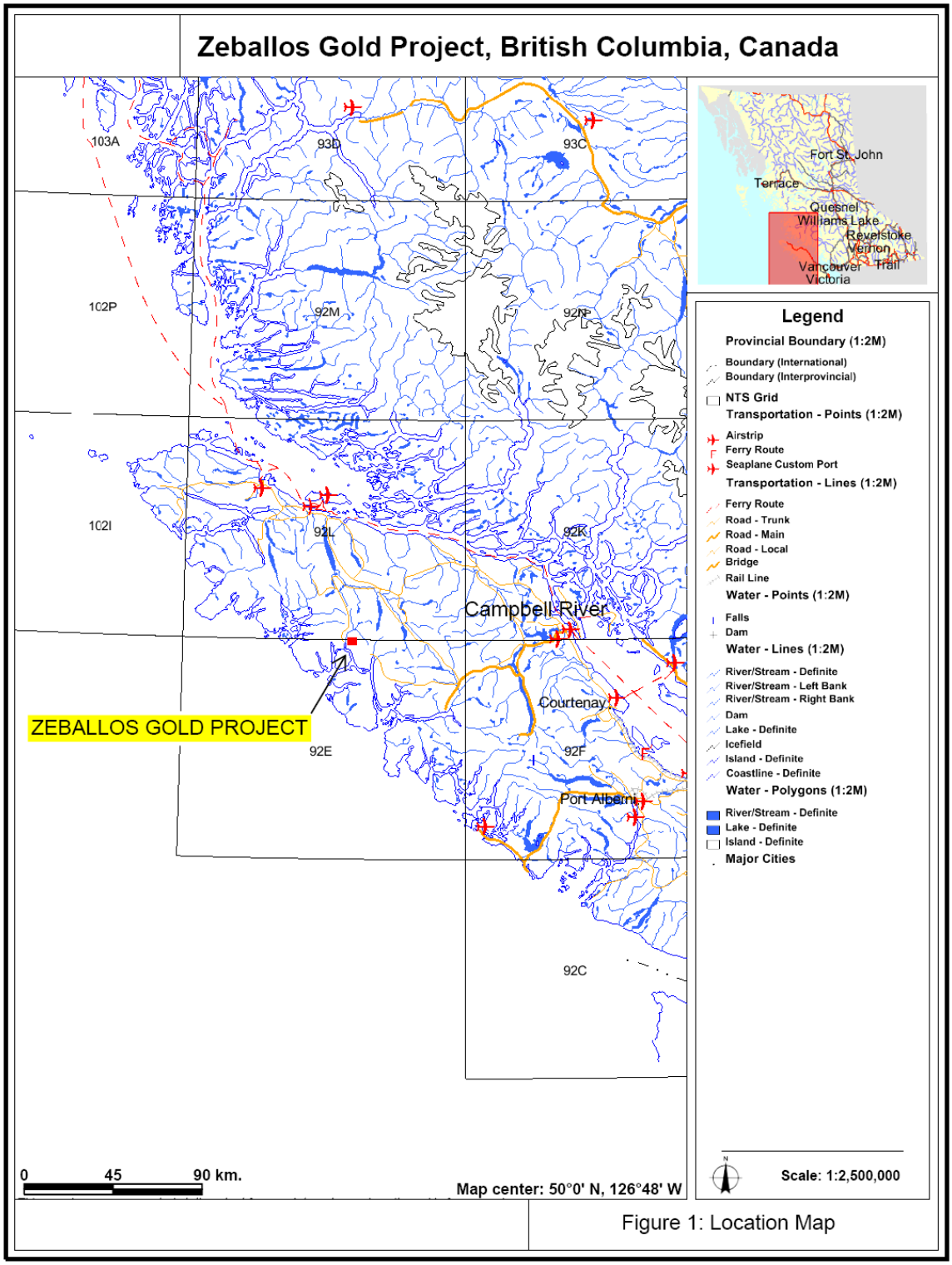

Figure 1: Location Map

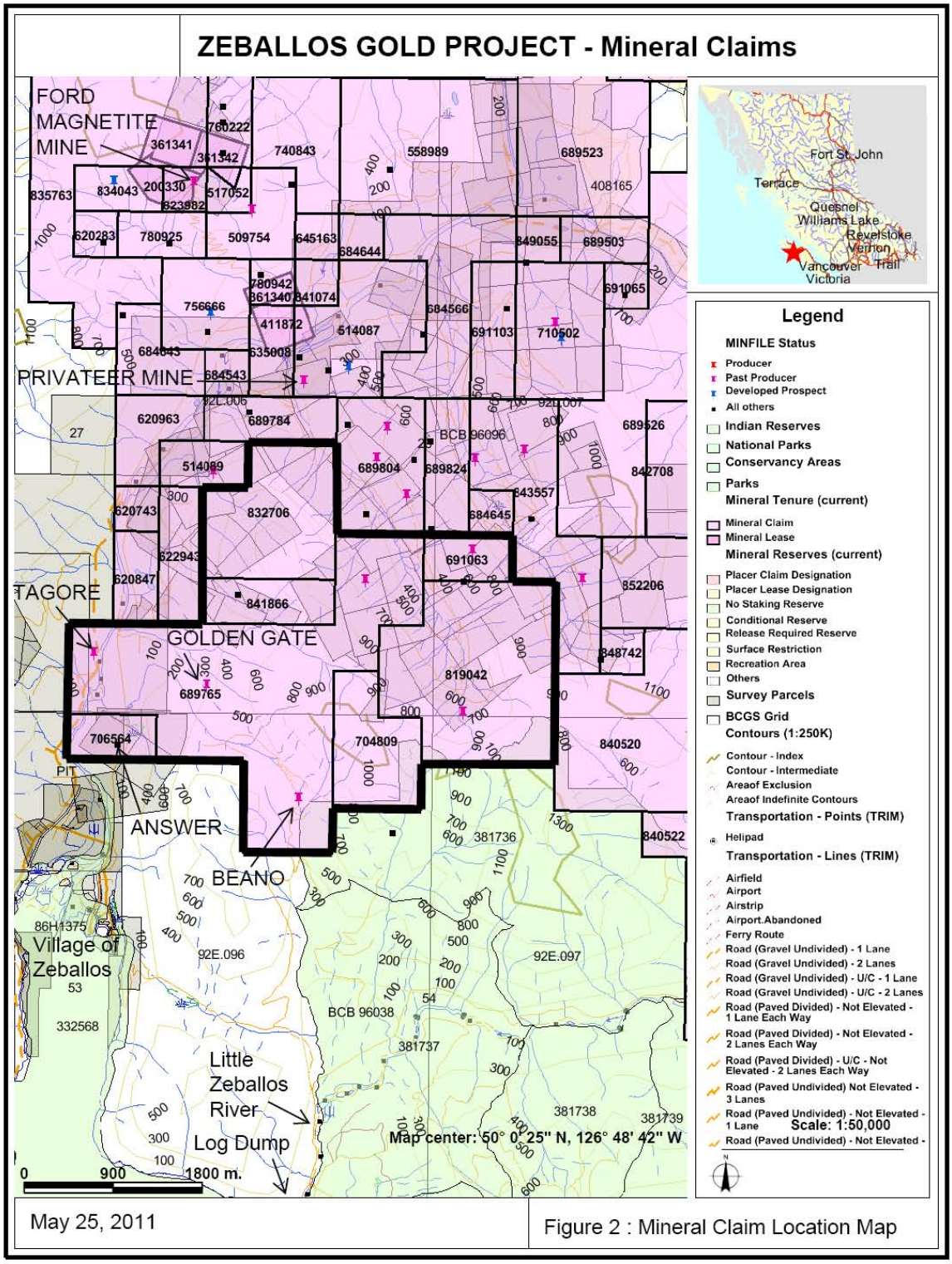

Figure 2 : Mineral Claim Location Map

INTRODUCTION

Purpose of Report

Mr. Perry Leopold, CEO of North Bay Resources Inc., contracted Brian Simmons P.Eng., to examine the company's Zeballos Gold Project and make recommendations for further mineral exploration and development.

The terms of reference used in this report are from the *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* adopted by the *Canadian Institute of Mining and Metallurgy*. This report was also written in accordance with *National Instrument 43-101 – Standards of Disclosure for Minerals Projects*.

Sources of Information

Sources of information noted in the text are *italicized* and listed in the References. The sources of the maps are noted on the Figures.

For a glossary of geological terms, I recommend using a computer online search engine such as "Google". Search on the geological term in question.

Extent of Field Involvement

Brian Simmons P. Eng. spent 3 days on the Zeballos Gold Project mineral claims from May 17th to May 19th, 2011. The objectives were to locate and inspect the Answer prospect, and the Tagore, Golden Gate, and Beano past producing mines.

Answer Prospect

On May 17th, my assistant and I searched for the Answer adits just north of the village of Zeballos (Figure2). We found a total of 4 test pits. Two test pits were found hiking into the site close to the Zeballos River. The first pit had six ¼ inch quartz/calcite veins (dipping 60 degrees east) hosted in a dark green coarse grained andesite. No sulphide mineralization was evident.

Picture 1: Answer Prospect Test Pit 1

We found another two test pits at the top of a very steep narrow canyon (Azimuth 130 degrees). The third pit was 5 feet in diameter and 10 feet deep. The fourth pit was 10 feet in diameter and 15 feet deep. Samples were taken but no mineralization was evident. Neither the upper or the lower Answer adits were found. On the south side of the canyon the rock was predominantly a light colored fine grained volcanic. On the north side of the canyon was a dark green coarse grained andesite. At the bottom of the canyon near the swap we found a concrete box with a metal lid, probably an old powder magazine.

Tagore Past Producer

In the afternoon of May 17th we searched for the Tagore mine shaft on the west side of the Zeballos River (Figure 2). On a rusty outcrop on the west side of the road we found some old metal pipes. Above the road bank we found a small adit with a vein. The vein material was unrecognizable because of the weathering and oxidization. The host rock was a light colored fine grain volcanic. Samples were taken but no mineralization was seen.

Picture 2: Tagore Adit

The Tagore shaft was not found probably because of its close proximity to the Zeballos River.

Golden Gate Past Producer

In the late afternoon of May 17th we found the road/trail to the Golden Gate. The overgrown logging road is located just south of the Zeballos Cemetery (Figure 2). The logging road turns into a flagged trail through a forest of second growth timber. The trail was well flagged until it ran into a helicopter logging cut block. It was getting late and we returned to Zeballos.

Picture 3: Golden Gate Road

On May 18th we returned to the road/trail leading to the Golden Gate. When we reached the helicopter logging cut block we hiked to the south east circumventing the cut block. We hiked through an old growth forest. We found the Golden Gate portal and trenches. The adit portal was still open. No collapsed material was evident. The north and middle trenches were still exposed but the southern trench was sloughed in. I took a sample from the material cast from the northern trench. The sample consisted of mineralized quartz. More mineralization was evident in the andesite wall rock. The northern trench was approximately 1 meter wide and 2 meters deep. The northern trench had an azimuth of 010 degrees, and was dipping 70 degrees east.

Picture 4: Golden Gate North Trench

Picture 5: Golden Gate Portal

Beano Past Producer

On May 19th, we took a Water Taxi to the log dump at the mouth of the Little Zeballos River (Figure 2). We hiked north along the logging road and powerline. When the logging road and the BCHydro power line turn west to Zeballos, we followed the flagged overgrown logging road to the north along Bingo Creek. The road was overgrown with alder trees and huckleberry bushes. Culverts and bridges were removed. The road base was solid, with only one minor washout. We found mineralized (pyrrhotite) boulders in Bingo creek. We hiked to the coordinates for the Beano base camp. The area had been logged about 40 years ago and was a mature forest with heavy moss ground cover. We hiked to the 600 meter elevation and were in snow. No mining workings or camp were found. We ran out of time. We hiked back down the mountain and met the water Taxi at the log dump.

Picture 6: Beano Overgrown Road

Picture 7: Bingo Creek Mineralized Boulder

RELIANCE ON OTHER EXPERTS

The authors of documents quoted in this report are listed in the references section.

PROPERTY DESCRIPTION AND LOCATION

The Zeballos Gold mineral claims are located in the Alberni Mining Division of British Columbia Canada (Figure 1). The seven mineral claims are contiguous (Figure 2) and total an area of 1225.3 hectares (Table 1).

The Zeballos Gold mineral claims were staked using the British Columbia Mineral Titles Online computer Internet system. With the British Columbia mineral claim staking system there can be no internal fractions or open ground. Mineral claim staking fees are $0.40 per hectare. All mineral claims staked in British Columbia require $4.00 per hectare worth of assessment work to be undertaken in year 1 through 3, followed by $8.00 per hectare per year thereafter.

North Bay Resources Inc. owns 100% of the Zeballos Gold mineral claims. Underlying much of the northern portion of the Zeballos Gold mineral claims are older crown granted mineral claims. If the crown granted mineral claims have not reverted, the crown grants retain the mineral rights.

This report focuses on the southern portion of the Zeballos Gold mineral claims that have no underlying crown granted mineral claims. This includes the Tagore, Golden Gate and Beano past gold producers. The crown grants covering the Answer Prospect have reverted.

Logging roads and trails provide access to the Zeballos Gold mineral claims. The main Zeballos road goes the claims. The power line from Tahsis to Zeballos traverses through the southern portion of the mineral claims. The Zeballos area is an active logging area and much of the mineral claims have been logged.

TABLE 1

ZEBALLOS GOLD MINERAL CLAIMS

Tenure Number	Claim Name	Owner	Tenure Type	Map Number	Good To Date	Status	Area (ha)
689765	GOLDEN GATE	204090 (100%)	Mineral	092E	2011/jun/02	GOOD	519.2
691063	GOLDEN GATE 3	204090 (100%)	Mineral	092L	2011/jun/02	GOOD	41.5
704809	GOLDEN GATE 4	204090 (100%)	Mineral	092E	2011/jun/02	GOOD	103.8
706564	GOLDEN GATE 5	204090 (100%)	Mineral	092E	2011/jun/02	GOOD	41.5
819042	GOLDEN GATE 6	204090 (100%)	Mineral	092E	2011/jul/15	GOOD	290.7
832706	GOLDEN GATE 7	204090 (100%)	Mineral	092L	2011/sep/03	GOOD	166.1
841866	GOLDEN GATE 2	204090 (100%)	Mineral	092L	2011/dec/27	GOOD	62.3
					TOTAL (ha)		**1225.3**

The past producing Tagore underground mine is located on the west side of the Zeballos River, about 2 kilometers north of the village of Zeballos (Figure 2).

Production from the Tagore was intermitted with the first high grade ore being shipped in 1929 and production ending in 1939. A total of 17 tons of ore was mined, producing 84 ounces gold, 65 ounces silver, 51 pounds copper and 44 pounds lead (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 006, Production Detail Report)

The Tagore underground workings consist of one shaft 140 feet deep, with two levels, totaling 235 feet of drifting and crosscutting. Production came from one vein, 0 to 15 inches wide and traced for 50 feet on strike. The strike of the vein is North 45 degrees East, with a vertical dip. Vein matter consists of quartz, calcite, and variable pyrrhotite, sphalerite, chalcopyrite, galena, pyrite and free gold (Hoatley, J.W., 1953, *Geology and Mineral Deposits of the Zeballos-Nimpkish Area, British Columbia,* Geological Survey of Canada, Memoir 272).

The Answer prospect is located on the east side of the Zeballos River, about 1 ½ kilometers north of the village of Zeballos (Figure 2).

The Answer workings consist of two adits totaling 200 feet in length. No production came from one vein, 0 to 2 inches wide. The strike of the vein is North 57 degrees East, with a dip of 70 – 80 degrees Northeast. Vein matter is Quartz calcite and pyrite. Assay values of 0.30 and 1.20 oz gold per ton were reported (Hoatley, J.W., 1953, Geology and Mineral Deposits of the Zeballos-Nimpkish Area, British Columbia, Geological Survey of Canada, Memoir 272).

The past producing Golden Gate mine is located 600 meters east of the Zeballos River, and about 2 kilometers north of the village of Zeballos (Figure 2).

In 1940 a total of 24 tons of ore was mined at the Golden Gate. This produced a total of 12 ounces gold, 5 ounces silver, 97 pounds copper and 86 pounds lead (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 005, Production Detail Report)

The Golden Gate underground workings consist of 290 feet of adit and drift. Production came from one vein, 1 to 8 inches wide and traced for 300 feet. The strike of the vein is North 10 - 20 degrees West, with a dip of 70 degrees Northeast. Vein matter consists of quartz, pyrrhotite, pyrite, and chalcopyrite (Hoatley, J.W., 1953, *Geology and Mineral Deposits of the Zeballos-Nimpkish Area, British Columbia,* Geological Survey of Canada, Memoir 272).

Beano, a past producing open pit and underground mine, is located approximately 2.5 kilometers northeast of Zeballos (Figure 2).

In 1948 and 1949 a total of 23 tons of ore was mined at the Beano workings. This produced a total of 106 ounces gold, 45 ounces silver, and 93 pounds copper (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 002, Production Detail Report)

Three styles of mineralization are recognized: 1) zones of quartz-calcite-pyrrhotite stringers 2) disseminated pyrrhotite 3) lenses of massive pyrrhotite measuring to 0.3 by 1.2 metres, as en echelon replacement of limestone along fractures. There are two sets of workings. The lower one, in the Bingo/Beano Creek Canyon, at an elevation of 710 metres, has 2 short adits, ranging from 2.0 to 2.5 metres in length and 2 small open cuts, exposing an area of 25 metres. The upper showing, above the creek canyon wall at elevation 800 metres, was explored by 4 open cuts.
Samples of massive pyrrhotite in the area have assayed up to 321.7 grams per tonne gold and 6.8 grams per tonne silver over narrow widths (Bulletin 27 p.138). (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 002, Capsule Geology).
There are no known environmental liabilities.

No permits have been applied for or acquired for the proposed work.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Topography, elevation and vegetation

The Zeballos Gold Project lies within the Vancouver Island Range of mountains. Elevations range from sea level to 1200 meters (Figure 2).
Rocky bluffs and incised canyons are common. Vertical cliffs occur at higher elevations.
The vegetation consists of forests of fir, hemlock and cedar trees. Most of the mineral claims have been logged and replanted. Just north of the Golden Gate mine the area was helicopter logged last year. The Beano area was logged about 40 years ago. The Answer and Tagore area is a mature forest. The undergrowth is very heavy consisting of moss, devils club and ferns.

Access to the Property

Traveling north on Highway 19 from the city of Campbell River, it is 140 kilometers to the Zeballos road intersection (Figure 1). A good all season 40 kilometer gravel road connects the village of Zeballos with Highway 19.

The Answer prospect is located just west of the main Zeballos road 1 ½ km north of the village of Zeballos.

The Tagore workings are located immediately to the west of the main Zeballos logging haul road 2 km north of Zeballos.

Access to the Golden Gate mine begins on an overgrown logging road. The logging road begins at the Zeballos grave yard locate 2 km north of Zeballos. The logging road turns into a flagged trail through a forest of second growth. The flagged trail ends in a helicopter logging clear-cut. Access to the Golden Gate

adit and trenches is made by traversing to the southeast of the clear-cut in a mature forest.

Access to the past producing Beano workings is made by taking a water taxi to the old log dump at the mouth of the Little Zeballos River. Hike up the old logging road north along the Little Zeballos River. When the logging road and the BCHydro power line turn west to Zeballos, take the flagged overgrown logging road to the north. The logging road then switchbacks up the mountain following Bingo creek to the camp and workings.

Proximity to Population Centre

The Zeballos Gold Project is about 2 kilometers from the village of Zeballos (Figure 2). Zeballos has 200 year-round residences. The village has an ambulance, medical station, gas station, grocery store, restaurants and accommodations.
By vehicle, the city of Campbell River is about 3 hours away from the Zeballos Gold Project. Campbell River has a population of about 50,000 people.

Climate

The project area is in a west coast rain forest. Average precipitation is over 5 meters. Most of the precipitation occurs from October to May with heavy snow at higher elevations.

Surface Areas

There is an ample supply of water from the creeks for drilling purposes.

HISTORY

Tagore Past Producer

The following is the history of the Tagore Past Producer as described in 1950 by John S. Stevenson *(Stevenson, J.S., 1950, Geology and Mineral Deposits of the Zeballos Mining Camp, British Columbia, Bull. # 27, British Columbia Dept. of Mines).*

One of the old properties in the district, the Tagore was first staked in1924, restaked several times, the last being in 1945 when it was restaked as the Nayda Nos. 1 and 2 by D. T. Lutes and was owned by Tagore Mines, Limited. In September, 1946, the property was under option to Conquest Mines, Limited, 510 Dawson Building, Vancouver.

The vein on this property was discovered in 1924, and it and surrounding ground were intensively prospected in 1925, 1929, and 1932 to 1933, after which no further work was done on the property until 1938 when Tagore Mines, Limited, was incorporated. This company commenced a new shaft about 15 feet southwesterly from an old shaft, but work was suspended in 1940. The company sank the shaft 133 feet and erected the headframe on a concrete collar that extended 18 feet above bedrock to avoid the high waters of the Zeballos River during floods. At 87 feet below the top of the collar, a working was driven southwesterly from the shaft for 70 feet from which point two flat diamond-drill holes are reported to have been drilled, one hole about 38 feet in a northwestern direction, and another about 30 feet in a southeastern direction. This level also extends northeasterly from the shaft for 15 feet to a reference point "A,"whence it goes westerly 20 feet and from the same reference point "A" it goes easterly 30 feet. At a depth of 140 feet a second level, the 140 level, was driven

northeasterly from the shaft for 60 feet, northwesterly from the shaft for 30 feet, and then north-easterly for 10 feet. After 1940 water filled these workings and was not pumped out until February, 1947, when 55 feet of crosscutting and 80 feet of drifting were done on the 140 level. The writer has not examined this recent work.

The history of the property prior to 1932 and the workings at that time have been described in detail by H. C. Gunning (1932, pp. 37, 38), who examined the property when much of the early work was being done. These workings were badly sloughed and overgrown with bush when the writer visited the property in 1945 and therefore Gunning's description (1932, pp. 37, 38) of the older workings has been incorporated in this report:-

The Tagore group of claims straddles Zeballos Rives about 1 ½ miles above its mouth. The vein is on the west bank of the river and was discovered in 1924 by J. West and A. Ostman. Known as the Eldorado at that time, it was systematically prospected and abandoned by an English syndicate in 1925. In 1929 it was optioned as the Tagore, by A. B. Trites, from Messrs. Malmberg and Nordstrom, of Quatsino. About 2 tons of ore, unofficially reported to have assayed about 20 ounces in gold to the ton, was shipped, but apparently results were not satisfactory for the property lay idle until 1932 when Malmberg, Nordstrom, and four associates commenced mining on a small scale, under an agreement with A. B. Trites. By September a shipment of 4,500 pounds had been made and the smelter returns indicated an assay value of 2.63 ounces of gold and 2.52 ounces of silver a ton; a gross value at that time of $50.50 a ton. The property is on the main Zeballos River trail and accommodation consists of two small cabins and a blacksmith shed.

The vein consists of quartz or quartz and calcite with a small to very large proportion of pyrrhotite, zinc blende, chalcopyrite, galena, pyrite, and native gold. Pyrrhotite and zinc blende are most abundant, and pyrite and galena are very

minor constituents. Native gold was seen only during microscopic examination of polished surfaces of the ores and then as small, scattered grains in sulphide or gangue. A very small amount of an unidentified grey mineral was also noted. The quartz is white and finely crystalline to coarse and vuggy. It is much more abundant than calcite which is quite locally, but in some places abundantly, developed. The vein has been followed for a total distance of about 50 feet and varies from a barren, tight fissure to an exceptional maximum width of about 15 inches. It trends northeast, along a well-defined fissure, and the dip is vertical. The rocks in the vicinity are Triassic flows, tuffs, limestone, and other sediments of the Bonanza group cut by a multitude of dykes and irregular bodies which vary from a very dark quartz gabbro containing abundant magnetite to light-grey and white micropegmatite. These Coast Range intrusives are very abundant for about one mile south of the property, but do not continue far to the north. The Triassic rocks are much contorted and somewhat faulted and generally have very steep dips.

The vein fissure cuts fine-grained, green, banded tuffs and crystalline limestone which strike 10 degrees north of east and dip very steeply north. Towards the north-east end of the vein these rocks are cut by a northerly trending diorite dyke, about 7 feet wide, which, on the west side, is partly replaced by white to light-grey quartz-augite-albitite. Within the limits of this dyke there is practically no ore in the fissure. The whole productive part of the vein is in the dense, brittle tuffs which have been extensively altered, in large part before the vein was formed, to garnet, epidote, and chlorite. Immediately north-east of the dyke the vein has been developed by a shaft to a depth of 15 feet. Just north of the dyke the vein was found to split into two parts, one continued north-east but died out within 8 feet, the other turned to 10 degrees north of east, approximately along the bedding, and had been followed for 14 feet at the time of examination. The vein pinched and swelled along this part, sometimes forming a narrow network of small veins in the volcanics, but, at the junction of the two parts, widths up to about 15 inches of good ore were encountered for a few feet. The vein continued

15 feet south-west of the dyke, in an open-cut, and then encountered altered crystalline limestone in which the ore soon ceased although the fissure continued. The limestone member is probably about 6 feet thick and dips steeply north; it was extensively altered to a mixture of garnet, diopside, quartz, calcite, and zinc blende, with some albite and apatite, before the vein was introduced, and, in heavily weathered portions, exhibits casts of fossils. No search has been made for the vein immediately south of the limestone, this part of the surface being drift covered, but the writer understands that some ore was encountered in the limestone immediately beneath a narrow lamprophyre dyke that strikes 13 degrees north of east and dips 36 degrees south, above the south end of the vein. Unfortunately the collar of the shaft is at the edge of the high water-level of Zeballos River, so that further development to the east would have to be well underground in order to avoid excessive inflow of water.

For several hundred feet to the south-east of this vein the ground was prospected by pits and open-cuts in 1925. Some low-grade, contact metamorphic mineralization, including considerable zinc blende, was found in the same types of rocks that are exposed near the vein, but no similar vein was encountered.

Examination of the ores under the microscope showed that the gold varied considerably in colour, probably because of a variable amount of silver alloyed with it, and that the tiny grains occur either in quartz, or in galena, or in sphalerite, or along the boundaries between different sulphides. It is definitely later than zinc blende, which it sometimes veins, and in all probability was one of tine last minerals introduced, No gold was observed in the pure pyrrhotite which forms a considerable part of the ore. Some surfaces suggest, but do not definitely prove, that the precious metal formed at about the same time as chalcopyrite.

It is noteworthy that the vein cuts and is definitely later than the contact metamorphic zinc mineralization in the adjoining rocks.

A working at an elevation of 160 feet about 1,000 feet upstream and 150 feet north of Tagore Creek at the base of a rocky knoll 30 feet high is not described by Gunning. The working consists of an open-cut 13 feet wide driven north 42 degrees east for 32 feet and an adit of the same width driven 10 feet from the end of the open-cut.

The rock is massive, green tuff and contains a limestone lens 3 feet long by 1 foot wide, which trends north 60 degrees west. A northwesterly trending granodiorite dyke 1 foot wide is exposed in the bluff above the adit. The tuff in the face of the adit has been brecciated by many small dykes of granodiorite.

A strong shear 1 foot wide, strike north 70 degrees west and dip 65 degrees northeastward, has been intersected by the adit 2 feet from the face, but it did not contain any mineralization.

The recorded production from the Tagore property includes 2 tons of ore shipped in 1929 (Gunning, 1932, p. 37), and reported to assay 20 ounces in gold to the ton, and includes other shipments in 1930, 1932, and 1939, which amounted to 16 tons of mined ore, and which contained in net amounts: Gold, 38 ounces; silver, 63 ounces; copper, 38 pounds; lead, 45 pounds.

Answer Prospect

The following is the history of the Answer Prospect as described in 1950 by John S. Stevenson *(Stevenson, J.S., 1950, Geology and Mineral Deposits of the Zeballos Mining Camp, British Columbia, Bull. # 27, British Columbia Dept. of Mines).*

This group of claims, about 1 mile up the main road from Zeballos townsite, includes the Answer Nos. 1 to 6 mineral claims staked in 1937, brought to Crown grant in 1939, and owned by Zeballos Answer Gold Mines, Limited, c/o Whittaker & McIlree, 603-610 Central Building, Victoria.

H. A. Heywood and associates drove the two adits on the property. The lower adit was extended 30 feet in 1939 by Zeballos Answer Gold Mines, Limited, incorporated that year to acquire the property. Since then no further work has been done on the property. No production has been recorded from the property.

The showing consists of a vein, strike northeasterly and dip vertical, and has been explored by two adits (Fig 4), which are about 400 feet northwesterly from a point on the main road 1.1 miles from Zeballos Post Office.

The rock in the adits is massive, dark-green tuff that is cut in places by dykes and irregular masses of fine diorite.

The vein, strike north 57 degrees east and dip 70 to 80 degrees northwestward, ranges in width from 0 to 2 inches but usually is about 1 inch and follows a shear zone 2 to 8 inches wide. The vein matter consists of quartz, calcite, and smaller amounts of pyrite.

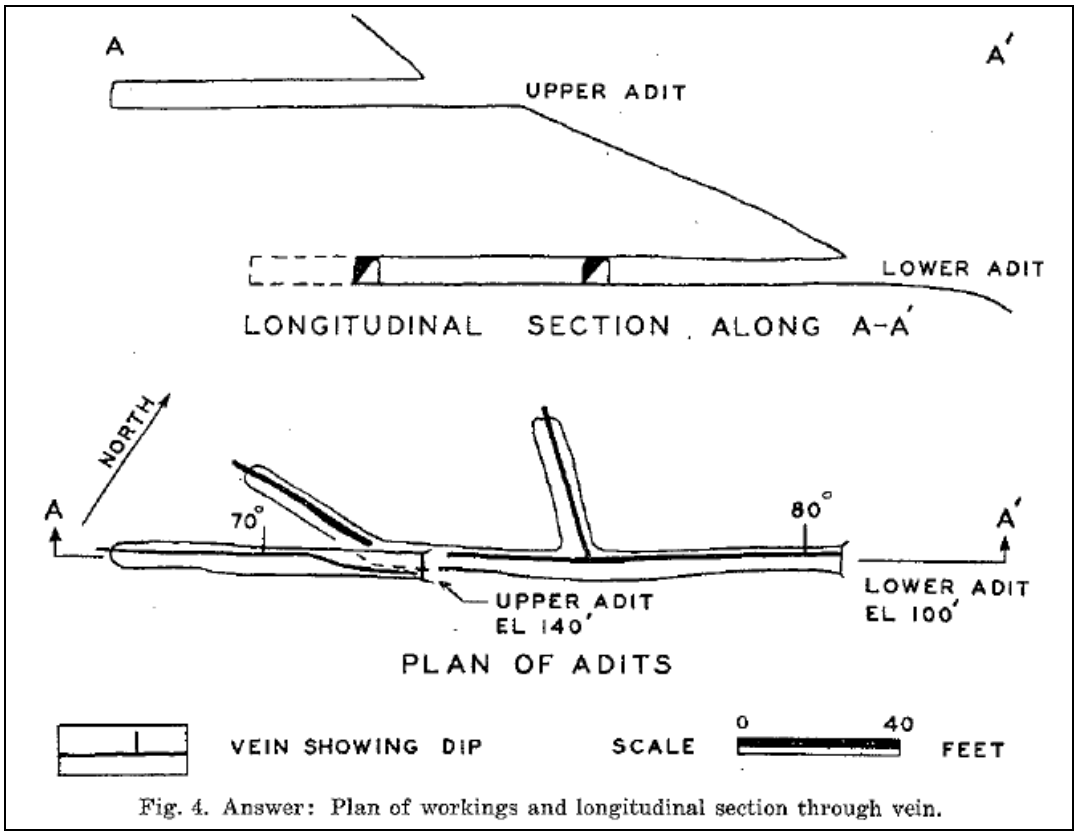

Fig. 4. Answer: Plan of workings and longitudinal section through vein.

Two adits, shown in plan and longitudinal section in Figure 4, have been driven on the vein. In the lower adit, a vertical branch fissure, strike north 35 degrees west and 62 feet from the portal, has been followed for 37 feet, in which distance it contains a few blebs of quartz. At 120 feet from the portal the adit leaves the original fissure to follow another branch fissure, 3 inches wide, strike east and dip vertical to 70 degrees northward. The quartz vein matter is fairly persistent along this branch fissure, but no vein matter is seen in the fissure at the face. It is reported that high assays in gold have been obtained along this branch vein.

In the upper adit the shear is along the southeast wall for 15 feet from the portal, then crosses the adit diagonally, and is on the northwest wall to the face. Quartz and calcite, 0 to 2 inches wide, follow the shear from the portal to the face but are absent at the face.

The vein is reported to have been traced southwesterly from the adit, but it cannot be traced northeasterly because of swamp and valley fill.

In 1938 Maconachie (Stevenson and Maconachie, 1938, p. 42) obtained the following assays from samples taken in the upper adit when it was in 13.5 feet:-

At portal plus 7 feet, across 3 inches of quartz with slight pyrite, in the face (April 10th, 1938): Gold, 1.20 oz. per ton; silver, 0.5 oz. per ton.

From portal plus 7.2 feet to portal plus 10.8 feet, over full width of fracture filling, ranging from 1 inch to 2 inches, and consisting of gougy, rusty calcite, a little quartz, one or two small patches of fine-grained, dark sulphides, and a slight amount of coarser sulphides, mainly pyrite (April 18th, 1938): Gold, 1.04 oz. per ton; silver, 0.6 oz. per ton.

From portal plus 10.8 feet to face at portal plus 13.5 feet, over full width of fracture filling, ranging from 1 inch to 2 inches and mineralized as the preceding sample: Gold, 0.3 oz. per ton; silver, 0.3 oz. per ton.

At portal plus 13.5 feet, over 2 ½ inches of calcite, a little quartz and slight visible pyrite, in the face (April 18th, 1938): Gold, 0.04 oz. per ton: silver, trace.

At portal plus 13.5 feet, over 18 inches on the footwall of the preceding sample, mostly barren greenstone with some calcite veinlets: Gold, nil; silver, nil.

Golden Gate Past Producer

The following is the history of the Golden Gate mine as described in 1950 by John S. Stevenson *(Stevenson, J.S., 1950, Geology and Mineral Deposits of the Zeballos Mining Camp, British Columbia, Bull. # 27, British Columbia Dept. of Mines).*

This group includes the Golden Portal Nos. 1 and 2 mineral claims staked in 1945 by Olaf Torjusson and Seth Witten, and the Golden Gate and Golden Gate No. 2 claims staked in 1936 by D. T. Lutes and C. W. Smith; all are owned by Golden Portal Mines, Limited. This property covers, in part, ground formerly covered by the Golden Gate group of claims originally staked in 1936 and 1937.

As the claims have not been surveyed, the position of the workings, but not the outlines of claims, has been shown. The claims are west of the Prosperity claims and extend northerly from Golden Gate Creek to Hidden Valley Creek and from 500 to 5,000 feet easterly from the Zeballos River.

The first work, which consisted mainly of the open-cuts (Fig. 5) above the present adit, was done by the Golden Gate Zeballos Mines, Limited, a private company, in 1936 and 1937. The adit'(Fig. 5) was started in 1938. From 1939 to 1945 little work was done on the property, but early in 1946 Golden Portal Mines, Limited, was organized, and this company continued the drift southerly to its present face, stopping work late in the same year.

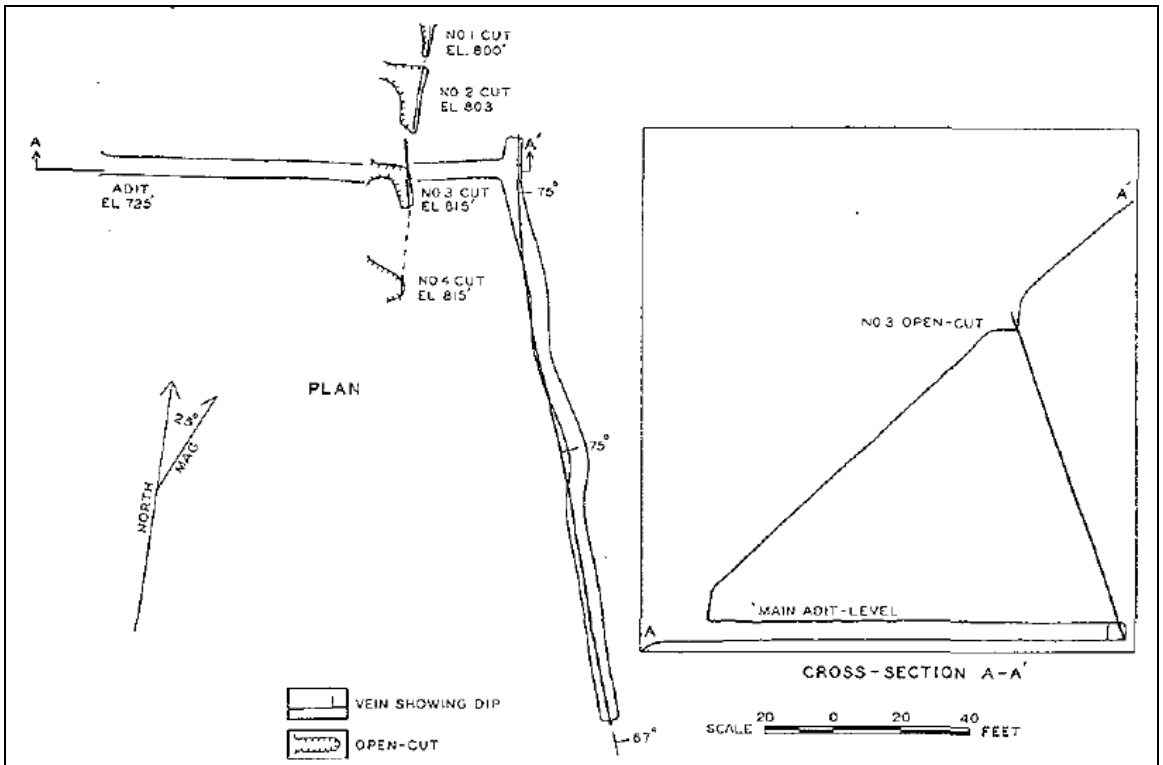

Fig. 5. Golden Portal (formerly Golden Gate): Plan and elevation of workings.

Recorded production amounts to 24 tons of ore shipped in 1940, which contained 12 ounces of gold and 5 ounces of silver, net. It is reported that a shipment was made in 1939 that consisted of 5 tons averaging $54 per ton.

The rock in the property is dark-green, massive andesite cut by many small dykes of fine-grained gabbro. Underground and in the open-cuts gabbro predominates.

The main showing on the property is a quartz vein that has been explored on the surface by open-cuts and underground by a drift 173 feet long. These workings are shown in plan and cross-section in Figure 5. Small pits, now sloughed, are reported to have traced the vein for an additional 300 feet southerly beyond the surface workings shown in Figure 5. Two pits, 750 feet upstream from the adit on the east side and 50 feet above the creek, have been sunk on a shear zone 1

foot wide, which is on the projected strike of the vein. The shear, which may be the same shear as in the adit, contains considerable rusty material and up to 3 inches of quartz.

In the drift and in the open-cuts above, the vein, strike north 10 to 20 degrees west and dip 71 degrees northeastward, is lenticular and ranges in width from 1 to 8 inches but never entirely dies out. It follows a well-defined shear zone usually only a few inches wider than the vein. The quartz contains pyrrhotite with small amounts of pyrite and chalcopyrite. The sulphides usually are in small amounts, but in some places they comprise 75 percent of the vein matter. Assays of vein matter on samples taken by the Department have ranged from a trace to 1.30 ounces of gold per ton.

Sibola Mines Limited

In 1983 Sibola Mines Limited of Vancouver B.C. conducted a sampling and drilling program on the Golden Portal (Hainsworth, W.G., 1983, *Drilling Report on the Sibola Mines Ltd., Golden Star Claim*, Geological Branch Assessment Report 12,863)

In May 1983 W.G. Hainsworth P.Eng., took three trench samples and three samples from the Golden Portal underground drift. The three trench samples ranged in values from 0.068 to 1.625 ounces gold per ton. The three underground samples varied from 0.001 to 0.012 ounces gold per ton.

Four BQ diamond drill holes from two drill sites tested the Golden Portal shear above and below the underground drift. Gold assay values ranged from 0.001 to 0.020 oz/ton.

A small (EXT size) drill was also used to drill along the vein structure to test the gold values down the dip of the vein. The first four holes were drilled within the

southern trench, on varying dip angles, with very poor recovery, for an aggregate depth of 37 feet. No assay values were reported. A fifth hole was drilled on the north extension of the trenches some 425 feet to the northeast of the adit portal. *Diamond drill hole #5 encountered a 9.8 meter intercept of 9.6 grams per tonne gold and a 1.5 meter section assaying 135.7grams per tonne gold and 44.2 grams per tonne silver (George Cross Newsletter #191, #192, 1983; Northern Miner Oct. 6, 1983).*

Beano Past Producer

The following is the history of the Beano property as described in 1950 by John S. Stevenson *(Stevenson, J.S., 1950, Geology and Mineral Deposits of the Zeballos Mining Camp, British Columbia, Bull. # 27, British Columbia Dept. of Mines).*

The Beano group, at the south edge of the map sheet, is reported to include the Beano No. 1 (L. 509), Freake Nos. 1 and 2 (Lots 521 and 522);Wedge (L. 512), and Wedge Fraction (L. 511) Mineral Claims, staked in 1944 by V. D. Davies and held by record by Mr. Davies.

No production has been reported from the property.

The showings are on Bingo (Beano) Creek. A tractor-road runs from the beach at the mouth of the Little Zeballos River to ore-bunkers 3 miles distant at an elevation of 1,225 feet; from the bunkers about 1,000 feet of good trail leads to the camp, elevation 1,470 feet. The property may also be reached by a steep foot-trail, 1 ¼ miles long, that leads over a hump, elevation 460 feet, east of Zeballos town and joins the tractor-road about 1 ¼ miles below the camp. The main workings, elevation 2,610 feet, are reached from the camp by a very steep foot-trail, about 2,000 feet long. At the time of the writer's visit in 1946 an aerial tram-line, about 3,000 feet long, was being built to connect the ore-bunkers with the main workings.

The ground was first staked in 1936 and 1937 by Alex Stewart and A. Trout. In 1938 A. Trout and H. Davis, of Vancouver, held an option on the property and that same year turned the option over to A. Freake and associates, of Toronto, who in 1938 and 1939 did the first extensive work on the property. They built the

trail over the hump from Zeballos, built shake cabins on the property, and did a small amount of surface stripping on both the upper showings and the canyon showings. In 1939 Freake and his associates are reported to have relinquished the property to the Victory Mining Syndicate, of Seattle. This syndicate organized Victory Mining Company, Limited, and in 1943 and 1945 the company built 4 miles of tractor-road from the beach at the mouth of the Little Zeballos, erected ore-bunkers a the end of the road, and in the winter of 1945-46 built 3,000 feet of aerial tram-line from the ore-bunkers to the upper workings. It is understood that a small amount of work was done during 1947 and 1948 by Mr. Davies.

The showings developed by workings are in the canyon of Bingo Creek (Fig. 40) and on the rim immediately above the canyon (Fig. 41). They consist of a zone of quartz-calcite-pyrrhotite stringers in actinolite rock and of grains and masses of pyrrhotite without the quartz and calcite, also in actinolite rock. The pyrrhotite usually contains a small amount of chalcopyrite, The actinolite rock is dark green and massive and consists of felted actinolite crystals with disseminated pyrrhotite grains between them. Some of the actinolite rock is relatively fine grained with crystals one-sixteenth of an inch long and some of it is coarse grained with crystals up to 2 inches long. A sample of fine-grained actinolite and one of coarse-grained assayed: Gold, 0.01 ounce per ton; silver, nil.

The actinolite rock represents the alteration of limestone that lies between two beds of andesitic tuff. In some places all the limestone has been replaced, and in others a considerable amount still remains in the footwall of the actinolite rock. The limestone appears to have been about 30 feet thick.

The strike of the rocks is northerly and the dip steeply eastward.

The workings in the canyon (Fig. 40) consist of two short adits and two open-cuts that have been driven in the west wall of the canyon across a zone of quartz-calcite-pyrrhotite stringers and lenses up to 3 feet thick that follow the formation.

The southern adit, about 30 feet above the creek bed, has been driven westerly for 8 feet. Most of the adit is in actinolite rock, but, about 4 feet from the portal, lime-

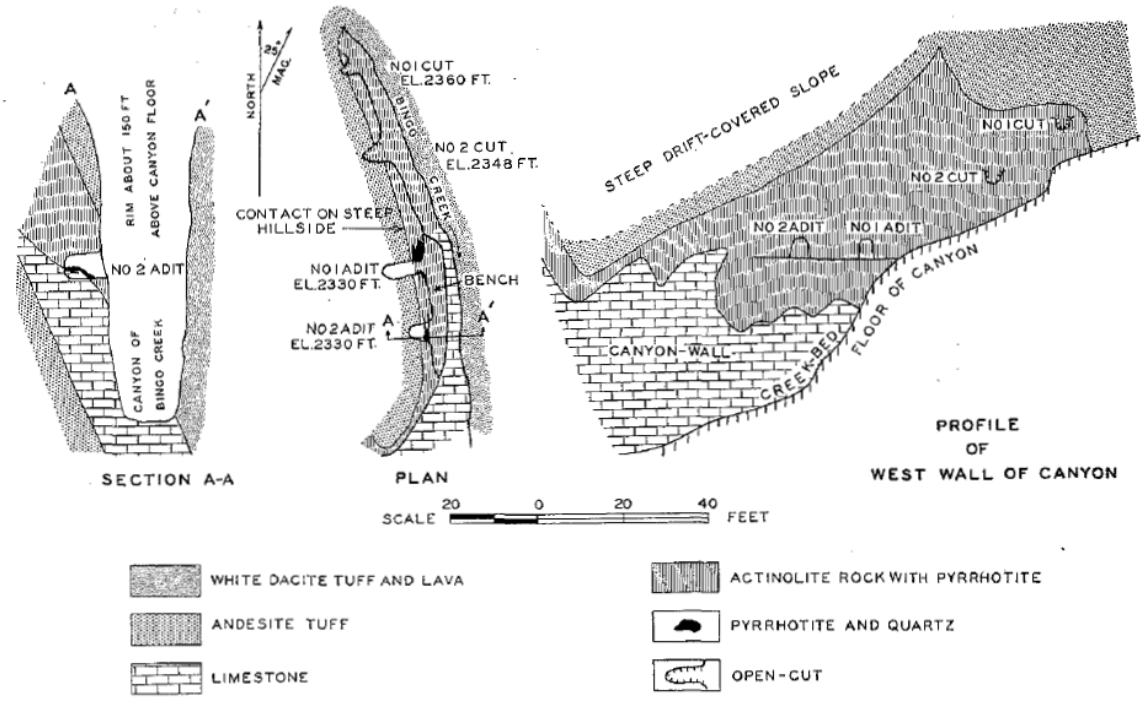

Fig. 40. Beano: Plan, cross-section, and profile of lower or canyon workings.

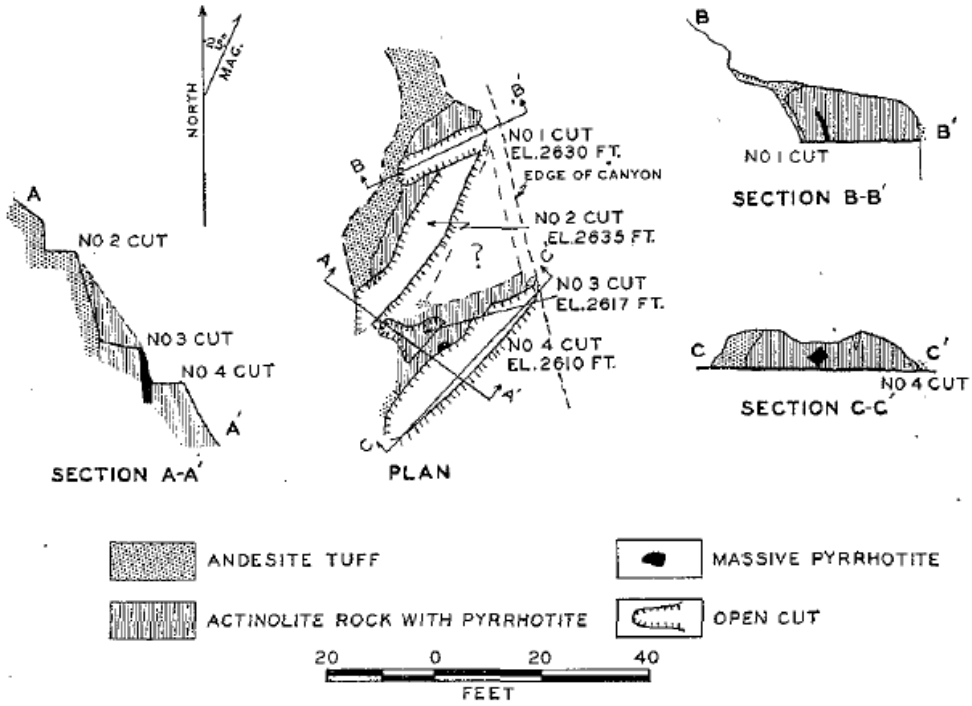

Fig. 41. Beano: Plan and sections of upper workings.

stone is found in the floor and rises half-way up the walls as the face is approached. Small masses of pyrrhotite, about a foot thick by 4 feet long, are found between the limestone and the actinolite rock. A sample, taken across 1 foot of massive pyrrhotite, assayed: Gold, 0.18 ounce per ton; silver, nil.

The northern adit, 6 feet above the creek bed, has been driven 7 feet through actinolite rock and then 4 feet through andesite. On the north wall of the adit at the portal a lens of pyrrhotite, quartz, and calcite 3 feet wide is found in the actinolite rock. This material extends along the canyon wall northerly for 6 feet, and stringers of pyrrhotite, quartz, and calcite a few inches wide extend southerly across the adit and along the canyon wall to the north wall of the southern adit.

The open-cuts are entirely in actinolite rock and do not crosscut any of the mineralized material that was found in the two adits. The mineralization appears to have petered out northerly from the adits.

The upper workings (Fig. 41), on the rim of the canyon above the lower showings, consist of open-cuts in a body of actinolite rock that contains disseminated pyrrhotite and some bodies of massive pyrrhotite. The mass of actinolite rock is lenticular and in the workings ranges in thickness from 20 to 30 feet. It appears to trend northerly and to dip steeply eastward. It lies between beds of andesite tuff and, as inferred from its occurrence in the canyon below, appears to be a replacement of limestone.

No. 1 cut has been driven across the actinolite rock and cuts a streak of pyrrhotite about 6 inches thick by 3 feet long.

No. 2, a combined stripping and cut 4 feet above the floor of No. 1 cut, extends along the face of the outcrop diagonally across the actinolite rock, which contains a moderate amount of disseminated pyrrhotite hut no massive lenses of the sulphide. A sample of actinolite containing pyrrhotite, taken by Maconachie

(1938, p. F 42) across the west end of this cut, assayed: Gold 2.76 ounces per ton; silver, trace; nickel, nil; platinum, nil.

No. 3 cut is in similar material.

No. 4 cut is in actinolite rock with disseminated pyrrhotite and exposes a lens of massive pyrrhotite 2 feet thick by 4 feet high. A sample taken across the massive pyrrhotite of this lens assayed: Gold, 6.06 ounces per ton; silver, 3.04 ounces per ton. A sample of similar material taken from the dump assayed: Gold, 3.04 ounces per ton; silver, nil.

Four samples taken by Maconachie (1938, p. F 42) across the face of No. 4 cut assayed as follows:-

No. 1.-At 3 feet from west end of the bench, across 50 inches . . . little visible mineral: Gold, 0.80 oz. per ton; silver, nil; nickel, nil; platinum, nil.

No. 2.-At 9 feet from west end of bench, across 28 inches . . . containing one section of abundant pyrrhotite: Gold, 1.60 oz. per ton; silver, 0.2 oz. per ton; nickel, nil; platinum, nil.

No. 3.-At 15 feet from west end of bench, across 10 inches . . . including 5 inches of almost solid pyrrhotite: Gold, 3.50 oz. per ton; silver, 0.1 oz. per ton; nickel, nil; platinum, nil.

No. 4.-A sample of massive pyrrhotite assayed: Gold, 9.38 oz. per ton; silver, 0.2 oz. per ton.

In 1948 and 1949 a total of 23 tons of ore was mined at the Beano workings. This produced a total of 106 ounces gold, 45 ounces silver, and 93 pounds copper *(Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 002, Production Detail Report)*

Canadian Superior Exploration Ltd.

In 1973 Tomas I. Sharps P.Eng. undertook a limited geochemical survey of the Zeb group of mineral claims for Canadian Superior Exploration Limited (Sharps, T.I., 1973, *Geochemical Report on the Zeb Group*, Canadian Superior Exploration Limited, Assessment Report 4819).

Soil samples were taken at 100 foot intervals along two claim lines (Figure 3). The geochemical survey was taken at the headwaters of the Golden Gate and Hidden Valley Creeks. The purpose of the geochemical survey was to determine if the auriferous limestone from the Banko claims (Beano showings) extended westward onto the Zeb claims (Golden Gate). Two areas sampled along the north-south claim line were found to be anomalous with results as high as 600 pbb gold.

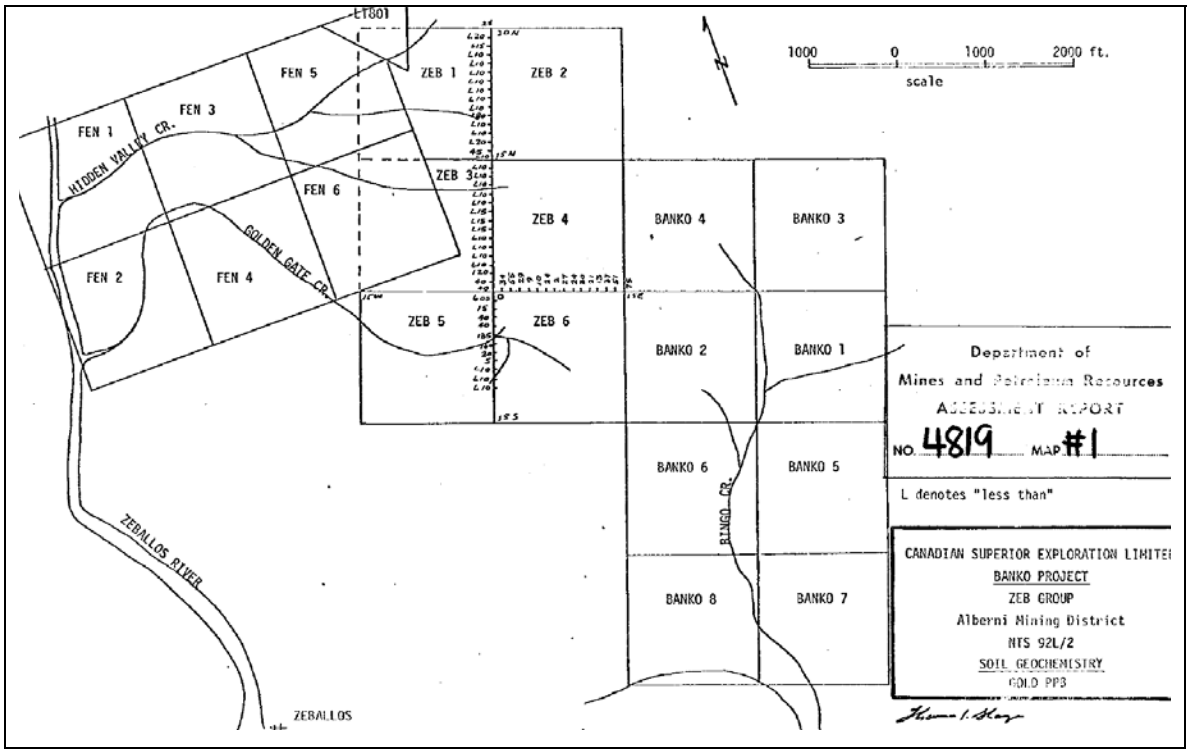

Figure 3: Canadian Superior Exploration Ltd. Soil Geochemistry

In 1974 Manex Mining Ltd. was commissioned to do geological mapping and soil sampling of the Banko Project for Canadian Superior Exploration Ltd. (Price, B.J., 1974, *Geological and Geochemical Report Banko and Zeb Claims,* Canadian Superior Exploration Ltd., Assessment Report 5079).

The Beano showing area (Figure 4) was found to contain soils that contained anomalous values of gold (50 – 8400 ppb), moderately anomalous amounts of copper (30 – 191 ppm) and small amounts of mercury (50 – 160 ppb).

Another area about 3000 feet to the west of the Beano showings (Figure 4) was found to have anomalous gold, copper and mercury values. This anomalous area is centered in a depression at the headwaters of the Golden Gate and Hidden Valley Creeks. The anomalous area is approximately 600 by 1200 feet with values of gold (40 – 1690 ppb), copper (30 – 58 ppm) and mercury (250 – 600 ppb).

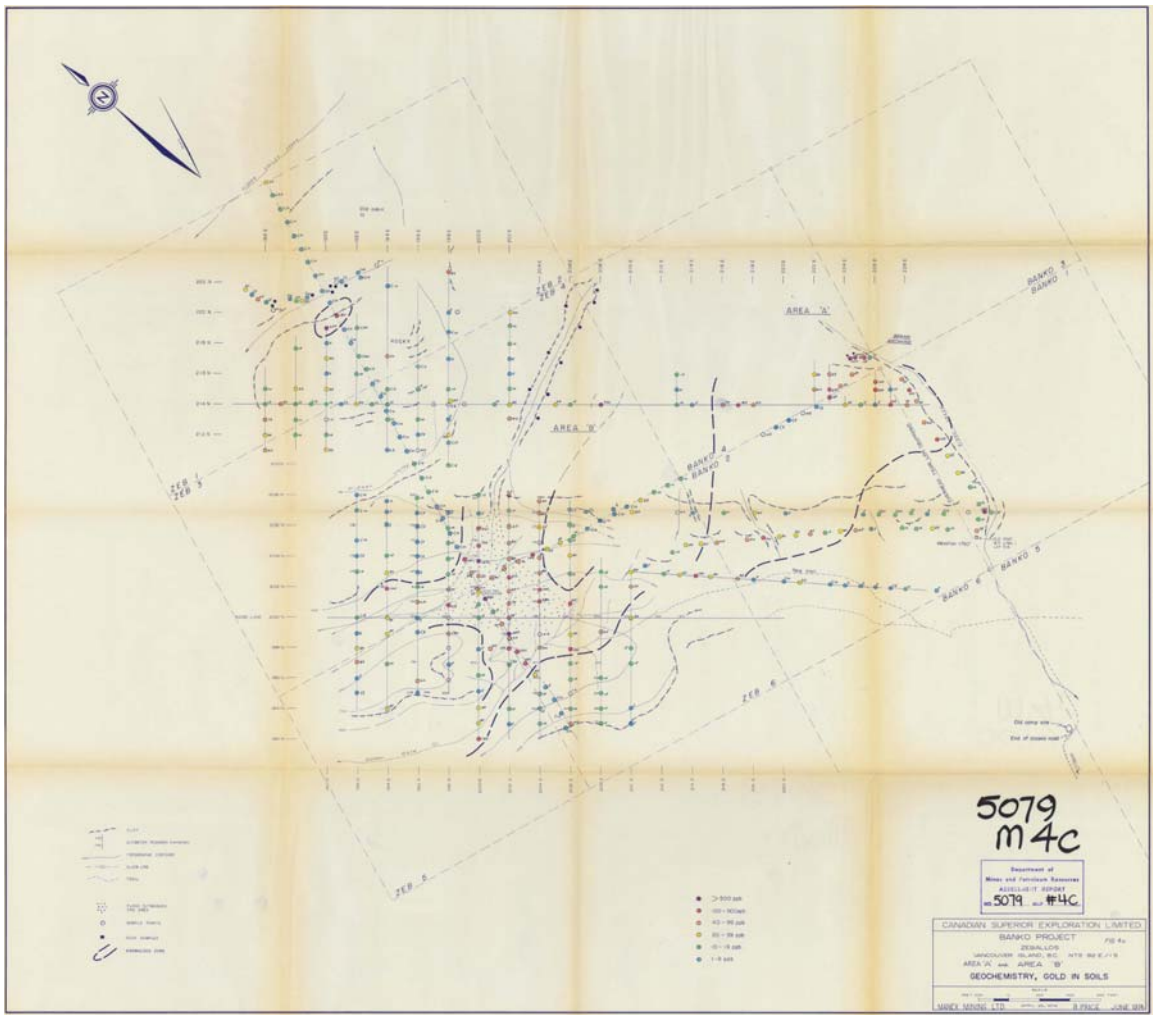

Figure 4: Canadian Superior Exploration Ltd. Gold in Soils

Billikin Resources Inc.

In 1983 Billikin Resources Inc. of Vancouver B.C. drilled 6 short holes in the area of the Beano main workings (Groves, W.D., 1984, *Assessment Report on Diamond Drilling on the following Claims, Beano Group (Beano plus Beano 2-5 Inclusive)*, Billikin Resources Inc., Assessment Report 12,573).

The diamond drill holes were located at the 2600 foot elevation on the west rim of the Bingo Creek Canyon. The drill holes were located around the main pyrrhotite showings to determine if any considerable tonnage existed in the exposed lens.

A Winkie diamond drill using 5/8 inch diameter (XRT) core was used. Good core recovery was reported. Water for the drill was pumped 250 feet vertically from Bingo Canyon. A helicopter was used to airlift the drill to and from the site.

Diamond drill holes 1 and 2 were located just west of a pyrrhotite lens. Drill holes 1 and 2 were drilled to a depth of 4.2 and 4.6 meters in a siliceous white rhyolite. No pyrrhotite was evident and the core was not assayed.

Diamond drill hole 3 was located on a pyrrhotite lens 1.5 meters above the main cross bench. The first 1.3 meters assayed 0.562 oz/ton gold in green actinolite rock with 15 to 20% pyrrhotite and minor chalcopyrite. From 1.3 to 3.2 meters DDH3 assayed 0.288 oz/ton gold in green actinolite rock with irregular blebs or pyrrhotite and minor chalcopyrite. From 3.2 meters to the end of the hole at 3.8 meters the hole graded out into rhyolite rock, assaying 0.098 oz/ton gold.

Diamond drill hole 4 was located 0.3 meters east of DDH3. DDH4 assay results were similar to DDH3 as the hole graded out from pyrrhotite mineralized actinolite into rhyolite rock.

Diamond Drill holes 5 and 6 were collared on the main bench in actinolite rock. Both holes graded out into rhyolite rock from pyrrhotite mineralized actinolite rock. The best assay was from DDH6 from 0 to 0.5 meters grading 1.135 oz/ton gold and 0.08% copper

Dr. W.D. Groves P.Eng. concluded that the pyrrhotite lens did not extend to depth in the drill area. Dr Groves also stated "*Drill core analysis confirmed mineralogical relations of auriferous pyrrhotite, plus minor chalcopyrite haloed by actinolite skarn replacing part of the siliceous tuff of rhyolite and nearby limestone accessing along fractures. Siliceous tuff rhyolite itself is not appreciably mineralized, nor are "feeder" sulphide veinlets."*

In 1984 Barry Price conducted a VLF-EM Geophysical survey on the geochemical anomaly discovered in 1974 at the headwaters of the Golden Gate and Hidden Valley Creeks (Figure 5). The geophysical report indicates a bedrock conductor is present striking to the southeast.

A southeast trending VLF-EM dip angle and field-strength anomaly was detected on three of the four lines measured, and it is expected to continue southeast (steep topography inhibited further measurement in this direction). The anomaly corresponds with a zone of rusty sulphide rich float and one poorly exposed rusty outcrop which remain to be tested. (Price, B.J., 1984, Geophysical Report Beano Claim Group, Zeballos, B.C., Billikin Resources Inc., Assessment Report 12,772)

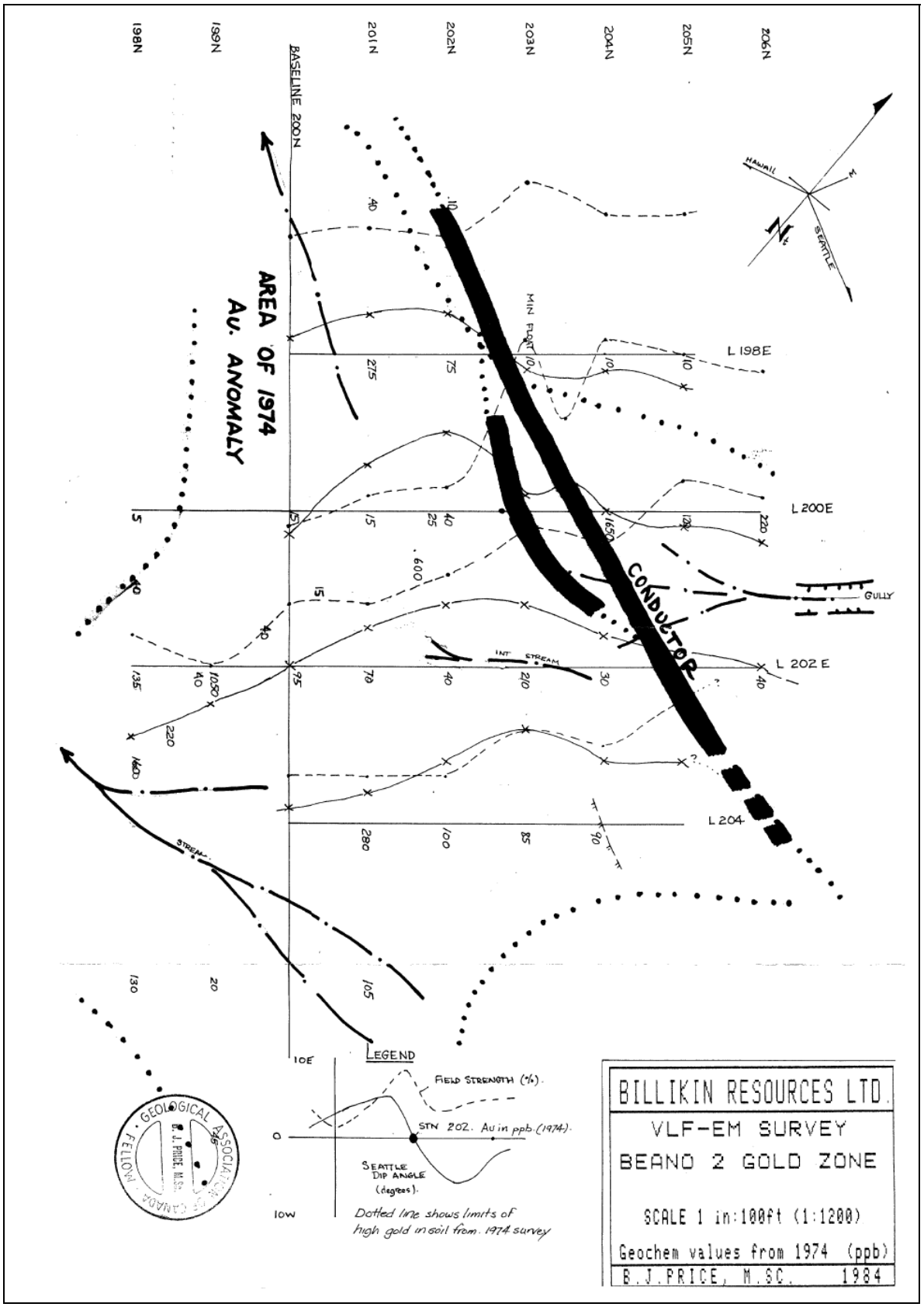

Figure 5: VLF-EM Survey Beano 2 Gold Zone

Battle Mountain (Canada) Inc.

In 1989 Battle Mountain (Canada) Incorporated optioned the Beano Project from Billikin Resources Incorporated. The following is the Beano Property Monthly Report for August 1989 (Bottrill, T.J., September 5, 1989, *Beano Property Monthly Report for August 1989*, Battle Mountain (Canada) Inc.)

The initial phase of the 1989 programme was completed August 14. The work completed included the following:

1. *6650 meters of line cutting and picketing;*
2. *Collection of 347 soil samples and 156 rock samples;*
3. *124 lineal meters of trenching in 7 trenches on the Ridge Zone;*
4. *1700 meters of magnetometer surveying, and*
5. *Geological mapping at 1:2500*

Attached is a 1:2500 scale map (Map A) of the grid and soil sample locations together with the assays. You will note that the area around the Ridge Zone, west of Beano Creek, is geochemically anomalous with a peak value of 1218 ppb Au.

A second cluster of anomalous values occurs over the andesite north of the diorite-andesite contact between the lines 600E and 800E. The peak value in this area is 205 ppb Au.

The most interesting assays received to date consist of 5 chip samples which averaged 2.07 oz. Au/t across a horizontal width of 5 m. These 5 chip samples were taken near the centre of the Creek zone.

Thirty-five m to the north a grab sample returned 0.39 oz. Au/t while 15 m to the north another sample returned 3,210 ppb Au. A sample from limestone (marble)

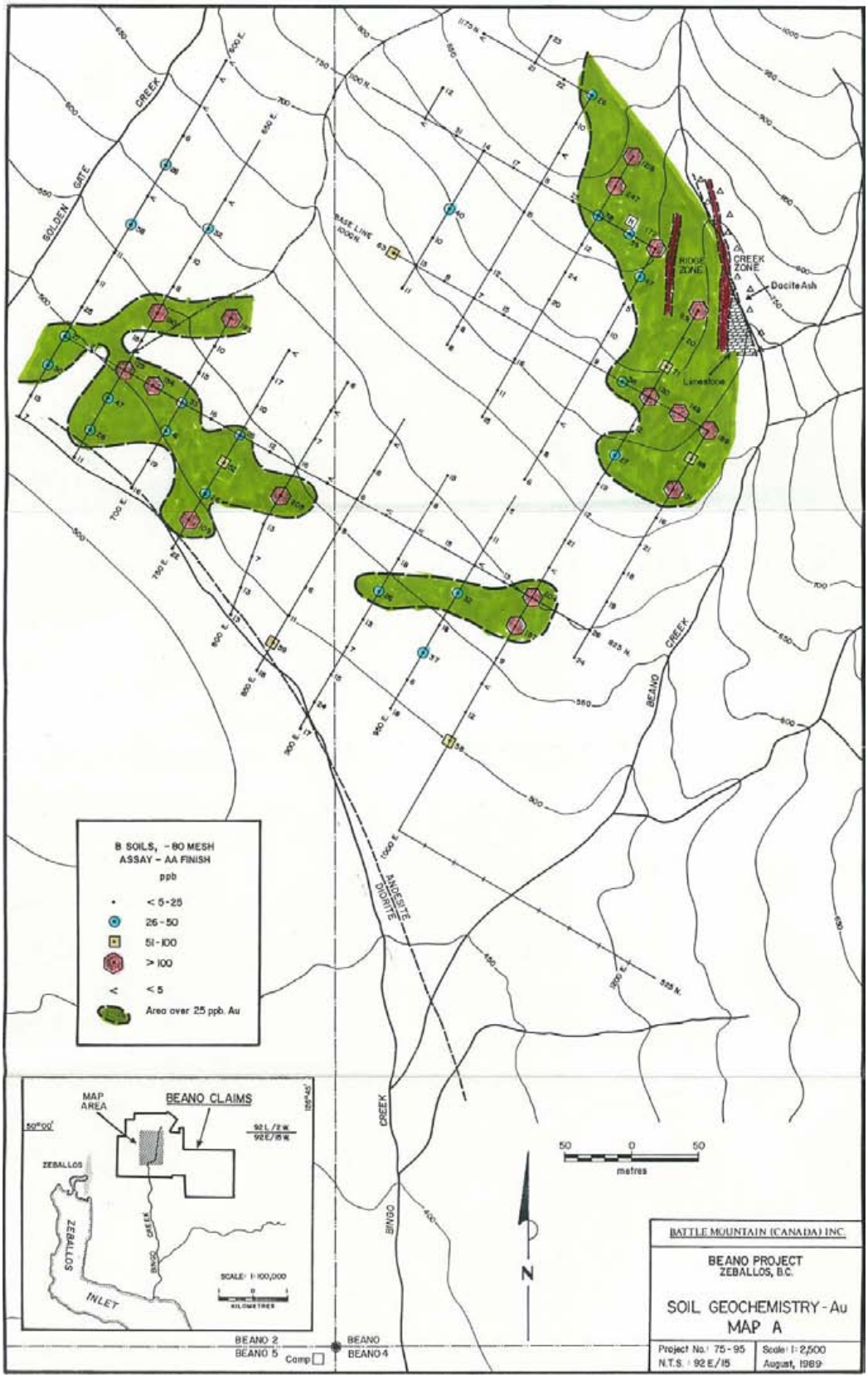

Figure 6: Battle Mountain Soil Geochemistry - Au

150 m to the north returned 1,506 ppb Au. The remaining 24 samples collected from this prospect ranged between trace gold and 661 ppb Au.

The best assays from the Ridge Zone trenching were derived from the previous exposed trenches. Eleven of these samples assayed >10,000 ppb Au with fire assays of these upper limit geochemical assays pending.

The following is the Beano Property Monthly Report for September 1989 (Bottrill, T.J., October 11, 1989, *Beano Property Monthly Report for September 1989*, Battle Mountain (Canada) Inc.)
In September all of the trench assays for the Ridge Zone were received and significant assays were obtained for trenches 4, 5, and 6 as shown on the attached 1:500 map entitled "Geology and Samples" (Map B).

The sampling in Trench 4 is subparallel to the skarn contact and therefore is not representative of a true width. The two samples in Trench 5 are separated by 3.9 m of material averaging less than 1 g Au/ton.

In Trench 6 the six consecutive assays depicted average 1.97 oz. Au/t over 4.7 m. To the east an adjoining 1 m sample returned 8,581 ppb (0.25 oz. Au/s.t.) which if included would give an uncut average grade of 1.66 oz. Au/t over 5.7 m for seven consecutive samples. Unfortunately our work was unsuccessful in tracing the auriferous skarn beyond the previously know area although we did confirm the previously know grades.

Our geological interpretation suggests that the Ridge Zone is a selvedge of limestone skarn dipping easterly at the approximate same angle as the present steep valley wall slope. On this basis it would occupy the same stratigraphic position as the Creek zone but the intervening skarn has been removed by erosion. We also interpret the limestone as an interflow of the Bonanza volcanic and not the more favorable Quatsino limestone mapped elsewhere on the Island.

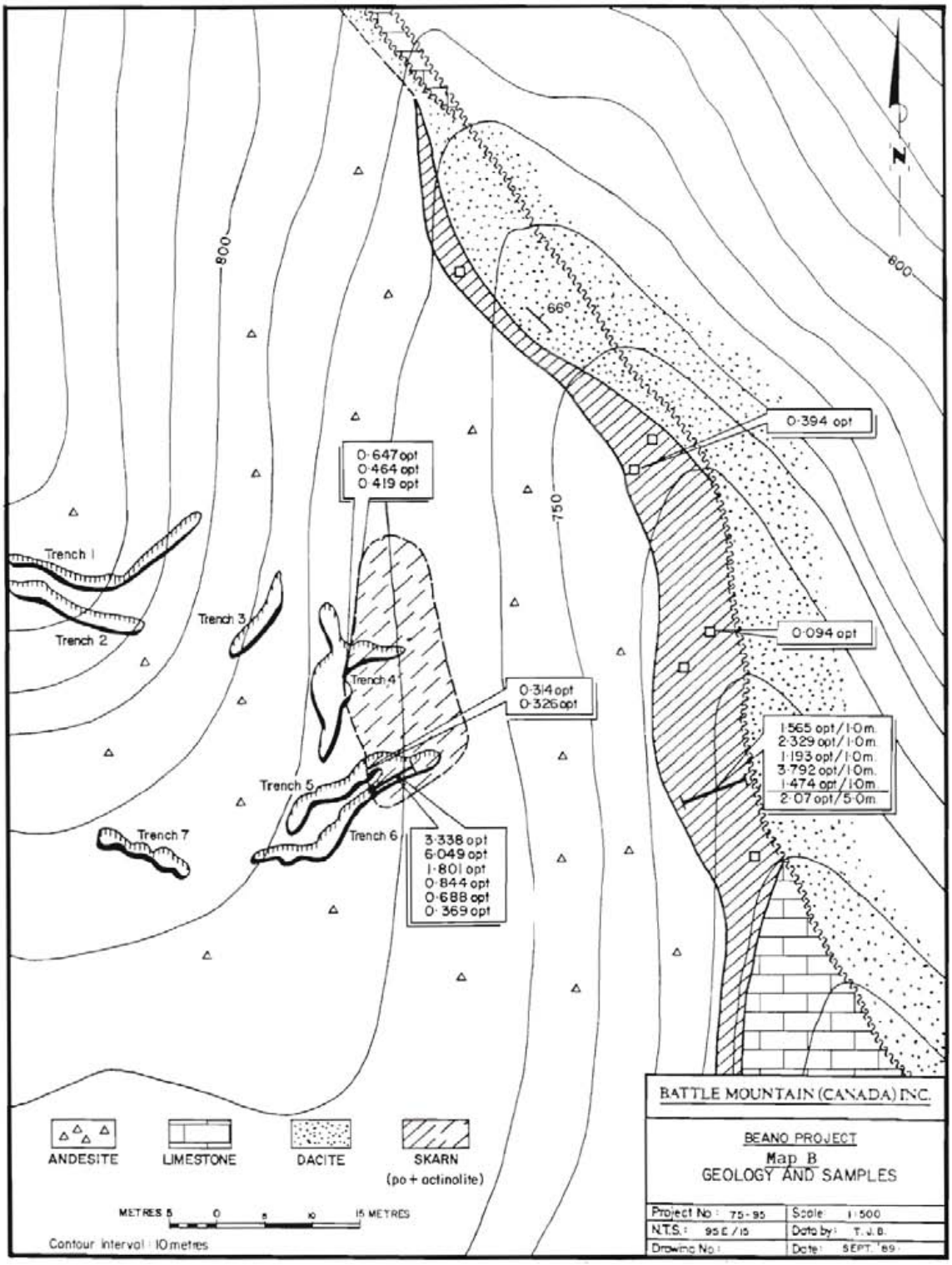

Figure 7: Battle Mountain Geology and Samples

GEOLOGICAL SETTING

The Regional Geology of the Zeballos Gold Project is shown in Figure 8.

Tagore

The Tagore occurrence lies in the Zeballos gold camp, an area underlain by a Lower Jurassic Bonanza Group Island arc sequence of basaltic to rhyolitic volcanic rocks. Conformably underlying the Bonanza rocks are limestones and limy clastics of the Quatsino and Parson Bay formations, and the tholeiitic basalts of the Karmutsen Formation, all belonging to the Upper Triassic Vancouver Group. Dioritic to granodioritic Jurassic plutons of the Zeballos intrusion phase of the Island Plutonic Suite have intruded all older rocks. The Eocene Zeballos stock, a quartz diorite phase of the Catface Intrusions, is spatially related to the areas gold-quartz veins. Bedded rocks are predominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 006, Capsule Geology)

Answer

The Answer occurrence lies near the southern limit of the Zeballos gold camp.

The area is underlain by Lower Jurassic Bonanza Group andesitic volcanic rocks which have been intruded by dykes and irregular masses of fine diorite of the Jurassic Island Plutonic Suite. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 023, Capsule Geology)

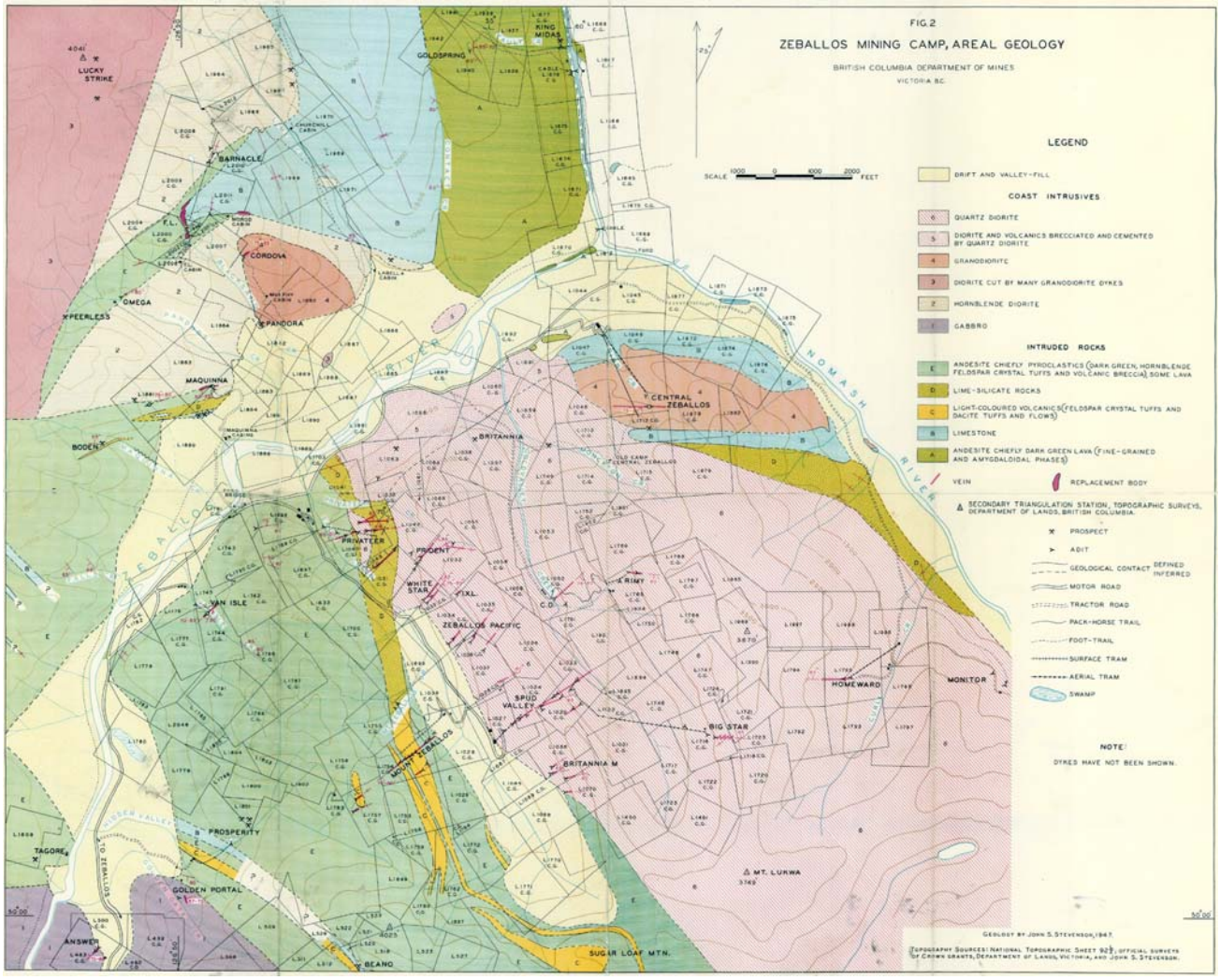

Figure 8: Zeballos Mining Camp, Areal Geology

Golden Gate

The Golden Gate occurrence lies in the Zeballos gold camp, an area underlain by a Lower Jurassic Bonanza Group Island arc sequence of basaltic to rhyolitic volcanic rocks. Conformably underlying the Bonanza rocks are limestones and limy clastics of the Quatsino and Parson Bay formations, and the tholeiitic basalts of the Karmutsen Formation, all belonging to the Upper Triassic Vancouver Group. Dioritic to granodioritic Jurassic plutons of the Zeballos intrusion phase of the Island Plutonic Suite have intruded all older rocks. The Eocene Zeballos

stock, a quartz diorite phase of the Catface Intrusions, is spatially related to the areas gold-quartz veins. Bedded rocks are predominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 005, Capsule Geology)

Beano

The area is underlain by northwest striking, southwest dipping tuffs and basaltic to rhyolitic flows of the Lower Jurassic Bonanza Group. The Bonanza Group conformably overlies Upper Triassic Vancouver Group volcanics and calcareous sediments. These rocks are intruded by Jurassic and Eocene granodiorites of the Island and Catface Intrusions. At the Beano occurrence, Bonanza Group white dacite and andesite tuffs are interbedded with a 10 metre wide band of limestone near a small Eocene stock. The limestone has been actinolite-altered and contains pyrrhotite plus or minus chalcopyrite. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 002, Capsule Geology)

DEPOSIT TYPES

Two types of mineral deposits are being explored for on the Zeballos Gold Project.

An epithermal gold quartz vein type deposit from the Tertiary Catface intrusions is being investigated for.

The second type of deposit being explored for is a stratabound replacement gold-copper skarn from the Bonanza volcanics.

MINERALIZATION

Tagore

The Tagore occurrence consists of a locally anastomosing quartz (plus or minus calcite) vein containing variable amounts of pyrr- hotite, sphalerite, chalcopyrite, galena, pyrite, free gold and an unidentified grey mineral. The vein, up to 38 centimetres wide but locally represented only by a barren, tight fissure trends southeast and dips vertically. It has been traced for 15 metres, and is hosted in Bonanza Group fine-grained green banded tuff with minor interbedded crystalline limestone striking 080 degrees and dipping 80 degrees north. Prior to the introduction of mineralization the volcanic assemblage was altered to garnet, epidote and chlorite, while limy beds were altered to garnet, diopside, quartz, calcite, albite and apatite, plus or minus sphalerite.

Several dykes and irregular bodies ranging from quartz gabbro with abundant magnetite to light grey micropegmatite are reported to occur (Bulletin 27, page

51). Lamprophyre dykes are also present. Where the veins cut through a 2.0 metre limestone band the fissure continues but the veining is absent. Similarly, where the vein cuts a 2.0 metre wide northeast trending diorite dyke, no mineralization is present. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 006, Capsule Geology)

Answer

Dark green massive tuff hosts a quartz-calcite-pyrite vein up to 5 centimetres wide that follows a 5.0 to 20.0 centimetre wide shear zone. The shear zone strikes 057 degrees and dips 70 to 80 degrees northwest.

A second vertical vein branches off and strikes 325 degrees. A third vein is 7.5 centimetres wide, strikes 90 degrees and dips 70 to 90 degrees north.

The main vein has been explored by underground workings for 180 metres. Samples assayed up to 41.1 grams per tonne gold and 20.6 grams per tonne silver over 3 to 7 centimetre widths (Bulletin 27, page 50). (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 023, Capsule Geology)

Golden Gate

The Golden Gate vein, striking 340 to 350 degrees and dipping 70 degrees east follows a shear zone in massive Bonanza andesite, cut by numerous fine-grained dykes of gabbro, presumably associated with nearby Jurassic Island Plutonic Suite and the Eocene Catface stock.

The shear zone is only a few centimetres wider than the vein, which is lenticular and ranges in width from 2.5 to 20 centimetres. Vein mineralogy includes pyrite, pyrrhotite and chalcopyrite in quartz gangue. Usually, sulphides make up a few per cent of vein material but locally, this can go as high as 75 per cent.

Gold mineralogy is not known. The vein has been traced over 168 metres. Lammers (1939) mentions the "Campbell Vein" 6 metres north- east of the shaft. This vein strikes 260 degrees with a 78 degree north dip. A 0.9 metre channel sample returned 25.4 grams per tonne and vein minerals are pyrrhotite, pyrite, sphalerite, chalcopyrite and galena in crushed, leached talcose gouge, quartz and calcite. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 005, Capsule Geology)

Beano

Three styles of mineralization are recognized: 1) zones of quartz-calcite-pyrrhotite stringers 2) disseminated pyrrhotite 3) lenses of massive pyrrhotite measuring to 0.3 by 1.2 metres, as en echelon replacement of limestone along fractures. (Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092E 002, Capsule Geology)

EXPLORATION

The nature of all relevant work to date on the Zeballos Gold Project has been;

1. site visit to the Zeballos Gold Project
2. the gathering of past information,
3. reviewing the information, and
4. the writing of this report.

DRILLING

No drilling was done on Zeballos Gold Project.

SAMPLING METHOD AND APPROACH

No samples were analyzed.

SAMPLE PREPARATION, ANALYSES AND SECURITY

This section is not applicable to this report.

DATA VERIFICATION

The sources of information, which are not based on personal examination, are quoted in the report and listed in the references. The information provided by the various parties is to the best of my knowledge and experience correct.

ADJACENT PROPERTIES

Zeballos Gold Camp

The Zeballos Gold Project is located at the southern end of the Zeballos Gold Camp. In the 1930's and 1940's, the Zeballos Gold Camp consisted of about 30 properties mining rich gold-quartz veins *(Hoatley, J.W., 1953, Geology and Mineral Deposits of the Zeballos-Nimpkish Area, British Columbia, Geological Survey of Canada, Memoir 272, page 47).*

In the Zeballos district, the discovery of the Tagore property was followed by a period of inactivity until 1934, when the first rich gold-quartz veins were found and in a short time turned the Zeballos camp into an important producer. Lode mining commenced in earnest in the winter of 1934-35. In 1936, the main high-grade vein of the Privateer mine was discovered, and shipments of high-grade ore were made in 1937. In 1938, a total of thirty properties, in various stages of development, were being worked. Activity continued at a high level until 1943, when all properties closed because of a shortage of labour. The Privateer reopened in 1945 but suspended operations in 1948.

The total production of gold amounted to 287,811 ounces, and the total silver to 124,700 ounces. The aggregate amount of ore mined in the camp amounted to 651,000 tons, of which approximately 370,750 tons were milled and the remainder, except for a small quantity of crude ore shipped direct to the smelter, was sorted out as waste. The overall grade for the camp was approximately 0.44 ounce of gold a ton mined or, based on a yield of 280,632 ounces from the ore milled, an average of 0.75 ounce of gold a ton milled.

Ford Magnetite Deposit

The Ford Magnetite Deposit (Figure 2), a past producing iron mine is located 4 kilometers north of the Zeballos Gold Project *(Government of B.C. Ministry of Energy, Mines and Petroleum Resources, MINFILE No. 092L 028, Summary)*.

Mineralization consists of a 21-metre thick tabular body of massive magnetite that strikes northeast and dips northwest. At the northeast end, it pinches out along the limestone-tuff contact. At the southwest end, 400 metres away, the magnetite fingers out in a migmatitic zone where the tuff is intruded by the Zeballos stock.

The magnetite follows the limestone-tuff contact down dip, but crosses the stratigraphy where the contact becomes vertical at depth. A thin layer of pyrite is present locally at the magnetite-limestone contact. Pyroxene-epidote skarn, with only minor garnet, occurs as an irregular 31 metre thick layer, 3 metres above the magnetite, forming generally sharp contacts. A second skarn band lies 61 metres above the first.

It has been suggested that magnetite replacement was partially controlled by fracturing (Minister of Mines Annual Report 1962, pages 100-103).

Most of the magnetite is pure, massive and fine-grained; but it commonly occurs as octahedral grains up to 1.3 centimetres across.

During 1962 and 1963 the deposit was mined by open pit methods. From 1963 to the end of production in 1969, underground methods were used. Between 1962 and 1969 the deposit produced 1,282,233,396 kilograms of iron concentrate from 1,681,283 tonnes mined.

MINERAL PROCESSING AND METALLURGICAL TESTING

In 1981 Dr. Groves P.Eng. took a 120 kilogram bulk sample from the Beano showings for metallurgical test work (Groves, W.D., 1982, Assessment *Report on Metallurgical Test Work on Ore from the Beano Claim,* Billikin Energy & Resources Inc., Assessment Report 9981). Half of the bulk sample came from the pyrrhotite rich section of Cut No. 4. The other half of the bulk sample came from the ore shipment dump at the top of the skyline.

A representative portion of the bulk sample was submitted to Spalding Research Limited of Vancouver B.C. A standard float-roast-cyanide process was used to recover the gold. Work included a preliminary roast of the pulverized sample, a preliminary floatation test (100% minus 80 mesh) and a roast of the float concentrates in a laboratory scale downdraft roaster.

It was observed the Beano property contained two types of gold bearing ore, pyrrhotite-actinolite and quartz-pyrrhotite.

The gold head grade for the floatation test was 1.288 oz/ton. Results from the first floatation test gave an 81% recovery, 18% tails loss and 0.3% loss into slime water overflow. It was planned to regrind and refloat the tails to improve the recovery.

Dr. Groves's interpretation and conclusions of the metallurgical test work are as follows. *To summarize work to date, it would appear that the standard float-roast-cyanide route will turn out to be feasible from a metallurgical point of view. It is evident from assays of representative samples of the ore that copper, lead and zinc values are too low to cause cyaniding problems or be worth recovery. Most of the silver present in the ore, though of minimal value, would turn up in the cyanided product.*

MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

No Mineral Resource or Mineral Reserve estimates were calculated.

OTHER RELEVANT DATA AND INFORMATION

None

INTERPRETATION AND CONCLUSIONS

The shaft from the past producing Tagore mine was not found because of its close proximity to the Zeballos River. The shaft is probably buried under debris from the high water levels of the Zeballos River. A short adit was found above the road, but there was no mineralization seen in the oxidized/weathered structure. In the underground workings the vein was up to 38 centimeters in width and only mined for 15 meters. This vein is a relatively small structure.

The adits were not found for the Answer Prospect. The portals were possibly sloughed or hidden by debris. Several trenches were found, but no mineralization was evident in the quartz/calcite veins.

The Golden Gate past producer is associated with a strong shear zone which has been traced over 168 meters on surface. In the underground drift 29 meters lower in elevation the vein has been mined for 51 meters. It is a strong well defined shear. In 1983 Sibola Mines drilled four BQ diamond drill holes into the shear zone without any significant gold values. Five short holes were drilled with a small (EXT) drill into the vein from the trenches. The fifth drill hole located in the northern trench was reported to have made a good intersection. The assessment report does not contain any drill logs or assays from these five short holes. The gold concentrations within the vein/shear structure appear to be sporadic.

In the 1940’s the Beano workings produced a high grade gold pyrrhotite skarn ore. Diamond drilling of the Beano workings in 1983 showed the gold pyrrhotite lens did not extend to depth. Soil sampling in 1989 (Figure 6) identified a gold anomaly to the west of the Beano workings.

A second gold anomaly was found at the headwaters of the Golden Gate and Hidden Valley creeks. Three soil sampling programs (Figures 3, 4, 6) confirm these results. A VLF-EM survey (Figure 5) conducted in the same soil anomalous area shows a strong conductor with a northwest strike. The Geology Map of the Zeballos Mining Camp by Stevenson (Figure 8) shows this gold anomalous area as unmapped. A band of limestone/volcanic rock from the Beano showings strikes northwesterly towards this anomalous area. Stevenson maps this limestone/volcanic structure again just north of the Golden Portal. It is possible that the band of auriferous limestone extends northwest from the Beano workings through this area. It is also possible that this is an epithermal gold quartz structure similar to the Zeballos gold camp.

The author believes both of these gold anomalous areas warrant further mineral exploration.

The Zeballos area has a history of lode gold production from the Zeballos Gold Camp and iron production from the Ford magnetite deposit. The Zeballos Gold Project is in close proximity to the Zeballos coast intrusive. This intrusive contact area has a high potential for a mineral deposit.

RECOMMENDATIONS

In the qualified person's opinion the character of the Zeballos Gold Project is sufficient to merit the following Phase 1 work program.

The mineral exploration program will focus on trenching and geological mapping of two gold anomalous areas. The prime target is at the headwaters of the Golden Gate and Hidden Valley creeks. A secondary target area is the gold soil anomaly west of the existing Beano workings.

1. Repair the road access to the Beano property from the log dump at the mouth of the Little Zeballos River. The existing logging road is a solid road, but it is overgrown with alder trees and the culverts have been removed. A small bulldozer would be required to plow the alder trees off the road. Culverts would need to be installed where the road crosses Beano Creek.
2. Locate if possible any of the line cutting and picketing from Battle Mountain's 1989 soil geochemistry survey.
3. At the headwaters of the Golden Gate and Hidden Valley creeks locate the untested poorly exposed rusty outcrop. This outcrop corresponds to the southeast conductor found by Barry Price in a 1984 VLF-EM survey (Figure 5).
4. Trench the anomalous area at the headwaters of the Golden Gate and Hidden Valley creeks. Trench in a northeast direction. Sample and geological map the trenches paying particular attention to rock types and contacts.
5. Trench, geological map, and sample the anomalous area around the Beano workings to the west if Beano Creek.
6. Geological mapping and sampling of any new logging cut blocks on the mineral claims.

PHASE 1 BUDGET

Permitting	$5,000
Bond	$10,000
Geologist and assistant $1000/day X 20 days	$20,000
Bulldozer (D5 size) for road clearing. $800/day X 5 days	$4,000
Excavator for trenching (7.5 tonne) $800/day X 10 days	$8,000
4X4 Truck rental	$6,000
Barging Bulldozer, Excavator and 4X4 Truck to Log dump from Zeballos (and return)	$10,000
Water Taxi to Log dump from Zeballos(Daily)	$2,000
Assaying	5,000
Accommodation and food	$10,000
Assessment Report	$10,000
Contingency	$15,000
TOTAL (CANADIAN DOLLARS)	**$105,000**

Contingent upon favorable results from the Phase 1 work program, a Phase 2 mineral exploration program would include diamond drilling.

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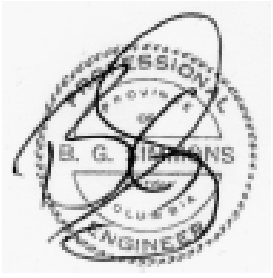
DATE AND SIGNITURE PAGE of author Brian Simmons

I, Brian Simmons, am a consulting Professional Engineer and President of Rodell Enterprises Limited, residing at 1235 Barnes Road, Crofton, British Columbia, Canada, V0R 1R0
This report titled ***Technica*****l *Report on the Zeballos Gold Project*** dated May 25th 2011, has been prepared for North Bay Resources Inc.
I am a member of the Association of Professional Engineers and Geoscientists of British Columbia. I am a registered Professional Engineer with License # 15588.
I graduated in 1981, from the Colorado School of Mines with a Bachelor of Science Degree in Mining Engineering. I have practiced my profession since 1982, both as an independent consultant and employee for mining companies in Canada, United States, and Mexico. My experience includes mineral exploration, development to production and production.
As a result of my experience and qualification I am a Qualified Person as defined in National Instrument 43-101.
For 3 days in duration from May 17th 2011 to May 19th 2011, I examined the Zeballos Gold Project mineral claims.
I am responsible for all sections of the technical report.
I am independent of North Bay Resources Inc. in accordance with the application of Section 1.4 of National Instrument 43-101.
I have read National Instrument 43-101, Form 43-101F1 and this technical report has been prepared in compliance with NI 43-101 and Form 43-101F1.
As of May 25th 2011, to the best of my knowledge, information and belief, the technical report contains all the scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 25th day of May, 2011 in Crofton, British Columbia, Canada



Brian Simmons, P. Eng.
Consulting Mining Engineer

RODELL ENTERPRISES LTD.
Brian Simmons P.Eng.
Box 151
Crofton, B.C.
V0R 1R0

INVOICE

INVOICE #:2011-6-23
DATE: June 23, 2011

Bill to:

North Bay Resources Inc.
PO Box 162, Skippack
Pennsylvania, USA, 19474

Project:

Zeballos Gold Project

DESCRIPTION	**AMOUNT**
Professional engineering services.	
Zeballos Gold Project site visit and National Instruments 43-101 Report	
4 days @ $600/day 3 field days + 2 (½ days) travel	$2400.00
National Instruments 43-101 Report	$5000.00
HST @ 12% Registration No. 119735538	$888.00
Expenses (see attached)	$2313.11
TOTAL (Canadian)	**$10,601.11**

Make cheque payable to: **Rodell Enterprises Ltd**.

If you have any questions concerning this invoice, please contact Brian Simmons Phone 250.210.2520, Email “briangsimmons@shaw.ca”

NORTH BAY RESOURCES INC.

ZEBALLOS MAY 16 TO 20TH, 2011.

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PURCHASE
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$336.00

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PURCHASE
AMOUNT $477.84
TIP $70.00
TOTAL
$547.84

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PURCHASE
TOTAL
$57.95

GEOLOGICAL ASSISTANT.
4 DAYS @ $200/DAY = $800.00
(3 DAYS FIELD + 2(1/2 DAYS) TRAVEL)

CHEV 4x4 SUBURBAN
843 km x 0.65/km = $547.95

EXPENSE TOTAL $2,313.11 ✓