### TILLICUM MOUNTAIN GOLD PROJECT

## **BURTON, BRITISH COLUMBIA**

#### COLUMBIA GOLD MINES LTD.

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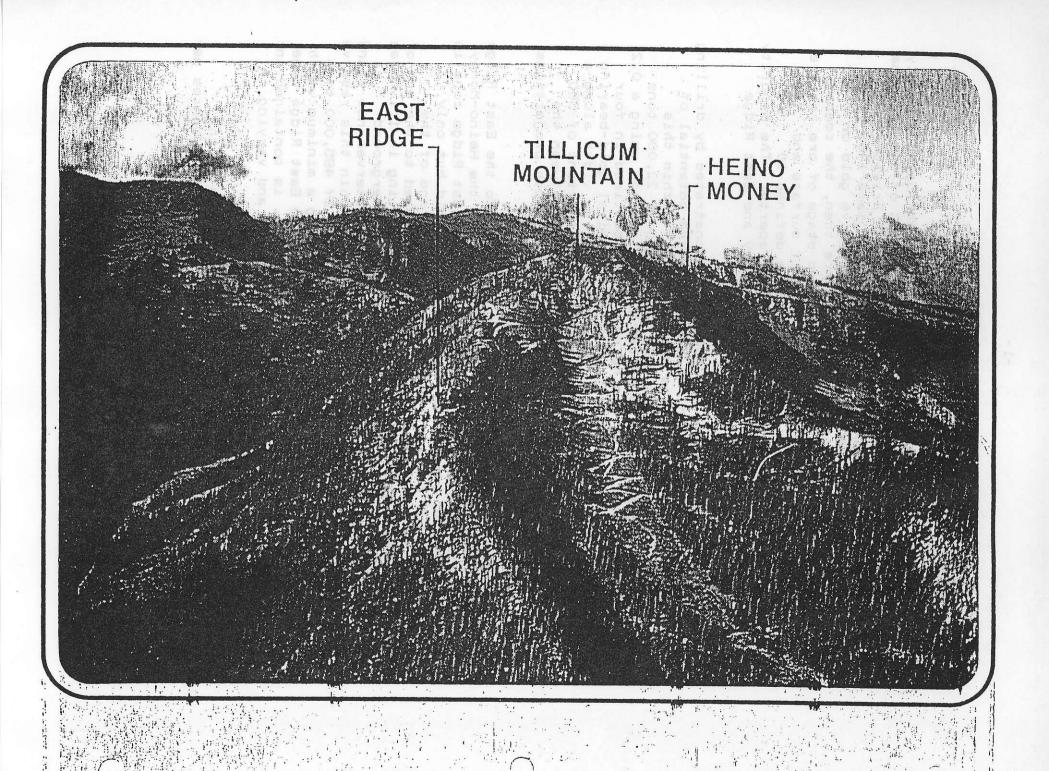
#### INTRODUCTION

Esperanza Explorations Ltd. is a Vancouver based publicly traded mineral resource company which owns 100% of the Tillicum Mountain Gold Property located in southeastern British Columbia. Esperanza acquired the property in late 1980 from local prospectors who had just discovered native gold on their mineral claims at Tillicum Mountain. Since then, the company has progressed the property to an advanced stage of ore reserve definition through a \$10 million program of surface and underground exploration. Work to date has defined 10 skarn-hosted precious metal zones on the property. The majority of work has been directed to the Heino-Money and East Ridge deposits.

The Heino-Money zone has now been demonstrated by drilling and underground exploration, to have a reserve potential of 50,000 tons grading 1.0 ounces per ton gold. Within this reserve, a mining reserve has been calculated of 22,000 tons with a diluted grade of 0.86 ounces of gold per ton using a 0.2 oz/ton gold cut-off. The mining reserve is outlined in four south raking shoots that occur in a near vertical gold-bearing skarn structure which averages about six feet in width along a strike length of about 600 feet and a vertical extent of 300 feet. The additional reserve potential occurs between the delineated shoots as well as along strike and depth projections of the skarn structure.

In 1988, the center of exploration moved to the East Ridge zone which lies approximately 1000 feet east of the Heino-Money zone. Earlier reconnaissance drilling of the East Ridge zone in 1983 and 1984 had identified the presence of gold but only limited knowledge had been gained as to the extend of the mineralization. The exploration program completed to the end of 1989 comprised over 53,000 feet of diamond drilling in 111 holes together with about 1000 feet of exploratory underground Total drill indicated and inferred reserves now stand drifting. at 1,306,000 tons grading 0.17 oz/ton gold. Within this reserve a drill-indicated reserve has been established of 485,000 tons with an in situ grade of 0.30 oz/ton gold using a minimum width of 5 feet and a 0.15 oz/ton cut-off grade. The East Ridge zone gold mineralization, like the Heino-Money zone, is contained in a skarn structure inclined at about 55 degrees and varying in width from 5 feet to over 15 feet.

Combined proven to drill indicated reserves at the Tillicum Property now total 507,000 tons grading 0.32 ounces per ton gold.



Metallurgical testing of a 3700 ton bulk sample mined from the Heino-Money zone in 1985 and 1986 indicated that in excess of 92 percent recovery can be achieved in a conventional flotation process which does not involve the use of cyanide.

The Tillicum Mountain Gold Project is regarded as an exceptionally attractive advanced exploration project with outlined reserves in excess of 222,000 ounces of gold. Potential extensions of the East Ridge and Heino-Money deposit as well as indications of additional extention targets suggest that the Property holds an excellent opportunity for increasing reserves.

The Tillicum Mountain Property reserves, as quoted in this report, are based on calculations completed by an independent engineering firm.



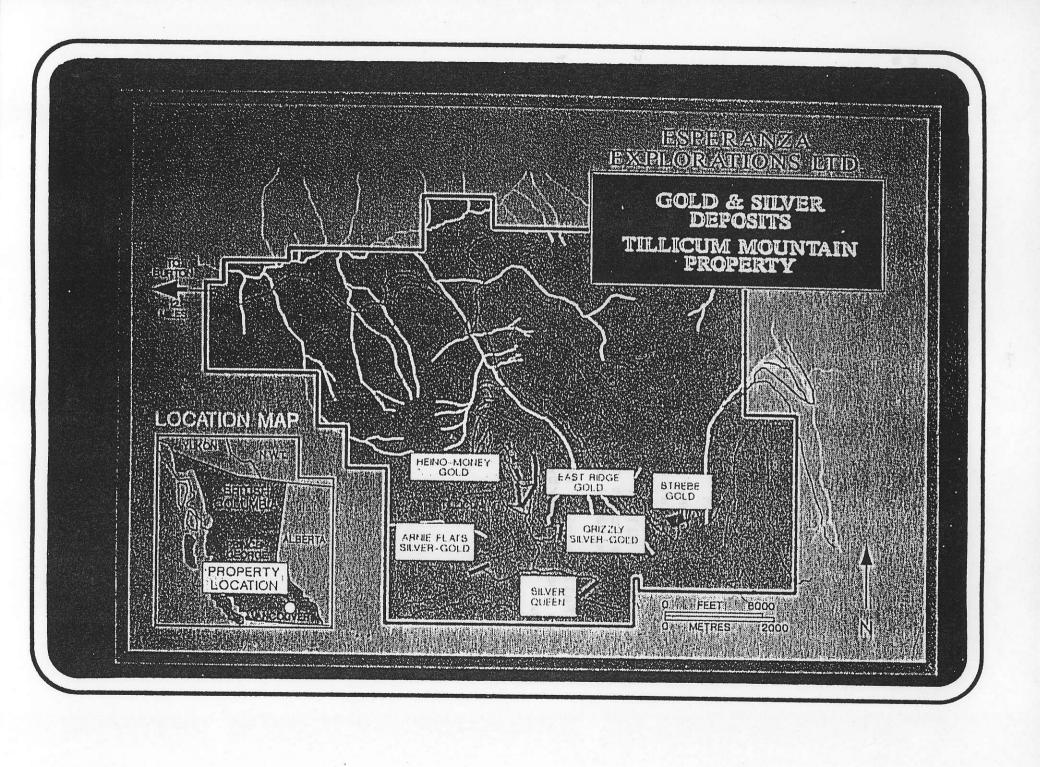
#### PROJECT LOCATION

The 15,000 acre Tillicum Mountain Property is situated in the Arrow Lakes Region of southeastern British Columbia, 8 miles east of the village of Burton. A property map outlining the claims boundary is shown on the following page. The property overlies Tillicum Mountain, on the western limits of the Valhalla Range, within the Slocan Mining Division. The coordinates for the claim group are latitude 49-59'N and longitude 117-43'W on NTS Maps 82F/13 and 82K/4. Elevations on the property range from 2900 feet to 7600 feet.

The known gold showings on the property occur on the slopes of Tillicum Mountain and in adjacent cirque valleys, at elevations ranging from 6360 feet to 7280 feet.

Access to the property is from Burton via a network of logging and mine access roads up Caribou and Londonderry Creeks. Total distance by road from Burton to the Heino-Money portal is 17 miles. The road is passable by 2-wheel drive truck to the central part of the property, then by 4-wheel drive to the various mineral zones.

Full service facilities, including housing, exist at Burton and the nearby town of Nakusp, located 36 miles north of Burton.



#### PROJECT HISTORY

The town of Burton was originally a gold mining camp founded in 1895. There are reports of numerous placer gold operations within the Caribou Creek system during the early 1900's. The Caribou Creek basin also contains several abandoned workings that saw intermittent small-scale mining activity during the period 1896 to 1930.

Within the Tillicum Mountain area during the period of 1925 to 1960, prospectors staked and worked the old Gold Hope, Tribune and Tillicum claims, but failed to find the "source" of placer gold in may of the creeks draining this rusty coloured peak. However, in 1980, local prospectors Arnie and Elaine Gustafson discovered gold in what is now known as the Heino-Money zone, on the north side of Tillicum peak.

In the fall of 1980, Esperanza Explorations Ltd. optioned the property and initiated an exploration program that sparked a district wide staking rush.

During the period 1981 to 1987, Esperanza completed 17,500 feet of surface diamond drilling and 3132 feet of underground drifting on the Heino-Money deposit. During 1985 and 1986, the underground drifting programs at Heino-Money produced a 3700 ton bulk sample which was processed in nearby custom mills. Use of a standard crushing, grinding, gravity and flotation circuit resulted in 92 percent recovery of gold for a net recovery of 3200 ounces of gold.

The 1988 underground drilling on the Heino-Money deposit combined with 1450 feet of underground exploration drifts and raises established a mining reserve containing 18,900 ounces of gold.

In 1988, Esperanza initiated a drilling program on the East Ridge deposit that totalled 43,140 feet in 75 holes and completed 9780 feet in 89 underground holes within the Heino-Money deposit. The 2060 drift level, totalling 1082 feet, established in the upper portion of the East Ridge zone, traced the main zone along strike for more than 600 feet.

In 1989, a total of 4700 feet of drilling in 10 holes within the northern extension of the East Ridge Gold Zone developed continuity of mineralization within an area previously tested by wide spaced holes.

The drill indicated reserve in the East Ridge Zone now totals 485,000 tons grading 0.30 oz/ton gold within an overall reserve of 1,306,000 tons assaying 0.17 oz/ton.

Also in 1989, a program of surface drilling was completed on the Grizzly Zone where four holes totalling 2068 feet outlined a large sulphide-gold mineralized system over a strike length in excess of 1700 feet.

An independent consultant engineering firm has completed reserve calculations and have now commenced a production feasibility study for small-scale production the Heino Money deposit.

#### GEOLOGICAL SETTING

The Esperanza Gold Property covers a portion of a roof pendent at the northwest end of the 150 mile-long arcuate belt of Rossland Group volcanics. This belt is host to several gold mines and prospects with total recorded production over the past 80 years in excess of 4.0 million ounces of gold.

The property is underlain by a sequence of Upper Paleozoic Milford Group volcano-sedimentary wackestones overlain by Jurassic Rossland Group andesitic flows and tuffaceous siltstones. Intrusive into the above succession are stocks and sills of syenite to diorite porphyry. All units have been metamorphosed to lower greenschist facies and intruded by Cretaceous-age granodiorite of the Goat Canyon and Halifax Creek batholiths. Late lamprophyre dyke swarms intrude Jurassic and older assemblages.

Gold occurs in calc-silicate-quartz skarns developed in massive andesite, andesitic tuffs and tuffaceous sedimentary rocks. The skarns are spatially related to syeno-diorite porphyry sills and stocks. High grade "Bonanza-type" gold ore shoots are hosted within quartz-actinolite-chlorite facies.

#### GOLD-SILVER MINERALIZATION

Gold occurs in calc-silicate, quartz skarns developed in metasedimentary and metavolcanics adjacent to or in close proximity to diorite porphyry sills. Skarn assemblages consist of quartz, plagioclase, tremolite-actinolite, clinozoisite, garnet, biotite and microcline. Skarns contain quartz-calc-silicate segregations, injections and veins that vary from less than 1 centimeter to 10 feet thick. Skarn zones vary in thickness from 6 feet to 200 feet. In summary, all known gold-silver skarns are spatially associated with swarms of diorite to syenite porphyry intrusions.

Native gold occurs within the skarn assemblages as 25 micron disseminations to 1 centimeter coarse flakes within and along the margins of the quartz-calc-silicate segregations. Skarns also contain variable amounts of pyrrhotite, pyrite, sphalerite, galena, as well as traces of chalcopyrite and tetrahedrite. The sulphides occur as fine disseminations oriented within the plane of the metamorphic foliation as coarse-grained aggregates within the segregations. Petrographic studies of polished thin sections indicate that the gold is contemporaneous with pyrrhotite, pyrite, sphalerite, galena mineralization and predates minor amounts of arsenopyrite and tetrahedrite crystallization.

The silver content of the skarns is variable. Gold-rich skarns commonly have very low silver content with silver-gold ratios of less than 1:1. Silver-rich skarns, such as the Silver Queen Zone, contain low gold values.

#### ORE RESERVES - EAST RIDGE

The East Ridge zone comprises a large gold mineralized system with a north-south strike length in excess of 3500 feet. Multiple gold bearing skarn horizons occur within a calc-silicate altered succession of tuffaceous sediments and volcanics reaching a thickness of 250 feet overlying a diorite porphyry intrusion. Diamond drilling to date has traced the mineralization to a depth of 1200 feet. Structurally controlled zones vary from 5 to 14 feet with an average thickness of 7 feet. The zone dips at an average of 55 degrees to the west. The East Ridge zone remains open along strike to the north and to depth.

High grade gold values are associated with quartz-pyrite-pyrrhotite mineralization with trace amounts of sphalerite and galena. Zones of high quartz-gold and sulphides appear to represent a combination of alteration fronts associated with intense calc-silicate development and bedding plane structures that provided channelways for migration of ore forming fluids.

Native gold occurs as 30 micron grains to 2mm flakes and is intimately associated with translucent quartz. A number of branching quartz-rich structures associated with the four main horizons hold demonstrated potential for high grade gold shoots.

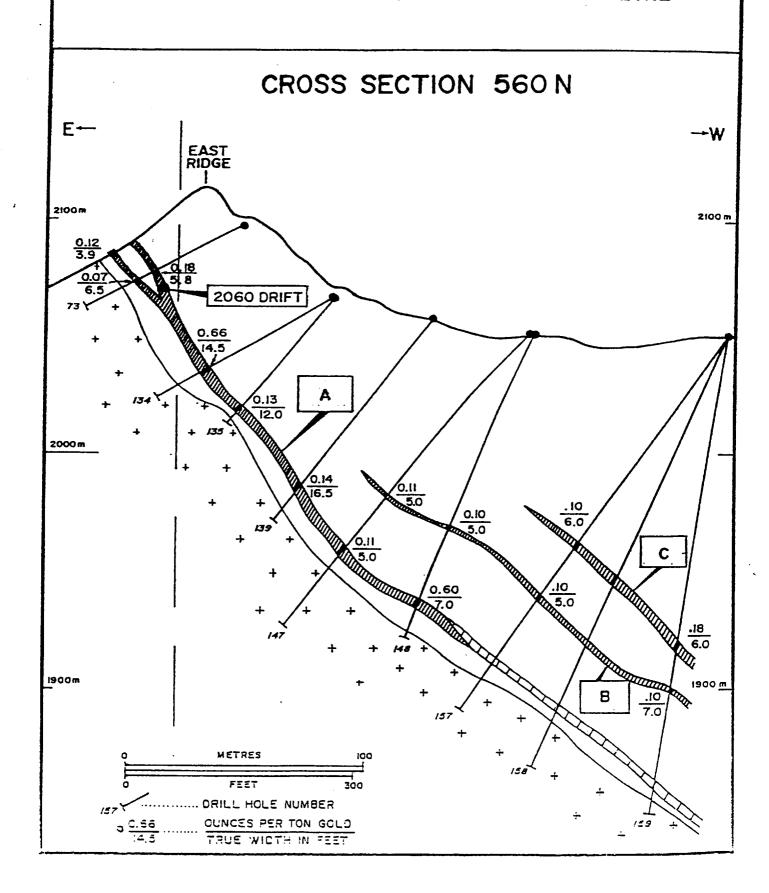
Drilling at East Ridge has defined continuity of gold mineralization in the "main zone" or A-zone and led to the discovery of four additional subparallel gold bearing structures. The structures appear to be stacked at regular intervals throughout the calc-silicate altered sediment-volcanic package. Lower grade intervals range to 0.11 oz/ton gold over 33 feet and 0.08 oz/ton gold over 80 feet with the narrower higher grade structures assaying to 0.66 oz/ton gold across 14.5 feet. Visible gold was common in drill core within the structually controlled mineralized zones.

An underground drifting program was initiated in late 1988 to test continuity and grade in the upper portion of the "A" zone. Face assays and muck samples confirmed drill hole grades.

Total drill inferred-indicated reserves now total 1,306,000 tons grading 0.17 oz/ton gold containing 222,000 ounces gold. Using a cut-off grade of 0.15 oz/ton, the drill indicated grade is calculated at 485,000 tons grading 0.30 oz/ton gold.

TILLICUM MOUNTAIN PROPERTY GOLD - SILVER DEPOSITS GOLD RESERVES DRILL INDICATED - INFERRED 1,306,000 T. @ 0.17 0z / T Au PROPERTY MAP DRILL INDICATED 485,000 T. @ 0.30 oz/T. Au TO BURTON ROAD HEINO-MÖNEY HEINO-MONEY EAST RIDGE MINING RESERVE 22,000 T. @ 0.86 oz/T. Au EAST RIDGE AREA OF TILLICUM, MTN. PEAK 600 GRIZZL O' metres ARNIE FLATS SILVER QUEEN

# ESPERANZA EXPLORATIONS LTD. TILLICUM MOUNTAIN PROJECT—EAST RIDGE GOLD ZONE



#### ORE RESERVES - HEINO-MONEY DEPOSIT

The Heino-Money Zone has been drilled over a strike length of 2000 feet and vertical extent of 800 feet. The near vertical zone trends north-south and averages 6 feet thick. Underground drifting and raising on 4 levels along a 600 foot strike length of the deposit have proven continuity of gold mineralization as well as locating high grade "bonanza" shoots.

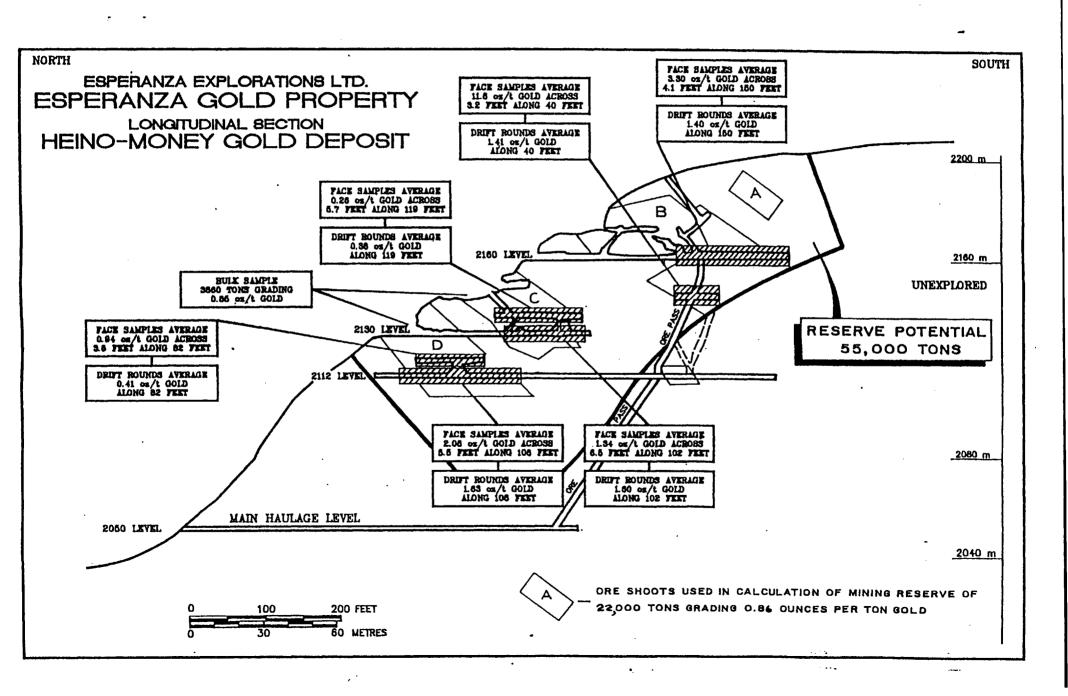
Gold mineralization occurs in a quartz-calc-silicate skarn developed within a steeply dipping structure that follows a massive andesite-tuffaceous andesite contact adjacent to a diorite sill. Native gold occurs as 25 micron disseminations to 3 cm coarse flakes within the skarn. Skarns also contain visible amounts of pyrite, pyrrhotite, sphalerite and galena. Silver content is variable with an overall silver-gold ratio of 1:1.

Prior to 1988, only 10 percent of holes drilled have gold values in excess of 1.0 ounces per ton due to a nugget effect caused by the presence of coarse grained gold. Drifting and bulk sampling through areas with drill hole assays in the range of 0.05 to 0.15 oz/ton gold have yielded bulk grades as determined from muck sampling of 0.4 to 1.6 oz/ton gold.

Surface drilling in 69 holes and detailed underground drilling in 98 holes, which established data points at approximately 25 foot centers, has identified a mineralized block measuring 700 feet long; 175 feet in width with an average thickness of 5.5 feet. The uncut weighted average of 83 holes within this block assays 1.13 oz. gold/ton over 5.5 feet. Reserve potential of the mineralized block stands at 55,000 tons which remains open on both ends with excellent exploration potential to depth along strike to the north.

Drilling to date has outlined a large fold with shallow easterly dips below the vertical limb containing the higher grade mineralization. Gold grades within the folded portion of the zone are low and average less than 0.1 oz. gold/ton. The vertical limb below the fold axis presents an attractive exploration target yet to be drill tested.

Underground drifting programs have been completed on three levels within the well mineralized block followed by establishment of a lower main haulage level and associated ore passes.



Underground sampling and drill hole data have defined four south raking ore shoots within the mineralized block. A mining reserve for the four shoots, calculated by an independent engineering firm using a 0.2 oz/ton gold cut-off and a dilution factor of 30 %, is 22,000 tons grading 0.86 oz/ton gold.

The above reserve is confined to mineralization within the immediate area of the workings developed within the skarn. No allowance has been made for reserve potential between the ore shoots. Additional exploration potential exists to depth.

# ESPERANZA EXPLORATIONS LTD. TILLICUM MTN PROPERTY GOLD RESERVES

DEPOSIT	PROVEN PROBABLE	DRILL INDICATED	DRILL INDICATED & INFERRED	TOTAL OUNCES GOLD
HEINO-MONEY	22,000 T @ 0.86 oz/T Au (18,900 oz)	<b></b>	<b></b>	18,900
EAST RIDGE		485,000 T @ 0.30 oz/T Au (145,500 oz)	1,306,000 @ 0.17 oz/T Au (222,020 oz)	222,020

TOTAL PROVEN - DRILL INDICATED RESERVE

507,000 TONS @ 0.32 oz/TON Au CONTAINING 164,400 oz GOLD

#### EXPLORATION POTENTIAL - ADDITIONAL ZONES

The Grizzly zone is located 3000 feet southeast of and parallel to the East Ridge trend and has been outlined by a coincident lead-gold soil geochemical anomaly and prospecting for a strike length of over 2500 feet. Surface sampling to date has yielded values to 0.13 oz/ton gold over 16 feet.

Diamond drilling of four wide spaced holes over a strike length of 1700 feet intersected gold bearing sulphide mineralization adjacent to a broad zone of calc-silicate skarn alteration. Gold grades vary from 0.58 oz/ton gold over 3.5 feet to 0.15 oz/ton over 15 feet. The most northerly hole intersected a large mineralizing system with a 250 foot thick section of intense calc-silicate skarn associated with pyrite-lead mineralization structurally overlain by a 40 foot section grading 0.08 oz/ton gold.

The Grizzly represents a large mineralizing system with attractive gold grades that requires further drill testing.

## SUMMARY OF EXPLORATION EXPENDITURES FOR THE PERIOD: 1980 - SEPTEMBER 30, 1989

ACCOUNT NAME	EXPENDITURE (\$)
Analysis (Assay/Geochem)	359,000
Logistical Support (Camp, Telephone, etc.)	515,000
Environmental	58,000
Metallurgical	139,000
Technical Support (Salaries, Drafting, Field Equipment)	2,098,000
Drilling	2,139,000
Property Costs	942,000
Contract Surveys (Geochem. & Geophysical)	90,000
Transportation & Fuel	580,000
Roads & Trenches	468,000
Underground	2,698,000
Miscellaneous	57,000
Capital Expenditures	403,000
TOTAL:	\$10,546,000

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