EAST GOLD PROPERTY

SKEENA MINING DIVISION
BRITISH COLUMBIA

for

BRUCEJACK GOLD LTD.

by D.S. Evans, Ph.D., P.Geol.

Consulting Geologist

March 31st, 1989

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SUMMARY

The East Gold gold-silver property is located 36 kilometres north of Stewart in northwestern British Columbia. Previous attention has been focused on "high level", precious metal-bearing epithermal veins and occurrences in Hazelton Volcanics of the Intermontane Belt that have been folded, faulted and sheared by intrusions and influences of the Coast Plutonic Complex. Past production (intermittently, 1929 to 1951 time period) from drifting and stoping has been documented at 1,533 ounces of gold and 4,024 ounces of silver. The average recovered grade is 1.8 ounces/short ton gold and 4.7 ounces/short ton silver.

During 1988, a rock sampling program was carried out over the claim group and this work has identified several significant new areas of precious metals enrichment associated with promising structural settings and environments, as well as indicating extensions of known mineralized shears and structures.

A phased program, partially contingent upon successful and favourable findings, is recommended to explore these new geological findings and geochemical anomalies. The estimated cost of Phase 1 is \$145,000, Phase 2 at \$145,000 and the total cost is \$290,000.

The East Gold property is well-situated in the Iskut River-Sulphurets mining camp, is an easily accessible property and has strong potential for discovery of mineable precious metals ore deposits.

INTRODUCTION

General

This report has been prepared at the request of Brucejack Gold Ltd. which holds an assigned option interest to earn a 100 per cent interest in the East Gold Property by making annual payments and performing exploration and development programs. Data compiled in this report has been gained from government and company reports, information supplied by the Optionee, and from a personal inspection

of the property made during 1987 prior to the 1988 exploration program.

This report discusses the mining history and current status of the East Gold property, assesses the potential for precious metals deposit localization; and, puts forward recommendations for continued exploration and development of the property.

Location and Access

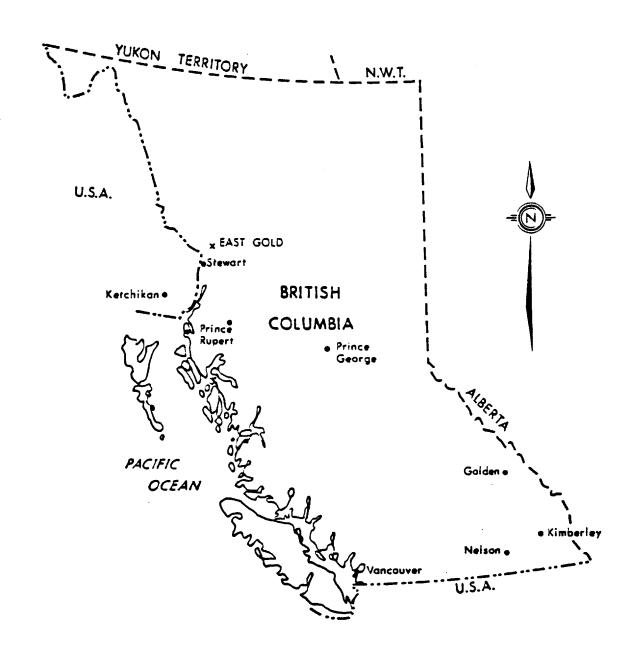
The East Gold property is located 36 kilometres northeast of Stewart and 208 kilometres north of Prince Rupert in northwestern British Columbia (Figure 1). The property is located on latitude 56° 17' N and longitude $103^{\circ}04'$ W within NTS map area 104B/8(E). The property is accessible on a year round basis by helicopter; and, by an old 4 x 4 "tote" road on the west side of the Bowser River just north and west of the Granduc airstrip.

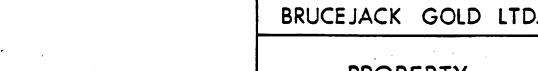
The property occupies an area of rugged mountainous terrain and topography ranges from 2100 to 3200 ASL. Vegetation is confined to the valley floor where abundant alder and spruce growth is found. Above 2200 ASL outcrop exposure is extensive. Timber and water are in good supply.

Supplies and accommodation are available at Stewart and there is a good supply of skilled exploration and mining manpower in the area.

Property and Ownership

The East Gold property consists of six, Two-Post claims and one, six unit Modified Grid claim to a total aggregate of 12 mineral units recorded in the Skeena Mining Division (Figure 2). Brucejack Gold has the right to earn a 100% working interest in the property by making annual property payments and carrying an exploration and development program under the terms and conditions of an option agreement between Catear Resources Ltd. and the underlying owners of the mineral dispositions. The properties are presently in good standing under the Mineral Tenure Act and Regulations of the Province of British Columbia.





1: 10,000,000

PROPERTY INDEX MAP

Figure 1

March, 1989

LTD.

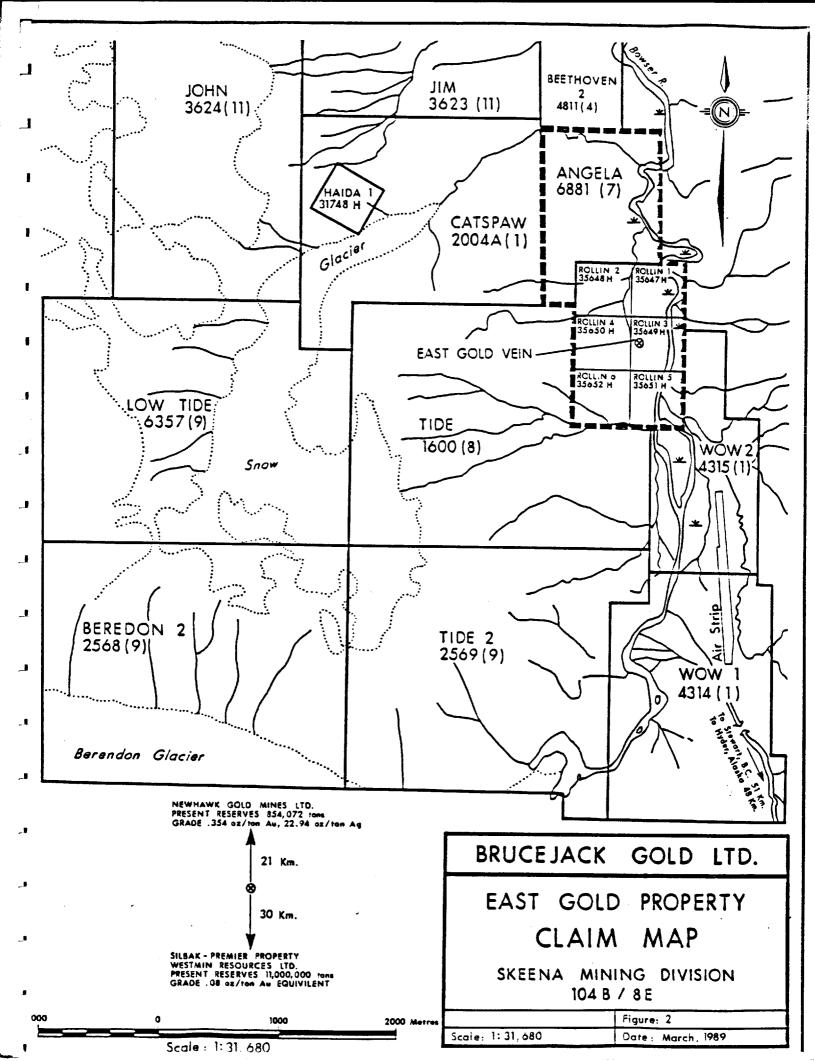


TABLE 1*

Name	Record No.	<u>Units</u>	Expiry Date
Rollin l	35647	1	July 22/97
Rollin 2	35648	1	July 22/97
Rollin 3	35649	1	July 22/97
Rollin 4	35650	1	July 22/97
Rollin 5	35651	1	July 22/97
Rollin 6	35652	1	July 22/97
Angela 1	6881	6	July 2/89

*--The Rollin Group is jointly owned by Messrs. Soucie, Halfyard and McKay and is presently held under an option agreement to Catear Resources Ltd.; and, subsequently assigned to Brucejack Gold Ltd. The Angela claim is owned by Catear Resources Ltd. and assigned to Brucejack Gold Ltd. under the same terms and conditions as the Rollin Group.

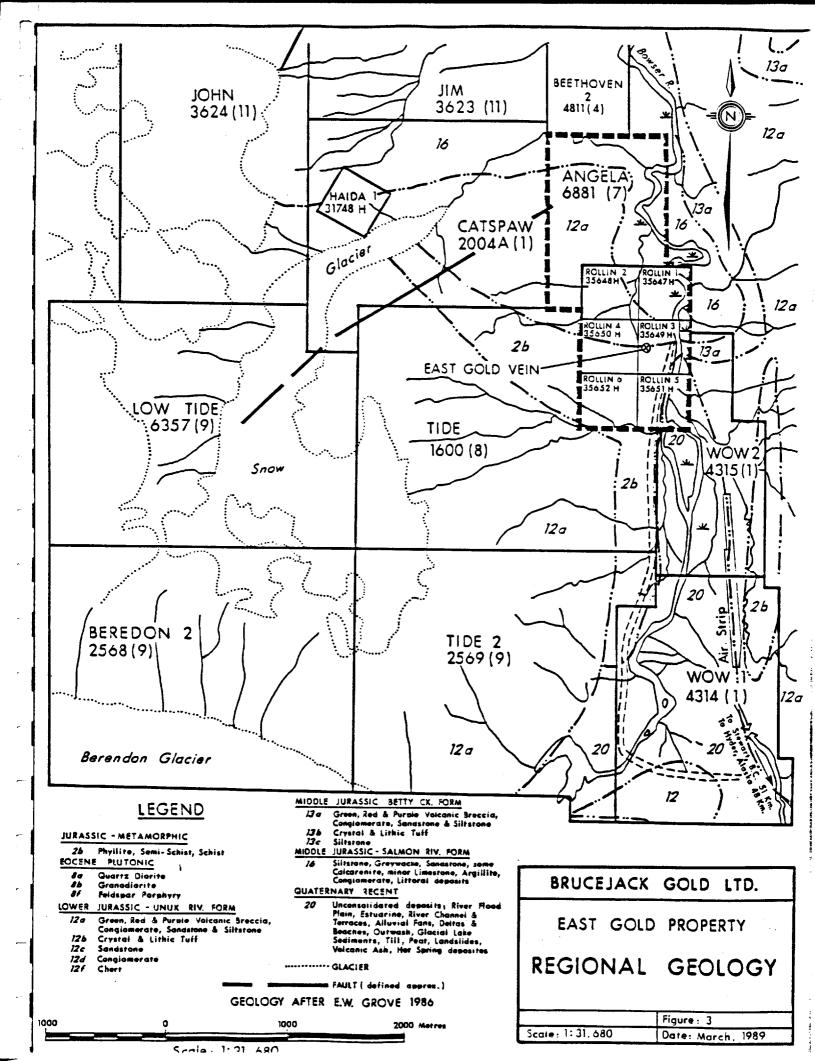
History

The "East Gold" properties were originally discovered and staked as the "Pioneer Group" in 1926. Early references also employ the name "Tide Lake" and all later references use the term "East Gold".

During the 1929-30 time frame, the Consolidated Mining and Smelting Company completed 10 diamond drillholes to investigate surface occurrences of free gold associated with several shear zones. With the exception of a single, high grade intersection grading 8.72 oz/ton gold and 8.78 oz/ton silver across five feet, the results were disappointing and the option was terminated.

Subsequently, several attempts were undertaken by various owners and custom operators to drift into the area of the promising drill intersection. Eventually, four tons of mineralized rock were shipped and averaged 19 oz/ton gold and 43 oz/ton silver. This small scale mining exercise set the tone for continued work at East Gold over the next 30 years.

By 1945, the mine workings included 220 feet of drifts, a 30 foot winze and a 70 foot raise (Figure 4). Production at this time period yielded 646 oz of gold and 1424 oz of silver. In 1949, production amounted to 96 oz of gold and 923 oz of silver and 1950, production consisted of 791 oz of gold and 1677 oz of silver.



Beginning in 1950, modern exploration and development programs supplanted small scale mining activities. The most important activity appears to be an underground drifting and drilling program performed by Utica Mines Ltd. in 1961. The results of this work are not available to the writer.

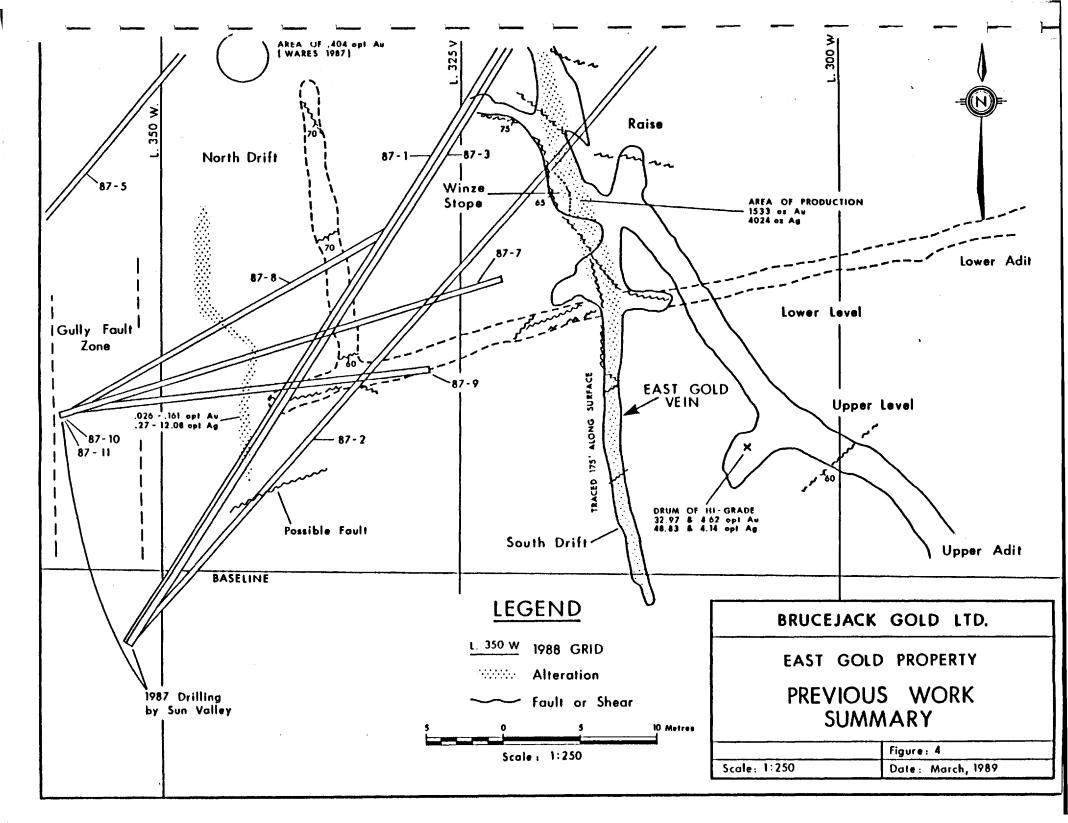
Recent Exploration Programs

In 1987, Sun Valley Gold drilled the property to establish continuity of high grade precious metals mineralization. Some 2625 feet BQ coring was completed in 12 drillholes (Figure 4). Significant intersections grading up to 0.1 oz/ton gold and 12 oz/ton silver were recorded. The option agreement was allowed to expire.

In 1988, a stream sediment and lithogeochemical program was carried out by Catear Resources Ltd. A 500 m x 850 m grid was positioned over the area of interest with 25 m line spacings and 25 m sample stations; and, 775 rock samples were collected from mineralized occurrences, shear zones, old surface workings and promising or favourable alteration zones. One hundred and sixty-six stream sediment samples were also collected during this period on, near and around the grid. All samples were geochemically analyzed for gold and silver.

The lithogeochemical program was successful in defining several structural trends associated with silicification and alteration and significantly enriched in gold, while the stream sediment survey determined that additional areas outside the grid location have additional, but unquantified precious metals potential. The threshold value for anomalous gold in stream sediments was statistically determined at 80 ppb -- a level well in excess of normal enrichment values in volcanic rocks.

The 1988 program was completed at an expense of approximately \$96,000 and defined several areas and zones where underground and surface followup activities to include trenching, additional sampling and diamond drilling may be justified.



GEOLOGY

The East Gold property is underlain by Jurassic volcanic, volcanosedimentary and sedimentary rocks and units within the Bowser Basin and termed the Hazelton Group. These rocks have been folded and faulted by granite intrusions and influences of the late Mesozoic and Cenozoic Coast Crystalline Complex to the west. The geological setting and environment is considered favourable for hosting "high level", epithermal deposits of geld and silver.

The oldest rocks in the area are early Jurassic Unuk River Formation volcanic rocks consisting of extrusive breccias, volcanic conglomerates, sandstones, siltstones, tuffs, limestones, cherts and coal. The succeeding Betty Creek Formation is another similar "trough filling cycle" and, is similarly succeeded by the thinner, but stratigraphically diverse Mt. Dilworth Formation. The middle Jurassic Salmon River Formation is dominantly sedimentary in origin consisting of interbanded and arenaceous sedimentary rocks and units and minor volcanic components.

The regional geological setting of the East Gold area is thought to be the result of successive periods of volcanism followed erosional periods and miogeosyclinal and eugeosyclinal accumulations which have been periodically disturbed and influenced by continuing emergences of intrusion of Coast Crystalline rocks and Pacific sea-floor spreading. Alldrick (1989) has postulated the presence of a "volcanic centre" in the immediate vicinity of the East Gold property to account for the presence of proximal volcanoclastic rocks and other related extrusives.

Geology of the East Gold property has been described in detail by both Fawley (1946, 1947) and Wares (1987). Kruchkowski and Sinden (1989) have summarized these findings as follows:

"The property is comprised of a fault bounded altered metasediment and metavolcanic sequence. The Summit Lake stock, a coarse-grained hornblende intrusive (occurs) along the southerly edges of the property. numerous feldspar porphyry dykes from 1-20 feet in width (occur). Black argillites are present...to the west. The predominant rock type

appear to be a variably altered green tuff with minor clastic horizons (Figure 3)".

Kruchkowski and Sinden identified several alteration sequences and zones, with a variety of pyrite, quartz and sericite assemblages associated with both major and minor structural trends (Figure 5). "Weak" to "strong" alteration patterns with varying proportions of pyrite and silica are evident. Rock units may be fully altered to a grey, schistose and sericitic rock hosting pervasive networks of quartz stringers and up to 15% pyrite. The structural setting and alteration pattern at East Gold is found elsewhere in the Stewart area, including the Silbak Premier deposit area and Newhawk Gold Mines Ltd. area.

MINERAL IZATION

Fawley (1947) describes three types of epigenetic mineralization at East Gold:

- i) high-grade veins,
- ji) mineralized shear zones.
- iii) various small quartz veins;

and, Wares (1987) has classified three types of mineralization according to mineralogical components as follows:

- i) pyrite-quartz only,
- ii) pyrite-quartz, barite, sphalerite, galena, tetrahedrite, arsenopyrite with rare ruby silver and electrum,
- iii) massive sphalerite and galena with some tetrahedrite and arsenopyrite stringers.

Kruchkowski and Sinden (op. cit.) consider the above classifications as essentially descriptions of "part(s) of the (same) mineralization event(s)" as precious metals enrichments and mineralization are found, to some degree, in all altered and mineralized rocks at East Gold.

They also believe that precious metals are distributed throughout the altered, pyrite-bearing rocks with silver most enriched in those areas where galena, sphalerite and tetrahedrite are found. High grade occurrences are located in subsidiary, splay or subparallel local structures and shears. Local controls on precious metals localization are dominated by several major faults, one at 160 degrees with a dip to the west at 65-80 degrees and an east-west structure called the "East Gold" fault. Splay or local subsidiary features generally trend 120-130 degrees, dip to the south and are characterized by localization of quartz-pyrite-gold-silver mineralizations (Figures 4 & 5).

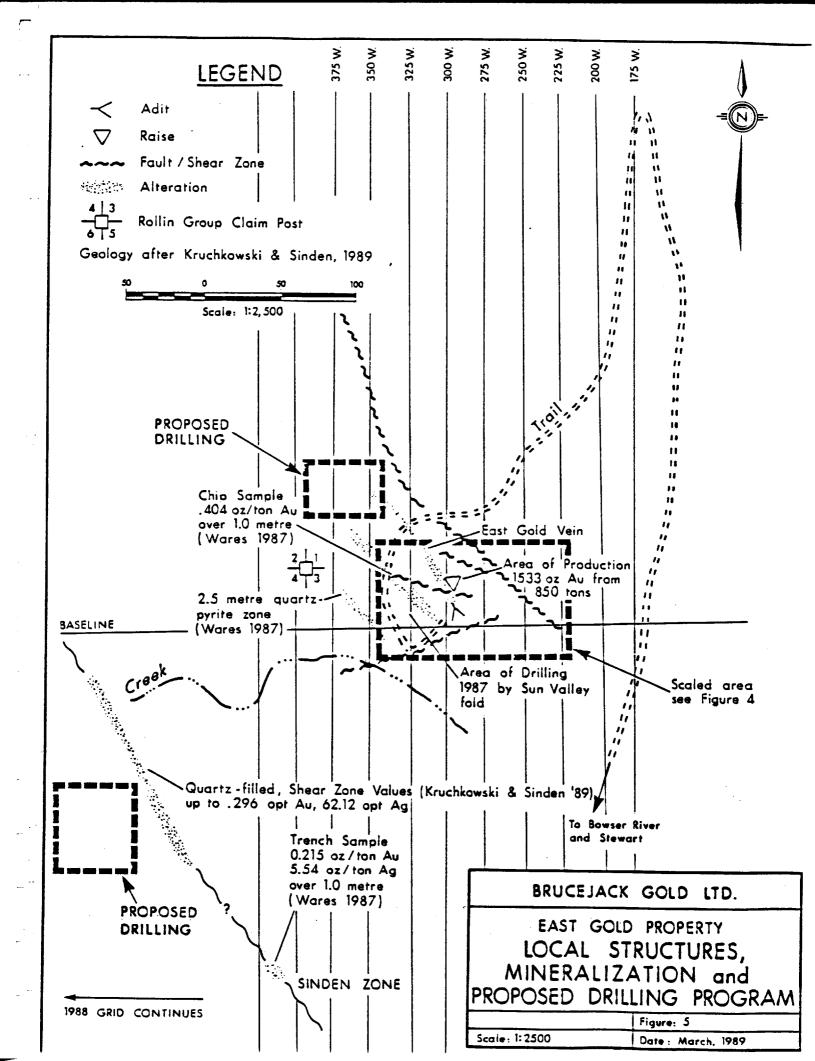
Precious metal-containing veins or lodes vary considerably in width, averaging from less than one inch to two feet. Evidence to date indicates considerable "pinching and swelling" of veins occurs along both strike and down dip. Where the "East Gold Vein" was developed and mined, the vein is a mixture of quartz (50%) and dark brown sphalerite and fine-grained galena (up to 50% combined) with minor amounts of pyragyrite, pyrite, arsenopyrite, tetrahedrite and pale yellow electrum.

The documented production history at East Gold includes:

Time	Ore Shipped	Gold	Silver
	tons	ozs.	ozs.
pre-1945	16.25	646	1,424
1949	5	96	923
1950	18	79.1	1,677

for a total production of 39.25 selected short tons reduced from 850 mined short tons to recover 1,533 oz gold and 4,024 oz silver for an average mined grade of 1.8 oz/ton gold and 4.7 oz/ton silver.

The combined geological and mineralogical information and evidence at East Gold is consistent with the proposed model for British Columbia epithermal gold-silver deposits (Panteleyev, 1986). Precious metals are accompanied by base metals and silver/gold ratios are greater than 1.0. This setting is often termed the "Bonanza Zone.".



It is concluded that a highly favourable and prospective setting and environment for the location of "high level", epithermal precious metals deposits is found at East Gold. Previous work efforts have been minimal and limited; but, have confirmed the potential for hosting either high grade veins and lodes and/or low grade, disseminated bulk mineable precious metals deposits.

CONCLUSIONS

The East Gold property contains numerous pyritiferous, silicified, altered and structurally-controlled zones that host significant geochemical enrichments of gold and silver, and associated amounts of zinc and lead. Previous small scale production from high grade mineralization has taken place from a restricted area. Surface exploration during 1987 and 1988 confirmed the presence of gold/silver anomalies coincidentally associated with silicified, sheared and altered rock in both previously unexplored locations and extending from known occurrence areas. Recent drilling (1987) explored and evaluated only a small area near the old workings. The property has good exploration potential for future discovery of several economic zones of high grade and/or low grade, disseminated precious metals mineralization.

RECOMMENDATIONS

Future exploration at the East Gold property should be directed at systematic evaluation of both the new and known areas of potential economic interest. A phased program should be undertaken as follows. In Phase 1, it is recommended that surface and underground geological mapping and sampling be carried out with particular attention given to promising local structural trends associated with significant alteration envelopes. Surface trenching and underground bulk sampling should be carried out where promising geological and mineralogical features are identified; and, where favourable results and indications have been previously located. If results and interpretation are sufficiently encouraging, Phase 2 diamond drilling is recommended.

The estimated cost of Phase 1 of the recommended program is \$145,000 and Phase 2 is \$145,000.

March 31st, 1989 Calgary, Alberta David S. Evans, Ph.D., P.Geol. Consulting Geologist

COST ESTIMATE

Phase 1	
Mobilization/demobilization: Roads: 5 days Geochemistry & assays: 800 samples Geologist: 30 days Geological Assistants: 120 days Blaster: 30 days Cook: 30 days Camp rentals: Subsistence: Helicopter: Travel, freight, communication: Supervision Misc: Drafting and reporting:	\$ 8,500 5,000 17,600 9,000 18,000 6,000 7,300 8,400 15,000 12,200 15,000 2,000 6,000
Subtotal:	133,000
Contingency:	12,000
TOTAL:	\$145,000
Phase 2 Diamond drilling, 100 m at \$120/m including site preparation & assays	120,000
Supervision, engineering, drafting and reporting	15,000
Contingency:	10,000
TOTAL	\$145,000
PHASE 1 & 2 GRAND TOTAL	\$290,000

March 31st, 1989 Calgary, Alberta D.S. Evans, Ph.D., P.Geol., Consulting Geologist

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- 8. Panteleyev, A., 1986: Ore Deposits #10. A Canadian Cordilleran Model for Epithermal Gold-Silver Deposits, Geoscience Canada, Vol. 13, No. 2, pp 101-111.
- 9. WARES, R., 1987: Drilling Report on the East Gold Property, (prepared for) Sun Valley Gold Mines Ltd., unpublished internal report. 17p.

CERTIFICATE

- I, DAVID S. EVANS, currently residing at 5232 Viceroy Dr., N.W., Calgary, Alberta, T3A OV7, Canada, hereby certify that:
- 1. I am a mining exploration geologist and have practised my profession since 1966.
- 2. I am a graduate of the University of British Columbia with a B.Sc. (1966) in Chemistry and Geology, and a graduate of the Royal School of Mines, University of London (UK) with a Ph.D. (1971) in Applied Geochemistry.
- 3. I am a registered Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, a Member of the Society of Exploration Geochemists, and a Fellow of the Geological Association of Canada (1973).
- 4. I examined the East Gold property in 1987. This report is based on that examination and a review of reports, maps and other data as is available on the East Gold property.
- 5. I have no interest, direct or indirect, in the properties or securities of Brucejack Gold Ltd., nor do I expect to receive any such interest. I have no interest, direct or indirect, in any mineral properties within 10 km of the East Gold property nor have I consulted on any such properties within the last year.
- 6. I consent to the use of the accompanying report in a prospectus, offering document or information circular issued by Brucejack Gold Ltd.

March 31st, 1989 Calgary, Alberta

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