GOLD 1 - CLAIMS

ISKUT RIVER - SULPHURETS MINING CAMP

Province of BRITISH COLUMBIA

NTS 104 B / 10

56° 37' N
130° 40' W

Prepared for: BRAZOS PETROLEUM CORP.
3773 - 19th Street N.E.
Calgary, Alberta
T2E 6S8

Prepared by: Hughes P. SALAT, P. ENG.
5904 Dalhousie Drive N.W.
Calgary, Alberta
T3A 1T1

NOVEMBER 27, 1989

TABLE OF CONTENT

1 - PROPERTY DESCRIPTION

The claims under investigation are the following:

claim name	Record #	Expiry date	Mining Division
GOLD - 1	5894	March 16,1990	Liard

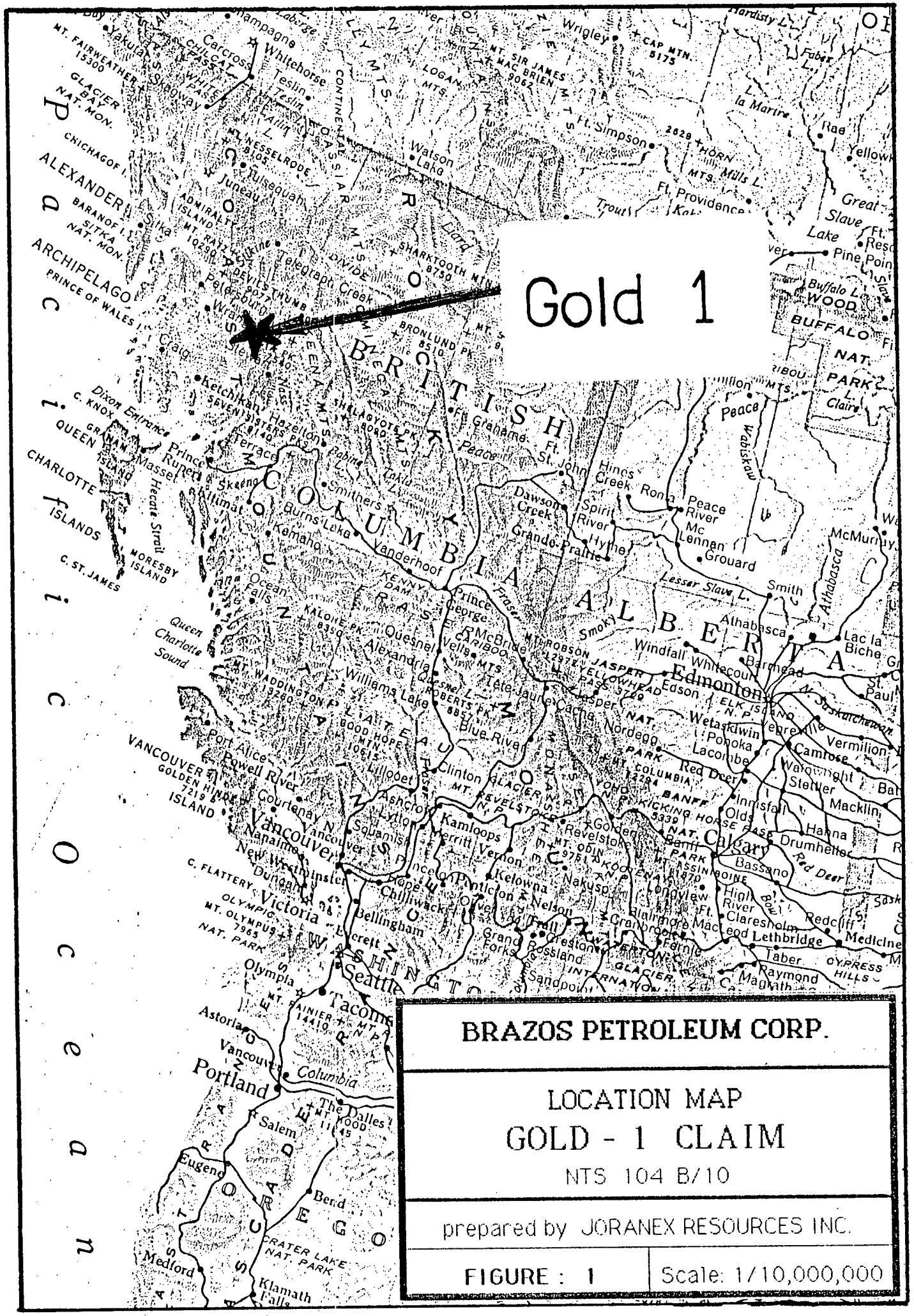
These claims are located within the presently very active Iskut River - Sulphurets Mining Camp in the Northwestern part of British Columbia (NTS 104 B /10), North of Prince Rupert and only 80 km North of the sea-port of Steward (see Figure 1).

2 - INTRODUCTION.

Exploration in the district goes back to 1893 when placer miners prospected the Unuk River and adjacent areas toward the Iskut River on their way to the Klondike Fields.

In the early part of this century, several major gold discoveries were made near Steward, in N.W. British Columbia, and along the lower reaches of the Iskut River. One of them, the Johnny Mountains Mine was subjected to some underground works. Recently, a flurry of exploration has re-opened the old working and turned the area into a major gold exploration Camp, with some promising prospects (Stikine, Inel, Eskay, Sulphuret).

The GOLD - 1 claims staked by Brazos Petroleum Corp. of Calgary, are located in close vicinity to these major deposits.



BRAZOS PETROLEUM CORP.

LOCATION MAP
GOLD - 1 CLAIM
NTS 104 B/10

prepared by JORANEX RESOURCES INC.

FIGURE : 1 | Scale: 1/10,000,000

3 - PHYSIOGRAPHY AND ACCESS.

The terrane in the North western part of British Columbia near the border with Alaska, consists of rugged mountains belonging to the Coast Ranges. Although of medium heights, heavy snowfalls and northern latitudes contribute to the large extent of glaciers capping most of mountain tops, lower reaches and streching far into the valleys where they terminate into long moraines

Wide U-shaped valleys are the trademark of dissection by the glaciers. While larger river systems occupy broad valleys and their wide braided sandbars provide flat fluvial terraces, their tributaries flowing from snowy ranges have dissected into their glacial moraine and oversteepened their banks often into inaccessible canyons.

Vegetation consists of spruce and pine trees on lower slopes up to 1500 meters elevation where it is replaced by alpine eco-systems. In valley bottom, and especially in avalanche areas the trees are intermixed or replaced by very thick, impenetrable alders (buck-brush) and devil's club, making progress at time impossible, at best very tedious.

Access to the claims, away from trails or roads, is restricted to helicopter drop-off either on mountain ridges or at bottom of valley.

4 - GEOLOGICAL SETTING.

The rock formations underlying the ground around Iskut and Unuk rivers, are a mixture of volcanics and mostly clastic sediments making the bulk of an "eugeosynclinal" succession, ranging in age from upper Triassic to late Jurassic.

This package of rock formations constitutes the western border of "Stikinia". This term applies to an uplifted arch through which the older Triassic units are exposed within the wider Intramontane tectono-stratigraphic assemblage, which makes up the framework of the Interior Plateaus and Mountains of British Columbia.

Stratigraphy of the region can be divided into four major units which are from base to top:

- The **Takla Group** (upper Triassic) of conglomerate, sandstone and siltstone intermixed with some volcanic elements.

- The **Unuk River Formation** (lower Jurassic) made of volcanic breccia and tuff as well as conglomerate and sandstone
- The **Betty Creek Formation** with its pillow lavas, green and purple volcanic breccia and some sandstone and siltstone.
- The **Salmon River Formation**, clearly transgressive on older units, is composed of greywacke, sandstone and argillite.

The last three units are lumped together into the **Hazelton Group** for correlative purpose across the Province of British Columbia.

In turn, the volcanic layers and sediments have been successively intruded by granodioritic plugs from the time of middle Jurassic until the Tertiary. These local igneous intrusions are easterly expressions of the main Coast Range Batholith protruding just a little distance away to the West. The larger intrusive stocks found in the area range from monzonite to quartz diorite in composition while the smaller ones present a more basic chemistry like diorite or gabbro.

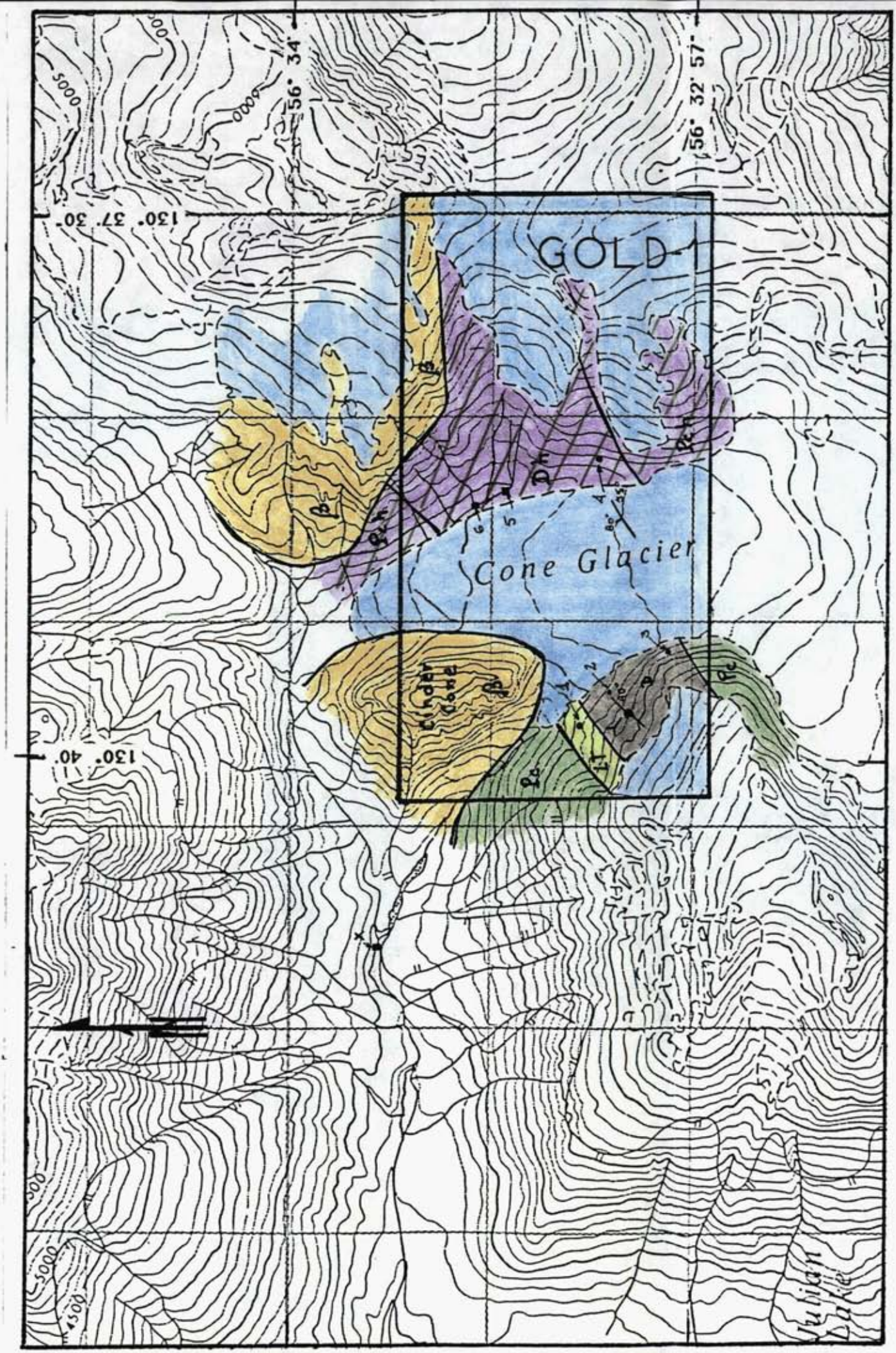
5 - PROPERTY GEOLOGY (figure 2)

The GOLD - 1 claim block is dissected into two parts by the huge northward extending tongue of Cone glacier. On its northernmost termination, the glacier rakes along an impressive, red colored cinder cone made of layered soft deposits of basaltic cinerites; its age is quaternary to recent.

Otherwise, the glacier tongue seems to divide the property bedrock between two facies of same rock units. On the western flank, one succession of greenish crystal tuffs, whitish dacitic lavas (see stop-point-2), lapilli tuffs (see stop-point-1) and greenish-violet pyroclastic breccia, varying from monogenic to polygenic. On the southern end of the mountain side (south of stop-point-3), the pyroclastics are brown to tan weathering and contain mainly cobble-size angular fragments.

Some rusty flow tops were observed and indicate younging to the northwest. This volcanic sequence is taken to belong to the Unuk River Formation of Grove's geological map.

On the eastern wall of the glacier valley, the same greenish and tan - weathered rock units are interlayered but with a more massive aspect; they are mainly felsic lavas and a few pyroclastic. Thin section study (see stop-point-4) confirms the recrystallized nature of the formation with strong silicification in most place. It is interpreted as hornfelsed equivalents to the rock units seen previously and hypothetised the presence of an intrusive nearby. Indeed Grove's map outlines a quartz diorite stock on the western flank of Harrymel creek, only a few kilometers away to the East of Gold-1 claim.



LEGEND

B	quaternary basalt/ cinerite
UNUK RIVER FORMATION	
Pc	Pyroclastics
LT	Lapilli tuff
D	Dacitic tuff & lavas
Pch	Hornfelsed pyroclastics
Dh	Hornfelsed dacite
	Bedding attitude
top	Younging
4	Stop point
×	Stream sediment sampling (for heavy liquid separ.)

BRAZOS PETROLEUM CORP.

GEOLOGICAL MAP
GOLD - 1 CLAIM
NTS 104 B/10

prepared by JORANEX RESOURCES INC.

FIGURE : 2 | Scale: 1/25,000

0 500 m

6 - PROSPECTION AND GEOCHEMICAL SAMPLING

Gold 1 claim covers the lower slopes of Cone glacier valley and itself is underlain by 60% glacier-ice. Walking along the side of Cone glacier offers the possibility to examine all outcrops and rubbles coming down from higher elevations.

On the prospection side, a moderately interesting feature consists the presence of cross-cutting seams and veins (5 to 10 cm wide) of ankerite and pyrite found in a large massive outcrop of rhyodacite at stop-point-3. The veining is striking at N 30° E with a dip of 30° to S. The veining subjects this particular outcrop to a tan weathering appearance. Chip-sampling from it returned only, after assay, "trace" of gold and nothing else.

Many ankeritic seams are prominent on the eastern side of the valley but none does contain any associated pyrite or other sulfide for that matter.

As the northeastern part of the valley is cut by a few creeks two large silt samples (stop-point 5 and 6) were taken with the idea that any mineralization in their catchment area would be detected. For the same reason, one bulk sample (20 kg) was obtained at the junction of the two streams flowing out from the Gold 1 property at stop-point X on figure 3 in the hope that any unseen mineralization would be detected. Assay results of the different sieved fraction after heavy liquid (Tetrabromoethane, d=2.96) separation have given a negative answer to this inquiry.

7 - CONCLUSION AND RECOMMENDATIONS

In majority covered by glacier ice, the Gold-1 claim block is underlain by a volcanic sequence of dacitic lavas, tuffs and pyroclastics. Towards its eastern margin, the sequence is hornfelsed by an intrusive in all probability the granitic stock mapped by Grove on the higher reaches west of Harrymel Creek.

Except for a few pyritic veining in dacitic flows, West of Cone glacier no mineralization was found by prospecting and neither is suggested by silt sampling or heavy separation technique applied to bulk sample.

On the basis of the foregoing results, no further work is recommended.

STATEMENT OF EXPENDITURES

-Helicopter support - 2 hours at $625	$ 1,200
-Field time - a) wages	
2 days - senior consulting geology	$ 800
2 days - prospector	$ 300
b) camp lodging + food	
2 days - 2 men	$ 600
-Travel-time and expenses	
2 men travel and wages (pro-parte)	$ 1,150
-Report, drafting and reproduction	$ 950
-Total	$ 4,450

REFERENCES

Grove, E.W. - 1971 - Geology and Mineral Deposits of the Steward Area, B.C.; B.C. Dept Mines & Petrol. Res. Bull. 58, 219 p.

Grove, E.W. - 1986 - Geology and Mineral Deposits of the Unuk River - Salmon River - Anyox Area; B.C. Ministry of Energy, Mines and Petrol. Res. Bull. 63, 152 p.

MINFILE Map 104 B, B.C. Dept Mines & Petrol. Res. Publications.(2 maps).

Regional Stream Sediments and Water Data, B.C. - 1987 - B.C. Open File RGS 18 / GSC Open File 1645, NTS 104 B - Iskut River.

CERTIFICATE

I, HUGHES P. SALAT, of the City of Calgary, Alberta, certify that:

1/ My present address is 5904, Dalhousie Drive N.W., Calgary, Alberta, T3A 1T1 and my occupation is that of a consulting geologist.

2/ I am a graduate of the Ecole Nationale Supérieure de Géologie Appliquée de Nancy and of Faculty of Earth Sciences, University of Nancy (France) with a degree of M.Sc. and have completed all credit requirements for a degree of Ph.D. at the University of Southern California in Los Angeles (unwritten thesis due to military recall).

3/ I have been practising continuously my profession of geologist since 1968 in Canada and Europe.

4/ I am a member of the Association of Professional Engineers, Geologists and Geophysicists of the Province of Alberta, of the Geological Association of Canada and of the Canadian Institute of Mining and Metallurgy.

5/ I have no interest either directly or indirectly, nor do I expect to receive any interest in the property covered in this report.

Hughes P. Salat
Consulting Geologist.

APPENDIX I

THIN SECTION STUDY

STOP - 1

Groundmass of cryptocrystalline matrix with plagioclase microliths (20%) and chloritic blebs (less than 20 µm).
-Rock fragments = represent 70% of the section, they are 2 to 8 mm in size, floating and fairly rounded.
80% of the rock fragments are made of monogenic, with a trachytic texture, very chloritized, rounded pieces, sometimes rimmed with fresher selvage of orthoclase microliths; some are vesicular, filled with chlorite.
The rest is completely epidotized, with some calcite fragments or rare clasts of prehnite and dolomite.
5% of opaque minerals (pyrite?) scattered throughout.
-Rock type = **Lapilli tuff.**

STOP - 2

-Texture = cryptocrystalline with 10% porphyroblasts and crystal aggregate within a very fine matrix (50 to 200 µm).
-Matrix = felt-like mass of feldspar and pagioclase (50 to 60% of the grains) and some 25% of quartz grains in a mesh of chloritic material (10 to 15%) associated with some epidote and very small opaque minerals.
-Porphyroblasts = less than 5% of section, of floating crystals or aggregates of same (rare) 50% of them are fresh, sometime zoned, plagioclase (An 20 to 35)
40% sanidine.
5 to 10% chlorite and epidote grains.
One cross -cutting vein of calcite.
-Rock type = **Porphyric latite.**

STOP - 4

-Texture = many crystals (40% of whole section) are deformed or broken, showing porphyroblastic tendancy. They are strongly modified and gradual in composition with a ground mass of fibroliths and diffuse bordered minerals. This section shows a strong alteration of its primary texture.
Modal composition = Quartz and silica, representing 60 to 70% of section with 25 to 30% of sub-automorphic crystals and the rest is impregnation with myrmekitic or sympletic replacement of plagioclase and other indistinguishable feldspar.
45% remnants of euhedral plagioclase, up to 1mm in size, An 30-50, porphyritic, most are damouritized.
5% chlorite laths and needles, fairly fresh.
1-2% newly formed muscovite in small crystals (200 µm).
3% disseminated pyrite or in blobs with chlorite.
-Rock type = **silicified (hornfelsed) dacite.**

APPENDIX II

ASSAY RESULTS

To: MR. HUGHES P. SALAT,
5904 Dalhousie Drive N.W.,
Calgary, Alberta T3A 1T1

File No. 32814
Date October 18, 1989
Samples Silts/Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPB Au	PPM Cu
Geochemical Analysis		
Gold 1- 5	NIL	25
6	NIL	21

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: MR. HUGHES P. SALAT,
[redacted]04 Dalhousie Drive N.W.,
Calgary, Alberta T3A 1T1

File No. 32814
Date October 18, 1989
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	OZ./TON GOLD	% Cu
"Assay Analysis"		
Gold-1 RX- 3	Trace	.03

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

[redacted]jects retained one month.
Pulps retained one month
unless specific arrangements
[redacted]e made in advance.

Assayer

To: MR. HUGHES P. SALAT,
904 Dalhousie Drive N.W.,
Calgary, Alberta T3A 1T1

File No. 32814
Date October 18, 1989
Samples Silts/Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPM Ag	PPM Zn	PPM Mo	PPM As
Geochemical Analysis				
Gold 1 RX- 3	0.4	187	16	7

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: MR. HUGHES SALAT,
504 Dalhousie Drive N.W.,
Calgary, Alberta
T[illegible]A 1T1

File No. 32814-1
Date November 3, 1989
Samples

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	% By Weight	PPB Au	PPM Cu
Heavy Liquid Separation			
Cold 1 -80+200 Sink	2.75	45	NSS
Float	97.25	NIl	34
Cold 1 -200 Sink	<.1	NSS	NSS
Float	100	NIL	48

* NSS = Non Sufficient Sample.

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

APPENDIX III

ANALYTICAL PROCEDURES

629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

LORING LABORATORIES LTD.

Phone 274-2777

Preparation Procedures for Geochemical Samples

1 - Soil And Silts:

a) The soil sample bags are placed in dryer to dry at 105°C.

b) Each sample is passed through an 80 mesh nylon seive. The +80 mesh material is discarded.

c) The -80 mesh sample is placed into a coin envelope and delivered to the laboratory for analysis.

2 - Lake Sediments:

a) The sediment sample bags are placed into the dryer at 105°c until dry.

b) The dried material is transferred to a ring and puck pulverizer and ground to -200 mesh.

c) The -200 mesh pulp is then rolled for mixing, placed into a coin envelope, and taken to the laboratory for analysis.

3 - Rocks and Cores:

a) The samples are dried in aluminum disposable pans at 105°C.

b) They are then crushed to 1/8" in jaw crusher.

c) the 1/8" material is mixed and split to sample pulp size.

d) The sample is then pulverized to 100 mesh, using a ring and puck pulverizer.

e) The -100 mesh material is rolled on rolling mat and transferred to sample bag. The sample is then sent to the laboratory for analysis.

629 Beaverdam Rd. N.E.
Calgary 67, Alberta

LORING LABORATORIES LTD.

Phone 274-2777

Geochemical Analysis of Soils, Sediments and Silts.

FOR: Copper, Lead, Zinc, Nickel and Silver, and Cobalt

Sample Preparation:

-Samples were placed in dryer overnight at 105°C.
-All samples are seived through an 80 mesh nylon screen.
-The minus 80 is placed in pre-marked sample bag for analysis. The plus 80 portion is discarded.

Sample Dissolution:

-1/2 gram samples are weighed and transferred to test tubes.
-One ml water added, then three mls hydrochloric (concentrated), one ml nitric acid (concentrated) are added.
-Test tubes are then placed into hot water bath 100°C and digested for three hours with occasional shaking to ensure complete digestion.
-Test tubes are removed from water bath and allowed to cool.
-Test tubes are bulked to exactly 10 mls, corked and shook.
-All samples are then allowed to settle until clear.
-The clear solutions are then aspirated through the atomic absorption spectrophotometer with appropriate standards to obtain the metal content.

Detection Limits and Precision:

Element	Detection Limit	Precision at 100 ppm level
Copper	1 ppm	$\pm$ 2 ppm
Lead	2 ppm	$\pm$ 4 ppm
Zinc	1 ppm	$\pm$ 2 ppm
Nickel	1 ppm	$\pm$ 2 ppm
Silver	0.2 ppm	$\pm$ 1 ppm
Cobalt	1 ppm	$\pm$ 4 ppm

LORING LABORATORIES LTD.
629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2
Phone 274-2777

Au Geochems (Soils & Sediments)

1. Weigh 10 g sample to fire assay crucible (carry blank)
2. Place crucibles in fire assay furnace at fusion temperature for 15 minutes.
3. Allow crucibles to cool on steel table.
4. Add 1 tablespoon flux and 1 inquart to each crucible.
5. Fuse for ½ hr. at fusion temperature.
6. Pour pots, remove slag and cupel.
7. Place beads into 50 ml flasks.
8. Pipette stds. and blank into 50 ml flasks.

   1 ml of 10 ppm = 1000 ppb
   1 ml of 5 ppm = 500
   1 ml of 1 ppm = 100
   0 ml = 0

9. Add 5 mls H2O, 3 mls HNO3 and place on 1 switch plate for 5 minutes. Take off plate. Add 5 mls HCl.
10. Digest until total dissolution approximately ½ hr.
11. Bulk flasks to approximately 25 mls with distilled H2O. Cool to room temperature.
12. Add 5 mls MIBK. Stopper and shake each flask for exactly 1 minute.
13. Allow MIBK to settle.
14. Set 1100 AA unit as follows:

    mu - 2428
    slit - .5
    lamp MA - 3
    flame - air-acetylene - extremely lean

Stds. 100 ppb - 10
1000 ppb - 100
500 ppb - reading

15. Report directly in ppb. Detection limit 5 ppb at reading of .5.

*-1 - for rock geochems steps 2 and 3 can be eliminated.

*-2 - it is important to maintain as closely as possible standard conditions for all samples and standards in a series.

Reagents & Material

- MIBK - 4-Methyl-2-Pentanone
- HCl - conc
- HNO3 - conc
- Flux - 2980 g PbO
  777 g Na2CO3
  68 g Na2B4O7
  68 g SiO2
  167 g Flour

GOLD-1

cinder cone

CONE GLACIER

glacier

cliffs

glacier

glacier

X

6 $\frac{0}{21}$ silt

5 $\frac{0}{15}$ silt

× Monogenic Pyroclastic

× Polygenic Pyroclastic

● 1 Lapilli Tuff

● 2 dacite

× flammish rhyolite

Vein × 20° dacite cut by 30° anhcrite veins + pyrite ● 3

80° 40° × interlayers of vesicular felsic lavas

Pyroclastics ×

cliff

● 4 massive tan-green hornfelsed dacitic lava

× Pyroclastic, hornfelsed

0 50 200 m

N

56° 32' 57"

130° 40'

130° 37' 30"

LEGEND

- ●2 Location of sample for thin section study or analysis
- × Point of observation
- X Location of large volume sample for heavy liquid separation
- $\frac{0}{21}$ silt $\frac{\text{Au in ppb}}{\text{Cu in ppm}}$, sampled medium
- Bedding attitude
- Creek, sandbar

BRAZOS PETROLEUM CORP.	
FIELD & ASSAY RESULTS GOLD-1 CLAIM NTS 104 B/10	
Prepared by JORANEX RESOURCES INC.	
FIGURE: 3	Scale: 1/5,000
To accompany Report on: GOLD-1 CLAIM by H.P. Salat - Nov. 27, 1989	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,787