

GALLANT GOLD MINES LTD.

GEOLOGICAL AND GEOPHYSICAL  
REPORT ON THE  
GEORGIA PROPERTY  
TRAIL CREEK MINING DIVISION  
BRITISH COLUMBIA  
NTS 82 F/4

by  
J.L. HARDY, M.Sc., F.G.A.C.

October 1986

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,743  
PART 10F2

FILMED

CLAIMS WORKED

CLAIM	TYPE	LOT	RECORD	ANNIVERSARY
ELANORE	R.C.G.	951	369	MARCH 28
IRON COLT	R.C.G.	795	367	MARCH 23
VIKING	R.C.G.	4416	314	SEPTEMBER 1
GEORGIA	R.C.G.	928	165	AUGUST 25
POTT	R.C.G.	733	363	MARCH 9
CALEDONIA/PUTNAM	R.C.G.	734/4917	364	MARCH 9
BUCKEYE	R.C.G.	534	365	MARCH 9
SILVERINE	C.G.	732		
EVENING STAR	C.G.	801		
GEORGIA FRACTION	C.G.	4668		
LA BELLE	C.G.	729		
MASCOT/KAPAI FR.	R.C.G.	1344/11012	776	JANUARY 16
ST. LAWRENCE	R.C.G.	1197	777	JANUARY 16
COPPER JACK/MICHIGAMIE/				
G.B. ARCHITECT FR.	R.C.G.	1185/1294/1707	778	JANUARY 16
NORTH STAR/TIP TOP	R.C.G.	797/798	779	JANUARY 16
KAY	M.C.		774	JANUARY 23
ALBERTA	R.C.G.		801	JANUARY 25

LOCATION:

49°05' / 117°48'

OWNERS:

M. & C. DELICH, M.M. BUTORAC, C. SIDEKO,  
GALLANT GOLD MINES LTD.

OPERATOR:

GALLANT GOLD MINES LTD.

PROJECT GEOLOGIST:

J.L. HARDY OF MARK MANAGEMENT LTD.

i

**GALLANT GOLD MINES LTD.**  
**REPORT ON THE**  
**GEORGIA PROPERTY**  
**TRAIL CREEK MINING DIVISION**  
**BRITISH COLUMBIA**  
**N.T.S. 82 F/4**

**SUMMARY**

The Georgia property consists of 20 modified grid units, four crown grants and reverted crown grants located in the Rossland Gold camp in, the West Kootenay district of S.E. British Columbia. It lies within two km of the former Le Roi-Centre Star-Josie systems. Still owned by Cominco, between 1890 and 1936 this produced about 6.2 M/T of ore grading 0.47 oz/t Au, 0.6 oz/t Ag, and 1% Cu. Up to 1941, gold was produced on a limited scale on several of the Georgia claims and old reports suggest that extensions to the Le Roi system exist on the Georgia property.

In 1982 Gallant Gold Mines Ltd. completed a preliminary field examination and literature review. This work confirmed that economic grades of gold exist at least locally on the claims. The following year, Gallant optioned the crown grants and seven of the reverted crown grants and by 1984 had acquired the property as it exists today. This was the first time that the ground had been assembled as a package and explored using modern geologic mapping, geochemical sampling and geophysical techniques.

Preliminary geophysical, geochemical and geological surveys in 1983 and 1984 investigated the potential of the property for vein, stockwork-type and stratabound mineralization. The results indicated that several strong mineralized veins and vein systems are present, and at least locally carry values up to 0.724 oz/t Au with wallrock values up to 0.340 oz/t Au. VLF-EM conductors are at least partly coincident with known vein systems, and extend beyond into covered areas.

The 1986 program carried out in late May, June and early July consisted of approximately 30 line km of Genie EM and magnetometer and about 4 line km of I.P. over what was believed to be the most geologically favourable area. These were followed by 1:2000 scale geological mapping over the entire property and 1:1000 scale geological and rock chip sampling over areas of interest. A 2277 ft (694 m) diamond drill program was completed in 7 holes; all core was analyzed for f.a.a. Au and 30 element ICP.

Genie anomalies (for the most part at least broadly coincident with previous VLF results) are typically narrow (<5 m width) but extend over strike lengths up to 500 m and dip nearly vertical. The Columbia-Kootenay, a past producer, currently owned by Cominco (and surrounded by Gallant ground) is marked by an excellent conductor 750 m long and up to 15 m wide. Two shorter and narrower conductors on Gallant ground are sub-parallel to that anomaly, and are at least partly coincident with outcropping massive sulphides.

I.P. results provide broad zones of high chargeability/low resistivity with highest intensity centres up to 40 m displaced from the Genie centres. A significant high with 300 m strike length and up to 100 m wide lacks a corresponding Genie response.

Drill testing of the best selected anomalies revealed up to 15% finely disseminated iron sulphides over widths up to 7 m (20 ft), and massive sulphide veinlets from several inches to 1 m (3.0 ft) in width. Best intersection was 0.131 oz/t Au over a 0.7 m (2.3 ft) massive pyrrhotite vein in hole G86.4.

Mineralization on the Georgia claim is related to the aureole of intrusive activity around the Rossland monzonite. The targets tested lie within a favourable environment for precious metal accumulations of mesothermal type, as evidenced by: high disseminated iron sulphide content, anomalous As, local high grade intersections in massive sulphide veins/wallrocks, pervasive silicification, etc. Drilling to date however, has failed to indicate the existence of economic quantities of precious metals. Several geophysical anomalies are as yet totally or partially untested.

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## 1. INTRODUCTION

In 1982 and 1984 Gallant Gold Mines Ltd. optioned the Georgia gold property located in the Rossland gold camp. A preliminary property examination and literature review completed in 1982 showed that vein-type mineralization is present on the property. Gold was produced in small quantities from several of the claims up until 1941. Drill indicated reserves at that time showed 38,500 proven tons averaging 0.228 oz/ton gold. Since then no work was carried out until 1980 when Cominco completed a small percussion drill program to test for low grade stockwork type mineralization.

In 1983 and 1984 Gallant carried out short term but systematic exploration programs using small crews based at the foot of Red Mountain. The work confirmed the potential of the known vein systems as described in the old reports and established the excellent possibility of extensions to the known mineralization. The 1986 programme described in this report further assessed the property potential.

### 1.1 LOCATION AND ACCESS

The Georgia property is located just north of Rossland on the flanks of Columbia-Kootenay and Monte Cristo Mountains in the Trail Creek Mining Division of the West Kootenay District of Southeastern British Columbia (Figure 1). It is centred on 49° 06' and 117° 47' within NTS 82/F 4 and covers an area of about 7.32 square kilometres.

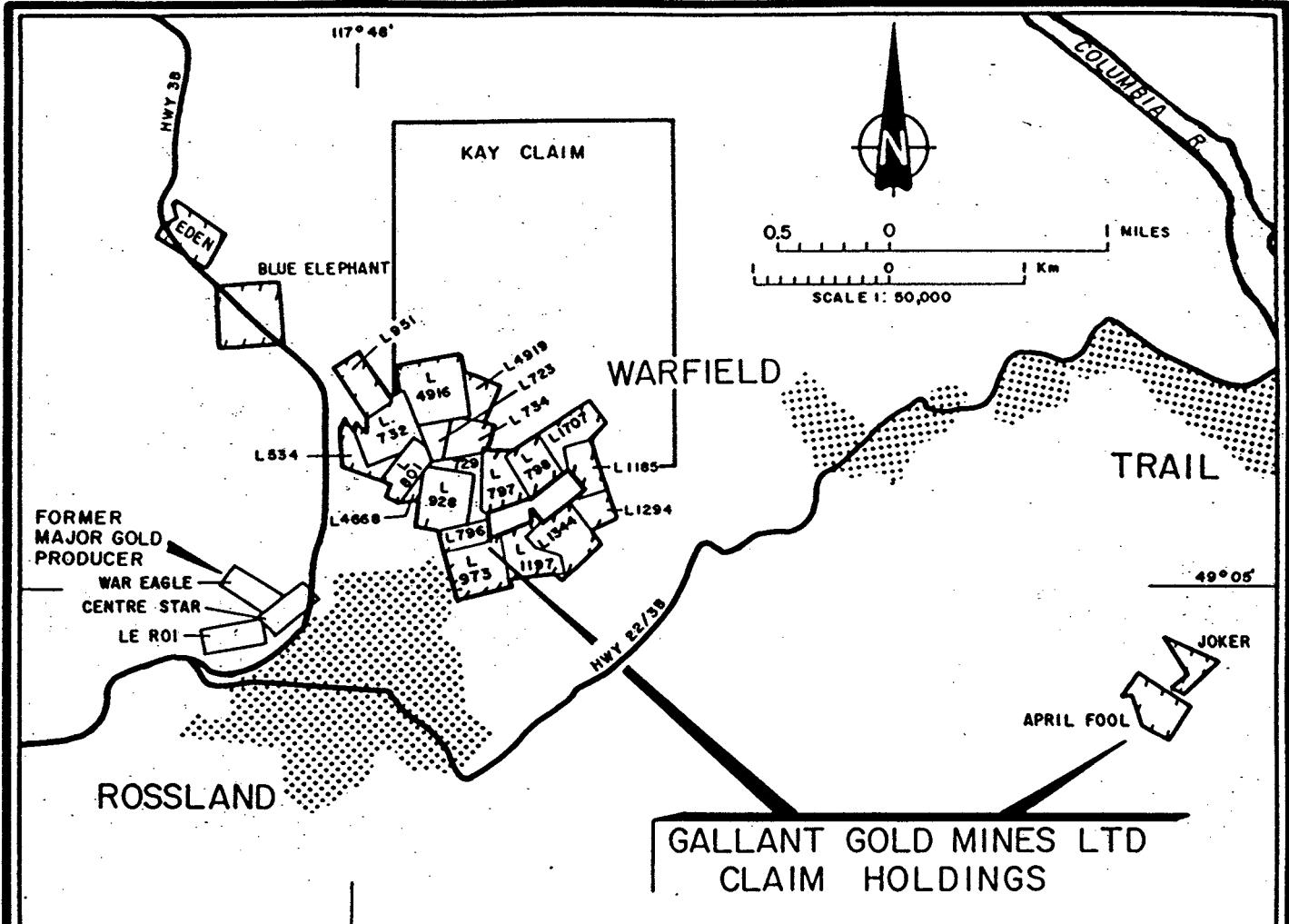
Good access to the crown grants and reverted crown grants is provided by a network of dirt and gravel roads that connect with the Rossland street system. The only access to the Kay claim is in the southwestern corner where it overlaps the crown grants. From Rossland, the Cominco smelter at Trail is only ten kilometres away by paved highway.

### 1.2 PHYSIOGRAPHY

The Georgia property is situated on the gently sloping north and east flanks of Monte Cristo and Columbia-Kootenay mountains which reach an elevation of 4200 feet (1280 metres) and 4060 feet (1237 metres) respectively. The property extends from these peaks down to 2400 feet (732 metres).

There are no major creeks on most of the property but surface drainage flows into Acme Creek to the north and northwest and Milk ranch Creek to the southeast. The area is well wooded with vegetation consisting predominantly of western hemlock, Douglas fir, western white pine, lodgepole pine, western red cedar, Engelmann spruce, white spruce, black cottonwood, aspen, common paper birch, larch, alpine fir, and grand fir. Some water is available in the old mine shafts and in Coyote Swamp.

In this Southern Interior climatic region, summers are temperate and dry while winters are cool with heavy snowfall. Precipitation averages 56 to 170 centimetres annually. Mean daily temperature in



GALLANT GOLD MINES LTD.  
CLAIM & LOCATION MAP  
TRAIL CREEK M.D.-B.C. NTS. 82-F-4  
JCF./r.w.r. FEB., 1985  
FIGURE 1

July is 16° to 18° C and in January is -5° to -10° C. The growing season lasts 181 days from April 15 to October 13.

The area has been glaciated and a thin mantle of till covers much of the map area.

### 1.3 CLAIM INFORMATION

The Georgia property consists of three adjacent groups of mineral claims referred to as the Georgia Group, the Georgia Extension and the Mining School Group. The Georgia Group, under option from Michael and Catherine Delich of Rossland, consists of one crown grant, and seven reverted crown granted claims. The Georgia Extension consists of three crown granted claims<sup>1</sup> under option from Michael M. Butorac, also of Rossland. The Mining School Group is comprised of four reverted crown grants<sup>1</sup> under option from Crispulo C. Sideco of Trail, B.C. In addition Gallant owns the Alberta reverted crown grant and the 20 unit Kay modified grid claim in its own right. For assessment purposes all fifteen claims were grouped together in the Georgia group. The claims are all located in the Trail Creek Mining Division.

Additional claim information is given in Table 1.

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<sup>1</sup>Although several of the claims were originally staked separately, contiguous claims have since been reissued together as one reverted crown grant where they form a combined total of 25 hectares or less. In addition there are four crown grants are not part of the main Georgia property.

TABLE 1

## CLAIMS

CLAIM	OWNER	STATUS	LOT No.	RECORD No.
ELANORE	M & C DELICH	R.C.G.	951	369
IRON COLT		R.C.G.	795	367
VIKING		R.C.G.	4416	314
GEORGIA		R.C.G.	928	165
POTT		R.C.G.	733	363
CALEDONIA/PUTNAM		R.C.G.	734/4917	364
BUCKEYE		R.C.G.	534	365
SILVERINE		R.C.G.	732	
EVENING STAR	M M BUTORAC	C.G.	801	
GEORGIA FRACTION		C.G.	4668	
LA BELLE		C.G.	729	
MASCOT/KAPAI FR.	C C SIDEKO	R.C.G.	1344/11012	776
ST. LAWRENCE		R.C.G.	1197	777
COPPER JACK/MICHIGAMIE/				
G.B. ARCHITECT FR.		R.C.G.	1185/1294/1707	778
NORTH STAR/TIP TOP		R.C.G.	797/798	779
ALBERTA	GALLANT GOLD MINES LTD.	R.C.G.		801
KAY	GALLANT GOLD MINES LTD.	M.G.C.	20 UNITS	774

R.C.G. - Reverted Crown-Granted Mineral Claims

M.G.C. - Modified Grid Claims

C.G. - Crown-Granted Mineral Claims.

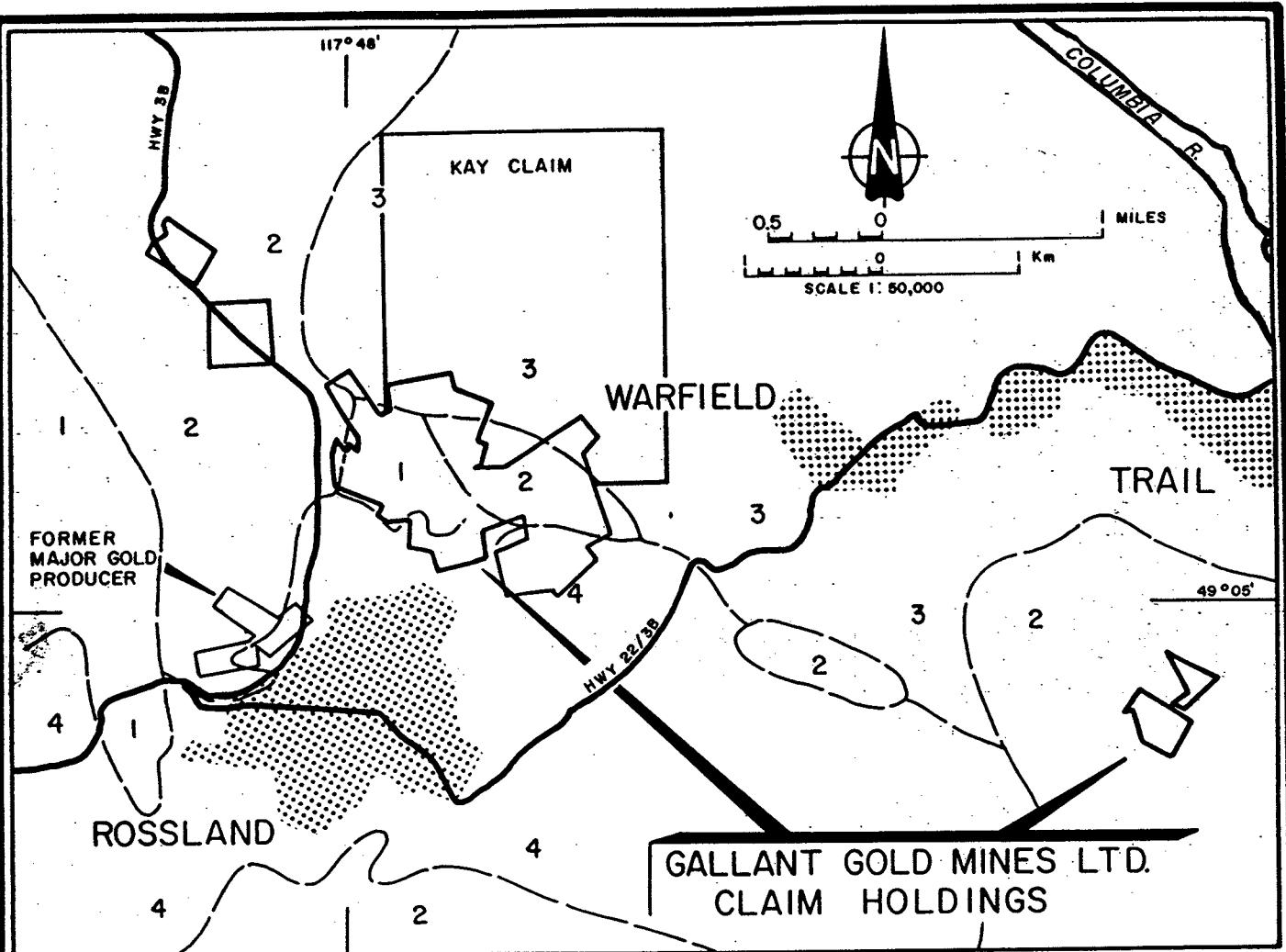
#### 1.4 HISTORY AND PREVIOUS WORK

Gold was first discovered in the Rossland area in 1887 and in 1890 the first claims were staked on Red Mountain about two kilometres west of the Georgia property. The resulting exploration and development work led to discovery of high-grade gold veins on the War Eagle claim in 1894. In 1895, similar mineralization was discovered on the nearby Centre Star and LeRoi claims. This brought on a gold rush that lasted until 1896.

The mines remained important producers until 1936. Production peaked at 360,000 tons per year in 1903 and averaged 286,000 tons per year until 1916, when there was a sharp decline until the main mines closed in 1928. At that time ores averaging 0.285 oz/t Au were not economic. Among the most important past producers were: LeRoi (39%), Centre Star (25%), War-Eagle (24%) and Josie (10%). Total district production was about 6.2 MT with an average grade of 0.47 oz/t Au, 0.6 oz/t Au and 1% Cu, while the initial ore (0.13 MT) graded 1.46 oz/t Au, 1.96 oz/t Ag and 1.73 % Cu.

The claims under option to Gallant Gold Mines Ltd. were all staked during the gold rush years from 1890 to 1896. Although the claims have been held almost continuously since the 1890's, government records show that only five claims, the Georgia, Evening Star, Iron Colt, Buckeye and Silverine have had significant exploration or development. This will be detailed in Section 2.4.

Apart from work directly related to old showings and workings, little has been done since that time. In 1980, Cominco drilled 20 percussion holes over a 350 x 400m area at sites shown in Figures 4 and 5. These tested for low grade stockwork type mineralization over As-Au soil anomalies (Nichols, 1981). However holes were drilled vertically to test near vertically dipping structures. In addition all core was analyzed, gold was run using only atomic absorption rather than fire assay techniques; limited work by Mark Management suggests that this will provide at best a 43% extraction. Results are therefore inconclusive. Highest values came from an area 200 x 100m which contains several E-W dipping veins of the main Georgia vein system; nine holes were anomalous but not economic. Best grades of 0.283 oz/t Au were recorded in 80.9 from 200-210 ft. It was concluded that reasonable potential remained for developing economically interesting tonnages of underground material.



#### LEGEND:

LOWER CRETACEOUS (?)

NELSON PLUTONIC ROCKS

**4** ROSSLAND MONZONITE: monzonite, porphyritic monzonite

**3** TRAIL BATHOLITH: granodiorite, diorite, quartz diorite.

LOWER JURASSIC

**2** ROSSLAND FORMATION: andesite, latite, basalt, flow breccia, augite porphyry, agglomerate, tuff; minor shale.

PENNSYLVANIAN (?)

**1** MOUNT ROBERTS FORMATION: slate, limestone, argillaceous quartzite, greenstone.

**GALLANT GOLD MINES LTD.**

#### **GEOLOGY OF THE ROSSLAND AREA**

TRAIL CREEK M.D.-B.C.

JCF./rwr.

NTS. 82-F-4

FEB., 1985

FIGURE 2

### 1.5 WORK BY GALLANT GOLD MINES PRIOR TO 1986

In 1983 and 1984 short systematic field programs were carried out by small crews based in the town of Rossland. These are detailed in Ridley & Troup (1983) and Troup, Freeze & Butterworth (1984) and were carried out to investigate the potential for vein and stockwork mineralization on the Georgia property.

VLF-EM was completed over much of the property on lines spaced at 100 m intervals with readings at 20 m stations, using a Geonics EM-16. Over the Mining School Group lines were run at 200 m intervals. Several strong but narrow conductors are coincident with known mineralized structures in outcrop and extend beyond into overburden covered areas. A strong conductor 900 m long and about 50 m wide coincides with the Columbia-Kootenay vein system. A less defined conductor about 400 m long and 30 m wide marks the most northerly of the Mascot veins. While conductors are present in the vicinity of the Georgia and Evening Star, they are more diffuse. Projections of several trends suggest possible extensions SW to the Le Roi.

Two distinct orientations are evident in both VLF and veins: broadly  $70^\circ$  in the east and more nearly  $0^\circ$  to  $10^\circ$  in the west. The VLF in the Georgia area may show evidence of both trends.

While many conductors are still unexplained, they tend to decrease in intensity northward as overburden cover increases. The sole exception is a well defined 200 m long x 20 m wide 80% anomaly at the border of the Kay and Viking claims trending about  $150^\circ$ .

Prospecting, mapping and rock chip sampling were carried out over known showings and areas of anomalous VLF. For the most part outcropping massive sulphides albeit of limited width and strike length are found to exist near the conductors.

The encouraging results of these programs indicated that further work was clearly required to fully assess the nature and extent of anomalies and mineralization on the Georgia property.

### 1.6 WORK IN 1986 BY GALLANT GOLD MINES LTD.

In 1986 the following program was carried out over the period May 27 to July 11, 1986 by a two person crew based in Rossland.

1. Detailed geological mapping and sampling of the property at 1:2000 and 1:1000 scale. Emphasis was placed on known showings, old workings and geophysical anomalies.

In addition a three person geophysical crew from P.E. Walcott and Associates Ltd. carried out as follows:

2. A Genie EM and magnetometer survey was completed over lines spaced at 50-100 m with measurements taken every 20 m on two grids.

3. An Induced Polarization survey was carried out on five lines in the most promising area of Grid 2. A narrow electrode spacing was used to probe for veins as well as disseminated sulphides. This geophysical work is described by Walcott (in process).

4. The program concluded with systematic diamond drilling of the most favourable targets identified in 1,2 and 3.

## 2.0 GEOLOGY AND SAMPLING

### 2.1 REGIONAL GEOLOGY

The Rossland mineral deposits occur within an area of plutonic and dyke rocks which intrude Upper Paleozoic and Lower Jurassic volcanic and sedimentary rocks, whose ages have been determined by a limited number of fossils. The Carboniferous Mt Roberts Fm includes grey siltstone, sandstone, conglomerate and minor limestone. The Jurassic Rossland Group is primarily andesitic volcanic breccia, lapilli tuff, volcanic sandstone/conglomerate and lenses of grey to black siltstone. These rocks are intruded and variably metamorphosed by three major groups of plutonic rocks: the Trail Pluton, the Coryell Batholith and the Rossland Monzonite. A large number of dykes, including diorite, lamprophyre and syenite also crosscut these rocks. Generalized regional geology is shown in Figure 2.

The camp is located on what Fyles (1984) has termed the Rossland break. This is a poorly defined long-lived zone of movement defined by an irregular line of intrusions and faults which trend ENE through both volcanics and sediments. Faults are inferred from discontinuities across the intrusions. The break extends for many kilometres north and south of the Rossland area and reflects the southernmost curvature of the Kootenay Arc which may be related to it. The area south of the break is characterized by NE trending structures, while the north domain in which the major mineral deposits occur contains northerly trending structures. Five kilometres north of the break these structures terminate against schistose rocks which dip at low S and SW angles. The complex distribution of the intrusive facies of the Lower Jurassic Rossland Group (ie. augite porphyry sills increase in size and number toward the break) would suggest that the break originated during Rossland volcanism. It later became a locus of repeated intrusions and now contains the Rossland monzonite and a group of serpentinites.

The Rossland area is adjacent to the SW corner of the Trail Pluton whose southern margin dips beneath the main camp. The eastern margin of the Coryell batholith occurs about 1 km west of the camp and related dykes and irregular stocks are present within. Each of these intrusions is surrounded by a zone of thermal metamorphism.

The pattern of the mineralization of the Rossland area suggests that it is a product of the complex structural and intrusive history of the camp.

On a regional basis, the area has been mapped by Little (1985, 1982, 1960 at 1:125000, 1:50000 and 1:250000 scales) and by Fyles (1982 at 1"=1000 ft). Almost all this regional field work was completed prior to 1970 though there has been more recent mapping in small sub-areas. Both regional workers agree that the Rossland Monzonite, and Rossland Group Volcanics/Sediments are present on the property. However, the distribution of these units differs and slightly different descriptive terminologies are used, which may in part be a function of

the different mapping scales used.

On a 1:12500 scale Little has mapped the Georgia property as underlain by Pennsylvanian Mt Roberts Fmt, Jurassic Elise Fmt and the Rossland Monzonite. The first is described as consisting of a thick assemblage of argillaceous quartzite, limestone, greywacke, black siltstone, chert, pebble conglomerate and minor volcanics. The base of the Mt Roberts Fmt is not exposed and the top has been deeply eroded prior to deposition of the Elise Fmt. A Pennsylvanian age is currently favoured, allowing tentative correlation with the Milford and Cache Creek Groups (Little, 1985, p.19).

This description of lithologies appears to fit well the fine grained sediments present on the Georgia property. On a larger scale however both Little and Fyles have considered these rocks as part of the Elise Fmt of the Rossland Group.

The Rossland Group consists of a complex succession of volcanic and sedimentary rocks. No Rossland type locality has been defined and sparse fossil marker beds indicate that the group is complexly folded. Because of these factors and because of alteration, shearing, faulting and widespread intrusion, it has not been possible to determine the local stratigraphic succession in the Rossland area. Fyles (1984) has defined green volcanic conglomerate/breccia and related volcanic rocks (unit 2e), augite porphyry sills and dykes (unit 2f), grey to black siltstone and argillite (unit 2c) and massive greenstone of uncertain origin (unit 2d). Little (1982) has considered these are part of map units: Jurassic Elise volcanics (Jev), Jurassic Elise sediments (Jes) and Jurassic Elise augite porphyry (JeI). This convention has been followed on the Georgia mapping. Age is believed to be lowermost Jurassic to early middle Jurassic (Little, 1982, p. 15).

On surface all rocks appear to be of greenschist metamorphic grade. Thermal metamorphic effects are most pronounced adjacent to the Rossland monzonite which has an aureole of hornfels up to 500 m wide with bleaching, silicification, extensive biotite and locally garnet and pyroxene development. Patterns may be locally complicated by the Trail intrusions.

Regionally the Elise Fmt consists of up to 2750 m of andesite and propylitized basalt metamorphosed to sub-greenschist and greenschist facies. Accurate measurements of thickness are difficult because bedding attitudes are scarce. Agglomerates, flow breccias, massive flows, tuffs, volcanic conglomerates and minor shales are included in these units. Irregular sill-like bodies of synvolcanic augite porphyry are common. In the area of the main mines the augite porphyry forms the Rossland sill up to 760 m thick. Augite phenocrysts are present in all volcanic units. The upper part of the Elise is interbedded with soft, carbonaceous shales of Pliensbachian/Toarcian age. It is underlain unconformably by beds of Sinemurian age. This would indicate a lower Jurassic (Sinemurian) age for the Elise, which thus correlates with Nicola and Takla Groups (Beddoe-Stephens 1982, p. 586).

The Rossland Monzonite forms two large stocks, one extending east from Rossland and one to the east-southeast of Trail and some smaller bodies north of Rossland. For the most part it is a non-equigranular green to green-grey medium crystalline rock comprised of feldspar augite, hornblende and biotite. Variations are caused by alteration, proximity to margins of the intrusion and to large inclusions within it. The mass at Rossland is particularly heterogeneous with the colour ranging from light grey to dark green and the grain size from fine to coarse. The fine grained facies superficially resembles andesites of the Rossland Group. The monzonite intrudes the Elise Fmt, while there is disagreement about its relationship with the Trail batholith. It is probably genetically related to the Nelson intrusions and hence of late Jurassic or early Cretaceous age. Contacts with the surrounding country rock vary from sharp to gradational over a few tens of metres. Near the main mines two monzonite protrusions are separated by an E plunging arch of augite porphyry.

To the north of the property Little has shown the Nelson intrusion, while Fyles has shown part of the Trail pluton, itself an irregular mass of granodiorite about 12 km across. Contacts in the Rossland area are mostly sharp and irregular. Lithologies are primarily relatively fresh biotite-hornblende granodiorite grading into quartz diorite and diorite. The granodiorite is generally a green-grey hypidiomorphic coarse to medium crystalline rock with visible quartz, feldspar, hornblende and biotite. Quartz diorite and diorite are most common as border phases. Age is believed to be late Jurassic-early Cretaceous.

The Rossland camp is characterized by abundant dykes which however have all been dated as Tertiary. Lamprophyre dykes typically trend 10-20°W and dip steeply. They range from a few cm to tens of metres thick. Biotite or hornblende may dominate. In the main mines the Josie and Nickel Plate dykes average more than 20 m in thickness and in part appear to have controlled the ore concentrations. Diorite and diorite porphyry dykes are also common.

The structure of the area is extremely complex and hard to decipher due to the lack of continuous rock outcrops. Faults and fractures most commonly dip steeply and occur in sets. A complex sequence of fracturing, faulting and filling of fractures by dykes has been only partly deciphered. Multiple episodes of brittle deformation apparently took place in Tertiary time. However, deep-seated pre-Tertiary fractures apparently controlled the Rossland break, which itself influenced subsequent deformation.

Two well-defined steeply dipping fracture sets occur: the fault dyke set trends northward (N20°W) and the other vein set trends eastward. The fault dyke set consists of extension fractures containing Tertiary dykes with dominant fault movements down on the west. The dykes are spaced at intervals of a few tens of metres and form part of a regional dyke swarm which occurs for many kilometres E and W of

Rossland. The emplacement of the dykes took place during a period of regional E-W extension which produced fault bounded blocks and expansion within them of up to 5% (Fyles, 1982, p.33).

The pattern of the vein set suggests it developed by east-west compressive stresses which produced shear failures in the 115/065 direction and tension fractures in the 90° direction (Ibid p.33). The area affected by this stress system may not have been larger than the Rossland Camp itself, and is a significant change from the E-W tensional system that produced the dykes.

## 2.2 ECONOMIC GEOLOGY OF THE ROSSLAND CAMP

Drysdale (1915) and Gilbert (1948) have provided the most detailed accounts of the gold mineralization using information which was based for the most part on primary observation. Later workers have relied heavily on their data. The ores are summarized as follows after Drysdale and Gilbert.

The Rossland ore consists mainly of pyrrhotite and chalcopyrite, associated with a gangue of altered country rock containing some quartz and locally a little calcite. The sulphides form from 50 to 70 percent of the mass. The values are largely in gold (0.4 to 1.1 ounces), with some copper (0.7 to 3.6 percent), and a little silver (0.3 to 2.3 ounces). There are all transitions from typical ore to solid sulphides or to rock matter, or to gangue with little apparent mineralization but carrying values.

The Centre Star-LeRoi was mined almost continuously over a strike length of several thousand feet but in general the veins are a series of ore shoots of no great width or strike length. On the whole the veins are non-persistent; one dies out and a parallel one appears, possibly connected with the first by a cross break. As the fissures strike at various angles within a 60° section, the relations of the shoots are often complex and their positions largely unpredictable. In the central area there are more than 20 individual veins which contain ore shoots up to 350 m in strike and dip length and 15 m thick.

Five main types of deposits have been recognized in the district, which may be enumerated as follows:

1. Ore deposits in true replacement vein fissures with fairly definite hanging and foot-walls. In contrast to the other types, such veins show great uniformity in width and value of ore. The best examples of this type traverse augite porphyrite country rock.

2. Ore deposits occurring along sheeted fissure or shear zones, in irregular, generally lens or tabular shaped shoots with intervening stretches of barren vein characterized by crushed country rock and fault gouge. The shoots as a rule, though not invariably, lie along the portion of the shear zone traversing a formation contact. In many cases only one definite wall is present, the other boundary being a commercial rather than a structural one, although there is generally a certain parallelism of lines of fracture for short distances which

3. Ore deposits in cross fractures or fault fissure veins which are of very local occurrence and of not very great economic importance. In some cases, however, the intersections of such cross fractures with main vein fractures show enrichment, whereas in other cases they show impoverishment. Such cross fractures are often misleading in diamond drill operations.

4. Ore deposits as irregular impregnations of country rock; in part somewhat resembling stockworks. This type of deposit occurs more commonly in areas underlain by the sediments of the Elise Formation.

5. Gold-bearing quartz fissure veins carrying iron, copper, and lead sulphides as well as gold. This type of deposit is more in the nature of cavity fillings than replacement veins.

While gold typically occurs with sulphides, there are several periods of mineralization and even massive sulphides do not necessarily show high gold values. The presence of silica and calcite is typically a good clue to the presence of gold.

The main Rossland veins occur on two general trends: the best developed is N60°-00E as shown in the Centre Star-Le Roi and the other N60°W as shown by the War Eagle. Less significant veins are parallel to these or in the acute angle between them. All veins dip between 60-80°N. The strongest veins are concentrated in three groups: the North Belt, Main Camp and the South Belt. On the Georgia property Monte Cristo Mountain claims lie within the North belt while the Columbia-Kootenay and probably the Mascot are within the Main Belt.

Between 1894 and 1941 about 6.2 MT of ore with an average grade of 0.47 oz/t and (13 g/t Au), 0.60 oz/t Ag and 1% Cu was produced from the veins of all Belts (Gilbert 1948, p.189). Since that time there has been no production. More than 98% of the ore shipped came from the Main veins (LeRoi, Centre Star, Josie and War Eagle claims) and more than 80% came from the central core zone between the Josie and Nickel Plate dykes an area of about 4000 feet by 2000 feet (Ibid. 1948, p.192). Silicification often accompanied ore deposition and appears independent of position with respect to intrusions (Bruce , 1917, p. 218).

While there is a great deal of conflicting evidence (summarized in Fyles, 1984, p.52) gold mineralization is now believed to be mainly post-Tertiary in age, though it is recognized that multiple periods of mineralization have occurred perhaps with multiple sources for metals.

As mining progressed, most of the important properties were taken over by the Consolidated Mining and Smelting Company of Canada Ltd (now Cominco) who were the principal owners during the period of mining and into the early 1960's. Intense geological work and appraisal were carried out by Cominco between 1941 and 1943. Little systematic work has been carried out since that time.

## 2.3 PROPERTY GEOLOGY

Mapping in 1986 used two geophysical grid bases at 1:2000 scale. The following map units are recognized with legends as shown in Figures 3, 4 and 5.

### Cretaceous: Nelson Intrusions

Map Unit 5: Granodiorite

Map Unit 4: Rossland Monzonite

### Jurassic: Rossland Group: Elise Formation

Map Unit 3: Augite Porphyry

a. hornblende granodiorite

Map Unit 2: Andesite Tuff to Agglomerate

Map Unit 1: Siltstone

#### 2.3.1 Elise Formation Siltstones (Map Unit)

Siltstones within map unit 1 are typically black to dark grey to brown grey and often finely laminated on a 5 mm to 5 cm scale. Lithologies range from siltstones to fine quartzites with lesser carbonaceous mudstones (as at L4N, 0+75E) and rare litharenites; they may be calcareous locally. Graded beds and soft sediment deformation are common in places.

Silicification is widespread and highly erratic and may be accompanied by bleaching. Biotite, frequently present as extremely finely crystalline aggregates is ubiquitous. It occurs within specific beds which tend to be somewhat more quartz-rich and lower in sulphide and in hornfelsed zones around intrusives.

Pyrite and pyrrhotite are frequently found as very fine disseminations in amounts from trace to 30%. Both sulphides may occur together or one may dominate. Either or both may be present in coarser crystalline clots, impregnations or along fractures +/- gypsum. Rarely sulphides are apparently stratabound but more often occur in highly irregular concentrations of cross-cutting patches. One such sample (83113) with 5% iron sulphides near the Evening Star graded 0.173 oz/t Au without obvious veining. Arsenopyrite may also be present as fine disseminations and up to 10% locally as apparent replacements. Sporadic discontinuous quartz and calcite veins are also found, generally less than 10 cm in width.

#### 2.3.2 ELISE FORMATION - TUFFS

The volcanics of map unit 2 are typically dark green to grey-green to brown green andesites. Generally they are fine-grained, though lapilli or larger sized fragments may be visible on the most favourable weathered surfaces. Augite, feldspar and hornblende phenocrysts are common. Where grain size is small, the greenish colour aids in distinction from map unit 1.

The bulk of the unit is volcaniclastic. Individual fragments typically merge with the matrix due to hornfelsing, alteration, weathering, and shearing. Fragments vary from lapilli to coarse agglomerate size. Finer varieties are commonly well banded on a cm scale and often show graded bedding. Fragment and groundmass compositions are closely similar, but variations in crystal size produce heterolithic tuffs. These often grade laterally into epiclastic varieties and eventually into siltstones.

Pyroclastic agglomerates are well exposed on the road to the microwave station and outcrop on the Silverine, Buckeye, and Elanore claims. Poorly sorted fragments up to 25 cm in diameter range from sub-rounded to highly angular in shape; these pass laterally into lapilli and eventually into crystal tuff. Locally there is patchy epidote alteration. Near L1N, 3+10E, agglomerate contains angular to sub-angular fragments with 15-20% pyrrhotite and a ground mass with 1-2% pyrrhotite.

Dark grey siltstone to fine quartzite is common as minor interbeds within the volcanic map unit at several horizons. On a regional basis sparse ammonites provide a Sinemurian (Early Jurassic) age. These rocks are commonly consistently hard and dense and may be weakly hornfelsed. Patchy silicification is common especially near intrusives.

In the tuffs, disseminated to clotted iron sulphides (both pyrite and pyrrhotite) vary from trace to over 30% locally,<sup>1</sup> but average less than 1-2%. In the agglomerates sulphides are generally less than 2%. Minor amounts are also present along paper-thin fractures +/- gypsum. Up to 5% very fine arsenopyrite needles may also occur. Thin quartz stringers are erratically developed and may account for up to 5% of rock volume.

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<sup>1</sup>This is apart from massive sulphide veins to be discussed more fully in the section on mineralization.

### 2.3.3 ELISE FMT AUGITE PROPHYRY MAP UNIT

The augite porphyry map unit is very complex as befits an origin during activity on the Rossland break. There are well-defined intrusive portions intermixed with distinct clastic phases. The unit is in places very difficult to distinguish from massive volcaniclastics with scattered hornblende phenocrysts, particularly where there has been alteration. The largest outcrops are present on the southerly slopes of Columbia-Kootenay Mt. Typically the unit is dark green with a slight brownish or pink tinge. Up to 15% phenocrysts of dark green or black augite or hornblende up to 5 mm across are characteristic in an aphanitic groundmass. Blocky feldspar phenocrysts may also be characteristic locally in a finer darker groundmass.

Commonly the rock is fragmental with sub-rounded to angular texturally heterolithic blocks from mm to up to a metre across. These are somewhat lighter in colour than the main mass of the porphyry but essentially the same composition. Typically the fragments are composed of augite porphyry in which the matrix is richer in plagioclase than the matrix of the surrounding porphyry. Because textures are often obscure, sawing may be needed to confirm the fragmental nature of the porphyry and in places these agglomerates are indistinguishable from those in map unit 2. Best exposures are on the SE slope of Columbia-Kootenay Mountain.

The augite porphyries are believed to be mostly peneconcordant with the tuffs and flows, and may be sill-like apophyses of feeders to the later flows.

A second major lithology is present in the augite porphyry map unit along the lower slopes of Columbia-Kootenay Mountain. This unit labelled map unit 3a in Figure 3 is a hornblende granodiorite which passes laterally over short distances to more typical augite porphyry lithologies. It is distinguished from map unit 5 by the presence of needle like, frequently aligned hornblende in a matrix of quartz, feldspar and finer mafics to provide an overall salt and pepper colour with a yellowish tinge. Blocky feldspar laths are typical in the groundmass.

Apart from massive sulphide veins which will be discussed in the section on mineralization, disseminated pyrrhotite and/or pyrite may be present from trace to 20% locally. Highest abundances may be associated with patchy silicification which leaves islands of unsilicified material. In addition iron sulphides occur along erratic paper-thin fractures, often with gypsum. Arsenopyrite may be present as fine needles or clots to 2-3% locally.

### 2.3.4. ROSSLAND MONZONITE MAP UNIT

Outcrops of the Rossland Monzonite, map unit 4, would appear to be scarce on the Georgia property or it is just a very difficult unit to distinguish from the main mass of the Trail Pluton. Irregular dyke-like bodies have been mapped on Columbia-Kootenay Mountain and north

from it east of Monte Christo Mountain toward the south of the Georgia property.

Where present it is a grey to grey-green medium crystalline equigranular rock with hornblende, plagioclase and potassium feldspar, and minor biotite in a finer crystalline groundmass. No quartz is present and it is typically non-rusty in contrast to the granodiorite and augite porphyry map units.

Cominco mapping in 1980 included areas of "mine granodiorite" as part of the Rossland Monzonite. In 1986, these outcrops were placed in the granodiorite map unit 5.

#### 2.3.5 NELSON GRANODIORITE MAP UNIT

The Trail pluton (a probable phase of the Nelson Intrusions) outcrops north and south of the Georgia property. Regionally on the north slope of Columbia-Kootenay Mountain the contact trends E and dips south, but this is difficult to observe on the property itself.

The southern outcrops are shown by both Fyles and Little to be part of the Rossland Monzonite. While sparse quartz poor varieties were in fact mapped as that unit, most outcrops contained +10% quartz and hence fitted within the map unit 5.

Lithologies are typically medium grey to grey-pink medium crystalline equigranular hornblende granodiorite. Crystal borders are variably distinct, but general alteration is confined to minor saussuritization of feldspars. Hornblendes are not typically needle-like or aligned in contrast to those within map unit 3. Locally slightly larger feldspar or hornblende phenocrysts or biotite spots may be present. In places magnetite occurs in 1-2 mm spots.

In some areas patchy silicification and feldspathization are very prominent. For example, in the area of the Evening Star workings, (apparently close to the contact of map units 1 and 2 with the granodiorite) highly altered hybrid lithologies occur cut by abundant anastomosing actinolite veins with patchy bleaching and feldspathization. Map unit end members are extremely hard to distinguish.

#### 2.3.6 DYKES

Mapping in 1986 basically identified dyke end members as felsic (fd) and mafic (md) dykes. Trends are most typically N-S.

The first are most commonly aplitic: light grey or white, very finely crystalline, characteristically sucrosic and composed predominantly of quartz, feldspar and <2% mafics. Well defined crystal banding on a mm scale is present in several dykes on Grid 2. Generally feldspars show a slight pinkish tinge. Widths range from a few cm to over 10 m.

These lithologies may grade into somewhat darker grey granodioritic varieties, which texturally resemble the main granodiorite masses but

have obvious linear form. Alternatively they may consist of 10-15% feldspar phenocrysts in a grey-green aphanitic groundmass.

Lamprophyre dykes occur in all areas of the property. Typically they are soft and dark brown-grey with biotite or hornblende subhedra. Widths are generally less than 2 m. Calcite vesicles may be present and the dykes are typically strongly magnetic.

Diorite dyke swarms are prominent on both Monte Cristo and Columbia-Kootenay Mountains. Typically there are green to brown-green, aphanitic and very fine-grained or porphyritic. In some cases, fine hornblende needles can be recognized. Widths vary from a few cm to over 3 m. Commonly these are also magnetic.

On the Columbia claim along the main access road a distinctive 8 m wide conglomeratic dyke outcrops whose description resembles that of the "conglomerate" or "white dyke" described by Drysdale (1915, p.3). It is a lamprophyre crowded with wallrock fragments, including a high proportion from formations which do not occur on surface in the Rossland area, such as apparent white quartzite, gneiss, syenite, vein quartz and aplite. Fragments up to 50 cm long are present in a poorly sorted fragment supported matrix.

## 2.4 PROPERTY MINERALIZATION AND SAMPLING

In general 1986 mapping revealed so many old pits, showings, workings, and veins it is impossible to describe them all. It is likely that during the peak of mining activities both Columbia-Kootenay and Monte Cristo Mountain were burned free of vegetation and almost their entire area worked at one time or another. Numerous additional workings remain unmapped and undiscussed.

Mineralization on the Georgia property falls into all five of Drysdale's deposit categories but types 1, 5 and 4 are the most common. Mineralization in the form of massive sulphide veins, veinlets and sulphide dissemination occurs in all map units. Sulphides include pyrrhotite, arsenopyrite, chalcopyrite and pyrite. In most cases these zones assay high in gold. Apart from the Columbia-Kootenay five significant veins have been found with assays ranging from 0.25 oz/ton over 25 cm to 0.614 oz/ton Au over 140 cm (Butterworth, Freeze & Troup, 1984).

The **Georgia**, **Buckeye**, **Silverine** and **Evening Star** claims on Monte Cristo Mountain are part of the **North Belt** deposits. On a regional scale they appear continuous but in detail are lenticular and offset by N trending faults. The North Belt veins occur in monzonite, granodiorite, siltstone and tuff and the host appears to control their structural characteristics and mineralogy (Fyles 1984, p. 38). All veins are offset by the N trending fault-dyke set.

The **Iron Colt**, **Mascot** and **Columbia-Kootenay** claims are believed to lie within the **Main Belt**. These veins form a continuous well-defined fracture system on a regional scale which extends from the southern slopes of Red Mountain NE through the city of Rossland to the eastern slopes of Columbia-Kootenay Mountain. The system trends 70° and consists of a series of veins dipping steeply to the north as well as important veins that trend about 120° and 90° with steep dips. The central Le Roi-Centre Star-War Eagle vein system was mined to elevations of about 600 m and explored by drilling to sea level.

Results of 1986 sampling are shown in **Table 2** which also gives the general location and a description of samples collected. The samples were placed in numbered plastic bags and sent to Chemex Labs Ltd. in North Vancouver for analysis. In the laboratory, samples were put through primary and secondary jaw crushers and a tertiary cone crusher. A sub-sample of approximately 250 grams was then pulverized in a rotary pulverizer. Pulp for precious metal analysis was screened to minus 100 mesh and examined for 'metallics'. The pulp was then analyzed for Au by atomic absorption after digestion with hot concentrated nitric and hydrochloric acids. Further the samples were analyzed for 30 elements (Al, Ag, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Ti, Tl, U, V, W, and Zn) by ICP-AES analysis.

**Table 2**

**Table 2**  
**Georgia Property: sample descriptions and results**

SAMPLE NUMBER	TYPE INTERVAL	Au (oz/t)	DESCRIPTION	GENERAL LOCATION
83112 C	chip; 25 cm	0.071	gouge zone with 15% py & po in horn-felsed siltstone/granodiorite.	Evening Star
83113 C	panel; 1 m <sup>2</sup>	0.173	limonitic siltstone 5-10% sulphides	Evening Star
83114 C	panel; 1 m <sup>2</sup>	0.004	limonitic siltstone without obvious veins, 1-2% iron sulphide	Evening Star
83115 C	chip; 10 cm	0.008	gouge vein in limonitic siltstone, <5% Fe-sulphide	Evening Star
83116 C	chip; 10 cm	<0.003	Q-rich shear zone; <5% Fe-sulphides in siltstone	Evening Star
83117 C	whole rock	0.020	light grey ash tuff with crystals	near 80.10
83118 C	panel; 1 m <sup>2</sup>	0.016	limonitic siltstone with up to 15-20% po	S of Evening Star near 80.6
83119 C	panel; 1 m <sup>2</sup>	0.008	limonitic siltstone, up to 10% po, minor aspy	near 80.6
83120 C	panel; 1m <sup>2</sup>	<0.003	limonitic siltstone, 5-10% po	near 80.6
83121 C	chip; 10 cm	0.006	sulphide mud from gouge zone in granodiorite	S of Evening Star
83122 C	chip; 10 cm	0.026	massive po; lesser py, 5% cpy in granodiorite	S of Evening Star
83123 C	chip; 15 cm	0.038	oxidized granodiorite with massive po, lesser py, 1-5% cpy	just E of main road
83124 C	panel; 1 m <sup>2</sup>	0.037	strongly oxidized wallrock with massive po, py where accessible	E of main road
83125 C	chip 75 cm	0.049	? orientation of vein with massive po, py	E of main road

Table 2 cont'd

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83126 C	panel 1 m <sup>2</sup>	0.007	strongly oxidized granodiorite with massive po, py	just E main road
83127 C	chip; 25 cm	<0.003	silicified siltstone with 5-10% py, po; minor aspy	L5N, 2+22W
83128 C	chip; 5 cm	0.005	limonitic gouge zone in granodiorite	L7N, 0+60 W
83129 C	chip; 10 cm	0.020	limonite gouge zone with Q, py, po; aspy 1-2%	SE of Micro-wave
83130 C	panel; 1 m <sup>2</sup>	0.064	bulk py, 2% cpy, 2% aspy in Hb grano-diorite	NW of Micro-wave
83131 C	panel; 1 m <sup>2</sup>	0.002	HW chip; andesite tuff; 5% po, 1% aspy	Columbia Kootenay
83132 C	chip; 10 cm	0.004	massive po>py; qtz gangue	Columbia Kootenay
83133 C	chip; 25 cm	0.092	massive po, minor cpy, partly oxidized	Georgia #1
83134 C	chip; 10 cm	0.044	massive py>>po, minor cpy	area of 80.8 & 86.3
83135 C	chip, 8 cm	0.022	oxidized massive py with yellow brown earth	Evening Star
83136 C	chip; 20 cm	0.020	massive po, 2-3% cpy	Evening Star
83137 C	panel; 1 m <sup>2</sup>	0.002	rusty siltstone 1-15% po	area of 80.20
83138 C	chip; 25 cm	1.780	massive po in augite porphyry	top of Columbia Kootenay
83139 C	chip; 30 cm	0.022	FW of 83140 C; oxidized, silicified intrusive	Columbia Kootenay
83140 C	chip; 13 cm	0.092	massive aspy with po; 2-3% cpy	Columbia Kootenay
83141 C	chip; 2 m	0.276	massive; py>>po with qtz in grano-diorite; trace cpy	Columbia Kootenay
83142 C	chip; 35 cm	0.004	massive po to 5% cpy in silicified augite porphyry	Mascot area

Table 2 cont'd

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83143 C	chip; 1.6 m	0.054	across W wall of pit silicified aug. porphyry; Q veins with po, py, aspy and cpy	Mascot area
83144 C	chip; 30 cm	0.006	semi-massive po>>asp, 2-3% cpy	Iron Colt
83145 C	chip; 10 cm	0.054	massive aspy, po; minor cpy	Iron Colt
83146 C	chip; 1.2 m	0.112	across most intense mineralization; silicified with aspy, massive po veins	St. Lawrence
83147 C	chip; 15 cm	0.046	massive po and py; silicified	area of 80.8
83148 C	chip; 40 cm	0.016	very oxidized vein plus wallrock; mas- sive veins 25 cm, 5 cm	Georgia #6
83149 C	chip; 10 cm	0.106	strongly oxidized; rusty qtz plus py	Evening Star
83150 C	chip; 15 cm	0.074	massive po with Q veins & sulphide mud	Tip-Top
00951 E	chip; 1.3 m	0.146	massive po; minor cpy in silicified and veined ? siltstone	Columbia "cglt dyke"
00952 E	chip; 10 cm	0.024	massive po, minor cpy in silicified siltstone	near G86.5
00953 E	chip; 8 cm	0.056	qtz vein with grey sulphide mud in hornfelsed ? siltstone	Mascot
00954 E	chip; 10 cm	0.010	gouge zone in augite porphyry quartz zone; oxidized, friable	Mascot
00955 E	chip; 20 cm	0.040	gouge zone; oxidized, friable, sulphide mud in augite porphyry	Mascot
00956 E	float	0.002	massive po, c.xline; minor cpy to 5% quartz	Mascot
00957 E	float	0.002	as above, increased silica, cpy to 5%	Mascot
00958 E	float	0.004	? silicified augite porphyry with po veinlets, 1-2% cpy	Mascot
00959 E	chip; 20 cm	0.012	gouge zone: friable; oxidized black sulphide and yellow aspy mud	Mascot
00960 E	float	0.006	euhedral striated py to 20%, partly oxidized; augite porphyry host	Mascot
00961 E	chip; 10 cm	<0.002	gouge zone; friable, yellowish, earthy	Mascot

Table 2 cont'd

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00962 E chip; 2.5 m	0.004	black sulphide, yellow aspy mud in oxidized, silicified augite porphyry.	Mascot
00963 E chip; 1 m	<0.002	strongly silicified with quartz, sulphide + aspy mud, 5% po	Tip-Top
00964 E chip; .6 m	<0.002	mass po, 0-5% cpy, partly oxidized	Tip-Top
00965 E chip; .6 m	<0.002	?parent: solfaterically altered host with black sulphide & yellow aspy mud	Tip-Top
00966 E chip; 10 cm	<0.002	friable sulphide mud with py remnants; Tip-Top augite porphyry host	Tip-Top
00967 E dump	0.150	massive po, veinlets coarse cpy 2-3% in places 5%;masses coarse aspy to 2%	Columbia Kootenay
00968 E dump	0.084	partly oxidized massive po, 1-2% cpy	Columbia Kootenay
00969 E grab	0.138	from open stope; very oxidized silicified? augite porphyry map unit with massive po, cpy and aspy	Columbia Kootenay
00970 E dump	0.232	massive po, 1-2% cpy; needles actinolite	Columbia Kootenay
00971 E dump	0.020	massive po; 1-2% cpy	Columbia Kootenay
00972 E dump	0.014	as above	Columbia Kootenay
00973 E dump	0.016	as above	Columbia Kootenay
00974 E dump	0.032	finer xline massive po, 1-2% cpy	Columbia Kootenay
00975 E chip; 30 cm	0.070	two main veins <5cm,silicified wall-rock with black and yellow mud	Columbia Kootenay
00976 E chip; 20 cm	0.022	silicification/solfateric alteration in siltstone with black & yellow muds with gouge zone	Columbia Kootenay
00977 E dump	0.098	massive po, partly oxidized	Columbia Kootenay
00978 E dump	0.048	granular quartz with po, partly oxidized	Columbia Kootenay
00979 E dump	1.524	massive po with up to 5% cpy, fine chlorite	Columbia Kootenay
00980 E dump	1.120	massive aspy, with lesser po, 1-2% cpy	Columbia Kootenay

00981 E float	0.080	massive aspy vein 2" wide in silici- fied augite porphyry	Columbia Kootenay
00982 E grab	0.328	semi-massive po from below 0964E; granular qtz or subrounded inclusions	Mascot
00983 E grab; 0.8 m	0.008	massive po, tr to minor cpy with gran- ular quartz (?tectonic)	Mascot
00984 E chip; 30 cm	0.006	E wall of above: chlorite-rich with cpy veins 2-3%	Mascot
00985 E chip; 20 cm	0.004	W wall of above; 1-2% cpy with oxidized quartz vein networks	Mascot
00986 E chip; 10 cm	0.004	gouge zone with qtz veins in oxidized siltstone	Georgia #2 42 m E from end
00987 E chip; 5 cm	<0.002	qtz vein, striking low angle/dips S trace Fe-sulphide	Georgia #2 34 m E from end
00988 E chip; 20 cm	0.002	qtz-rich shear zone, cuts face at 50° angle; 1-2% Fe-sulphide	Georgia #2 27 m E from end
00989 E chip; 2 m	<0.002	shattered and qtz veined siltstone trace Fe sulphide	Georgia #2 25 m E from end
00990 E chip; 10 cm	<0.002	friable qtz vein in silicified silt- stone; 1-2% Fe-sulphide	Georgia #2 22 m E from end
00991 E chip; 20 cm	<0.002	high angle quartz veins up to 8 cm wide with oxidized siltstone gouge	Georgia #2 16 m W from portal
00992 E chip; 35 cm	<0.002	as above with silicified siltstone and vein to 35 cm (pinch & swell)	Georgia #2 15 m W from portal
00993 E chip; 15 cm	<0.002	qtz vein in silicified siltstone; trace po	Georgia #2 13 m W from portal

Table 2 cont'd

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00994 E chip; 30 cm	<0.002	7 cm qtz vein plus 5 cm vein with silicified siltstone; 1-2% py	Georgia #2 6 m W from portal
00995 E chip; 10 cm	<0.002	veins 80° on wall in silicified siltstone	Georgia #1 end of north branch
00996 E chip; 10 cm	0.004	qtz veins and friable silicified siltstone	Georgia #1 3 m W on north branch
00997 E chip; 30 cm	0.112	series of veins at 90° on face likely silicified granodiorite	Georgia #1 1 m north on north branch
00998 E chip; 5 cm	0.004	strong vein 65° vertical; calcite, some quartz with chlorite	Georgia #1 N face N branch
00999 E chip; 10 cm	0.002	qtz vein with chlorite in granodiorite	Georgia #1 N face N branch
01000 E chip; 5 cm	0.002	quartz plus calcite vein with greenish wallrock fragments in siltstone host	Georgia #1 2 m W from E end E branch
16401 E chip; 8 cm	0.026	qtz vein with slices of greenish country rock 90° on face	Georgia #1 6 m W from portal
16402 E chip; 20 cm	0.156	friable rusty material; ? gouge	Buckeye adit 125 m from E end

16403 E chip; 20 cm	0.002	oxidized; granodiorite with qtz vein; excavated by previous workers	Buckeye adit 156 m from E end Buckeye adit
16404 E chip; 25 cm	<0.002	granodiorite with oxidized vein; 2-3% po, trace cpy	Buckeye
16405 E chip; 10 cm	0.010	qtz vein in silicified siltstone	Mascot

#### 2.4.1 GEORGIA

The Georgia was staked on August 27, 1893 and from 1893 to 1897 was explored with a series of trenches, shafts and two adits. In 1937 the property was optioned by the Gold Cup Mining Co. Ltd. and from 1937 to 1941 was worked by with a series of trenches, diamond-drilling holes and hundreds of feet of underground workings on three levels. This led to the discovery of 12 veins with gold values ranging from trace to about 0.4 oz/ton. Grades from 0.15-0.25 oz/ton Au were repeatedly obtained across widths of 5-10 feet in massive pyrrhotite/pyrite veins with arsenopyrite and minor chalcopyrite. The strongest veins are over 15 feet in width with grades improving with depth (Haggen 1940, p. 18). Past production of 49 tons yielded 466 grams of gold and 653 grams of silver (Fyles 1982, p. 36), and suggests that best gold values are not always associated with the heaviest sulphides.

A company report dated 1940 states that reserves of 38500 tons averaging 0.228 oz/ton Au were drilled off along veins 11, 11A and 12 in 1938. Spot values up to 2.5 oz/t Au were recorded. Two ore shipments of 232 lbs. and 200 lbs. were sent for metallurgical testing. The shipments averaged 0.225 and 0.30 oz/ton Au and lab tests indicated that 92.0% recovery could be obtained with cyanidation.

In 1938 a mining operation was recommended on the Georgia "in view of the highly favourable conditions for deeply seated ore bodies, the presence of ore stringers over a wide belt and ore at the east contact of the favourable diorite" (Haggen 1938, p.23) ie. those conditions which produced the large ore bodies of the Rossland camp. This work was not completed but it was concluded that workings to that time did not reach the sections most favourable for ore deposition (Haggen 1940, p.4). Geological conditions were described as (Haggen 1938, p. 9) similar to the Le Roi with the possibility that the vein in the SW corner of the Georgia was the Le Roi extension as augite porphyry was intruded by Rossland monzonite and both were penetrated by diorite porphyrite tongues of the Trail batholith. The #12 vein shown on Figure 5 lay only 3500' (1067 m) from the productive easterly limit of the Le Roi workings, trended sub-parallel, and so was assumed to lie along the same shear. A calcite stringer on the south wall was cited as supportive evidence, as this is also present in the Le Roi.

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<sup>1</sup>In addition there are 1000 tons of 0.228 oz/t Au listed as probable and 6500 tons of 0.375 oz/t Au listed as proven with extensions to the east and in depth indicated.

In 1980 the property was optioned by Cominco and explored for a low-grade stockwork that could be mined by open-pit mining methods. Cominco tested the property with 20 vertical percussion drill holes ranging in depth from 20 to 270 feet. The drill holes were all sub-economic ranging from 54 to 312 ppb gold. Cominco's report suggests the results are inconclusive since vertical drilling was used to test mineralization controlled by vertical structures.

In 1983, Gallant chip sampling in quartz stockworks in silicified sediments with pyrrhotite, arsenopyrite and minor chalcopyrite yielded best grades of 0.248 oz/t Au (47160) over 25 cm. Similar values were recorded in dump material (47163). Individual sulphide veins ranged up to 35 cm in width and provided grades up to 0.528 oz/t (47182) and 0.160 oz/t (47292) Au.

Mapping in 1986 suggests that the Georgia showings are underlain by quartz-bearing granodiorite of the Trail batholith which intrudes strongly hornfelsed pyrrhotite-rich siltstones and minor tuffs of the Elise Formation. Sampling in the No. 1 adit returned best values of 0.112 oz/t Au over 30 cm in 7 samples. This compares with historic values from 0.03 to 0.30 oz/t Au with hand-sorted bin samples yielding 0.44 oz/t Au. A total of 9 samples in the No. 2 adit provided only sub-economic values less than historic FW and HW averages of 0.055 and 0.06 oz/t Au respectively. Widths of up to 40 ft of siliceous ore which had been reported (Haggen 1940, p. 14) were not observed. The No. 3 vein, a strong north-south vein which dips about 70°W, provided best surface exposures of the Georgia mineralization. Maximum width was 1.35 m but best "in place" values in massive pyrrhotite were sub-economic.

#### 2.4.2 EVENING STAR

The Evening Star crown grant staked in 1890, lies immediately northwest of the Georgia claims. Little information is available on this claim but B.C. Department of Mines records show that it was worked from 1896 to 1901, from 1907 to 1908 and from 1932 to 1941. About 2859 tons were mined to yield 56701 grams of gold and 21521 grams of silver. In 1935 it was the largest shipper from the camp and up until 1940 shipped several thousand tons of ore averaging 0.3 to 0.5 oz/t gold (Haggen, 1940). Assays up to 80 oz/t are reported (Drysdale 1914, p. 146); average ore ran 1.2 oz/t in one vein in a siltstone host.

In 1980 Cominco optioned the claim and explored it for a low-grade gold stockwork that could be mined by open-pit methods. Seven vertical percussion drill holes ranging in depth from 30 to 270 feet were put down. All were sub-economic. The best hole located near former workings assayed only 47 ppb Au.

The veins trend 65°, dipping at moderate angles to the NW. Best grades are reported where E-W stringers cross the large veins. Despite the limited production, extensive underground workings exist on the property with about 20,000 tons of hornfelsed siltstone and tuff on the dump in front of the lower adit (Troup, 1982). Two composite samples of dump material assayed 0.042 and 0.030 oz/ton gold

suggesting that mineralization extends into the wall rocks adjacent to the veins. A chip sample taken across a six-inch quartz vein exposed in the lower adit assayed 0.402 oz/ton gold (Ibid). In 1983 best results were 0.312 oz/t Au in a 1.8 m zone with disseminated pyrrhotite/pyrite and 1.8% Cu; best grab results were 0.150 oz/t Au in a massive sulphide sample in a sedimentary host. More recently, dump samples of disseminated arsenopyrite and pyrrhotite showed highest values of 0.878 oz/t Au but gold distribution would appear to be erratic. Host rocks are hornfelsed siltstones for the most part with lesser tuffs and granodiorite. Silicification is widespread but erratic. Arsenopyrite is common with the other sulphides in veins and disseminated up to 5% in the country rock. One chip sample of HW gave values of 0.22 oz/t Au over 1m in silicified volcanics (Hardy, 1984).

In 1986 best results were obtained from a 1 m<sup>2</sup> panel which assayed 0.173 oz/t Au (83113C) in a limonitic siltstone with 5-10% very finely disseminated sulphides.

#### OVERVIEW GEORGIA - EVENING STAR CLAIMS

Past work concentrated primarily on evaluating the east-west veins typical of the main Rossland camp on the Georgia and Evening Star. Veins are generally steep dipping zones 5-10' wide in which average grades of 0.15 to 0.25 oz/t Au were consistently obtained. The underground workings tested an area about 200 m x 200 m. Within this area perhaps 4 major veins are present and traceable for up to 50 m along strike. Early drill holes have intersected the veins up to 70 m down dip. Several narrower veins are also intersected which trend N-S and usually connect two of the larger veins; these are often of replacement type along fissures. Past results suggest potential for the larger high grade veins over 230 m-300 m on strike and down dip at least 170 m. This has not been fully tested by the surface work to date.

Pyrrhotite, arsenopyrite and pyrite are present as disseminations to masses along the fissures. Locally, minor chalcopyrite may occur. Gangue usually forms only a small proportion of the vein and consists of very finely crystalline rock flour or impure quartz. Cominco concluded that a large percentage of gold appears to be associated with the arsenopyrite, but limited polished section work (Bob Buchan, Lakefield Research, personal communication, 1984) suggests that the gold is distinctly later than the arsenopyrite. From old data, wall rocks average 0.01 to 0.06 oz/t Au (Haggen 1938, 1940) and near the percussion drilling average 54-312 ppb over sections up to 60 ft. The 1986 results of 0.173 oz/t described above (83113C) also suggest potential for at least localized enrichment beyond that.

#### 2.4.3 BUCKEYE

The Buckeye claim was staked in the early 1890's and explored with about 500 feet of underground workings prior to 1915. Two veins of 1.5 feet and 6" in width were encountered but there is no recorded production from the claim, despite the approximate 170 m extent of the

old adit.

Limited sampling in the adit yielded gold up to 0.648 oz/t Au in a 0.14 m (47178:1983) wide series of quartz veins with chalcopyrite, pyrite and arsenopyrite in a possible intrusive host. Sampling just to the north along an old open pit provided 0.614 oz/t over a similar 1.4 m wide quartz vein (47184:1983). In 1986 best results were 0.156 oz/t Au from 20 cm of rusty weathered material; country rock was silicified and appeared to be granodiorite, though much of the adit appears to be within silicified siltstone. Several other adits are present on the claim and reported to be open but were not investigated (T.Eccles, personal communication, 1986)

#### 2.4.4 Silverine

The Silverine crown grant was staked in 1890 and explored intermittently until 1944. Government files contain no information on the exploration or production history of this claim but the Trail smelter files show that 89 tons of ore averaging 0.54 oz/t gold were shipped between 1934 and 1944. A dump containing an estimated 1500 tons of waste is present on the claim.

#### 2.4.5 Iron Colt

The Iron Colt was staked on August 6, 1890 and worked intermittently from 1896 to 1939. The property was explored with two adits and more than 2500 feet of underground workings. Massive sulphide ore carrying about 0.20 oz/ton gold is reported to have been discovered along the footwall of a monzonite dyke. No production records are available but small shipments averaging about 0.20 oz/ton gold are reported to have been made from the claim and a 20 ton shipment yielded 186 g of gold and 466 g of silver. (Fyles 1982, p.36) in 1936-37.

Gallant work shows that veins to 1.7 m wide are present with minor arsenopyrite and chalcopyrite in silicified sediments with up to 0.196 oz/t Au (47168:1983). Sulphides are disseminated in the wallrock for 10 m on opposite sides of the vein. Massive arsenopyrite and chalcopyrite veins to 90 cm with gold values to 0.478 oz/t Au are also present in a monzonite host. The Main vein, possibly the westward extension of the Columbia-Kootenay vein, strikes N63E with a steep N dip. It contains ore characteristic of the Columbia-Kootenay, described as "light-coloured, close textured with calcite seams and patches of chalcopyrite" (Drysdale 1915, p. 207). One chip sample of FW to massive sulphide veins collected ran 0.34 oz/t Au (Hardy, 1984). In 1986, adjacent to the Iron Colt on the St. Lawrence, a 1.2 m chip across the most intensely mineralized (pyrrhotite>>arsenopyrite) area gave 0.112 oz/t Au (83146C) within a probable silicified granodiorite. A 10 cm chip across a massive arsenopyrite vein with minor pyrrhotite and chalcopyrite yielded 0.054 oz/t (83143C) in a similar host.

#### 2.4.6 Columbia-Kootenay

The Columbia and Kootenay claims were located in 1890. Considerable work has disclosed a mineralized zone with NE-SW trend which dips 45-75°W. Despite large dumps, past production from 1896-1904 is only recorded as 144 tons containing 68,500 grams of gold. About 9750' of development was completed prior to 1898 and an estimated 15000 tons were produced from 4000 m (12000 feet) of development work; a total of 12805 tons averaged 0.38 oz/t Au. In 1940 reserves were estimated at 10000 tons of 0.15 oz/t Au.

The ore zone is reported to follow a contact between a biotite monzonite HW and an augite porphyry FW, partly replaced by ore. On surface the vein is heavily oxidized and both massive and disseminated pyrrhotite occur in a hard fine-grained gangue with minor chalcopyrite. Arsenopyrite is present locally. Vein width is reported from a few cm to thirty feet of nearly solid pyrrhotite with persistence of ore shoots dependent almost entirely on geologic structure. Despite the heavy sulphide mineralization, gold values are generally low.

While little geologic information is available, the claims were definitely considered part of the Central Belt and Haggen (1938, p. 10) at least appeared to think they were the extension of the Le Roi - Centre Star system (by way of the Georgia).

Extensive workings and dumps remain from the top of Columbia-Kootenay Mountain down to the level of the lowermost most and most easterly road shown in Figure 4. To try and assess best and average grades within this vein a total of 12 dump samples was collected in 1986. These are described in Table 2 and consist primarily of massive pyrrhotite with 1-5% stringers or clots of chalcopyrite, minor coarsely crystalline pyrite and occasional disseminations to clots of trace to 2% arsenopyrite. Rarely quartz gangue is present. Values ranged from 0.016 oz/t to 1.524 oz/t Au. One grab sample in outcrop from an approximate 40 m long open stope within the augite porphyry map unit yielded 0.138 oz/t Au; a chip 2 m sample across its end provided 0.276 oz/t Au. Overall best outcrop values on the claim are 1.780 oz/t Au for a 25 cm chip across a massive pyrrhotite vein (lacking chalcopyrite) in augite porphyry on the Columbia claim near the end of the road on top of Columbia Mountain. In all cases host lithologies appear complex with patchy bleaching and silicification and may be near the contact of the granodiorite map unit. Pyrrhotite averages 2-3% finely disseminated in the wallrocks; trace to 1-2% arsenopyrite is also common. Some outcrop in the area of the open stope suggests at least localized garnet-pyroxene skarn development.

Away from the old workings, a 1.3 mm massive arsenopyrite veinlet with lesser pyrrhotite and trace chalcopyrite, (along the NE contact of the conglomerate dyke described in 2.3.6) provided 0.146 oz/t Au (00951E). Vein margins are sharp but the vein is surrounded by a zone of bleaching and finer veining in the country rock. Float samples of massive arsenopyrite and pyrrhotite with granular quartz collected nearby graded 1.120 oz/t Au (00980E) and 0.328 oz/t Au (00982E).

#### 2.4.7 Mascot

Three tunnels and several prospect shafts are reported on the claim for a total of about 3500' (1067 m) of development. The upper tunnel showed a couple of feet of fairly solid ore which is chiefly magnetite with little chalcopyrite. A 4-6' quartz vein is known to have yielded "good" values. Surface sampling is reported to have averaged 0.12, 0.25 and 0.30 oz/ton Au on the Main, Middle and Kapai veins (Haggen 1938, p.23) with highest values excluded. The Main vein is siliceous, extending for 1200 ft at 2 ft width and the Kapai for 1300 ft at an unspecified width, at least in places as much as 40 ft.

Chalcopyrite is present in the country rock, though the ore itself tended to be copper-poor. A total of 12800 tons of probable ore (above No.3 level) at 0.193 oz/t Au occurs on the main Mascot vein and 800 tons of 0.429 oz/t Au on the Kapai vein (probable extension of the North vein) with more favourable geology on the west extending on the St. Lawrence claim. Workings in this area have historically produced very high surface values which may represent concentrations due to weathering. Magnetite is present locally in the North vein.

In 1986, the best surface showing on the Mascot was a coarsely crystalline lens of massive pyrrhotite with 1-2% chalcopyrite (00983E). Exposed in a road bed, it yielded 0.008 oz/t Au over 0.8 m. Wallrocks averaging 0.005 oz/t Au (0984E, 0985E) are bleached, silicified and brecciated and strongly resemble material from about a 44.3-44.4 m (145.3-145.8') depth in G86.6.

### 3. Geophysics

Complete geophysical methods, instrumentation and logistics are described in Walcott (1986, in process). Only results and conclusions will be discussed in the sections which follow.

#### 3.1 Genie-EM Results

Two grids were run: Grid 1 with a base line at 068° and lines spaced at 50 and 100 m intervals and Grid 2 with base line at 010° and similarly spaced lines. Each orientation was selected to cross the prevailing vein orientation near perpendicular to strike with an overlap between the two grids in the area of the Georgia-Evening Star where both vein orientations appear to be present.

On Grid 1 conductors trend sub-parallel to the base line and one another. The best conductor is about 750 m long and up to 20 m wide along L0+00E to 7+00E at 2+50S and apparently coincides with the Columbia-Kootenay vein system. Just south of it a smaller and narrower conductor on L2+00E to L4+00 E at 4+25S coincides with the surface trace of the Main Mascot vein along a very steep talus slope which precluded drill testing. A somewhat broader (up to 20 m) anomaly is present further east and south on lines 5+00E and 6+00E at 6+70S which coincides with an outcropping sulphide vein already described on the Mascot; apart from the Columbia-Kootenay anomaly this is the strongest anomaly on the property. In addition three spot anomalies are present at L3+00W, 1+75N; L5+00E, 6+00S and L6+0E, 4+75S.

On Grid 2 a very thin (<10m) conductor trends about 160° from lines 3+00N to 7+00N. VLF anomalies recovered from previous years and plotted with the Genie results are in part coincident with and trend parallel to this conductor. A complex pattern of single line conductors occurs on L0.00 and L1+00N, W of the baseline. These are in part coincident with the previous VLF results in this area but here as elsewhere on the grid, anomalous VLF also are present in areas where no Genie conductors occur.

All anomalies suggest conductors which are relatively steeply dipping and results are compiled in Figure 7.

#### 3.2 I.P. Results

Dipole-dipole I.P. was run on 7 lines on Grid 2 over the area of the Georgia-Evening Star where the two vein trends were known to be present. Results were classified as anomalous or possibly anomalous and resistivity lows were also recorded. These compiled results are shown in Figure 7. The best defined anomaly trends about 160-180° from a centre on L4+00N, 2+00W to L1+00N, 1+60W. An anomaly is also present centred on L4+00N, 1+00E, and extending to L3+00N partly coincident, with the Genie conductor previously described. A third anomaly at L4+00N, 0+60W extends to L3+00N, 0+60W. A single line high is also present on L1+00N, 1+35E.

In general the best Genie-EM responses tend to be displaced about 40 m from I.P. centres. Maximum values of up to 71 milliseconds occur against a <10 millisecond background. Resistivities are highly variable.

### 3.3 Magnetometer Results

Magnetometer surveys were carried out on Grids 1 and 2, using the same lines used for the Genie-EM survey. Patterns are extremely complex and anomalies do not necessarily coincide with Genie or I.P. highs. Prospecting suggests that both magnetic and non-magnetic pyrrhotite are present and pyrrhotite/pyrite ratios are highly variable.

## 4. Diamond Drilling

### 4.1 Logistics

A modified Longyear 38 on a sled was used to drill 7 holes for a total of 2277 ft (694 m) over the last two weeks of June and the first week in July. A three man crew operated for one shift with an additional man hauling water as required. All moves were completed using a JD 550. Water was obtained from the Evening Star shaft and Coyote swamp and eventually hauled and dumped in the Georgia No. 2 adit.

All core was split in half, bagged and shipped to Chemex Labs in Vancouver. Results are shown in Appendix 2. It was analyzed using the procedure described in Section 2.4. The remaining core was removed from the property and is stored in a garage rented from Norma Syvertson of Rossland.

### 4.2 Drilling Results

DDH G86.1 (72.5m, -520, azimuth 100°) was drilled on L3N to intersect an I.P. anomaly centred at 3+65 W at 28 m depth. The hole penetrated dark grey siltstones with 5-10% pyrrhotite at the estimated depth of the I.P. centre as shown in Figure 6.1. At greater depth pyrrhotite abundance decreases and intervals of granodiorite are present. The anomalous I.P. therefore likely results from pyrrhotite bearing siltstones around a hornfelsed granodiorite.

Hole DDH G86.2, (-450, 82.3 m, 2900) shown in Figure 6.2, was collared to intersect I.P. centred at 0.37.5E and Genie-EM centred at 0+12E on L5N. The upper portion of the hole intersected primarily siltstones with 5-10% pyrrhotite and/or pyrite. Proportions of each of the two sulphides vary widely but decrease to 1-2% pyrite at about 40 m depth in the hole at the granodiorite contact. Minor coarsely crystalline pyrrhotite veins occur at 66.3-67.0 m, 68.4-69.0 m and 75.9-77.3 m with massive pyrrhotite from 67.0-68.4m; vein orientations are not consistent, so the widths are not possible to estimate. These are well below the estimated 50 metre maximum depth of Genie-EM penetration. The fact that the Genie anomaly was penetrated at almost 50 m below surface suggests that the hole may have passed just below the anomaly centre and may not have fully tested the target. The I.P. results however are explained by the iron sulphide abundances within the siltstones in the hole.

Hole DDH 86.3, (-620, 153.3 m, 3340), was drilled to intersect short length Genie conductors centred at L3+00W, 1+35N and L0+50N, 0+15W as well as VLF-EM recovered from previous years and spotted in the field. It was also drilled to test intersections of up to 9636 ppb Au obtained in Cominco percussion Hole 80.8 over 61-64 m and intersections of 825 ppb Au over 20 ft and 1080 ppb Au over 10' in Hole 80.8. Nearby as shown in Figure 6.3 two outcropping massive sulphide veins, parts of the Georgia system also deserved testing at depth. In its upper part, the hole intersected bleached and silicified siltstones with granodiorite dominating down the hole.

In the lower part is a complex zone of apparent mafic and felsic dykes and granodiorite intrusives. While three massive pyrrhotite veins are present at 26.2-26.4 m (85.9-86.5 ft), 44.5-47.0 m (146-154.3 ft), 65-65.3 m (213.3-214.3 ft) and 69.5 m (227.9-228.1 ft), the Genie-EM is not well explained by granodiorite with 1-2% pyrrhotite. The veins intersected are not sufficiently distinctive to be connected with certainty to either of the outcropping veins. Best intersection was 0.086 oz/t Au from 52.5-53.4 m (172.2-175.3 ft).

Hole G86.4 was drilled at 150° azimuth, -45°, to a depth of 152 m, to test the intersections of G86.3 from the opposite direction at a spacing of close to 25 m further W. The hole was designed to test a VLF conductor derived from previous data at L3+50W, 1.55N, and 3+0W, 1.64W and confirmed by several quick lines in 1986. It also tested outcropping massive sulphides as shown and passed beneath the high grade sections in 80.8 and 80.10 already described. The lithologies present suggest that the hole passed close to the granodiorite/siltstone contact with common silicification, bleaching, hornfelsing and biotite development. As shown by the drill log in Appendix 1, the VLF is underlain by siltstones with 2-3% pyrite and granodiorite and <1% pyrite though the hole passed somewhat deeply through the anomaly at 45-50 m depth.

Numerous massive sulphide veins were intersected as at 8.0-8.1, 9.1-9.7, 15.2-15.3, 28.8-30.0, 31.2-32.6, 44.1-44.5 and 81.8-81.9 metres. The composition of the veins is dominantly pyrite or pyrrhotite, with up to 10% arsenopyrite at 8.0-8.1 m and 1-2% chalcopyrite at 15.2-15.3, 44.1-44.5 and 81.8-81.9 m. Best intersection was a massive pyrrhotite vein grading 0.131 oz/t Au over 43.8-44.5 m (143.7-146 ft), with 0.086 oz/t Au at 7.3-8.8 m (24.0-29.0 ft), 0.048 at 30.0-30.9 m (98.4-101.3'), 0.087 at 30.9 m (101.3-101.5') and 0.060 oz/t Au at 30.9-32.2 m (101.5-105.5'). Since vein orientations are not consistent no estimate of true width is possible.

Hole DDH G86.5 (-47°, 83.8 m, azimuth 290°) tested moderately anomalous I.P. along L4+00 N as well as anomalous gold and copper in 80.19 as shown in Figure 6.5. It failed to test strongly anomalous I.P. centred at 1+12E and a Genie-EM conductor at 0+72E.

The hole intersected siltstones with less than 3% pyrrhotite. Lithologies were sheared and polished in places and locally carbonaceous. All intersections were less than 0.05 oz/t Au.

Hole DDH 86.6 (-45°, 83.8 m, 158° azimuth) was collared to test a Genie-EM anomaly on L6+00E at 6+50S as shown in Figure 6.6 as well as an outcropping massive lens exposed on surface. This lens has been described in section 2.3.7 and strongly resembles material intersected at about 44 m (145.3-145.8') down the hole which averaged 0.162 oz/t Au.

The hole penetrated augite porphyry and its hornblende granodiorite sub-unit with minor siltstones. Amounts of iron sulphide varied as shown but the Genie anomaly appears well explained by the massive sulphide lens observed. Best intersection recorded was 0.162 oz/t Au

from 32.1-33.6 m (105.3-110.3 ft).

Hole DDH G86.7 (-460, 65.5 m, azimuth 1580) was collared on L5E to test a Genie-EM anomaly at slightly more than 30 m depth. As shown in Figure 6.7 the hole penetrated rocks averaging less than 5% iron sulphides. Two semi-massive zones at 15.6-16.8 m and 34.2-34.6 m provided up to 20% pyrrhotite and 2-3% chalcopyrite, but all grades were sub-economic. The Genie anomaly is thus not well explained.

Table 3 Core Recovery - Georgia Property

DDH G-86.2

DDH G-86.3

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
8.0- 9.5= 1.5	0.9	61.1	23.0- 26.0= 3.0	2.7	88.9
9.5- 14.0= 4.5	1.9	40.7	26.0- 36.0=10.0	8.6	85.7
14.0- 16.0= 2.0	0.8	37.5	36.0- 43.0= 7.0	6.7	95.2
16.0- 22.0= 6.0	4.6	76.3	43.0- 46.0= 3.0	2.9	97.2
22.0- 27.0= 5.0	3.4	68.3	46.0- 53.0= 7.0	6.0	85.7
27.0- 37.5= 9.5	7.8	81.6	53.0- 56.0= 3.0	2.6	86.0
37.5- 42.5= 5.0	3.5	70.0	56.0- 57.5= 1.5	0.9	61.1
42.5- 45.0= 2.5	0.9	36.7	57.5- 62.0= 4.5	3.8	85.1
45.0- 47.0= 2.0	0.3	16.5	62.0- 70.0= 8.0	7.7	95.8
47.0- 49.0= 2.0	1.3	62.5	70.0- 74.0= 4.0	3.6	89.4
49.0- 50.5= 1.5	0.8	50.0	74.0- 84.0=10.0	9.5	95.0
50.5- 53.0= 2.5	0.8	30.0	84.0- 89.0= 5.0	5.0	100.0
53.0- 55.0= 2.0	0.4	20.9	89.0- 96.0= 7.0	6.8	96.4
55.0- 56.5= 1.5	0.8	50.0	96.0-106.0=10.0	9.4	94.2
56.5- 58.5= 2.0	1.1	54.2	106.0-116.0=10.0	9.8	97.5
58.5- 60.5= 2.0	1.3	66.5	116.0-123.5= 7.5	6.8	91.1
60.5- 62.5= 2.0	1.4	70.9	123.5-132.0= 8.5	8.1	95.1
62.5- 64.5= 2.0	1.7	83.4	132.0-141.0= 9.0	8.6	95.3
64.5- 69.0= 4.5	3.9	83.3	141.0-146.0= 5.0	5.0	100.0
69.0- 70.5= 1.5	0.6	38.7	146.0-156.0=10.0	9.8	97.5
70.5- 74.5= 4.0	2.8	68.8	156.0-166.0=10.0	10.0	100.0
74.5- 76.0= 1.5	0.8	55.3	166.0-176.0=10.0	9.5	95.0
76.0- 78.5= 2.5	1.0	40.0	176.0-186.0=10.0	10.0	100.0
78.5- 81.0= 2.5	0.8	30.0	186.0-193.5= 7.5	7.4	98.9
81.0- 82.0= 1.0	0.5	50.0	193.5-202.0= 8.5	8.5	100.0
82.0- 84.0= 2.0	1.6	79.0	202.0-212.0=10.0	9.7	96.7
84.0- 93.0= 9.0	8.1	89.8	212.0-216.0= 4.0	4.0	100.0
93.0-103.0=10.0	9.3	92.5	216.0-223.0= 7.0	6.3	89.3
103.0-107.5= 4.5	3.8	85.0	223.0-231.0= 8.0	7.2	89.6
107.5-114.0= 6.5	5.8	89.7	231.0-236.0= 5.0	5.0	100.0
114.0-122.0= 8.0	7.4	92.7	236.0-243.0= 7.0	6.8	97.6
122.0-124.0= 2.0	1.7	83.4	243.0-253.0=10.0	9.6	95.8
124.0-134.0=10.0	8.3	82.5	253.0-263.0=10.0	9.7	96.7
134.0-137.5= 3.5	2.5	71.4	263.0-270.0= 7.0	6.6	94.0
137.5-143.0= 5.5	4.3	77.3	270.0-274.0= 4.0	3.5	87.5
143.0-149.0= 6.0	5.3	88.8	274.0-279.0= 5.0	4.7	93.3
149.0-154.0= 5.0	4.8	96.6	279.0-283.0= 4.0	4.0	100.0
154.0-164.0=10.0	9.5	95.0	283.0-291.0= 8.0	7.3	90.6
164.0-174.0=10.0	9.9	99.2	291.0-296.0= 5.0	4.8	96.6
174.0-184.0=10.0	9.8	97.5	296.0-302.5= 6.5	6.1	93.6
184.0-194.0=10.0	9.8	98.3	302.5-309.5= 7.0	6.7	95.2
194.0-200.0= 6.0	5.5	91.7	309.5-316.0= 6.5	6.5	100.0
200.0-210.0=10.0	9.9	99.2	316.0-326.0=10.0	9.4	94.2
210.0-220.0=10.0	9.7	96.7	326.0-336.0=10.0	9.8	97.5
220.0-230.0=10.0	9.7	96.7	336.0-346.0=10.0	9.7	96.7
230.0-240.0=10.0	9.2	91.7	346.0-356.0=10.0	9.2	91.7
240.0-250.0=10.0	9.8	98.3	356.0-366.0=10.0	10.0	100.0

DDH G-86.2 cont'd.

DDH G-86.3 cont'd.

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
250.0-260.0=10.0	9.6	95.8	366.0-368.0= 2.0	10.0	41.5
260.0-270.0=10.0	9.6	95.8	368.0-374.0= 6.0	5.1	84.7
			374.0-382.0= 8.0	8.0	100.0
			382.0-386.0= 4.0	3.7	91.7
			386.0-388.0= 2.0	1.8	87.5
Total % core recovery DDH G-86.2 = 83.3%			388.0-391.5= 3.5	3.3	95.2
			391.5-394.5= 3.0	2.8	91.7
			394.5-396.5= 2.0	1.7	83.4
			396.5-400.5= 4.0	3.8	93.8
			400.5-410.0= 9.5	9.3	98.2
			410.0-412.0= 2.0	1.4	70.9
			412.0-416.0= 4.0	3.8	93.8
			416.0-422.5= 6.5	6.5	100.0
			422.5-430.5= 8.0	7.1	88.5
			430.5-440.0= 9.5	9.3	98.2
			440.0-448.0= 8.0	7.6	94.8
			448.0-450.0= 2.0	1.5	75.0
			450.0-459.0= 9.0	8.5	94.4
			459.0-465.0= 6.0	5.3	88.8
			465.0-467.0= 2.0	1.5	75.0
			467.0-473.5= 6.5	5.8	88.5
			473.5-475.5= 2.0	1.3	66.5
			475.5-479.0= 3.5	2.8	80.9
			479.0-483.5= 4.5	4.0	88.9
			483.5-485.0= 1.5	1.2	77.8
			485.0-493.0= 8.0	6.9	86.5
			493.0-503.0=10.0	9.8	97.5

Total % core  
recovery DDH G-86.3 = 94%

\*\*\*\*\*

DDH G-86.4

DDH G-86.5

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
14.0- 15.0= 1.0	0.8	75.0	14.0- 15.0= 1.0	1.0	100.0
15.0- 17.0= 2.0	0.9	45.9	15.0- 16.5= 1.5	1.0	66.7
17.0- 20.0= 3.0	2.8	91.7	16.5- 18.5= 2.0	1.6	79.0
20.0- 25.0= 5.0	4.4	88.3	18.5- 20.5= 2.0	1.7	83.4
25.0- 29.0= 4.0	3.3	83.3	20.5- 25.0= 4.5	4.5	100.0
29.0- 33.0= 4.0	3.4	85.4	25.0- 31.5= 6.5	6.3	97.4
33.0- 39.0= 6.0	5.8	95.8	31.5- 35.0= 4.5	2.8	62.9
39.0- 41.0= 2.0	2.0	100.0	35.0- 40.5= 5.5	5.5	100.0
41.0- 45.0= 4.0	4.0	100.0	40.5- 45.0= 4.5	4.5	100.0
45.0- 55.0=10.0	10.0	100.0	45.0- 50.5= 5.5	4.9	89.4
55.0- 60.5= 5.5	5.2	93.9	50.5- 53.0= 2.5	2.5	100.0

## DDH G-86.4 cont'd.

## DDH G-86.5 cont'd.

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
60.5- 62.5= 2.0	1.6	79.0	53.0- 55.0= 2.0	1.7	83.4
62.5- 71.0= 8.5	8.5	100.0	55.0- 60.5= 5.5	5.2	95.5
71.0- 78.5= 7.5	6.8	90.0	60.5- 65.0= 4.5	4.4	98.2
78.5- 81.5= 3.0	2.9	97.2	65.0- 75.0=10.0	9.7	96.7
81.5- 91.0= 9.5	9.0	94.7	75.0- 85.0=10.0	9.8	97.5
91.0- 99.0= 8.0	8.0	100.0	85.0- 95.0=10.0	---	----
99.0-105.0= 6.0	6.0	100.0	95.0-105.0=10.0	---	----
105.0-109.0= 4.0	4.0	100.0	105.0-115.0=10.0	---	----
109.0-111.0= 2.0	2.0	100.0	115.0-119.5= 4.5	---	----
111.0-115.0= 4.0	3.2	79.2	119.5-125.0= 5.5	---	----
115.0-125.0=10.0	9.4	94.2	125.0-135.0=10.0	9.8	97.5
125.0-135.0=10.0	9.3	92.5	135.0-145.0=10.0	10.0	100.0
135.0-137.5= 2.5	2.1	83.3	145.0-155.0=10.0	9.8	98.3
137.5-143.0= 5.5	4.8	87.8	155.0-165.5=10.0	10.0	100.0
143.0-153.0=10.0	9.6	95.8	165.0-175.0=10.0	10.0	100.0
153.0-163.0=10.0	9.8	98.3	175.0-185.0=10.0	9.7	96.7
163.0-166.0= 3.0	2.7	88.9	185.0-195.0=10.0	9.8	97.5
166.0-168.0= 2.0	2.0	100.0	195.0-205.0=10.0	9.9	99.2
168.0-174.0= 6.0	5.8	97.2	205.0-215.0=10.0	10.0	100.0
174.0-181.0= 7.0	6.5	92.9	215.0-225.0=10.0	9.9	99.2
181.0-183.0= 2.0	2.0	100.0	225.0-234.0= 9.0	8.3	92.6
183.0-190.0= 7.0	6.6	94.0	234.0-244.0=10.0	9.8	98.3
190.0-196.0= 6.0	5.7	94.5	244.0-250.5= 6.5	6.5	100.0
196.0-201.0= 5.0	4.9	98.3	250.5-255.0= 4.5	4.2	92.6
201.0-209.0= 8.0	7.0	87.5	255.0-265.0=10.0	9.9	99.2
209.0-214.0= 5.0	4.8	96.6	265.0-275.0=10.0	9.7	96.7
214.0-217.0= 3.0	2.8	94.3			
217.0-219.0= 2.0	1.9	95.9			
219.0-223.0= 4.0	3.3	83.3	Total % core		
223.0-231.5= 8.5	8.2	96.1	recovery DDH G-86.5 = 97%		
231.5-241.0= 9.5	9.4	99.1			
241.0-251.0=10.0	9.6	95.8			
251.0-255.0= 4.0	4.0	100.0			
255.0-261.0= 6.0	6.0	100.0			
261.0-270.0= 9.0	8.0	88.9			
270.0-275.0= 5.0	4.9	98.3			
275.0-280.0= 5.0	4.2	85.0			
280.0-282.5= 2.5	2.4	96.7			
282.5-287.0= 4.5	4.3	96.2			
287.0-289.5= 2.5	2.0	80.0			
289.5-294.0= 4.5	2.7	59.3			
294.0-302.5= 8.5	8.5	100.0			
302.5-312.0= 9.5	9.5	100.0			
312.0-315.0= 3.0	2.6	86.0			
315.0-323.0= 8.0	7.4	92.7			
323.0-325.0= 2.0	2.0	100.0			

## DDH G-86.4 cont'd.

## DDH G-86.6 cont'd.

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
325.0-327.0= 2.0	1.8	91.5	6.0- 11.5= 5.5	0.8	
27.0-331.0= 4.0	3.7	91.7	11.5- 15.0= 3.5	3.2	57.6
331.0-340.0= 9.0	8.2	90.7	15.0- 17.0= 2.0	0.8	21.4
340.0-350.0=10.0	9.4	94.2	17.0- 19.0= 2.0	1.3	62.5
350.0-357.0= 7.0	7.0	100.0	19.0- 21.5= 2.5	0.7	23.2
357.0-365.0= 8.0	7.6	94.8	21.5- 25.0= 3.5	1.4	40.5
365.0-375.0=10.0	9.8	98.3	25.0- 26.0= 1.0	0.4	41.7
375.0-385.0=10.0	9.5	95.0	26.0- 28.5= 2.5	2.2	86.7
385.0-395.0=10.0	9.2	91.7	28.5- 31.5= 3.0	2.8	94.3
395.0-405.0=10.0	9.7	96.7	31.5- 35.0= 3.5	3.2	90.5
405.0-415.0=10.0	9.8	97.5	35.0- 45.0=10.0	9.3	93.3
415.0-425.0=10.0	9.8	97.5	45.0- 47.0= 2.0	1.7	83.4
425.0-428.5= 3.5	---	----	47.0- 49.5= 2.5	2.5	100.0
428.5-436.5= 8.0	---	----	49.5- 53.0= 3.5	3.1	88.1
436.5-445.0= 8.0	---	----	53.0- 55.0= 2.0	2.0	100.0
445.0-453.0= 8.0	---	----	55.0- 59.0= 4.0	3.6	89.5
453.0-457.5= 4.5	---	----	59.0- 62.0= 3.0	2.8	94.3
457.5-461.5= 4.0	---	----	62.0- 68.0= 6.0	6.0	100.0
461.5-470.5= 9.0	---	----	68.0- 73.0= 5.0	4.3	86.6
470.5-476.5= 6.0	6.0	100.0	73.0- 80.5= 7.5	5.8	77.7
476.5-485.0= 8.5	7.8	92.1	80.5- 83.0= 2.5	2.5	100.0
485.0-495.0=10.0	8.8	88.3	83.0- 89.0= 6.0	5.8	95.8
495.0-501.0= 6.0	5.8	97.2	89.0- 95.0= 6.0	5.7	94.5
			95.0-101.0= 6.0	4.9	82.0
			101.0-110.0=10.0	8.8	98.1
Total % core recovery DDH G-86.4 = 94%			110.0-120.0=10.0	9.9	99.2
			120.0-130.0=10.0	9.8	97.5

## DDH G-86.7 cont'd.

## DDH G-86.6 cont'd.

Core box Length	True Length	Recovery Percent	Core box Length	True Length	Recovery Percent
22.0- 25.0= 3.0	2.6	86.0	130.0-140.0=10.0	9.8	98.3
25.0- 35.0=10.0	9.4	94.2	140.0-150.0=10.0	9.5	95.0
35.0- 39.5= 4.5	4.4	98.2	150.0-152.5= 2.5	2.3	90.0
39.5- 43.5= 4.0	3.9	97.9	152.5-161.0= 8.5	8.5	100.0
43.5- 53.0= 9.5	9.2	97.4	161.0-169.0= 8.0	7.4	92.7
53.0- 57.0= 4.0	3.8	95.8	169.0-175.0= 6.0	6.0	100.0
57.0- 59.0= 2.0	1.9	95.9	175.0-185.0=10.0	9.2	91.7
59.0- 63.0= 4.0	3.8	93.8	185.0-195.0=10.0	9.8	97.5
63.0- 69.0= 6.0	5.5	91.7	195.0-202.0= 7.0	6.2	89.3
69.0- 72.0= 3.0	3.0	100.0	202.0-205.0= 3.0	9.8	100.0
72.0- 75.0= 3.0	2.6	86.0	205.0-215.0=10.0	6.3	97.5
75.0- 79.0= 4.0	3.6	89.5	215.0-219.0= 4.0	3.0	95.8
79.0- 80.0= 1.0	0.9	91.7	219.0-229.0=10.0	9.8	96.7
80.0- 82.0= 2.0	2.0	100.0	229.0-235.0= 6.0	3.8	95.8
82.0- 92.0=10.0	10.0	100.0	235.0-241.5= 6.5	5.8	93.6
92.0- 95.0= 3.0	2.5	83.3	241.5-243.0= 1.5	6.1	77.8
95.0- 99.0= 4.0	3.2	79.2	243.0-245.5= 2.5	1.2	93.2
99.0-100.5= 1.5	1.5	100.0	245.5-250.5= 5.0	2.3	96.6
100.5-103.0= 2.5	1.6	63.2	250.5-257.0= 6.5	4.8	94.9
103.0-105.0= 2.0	2.0	100.0	257.0-261.0= 4.0	6.2	100.0
105.0-113.5= 8.5	7.8	91.2	261.0-263.5= 5.5	5.2	66.5
113.5-119.0= 5.5	5.3	96.9	263.0-268.5= 5.5	5.2	94.0
119.0-124.0= 5.0	4.4	88.3	268.5-275.0= 6.5	6.5	100.0
124.0-126.5= 2.5	2.4	96.7			
126.5-131.5= 5.0	5.0	100.0			
131.5-135.0= 3.5	3.3	95.1	Total % core		
135.0-145.0=10.0	9.8	97.5	recovery DDH G-86.6 = 90.4%		
145.0-153.0= 8.0	7.5	93.8			
153.0-159.0= 6.0	6.0	100.0			
159.0-163.5= 4.5	4.5	100.0			
163.5-173.0= 9.5	9.2	96.5			
173.0-183.0=10.0	9.2	92.5			
183.0-191.0= 8.0	8.0	100.0			
191.0-201.0=10.0	9.8	97.5			
201.0-211.0=10.0	9.8	98.3			
211.0-215.0= 4.0	3.8	95.8			

Total % core  
recovery DDH G-86.7 = 94.7%

## 5. Discussion and Conclusion

The Rossland camp has been an extremely rich producer in the past with a single shoot in the Le Roi system yielding over one billion dollars worth of gold at current prices. The ores extended to great depth and some veins were over 1300 m long and from a few cm to 40 m wide. No data have been released by Cominco on their ground and despite sales of other assets the Rossland ground is apparently not available. The Rossland camp is the only major past producer in BC which has not yet undergone a recent re-examination.

Most of the Georgia property was initially staked from 1890-1896 and has been held continuously ever since with little recent work. Old timer exploration concentrated on following known veins and searching for direct extensions. Less visible ore may easily have been missed, as exploration was limited to hillside adits and shallow exploration shafts.

Work by Gallant Gold Mines has established the existence of Genie, VLF-EM and I.P. anomalies, which are at least partly coincident with known gold veins and sulphide accumulations. Drill testing of the best of these produced intersections of 0.131 oz/t Au over 0.7 m in hole G-86.4 and 0.162 oz/t Au over 1.5 m in G 86.6. Conductors are more extensive than known veins in areas of low outcrop. Several anomalies remain untested and the I.P. covered only a limited portion of the ground with large anomalies open ended.

It is known for certain that the host rocks of the veins can contain anomalous gold, but as yet it has not been established whether such values over significant widths can approach economic concentrations. In 1986 the generally discouraging diamond drill results suggest that there remains only very limited potential for a low grade bulk tonnage deposit. However, in view of the fact that historically Rossland veins pinch and swell and change direction with common grade discontinuities, and the limited number of holes completed, potential still remains for small high grade vein type deposits on the property. Evaluation of this possibility would require patterned or grid drilling of all anomalies at a relatively close spacing. Further geological mapping and sampling should be completed on old workings and showings on the Alberta, Kapai, Mascot, Columbia-Kootenay, Caledonia, Iron Colt and west of the Buckeye, perhaps in the company of old timer/guide, T. Eccles.

In conclusion mineralization on the Georgia property is related to the aureole of intrusive activity around granodiorites of the Trail Intrusion or Rossland Monzonite ("mine granodiorite" of Cominco). The targets tested lie within a favourable environment for precious metal accumulations of mesothermal type as evidenced by high disseminated iron sulphide content, regionally anomalous 30 element I.C.P. (especially As, base metals, Ag), local high grade intersections in veins and wallrocks, pervasive hornfelsing, bleaching, silicification, etc. Drilling to date however has failed to indicate the existence of economic quantities of precious metals.

## 6. BIBLIOGRAPHY

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## 7. STATEMENT OF QUALIFICATIONS

JENNA HARDY

I, Jenna Hardy of 535 E. Tenth St., North Vancouver, B.C., V7L 2E7 certify the following:

1. I am a project geologist with a B.Sc. (1974: Honours) and M.Sc. (1980) in geology from the University of Toronto.
2. I have practised my profession in the Cordillera since 1978 first with Rio-Canex Ltd, then SMD Mining and Falconbridge Ltd.
3. I am a Fellow of the Geological Association of Canada.
4. I personally supervised all work carried out on the Georgia property over the period May 27 to July 12, 1986.
5. I have no interest financial or otherwise in Gallant Gold Mines Ltd.

Respectfully submitted,

  
JENNA HARDY

## 8. COSTS STATEMENT

### GALLANT-GEORGIA PROPERTY

18 April - 18 July 1986

#### GENERAL

##### FOOD & ACCOMMODATION:

2 Pers, 110 man days @ \$27.71	\$ 3,048.61
	2,426.00

##### SUPPLIES:

	306.51
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##### FUEL:

	904.42
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##### SHIPPING & POSTAGE:

	286.35
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##### TELEPHONE SERVICE:

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##### RENTALS:

Mark 4WD Bronco, 21 May-11 July,	
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50 days @ \$43.00	\$ 2,150.00
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Ezekiel field equipment, 27 May-	
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11 July, 92 man days @ \$6.00	<u>552.00</u>
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	\$ 2,702.00
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MAINTENANCE:	574.12
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CONSULTANT FEES:	
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Archean Engineering Ltd.	7,375.00
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REPORT PREPARATION:	<u>3,373.50</u>
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TOTAL GENERAL COSTS:	\$20,996.51
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#### GEOLOGICAL MAPPING COST

##### SALARIES & WAGES:

2 Pers, 51 man days @ \$140.74	\$ 7,177.71
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BENEFITS @ 5%	371.52
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GENERAL COSTS APPORTIONED:	
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51/110 X \$20,996.51	<u>9,734.75</u>
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TOTAL GEOLOGICAL MAPPING COST:	\$17,283.98
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#### DIAMOND DRILLING COST

##### SALARIES & WAGES:

2 Pers, 59 man days @ \$140.01	\$ 8,260.79
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BENEFITS @ 5%	436.16
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ASSAYS & ANALYSES-Chemex Labs	
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412 Rocks for Au @ \$11.50	\$ 4,738.00
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20 Rocks for Au, Cu @ \$17.50	350.00
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53 Rocks for Au @ \$17.00	901.00
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485 Pulp for 30 ele. ICP @ \$ 6.50	3,152.50
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1 Pulp for 23 ele. ICP @ \$27.00	27.00
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11 Pulp for W, Sn, Ga @ \$13.00	143.00
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Supplies	<u>105.00</u>
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	\$ 9,416.50
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**Costs Statement cont'd****DIAMOND DRILLING:**

Beaupre 2277' @ \$16.43	\$37,407.00
Beaupre water truck 37 hrs @ \$50.00	1,850.00
E.G. Whalley & Son core boxes	<u>533.66</u>
	\$39,790.66
<b>GENERAL COSTS APPORTIONED:</b>	
59/110 X \$20,996.51	<u>11,261.76</u>
<b>TOTAL DIAMOND DRILLING COST:</b>	<b>\$69,165.87</b>
	=====

**GEOPHYSICAL SURVEY****P.E. WALCOTT & ASSOCIATES:**

Em & Mag, 26 Apr-23 May	\$15,414.64
I.P., 17-21 May	<u>5,463.10</u>
	\$20,877.74
	=====

GEOLOGICAL	\$ 17,283.98
DIAMOND DRILLING	69,165.87
GEOPHYSICAL	<u>20,877.74</u>
	\$107,327.59
	=====

**APPENDIX 1: DIAMOND DRILL LOGS AND CORE RECOVERIES**

LOCATION: L3N 1+86W		Diamond Drill Record						HOLE NO. G86.1	Page 1 of 8
AZIMUTH: 102		DIPS - collar 52 °		CONTRACTOR: Beaupre Diamond Drilling			PROPERTY: Georgia		
ELEVATION: 4100'		- m °		LOGGED BY: J.L. Hardy			CLAIM NO. Evening Star		
LENGTH: 238 ft.		- m °		DATE: June 21, 1986			SECTION NO. 6.1		
CORE SIZE:		- 238' m 52 °					STARTED: June 20, 1986		
PURPOSE: to test broad chargeability I.P. centred on L3N, 1+65W								COMPLETED: June 21, 1986	
Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS			
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance	
		NOTE: BOXES 5,11 totally spilled; box 8: first two rows; box 7: 126-135 spilled; box 10: first two rows;							
		box 12: first row							
		Box 1: 8-24'; Box 2: 24-42.5'; Box 3: 42.5-60.0'; Box 4: 60-78.9'; Box 5: 78.9-96.0'; Box 6: 96-115.1';							
		Box 7: 115.1-135.0'; Box 8: 135-151.5'; Box 9: 151.5-169.7'; Box 10: 169.7-188.3'; Box 11: 188.3-206.9'; Box 12: 206.9-223.8'; Box 13: 223.8-238; END OF HOLE: 238							
0	8	CASING							
8	40.3	siltstone, various shades brown to grey and brown-grey; fine-grained with easily visible biotite only in most brown varieties, variably laminated; PLUS tuffs: green grey to grey, fine grained, homogeneous, no fragments visible but logged on basis of field mapping and presence of vague feldspar			thin chlorite-rich bands/partings, sometimes associated with microbreccia zones; bands most often near right angles to c.a.; local bleaching, silicification			sparse irregular discontinuous quartz veins, often with slightly coarser po	
		-up to 5% po, averages 1-2% but may be along partings to 40% in tuffs; po 5-10% in places 15-20%							

## Diamond Drill Record

HOLE NO. G86.1 | Page 2 of 8

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
					but easily confused with			
					biotite (ubiquitous)			
					-frequently massive po along			
					discontinuous partings or			
					fracture planes to 40% over			
		CONTACTS typically diffuse, gradational with tuff bands			distances of core diameter,			
		averaging 1 cm thick (range			but widely discontinuous			
		from 10mm-10 cm); appear in			-sparse po as medium xline,			
		places patchy and at variable			irregular swirls, clots;			
		angles to c.a., perhaps			generally less than 1 cm			
		complicated by intrusive	31	31.5	in extent			
		proximity			prominent microbreccia			
					zone with quartz and			
					chlorite matrix; brown			
					angular siltstone fragments			
			32.9	33.1	as above			
			36.5		aspby veinlet, discontinuous			
40.3	157.6	siltstone, darker grey than			sparse chlorite-quartz			
		previously, generally with			micro breccia along veins			
		out greenish tuff areas			or partings; rare after 43'			
		and typically finer grained			-over interval po 5-10%,			
		than before			very finely disseminated,			
		40.3-52: dark grey, very			less in areas of patchy			
		fine-grained			silicification; to 40% along			

## Diamond Drill Record

HOLE NO. G86.1 | Page 3 of 8

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		60-60.4': granodiorite or possible felsic dyke; grey to light green grey with abundant feldspar subhedral in slightly darker grey ground mass; associated with patchy bleaching, silicification and 2-3% fine po			paper thin fractures, usually discontinuous; also medium crystalline po in irregular clots, swirls; discontinuous mm to cm size; also bands/swirls to 20% -silicification typically patchy, irregular			minor quartz veins with po
			52	53	area of bleaching/breccia			
			63	65	zone of quartz veins and breccia; trace sulphides in cement; po bands in siltstone show displacement			
		65.6-66': disturbed zone; minor fault with associated quartz influx, bleaching, silicification, 15% very fine po in all areas except quartz						quartz occupies 10% of interval
		70-72: zone of increased quartz veins w/wo po rims; veins paper thin to 10mm thick; irregular, discontinuous, accompanied by bleaching and silicification	78.3	78.5	po, c. xline, cm veins and irregular swirling clots, po 15-30% of ground mass, borders partly coincident with area of silica influx			75.5-76.5: close-spaced brittle quartz veins, trace po

### Diamond Drill Record

HOLE NO.G86.1

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## Diamond Drill Record

HOLE NO. G86.1

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		134-? since box 8 spilled:			irregular po veinlets,			
		return to pronounced pink and			bleaching, silicification			
		brown as described; laminae			continue as before			
		on mm to cm scale with good						
		evidence of soft sediment	154.2		microbreccia: very angular			
		deformation; po abundance			black siltstone fragments			
		not related to position			in crystalline po cement			
		in laminae but irregular						
		diffuse swirls cut across						
		laminae						
157.6	185	granodiorite: medium xline,			2-3% fine po plus 5mm			
		equigranular with 5% subhedral			coarser xline clots; minor			
		feldspar slightly larger			po with quartz in veinlets,			
		than rest of ground mass;			fractures to 10% rarely to			
		rarely bleached			40%			
		-local chlorite bands/			-locally medium xline py			
		partings to microbreccia						
		zones; fractures at varying						
		angles to c.a. and often						
		with bleaching						
		161.1-9; 163.4-164: ? xeno-						
		liths or irregular contact						
		zone of dykes; dark green						
		very finely xline biotite-						

## Diamond Drill Record

HOLE NO.	G86.1	Page	6 of 8
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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		hornblende-feldspar rich	161.9	162	1 zone of quartz influx			
		rock with 2-3% fine po;			and micro breccia with			
		contact sharp though slightly			siltstones and feldspar			
		wavy with the above			phenocrysts locally; 2-3%			
					po			
			169.2	.9	zone of broken core: bleached,			
		BOX 10: 169.8-175, spilled			sheared, calcite veins, no			
		but granodiorite continues			sulphides			
		as above to 184.9'						
					181.1-181.4; 182.3-182.9:			
					prominent bleaching, leaves			
					only sparse feldspar visible;			
					massive po veinlets to .5 cm			
					wide; trace ? aspy, plus			
					chlorite-rich partings			
			184.6		.5 cm massive po vein at			
					70 angle c.a.			
185.	?	siltstones, distinct brown			po to 5% very finely diss-			
		grey with blotchy appearance;			minated plus near massive			
		may be bleached along thin			.25 cm veins, irregular and			
		partings and locally			discontinuous, as well as			
		laminated, though angles			along paper thin partings			
		vary widely to c.a.						

## Diamond Drill Record

HOLE NO. G86.1

Page 7 of 8

Section	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
	BOX 11: 188.3-206.9: totally spilled, though most of material originated in box -half is feldspar-hornblende porphyritic dyke rock: light to medium brown grey with 10-15% subhedral to anhedral feldspar, slightly saussuritized -half is distinct brownish siltstone as before			1-3% finely xline po with trace slightly coarser py; veinlets of aspy 2-3% of interval			
	BOX 12: 206.9-223.9: to 212 granodiorite as before						
212	230.3 siltstones, dark grey to brown grey; lack patchy colour changes as described before except for 212-214.7 -223.8-225.3: area of fine black squiggles: ? wisps of finer grained mudstones			po less than 5%, finely disseminated plus local veins to 5 mm, minor clots and swirls; generally less po visible than in siltstones above but still averages 2-3%			minor diffuse quartz veinlets, very irregular, typically lack po though may contain trace py
	CONTACT: gradational over 2-3' with slight change of						

## Diamond Drill Record

HOLE NO. G86.1 Page 8 of 8

LOCATION: L5+06N, 0+55E		Diamond Drill Record						HOLE NO. G86.2	Page 1 of 6
AZIMUTH: 279		DIPS - collar	47 °	CONTRACTOR: Beaupre Diamond Drilling			PROPERTY: Georgia		
ELEVATION: 3840'		- m	°	LOGGED BY: J.L. Hardy			CLAIM NO. Pott		
LENGTH: 270'		- m	°	DATE: June 23, 1986			SECTION NO.		
CORE SIZE: NQ		- 270'	45 °				STARTED: June 22, 1986		
PURPOSE: to intersect anomalous IP and Genie responses								COMPLETED June 23, 1986	
Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS			
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance	
0	8	CASING							
8	16	siltstone, dark grey, rare			weathering effects as porous			irregular, high angle calcite	
		broad diffuse laminae at			areas with oxide rims and			veins, typically 1-2% and	
		90 degrees c.a.			rusty fracture surfaces			less than .5 cm	
					plus/minus po; persist to				
					45°				
					-pyrite with po very finely				
					disseminated throughout,				
					hard to estimate percent,				
					likely near 15%, rarely				
					to 20%; also in very fine				
					fractures and along				
					partings or fracture planes				
					-slightly coarser py in				
					irregular swirls				
16	25	silstone, but brecciated							
		with open fractures,							
		partly filled by calcite							

## Diamond Drill Record

HOLE NO. G86.2

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## Diamond Drill Record

HOLE NO. G86.2

Page 3 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
49	59	return to dark grey, silt-stones, faint laminae; core typically broken with many chloritic and often graphitic slickensided partings			po 5-10%			
59	64.5	return to brecciated siltstones as at 16-25'			po only sulphide present in coarse crystalline patches to 2-3%, plus very fine disseminations up to 5%			
64.5	81.9	siltstones, dark grey, in places laminated with bands defined by slight changes in colour and grain size; microfaults, slumps and load features suggest soft sediment deformation; partings and broken core often show chlorite and calcite with lesser graphite			po very fine throughout about 5-10%; in places to 15%, plus local coarser patches and swirls of restricted size			sporadic zones of calcite veins generally less than .25 cm; rubble breccias common
	-66-68.1:	siltstone, medium grey, approaches fine quartzite			po 2-3% fine plus to 5-10% coarser swirls			

## Diamond Drill Record

HOLE NO. G86.2

Page 4 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
81.9	127.6	end of intervals of broken core, blocky ground; siltstone, dark grey, laminated on mm to cm scale but laminae at variable angles c.a.; lesser medium grey, coarser siltstone to quartzite to 10% of sequence, microfaults and swirls suggest soft sediment deformation; in places fabric suggests shearing and may be graphitic along partings, though elsewhere chlorite; local zones of gouge as at 107.3 or crackle breccia as at 110-114 and 117.5-119.2 -123.5-124.7: granodiorite, medium fine crystalline, light grey to grey green with patchy silicification, and colour changes; locally sericitic and bleached			some intervals have po as mm slashes, crudely parallel to banding; po also finely disseminated in matrix from 5-10% plus 2-3% along partings and fractures where it grades locally to 30%			locally minor calcite veins with or without po and microbreccia
	254.1	granodiorite, various shades of green to grey			po 1-2% disseminated throughout plus massive			sparse quartz and calcite veins less than 1cm

## Diamond Drill Record

HOLE NO. G86.2

Page 5 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		green to brown green, equi-			po in irregular discontinuous veins as at 132-133: po			minor zones of quartz influx with diffuse edges merging
		granular though individual						
		feldspars slightly coarser against greenish ground			averages less than 5%			with silicified zones
		mass; partings show chlorite and yellow-brown oxide;			154.2: trace cpy with po in minor vein			
		commonly calcareous, locally blocky hornblendes partly altered to biotite; sporadic xenoliths, generally less than 3 cm; rarely more than 10 cm.			173.2-173.5: zone of silica and actinolite with coarse highly irregular aspy veins			
					lesser po; aspy 5% and po 2% of interval; also at 186.9-187			
					-216: trace cpy with po in quartz vein			
					-217.4-219.8: gradual increase in irregular coarsely crystalline po veins to several every few cm; veins massive generally less than 1 cm			
					-219.8-224.3: massive po with chlorite rim near parallel to c.a.; very irregular edges, minor cpy			
					-224.2-226.6: as at 217.4			

## Diamond Drill Record

HOLE NO. G86.2

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Diamond Drill Record				HOLE NO. G86.3	Page 1 of 11
LOCATION: 10m @313 from BI, 0+50N	DIPS - collar	62 °	CONTRACTOR: Beaupre Diamond Drilling	PROPERTY: Georgia	
AZIMUTH: 334	- m	°	LOGGED BY: J.L. Hardy	CLAIM NO. Georgia	
ELEVATION: 3080'	- m	°	DATE: June 23, 1986	SECTION NO.	
LENGTH: 503' (153.3m)	- 153.3 m	62 °		STARTED: June 23, 1986	
CORE SIZE: NQ				COMPLETED: June 25, 1986	
PURPOSE: to test Genie EM conductors at near right angles and 150' (45.7m) depth					

Section	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
0	Casing: rubbly, partly broken ground, silicified siltstone or granodiorite, likely very close to contact -brown-grey to green-grey with patchy colour changes and areas of bleaching			py 2-3% throughout and along irregular, discontinuous fractures or veins			
23	disturbed zone: appears swirled, contorted with highly irregular patches of chlorite, massive calcite, apparently replacing medium crystalline biotite rich siltstone; siltstones themselves show patchy colour changes and silicification with borders diffuse and hard to define	29.9		finely crystalline po as highly irregular veins and replacements; averages 2-3% with some semi-massive sections of several inches at 10%; minor py as irregular clots, plus trace anhedral cpy			

### Diamond Drill Record

HOLE NO. G86.3

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## Diamond Drill Record

HOLE NO. G86.3 | Page 3 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION. MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
39.8	75	CONTACT AREA: siltstones			po 1-5% finely disseminated			minor calcite and quartz
		plus granodiorites			as well as in places massive			veins with po; calcite
		-siltstones: coarse-grained,			to semi-massive veins			also along partings
		with biotite easily visible,			adding only trace overall;			
		distinct medium brown colour			grades hard to estimate			
		-plus distinctly green			due to biotite			
		areas which may be tuffs						
		or granodiorites, medium			-47.4-48.9: zone of bleaching,			
		crystalline, borders not			silification, quartz and			
		distinct and tend to grade			calcite veins			
		into one another			-65.3-68.1: po with siltstone			
		-pervasive but patchy			remnants with po as surrounded			
		silicification			blebs to 10mm 1-2% of interval			
		-most of sequence probably						
		close to contact and has						
		been hornfelsed with presence						
		of biotite and sporadic						
		feldspar crystals						
		-portions definitely grano-						
		diorite with areas of						
		assimilated siltstone						
75	146	biotite granodiorite: fine			po 1-2%, rarely to 10%,			
		to medium crystalline			medium crystalline but			
		-shades of grey to green			coarser along fractures			

## Diamond Drill Record

HOLE NO. G86.3 | Page 4 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
		grey; individual crystal			and in clots; to 10-20% along			
		borders not distinct; equi-			subrounded black xenoliths			
		granular, biotite very						
		fine in ground mass and			-85.9-86.5: massive po			
		15-20% as coarser subhedra			vein surrounded by green			
					chlorite to 10% over			
		123.2-127: lamprophyre			interval; vein very			
		dyke: dark green, very fine			irregular but maximum			
		grained plus augite			width about 1cm, pinches			
		phenocrysts and 1 cm			and swells			
		irregular clots of chlorite			-93.8: irregular patch			
		-chloritic slickensided			semi-massive po			
		contacts with country						
		rock						
146	154	3 likely granodiorite,			po as massive coarsely			quartz veins irregular and
		various shades of light to			crystalline veins to masses			discontinuous with po and
		medium green to green-grey			of highly irregular shape;			minor calcite
		-disturbed zone of patchy			largest vein 2cm at 45			
		bleaching and silicification			degrees to c.a.; po less			
		-remnants of siltstone			than 5% overall			
					-trace medium crystalline			
					cpy at 146.5, 149.3 with			
					calcite; immediate country			
					rock looks like			

## Diamond Drill Record

HOLE NO. G86.3

Page 5 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
					hornfelsed siltstone			
154.3	172	1 granodiorite, less bleached and silicified than previous, with more remnants of coarse-grained biotite granodiorite; still patchy colour changes			fewer po veins than above, averages 2-3%; crackle breccia at 160.9-161.1 with 2-3% cpy veins, minor calcite and po 30% of interval -160.3: trace cpy with po -168.9: trace aspy with po			
172.1	175	3 granodiorite, very coarse crystalline, grey-green, equigranular, feldspars not readily visible; patchy silicification and felds- pathization			locally po in crackle breccia with veins to 2 cm; minor cpy, locally to 5% plus aspyle to 10% in places; all appear to be part of a single vein system			
175.3	21	5.7 biotite hornblende granodiorite, coarsely crystalline, generally fresh, green-grey colour dominates			po 1-2%, medium crystalline disseminations to coarsely crystalline clots; aspy to 1% in veins and disseminations -213.2-214.2: massive po, coarsely crystalline; to 3% aspy and in places 1-2% cpy, sometimes with chlorite along slickensided fractures			minor quartz veins, less than .5cm, often with chlorite; bleached areas extend outward

## Diamond Drill Record

HOLE NO. G86.3

Page 6 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
215.7	232	3 biotite granodiorite, coarsely crystalline as above but distinct brown rather than green dominates			214.2-217.9: disturbed zone with much calcite and chlorite and quartz influx with coarsely crystalline po veins, replacing into wallrocks; patches of fine grained biotite-rich mater- ial which may be silstone remnants; po to several cm across, averages 10-15% over interval -overall po 3-5% as fine disseminations and veins			
								minor quartz veins and actinolite zones with silica and bleaching
232.3	243	hornfelsed siltstones; dark brown to green brown, with patches of coarsely crystalline biotite- hornblende granodiorite, irregular borders			chlorite veins with calcite and po, in places crackle breccia -227.9-228.1: major calcite and quartz influx with massive po and trace cpx			
243	370	2 hornblende-biotite grano- diorite as before			po less than 2-3%, medium crystalline disseminations			minor quartz and calcite veins less than 1cm wide

## Diamond Drill Record

HOLE NO. G86.3

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		equigranular, relatively			and fractures, often with			-279-280 7. disturbed zone
		fresh, medium dark brown			slickensided surfaces; local			of calcite and quartz influ-
					zones of silica, bleaching,			with po up to 10% of veins
		-296-301: interval of			and chlorite			
		sheared siltstone interbedded			-261.5: 3cm po vein with			
		with biotite-rich granodiorite,			1-2% cpy bounded by chloritic			
		finer crystalline than is			slip planes with calcite			
		typical			-274.1-275.4: .5cm po			
		-313.1-314.7: mafic dyke,			vein sub-parallel to c.a.			
		dark green, calcareous with			with minor py and trace cpy			
		mm calcite spots and 3%						
		augite phenocrysts; 2-3%						
		anhedral py						
		-360.1-361: hornfelsed			upper part quartz veins with			-362.5-364.7: calcite vein
		siltstone, medium brown			chlorite and po as irregular			subparallel to c.a. with
		with biotite and granular			anastomosing veins; 2-3%			slickensided chlorite, no
		interlocking texture			cpy			sulphides
370.2	371.2	?dyke, or bleached			trace py disseminations,			
		equivalent of granodiorite			medium crystalline; more			
		in contact zone: light grey			in apparent medium grey			
		to white, finely crystalline			xenoliths			
		with faint effervescence;						
		vague white feldspar plus						
		apparent quartz subhedra						

## Diamond Drill Record

HOLE NO. G86.3 | Page 8 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft.	to ft.		from ft.	to ft.		Thickness mm	Angle to core	minerals in decreasing abundance
371.2	374.4	?dyke, finely crystalline, dark purple grey, sparse blocky, rounded augites, strongly magnetic; relatively softer than above -contact may be irregular, with apparent bleaching, silicification			1-2% medium crystalline py			.25 cm calcite spots 10%, minor calcite veins with chloritic slickensides
374.4	388.5	return to light grey ? dyke material but medium crystalline with subhedral feldspar as before			trace subhedral to euhedral py			
388.5	390.5	return to dark purple- grey ?dyke or contact phase			1% finely disseminated to clots of py and trace py as before			
390.5	396.5	biotite-hornblende grano- diorite, medium grey			less than 1% medium cry- stalline po as disseminations to clots			minor quartz and chlorite veins
396.5	406.8	dark purple-grey dyke as before, in places						

## Diamond Drill Record

HOLE NO. G86.3 Page 9 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		transition to light grey			py to 1-2% with calcite			
		rock with calcite spots;			spots			
		possible bleached equivalents						
406.3	414.3	granodiorite, medium			1-2% py as before			
		crystalline but with more						
		alteration as individual						
		crystals not distinct						
414.3	424	medium grey dyke, finely			less than 1% py			
		crystalline, in places with						
		highly irregular green						415-420: crackle breccia
		hornblende crystals; mm						with irregular calcite veins
		calcareous spots in ground						at high angle to sub-parallel
		mass						to c.a.
424	449.9	return to white felsic						
		dyke as before, but now						
		medium crystalline inter-						
		locking quartz and feld-						
		spar; in places vague						
		"circular" texture shown						
		with apparent clear core						
		surrounded by cloudy						
		feldspar; calcareous in						

### Diamond Drill Record

HOLE NO. G86.3 Page 10 of 11

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		places, sericitized with 1-2% feldspar subhedra						
449.9	452	return to black dyke with calcareous spots						
452	461.3	hornblende biotite grano- diorite, medium crystalline, medium grey green, equigranular			po as medium crystalline disseminations and with calcite in fractures and veins 1-2%			minor calcite and chlorite with quartz in veins; local bleaching
461.3	462.9	purple-grey dyke as described						
462.9	487.6	white intrusive with circular textures above			1-2% subhedral medium crystalline py			brittle open fractures with drusy quartz fill
487.6	492.9	purple-grey dyke rock as before to 489, then medium crystalline, green brown material which resembles finer crystalline phases of granodiorite			2-3% fine po, minor aspy			

### Diamond Drill Record

HOLE NO. G86.3 Page 11 of 11

LOCATION: 24m at 70 from	LO+50N, 2+75W	Diamond Drill Record			HOLE NO. G86.4	Page 1 of 13
AZIMUTH: 158 degrees	DIPS - collar 46 °	CONTRACTOR: Beaupre Diamond Drilling			PROPERTY: Georgia	
ELEVATION: 4060'	- 501' 45 °	LOGGED BY: J.L. Hardy			CLAIM NO. Georgia Fr/Georgia	
LENGTH: 501'	- m °	DATE: June 27, 1986			SECTION NO. 6.4	
CORE SIZE: NQ	- m °				STARTED: June 26, 1986.	
PURPOSE: to test VLF centred at L3+50W, 1+55N, L3W, 1+64N in area of old workings					COMPLETED: June 28, 1986	

Section from <del>ft</del> to <del>ft</del>	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from <del>ft</del>	to <del>ft</del>		Thickness mm	Angle to core	minerals in decreasing abundance
0 14'	Casing						
14' 16.5	siltstone: distinct brown grey, fine-grained, biotite easily visible			po 2-5%, finely disseminated			sparse calcite and chlorite veins, generally less than .5cm, variable angles
16.5 29.3	hornblende-biotite granodiorite, light green grey, medium crystalline, equi- granular; individual crystals indistinct; in places more like biotite rich siltstone, but vague feldspars generally seen; moderate effervescence common			bleaching and silicification throughout with oxidation to 32' -po common as sporadic veins less than 3mm wide, except where noted; near 80 degrees to core axis; also as irregular clots to .5cm; averages 1-3% -minor subhedral aspy along fractures, total trace -py medium crystalline, anhedral to euhedral as			quartz veins, bleaching, silicification, often with indistinct borders with country rock

## Diamond Drill Record

HOLE NO. G86.4 | Page 2 of 13

Section from ft	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
				patches, veinlets, clots			
				to .25 cm, averages less than 1%			
				-26.3-26.7: po, massive, coarsely crystalline vein			
				to crackle breccia; maximum vein width 1.5cm, partly edged by chlorite and aspy			
				with py centre and with cpy in subsidiary veinlet; py 5%, aspy 10%, cpy 2%, plus 2-3% along veins and fractures often near right angles to c.a.			
29.3	38.3	siltstone: brown-grey, med. grained with biotite easily visible; in places patchy silicification and zones of bleaching so likely close to granodiorite contact; chloritic with slickensides on some partings; moderately strong effervescence		29.3-29.6: area of more pervasive silicification/ bleaching; textures gone -30-31.7: as above plus some open fractures, general ly zone of veins and semi-massive po with up to 3% cpy; includes 30-30.9 po, massive c. crystalline vein with calcite and chlorite; po 15-20%			minor quartz and calcite veins which may contain po

## Diamond Drill Record

HOLE NO. Page 3 of 13

Section from ft - to ft	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
				36.3-38.3: zone of veins to patches to crackle breccia with massive coarse po corroding into wallrock; magnetic; po overall about 35% of interval -to 5% anhedral cpy locally but averages 1%			chlorite locally on slicksided surfaces
				-5-10% py with po but averages 2-3% overall			
38.3	42.4	? siltstone; very patchy medium green to brown, silicified, likely close to granodiorite contact		po in irregular coarse veins less than .5 cm wide, generally with calcite; variable angles to c.a., 2-3% average			minor calcite veins
				39.9: coarse po with sub-hedral coarsely crystalline py in irregular veins with calcite subparallel to c.a.			
				-sulphides 15% over interval with 2-3% coarse cpy			
				-41.5: minor cpy in calcite			
				-41.9-42: coarse semi			

## Diamond Drill Record

HOLE NO. 86.4 | Page 4 of 13

Section from ft	ROCK DESCRIPTION	Interval from ft		ALTERATION, MINERALIZATION etc.	VEINLETS		
		to ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
				massive po, py with minor cpy			
42.4	55.9 return to more typical siltstone: medium brown grey, coarse-grained, biotite rich but with local swirled or disturbed areas of green laminated material showing closeness to grano- diorite; patchy but pervasive silicification			po and py. coarsely crystal- line in abundant fine veins and disseminated in walls; overall about 5%, locally to 10%, replace into walls 45-45.5: po 10-15% as irregular mesh and vein network 47.6-49.1: many veins as HW to massive sulphides; coarsely crystalline po patches to veins 15-20%, 1-2% cpy overall locally to 5%; fine apsy averages 2-3% overall to 20% locally; country rock dark chlorite and quartz rich 49.1-50.9: massive po, subparallel to c.a.; minor calcite and quartz inclusions with cpy to 10% locally (averages 1-2%)			sporadically abundant cal- cite, irregular and dis- continuous at varous angles and often with coarse po

## Diamond Drill Record

HOLE NO. 86.4 | Page 5 of 13

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
					-highly irregular borders			
					with silicified siltstone			
		50.9-51.9: very silicified			country rock			
		light grey; all textures						
		gone; many chloritic fractures			+50': py dominant sulphide in veins and py greater than po with total sulphides			
					2-3%			
55.9	72.4	hornblende biotite grano-			py 1-2%, medium crystalline			local chlorite along veins
		diorite, darky green-grey,			clumps to 10 cm diameter;			and in patches with calcite:
		coarsely crystalline, equi			irregular veins to 5 cm wide			minor calcite veins
		granular; slight variations			63.1-63" py and po 15%			
		in composition and crystal						
		size; patchy but pervasive						
		silification and areas of						
		dark brown finer material						
		which may be siltstone						
		remnants						
72.4	77.3	hornblende granodiorite,			py 1-2% disseminated in clots			
		finely crystalline with			and along fractures; chlorite			
		calcite spots to 1 cm			with pyrite along slicken-			
		decreasing down; likely			sided surfaces			
		close to siltstone contact						

### Diamond Drill Record

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Section		Rock Description	Interval		Alteration, Mineralization etc.	Veinlets		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
77.3	80	SILTSTONE, dark brown, faintly banded with finer and coarser layers, contact with below bleached and silicified			78-78.1: massive coarse crystalline py with calcite -overall py 2-3%			
80	109.3	hornblende granodiorite, equigranular with local areas of silification, bleaching and chlorite extending out from quartz veins			averages 1-2% med. crystal-line py in fine veins and clots 83.5: close-spaced py veins, right angles c.a. 94.5-98.4: zone of greater py and po with chlorite as disseminations of py subhedra and po anhedra extending irregularly into rock; several massive to semi-massive sections -po and py 15% 101.2-101.5: massive py with lesser py 15-20%, plus 5-10% aspy 101.7-101.8; po with trace cpy 102.5-102.6: irregular coarse py 25%			

### Diamond Drill Record

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Section	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
	+105: darker green, finer crystalline, likely close to siltstone contact			103.7-104.2: py and po in veins with chlorite, also replace into ground mass 106.5-108: bleached, light grey to grey pink, blotchy, silicified, no primary textures remain with py 5-10% as very fine subhedra to massive, minor po			
109.3	117.2 ?dyke: dark brown, finely crystalline; sporadic augite subhedra to 10%; mafics rimmed by calcite blebs which resemble vesicles			py 5-10% as fine dissemin- ations, sometimes crudely banded, irregular swirls, veinlets			
117.2	126.3 granodiorite, light medium grey to green grey, equi- granular, only feldspars distinctly visible; patchy silicification and chlorite			1-2% py, less than 1% po as subhedral clots; minor amounts in quartz veins			sporadically abundant quartz and calcite veins, variable angles to c.a.

## Diamond Drill Record

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
126.3	131.3	mixed zone of silicified siltstones with granodiorites; patches of siltstone remain, contacts irregular and diffuse			py 5% as discrete euhedra, irregular clots, swirls, veins; po less than 1% as disseminations and veins			
131.3	138.2	return to predominant granodiorite, patchy colour changes, bleached, silicified, fractures common			2-3% py, trace po			
138.2	144.7	siltstones, medium brown to brown grey with greenish bands, 70 degrees to c.a., some bleaching, little silicification			1-2% finely disseminated po			
144.7	151.6	siltstone, light grey to green, splotchy, highly bleached and silicified; +147.7: returns to dark brown grey siltstone until 150.7			1-2% po 144.7-146: massive po replacing into country rock with sharp but irregular borders: po 60% with 1-2% cpy; very silicified			

## Diamond Drill Record

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
151.6	168.5	mafic dyke: 10-15%			trace to 1% fine py			
		feldspar-hornblende pheno-						
		crysts in medium green,						
		finely crystalline ground						
		mass; local epidote						
168.5	196.9	siltstones, medium to			py 2-3% finely disseminated			quartz very much greater than
		coarse grained, various			and impregnations; minor			calcite in sporadic veins
		shades of brown green, light			po with chlorite in veins			
		green and brown, patchy;						
		borders diffuse; likely						
		near granodiorite contact,						
		since patchy silica,						
		isolated feldspars, green						
		colour						
		169.4-169.8, 170.6-171:						
		mafic dyke						
196.9	213.6	siltstone, predominantly			1-2% po as disseminations			minor irregular calcite veins
		dark brown grey and much			and coarser in clots			
		less silicified and altered						
		than above; localized green						
		and brown patches						
		-poorly laminated with						
		colour changes and grain size						

## Diamond Drill Record

HOLE NO. 86.4

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		differences; possible						
		sedimentary breccia						
213.6	232	2 granodiorite, light grey			po fine dissemination and local clots; minor veins; minor py subhedra along very thin fractures			minor quartz veins, some up to 2 cm, but subparallel to c.a.
		to grey green, medium						
		crystalline, equigranular,						
		individual crystals not						
		visible due to alteration;						
		pervasive silica and						
		bleaching						
232.2	255.6	siltstone as before; likely close to intrusive			po 2-3% in minor veins and disseminations			sporadic quartz veins, minor breccias
		contact with bleached and			232.2-232.3: quartz plus arsenopyrite veins with minor py and chlorite on slickensided surface; marks			
		silicified areas			contact with siltstone below and granodiorite above			
					255.1-255.6: zone of quartz influx with chlorite, po and trace cpy at contact			
					with siltstone above and granodiorite below: po 10%			
					of interval			

## Diamond Drill Record

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
255.6	289.4	granodiorite, medium			less than 1% fine py			minor sporadic quartz veins,
		grey to grey green, medium			268.3-.7: massive po,			often 60 degrees to c.a.,
		crystalline, equigranular			with quartz, chlorite,			associated microbreccia
		though individual crystals			py on slickensided			
		cannot be distinguished;			surface; minor cpy			
		local patchy silicification						
289.4	322.3	granodiorite, white to			1-2% iron sulphides with			common quartz influx and
		grey green to light grey,			py medium crystalline along			veins with lesser calcite
		finely crystalline with			irregular fractures and			
		individual crystals not			as fine disseminations;			
		easily visible; pervasive			chlorite along partings			
		intense silicification and			with 1-2% subhedral to			
		saussuritization; fine open			euhedral py			
		fractures locally abundant						
		creating zones of crackle						
		breccia						
322.3	324.5	mafic dyke: dark green,			trace medium crystalline			
		very finely crystalline			py clots			
		with subrounded calcite						
		clots; good effervescence						
		in ground mass; lightens						
		downward with 5-10% horn-						
		blende phenocrysts						

## Diamond Drill Record

HOLE NO. 86.4

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
324.5	336.6	.6 felsic dyke, light grey to pink grey, ranges from fine-grained with 5-15% feldspar phenocrysts with hornblende to medium crystal -line with angular textures (?) of apparent quartz inside feldspar from 324.5 to 328; contact with below gradational with slight colour change in ground mass			1-2% medium crystalline po or py as clots and along quartz microfractures; less than 1% aspy eu or subhedra throughout			
336.6	409	?more mafic dyke, medium grey, finely crystalline ground mass with 5-20% feldspar, lesser hornblende and augite; sparse biotite; ground mass slightly effervescent -contact with below sharp and marked by a zone of calcite-cemented breccia			1-2% py subhedra in ground mass			minor calcite veins, often near subparallel to ea.

### Diamond Drill Record

HOLE NO. 86, 4

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LOCATION: L4N, 060E		Diamond Drill Record				HOLE NO. G86.5	Page 1 of 6
AZIMUTH: 275	DIPS - collar 44 °	CONTRACTOR: Beupre Diamond Drilling				PROPERTY: Georgia	
ELEVATION: 4040'	- m °	LOGGED BY: J. Hardy				CLAIM NO. Pott	
LENGTH: 275 ft.	- m °	DATE: July 2,3, 1986				SECTION NO.	
CORE SIZE: NQ	- m °					STARTED: June 30, 1986	
PURPOSE to test IP and Genie EM anomalies						COMPLETED: July 1, 1986	

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
0	14	CASING						
12.5	14	hornblende diorite: dark grey, medium grained; could be a boulder			open fractures with oxidation			
14	18.5	siltstone: dark grey to brown-grey			py as disseminations, impregnations, veinlets, averages 5%			sporadic quartz and calcite with only trace fe sulphides
		14.5-16.5: finer, darker			-14-14.1: 15% py			
18.5	51.7	mixed hornfelsed siltstones and granodiorite with gradational transitions; CLOSE TO INTRUSIVE CONTACT; various grey to grey-green; grain size coarse to fine; hard to separate distinct end members			1-2% py in fine disseminations, irregular veins, along partings; localized silicification			minor quartz and calcite veins, generally less than 10 mm; may have bleached walls; variable angles to c.a.
		18.5-20.5: crackle bx, minor quartz, py			open fractures with oxidation persist to 48'			

## Diamond Drill Record

HOLE NO. G86.5 | Page 2 of 6

Section from ft	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		22	22.3	asp y 5-10%, med. xline subhedral; in vein extending into wallrock; 5% py			irregular calcite veins, 70 c.a., less than 5% of interval
		42.3		coarse po as vein to impregnation, less than 1 cm diameter; minor coarse cpy			26.8-.9: area of quartz veins, bleaching, silicification; py 5% in med. xline clots
		+42.3		po averages 1-2%, medium xline, disseminated to clots; minor veins over less than 2 cm intervals which contain up to 10%			45-48: quartz vein with sheared chloritic edges and open fractures
51.7	68.3 siltstone: dark grey to brown grey, very fine to medium grained; laminae well defined at mm to .5cm scale; 85 c.a. to 58', when angles are highly variable to 63', then average 70°c.a. -marked soft sediment deformation as folds, micro- folds/faults, load features			po as irregular veins at variable angles to c.a.; sometimes parallel to laminae with calcite veins; elsewhere increased to 10- 15% in specific laminae; detail shows not strat- abound but slightly cross cutting or irregular impregnations -po very fine crystalline			

## Diamond Drill Record

HOLE NO. G86.5

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Diamond Drill Record							HOLE NO. G86.5	Page 3 of 6
Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
					so could be mistaken for biotite; overall averages 5-10%; in places semi- massive to massive impreg- nations, generally less than 3 cm diameter			59.3-61.2: crackle breccia, calcite cement, minor po
			66.8	67.1	irregular po veins rimmed with calcite; massive centre subparallel to c.a. extends to similar zone parallel to laminae			
68.3	107.9	siltstone: medium brown to brown-grey, medium grained, mostly well-laminated on mm to 3 cm scale, variable angle to c.a.; minor faults, sometimes along veins, as well as churned, swirled zones; local bleached areas surround some po impregna-			po as med. coarse xline veinlets with lesser semi massive impregnations and along fractures; lesser v. finely disseminated; averages 10% py overall -crackle breccia with po veinlets and open fractures sporadic, widest about 1'			
			190.7	191.3	15%po			

## Diamond Drill Record

HOLE NO. G86.5 Page 4 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from	to		from	to		Thickness mm	Angle to core	minerals in decreasing abundance
107.9	111.8	siltstone: med. brown to brown grey, diffuse colour changes, no laminae -contact with above 50 c.a.			po as irregular veinlets to impregnations with open fractures; 5% of interval -minor bleaching and silicification			
111.8	123.6	return to dark grey, finer-grained, well laminated siltstones, as before			po with calcite in irregular, brittle veins as well as fine disseminations; 5-10% overall			intervals of crackle breccia as at 114.5-115.3, 116.5- 117.2, 119.5, 123.5: calcite plus po cement, plus open fractures
123.6	128.4	siltstone, medium brown to pink brown, medium grained -contact with below gradational by slight darkening in colour			po 1-2% primarily as irregular, massive to semi- massive veinlets with calcite, to 10 mm; plus very fine disseminations			
128.4	134	return to dark grey, well laminated siltstone as before; 70° c.a., only minor soft sediment defmt.						
134	157.8	return to brown and coarser siltstones, generally well			po 2-3% primarily in veins and fine disseminations			

## Diamond Drill Record

**HOLE NO. G86.5**

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### Diamond Drill Record

HOLE NO. G86-5

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LOCATION: L6E, 6+; 4S		Diamond Drill Record						HOLE NO. G86.6	Page 1 of 10
AZIMUTH: 158 degrees		DIPS - collar	45 °	CONTRACTOR: Beaupre Diamond Drilling				PROPERTY: Georgia	
ELEVATION: 3480'		- m	°	LOGGED BY: J.L. Hardy				CLAIM NO. Mascot	
LENGTH: 275'		- m	°	DATE: July 4, 1986				SECTION NO.	
CORE SIZE: NQ		- 275'	45°					STARTED: July 2, 1986.	
PURPOSE: to test Genie EM response on line 6E plus subcropping massive sulphide veins						COMPLETED: July 4, 1986.			
Section		ROCK DESCRIPTION		Interval		ALTERATION, MINERALIZATION etc.		VEINLETS	
from ft	to ft			from ft	to ft			Thickness mm	Angle to core
0	6	CASING							minerals in decreasing abundance
5	15	augite porphyry, medium green, medium fine crystal-line, generally equigranular with individual crystals not easily distinguished; sparse augite phenocrysts partly altered to chlorite -to 26' core recovery poor and some grinding				2-3% fine po disseminations			minor quartz veins near right angles to c.a., lack significant sulphides
15	19	siltstone, medium brown-grey, fine grained, generally not silicified, oxidation common on cm partings				po 2-3% as fine disseminations; in places 5-10% along fractures and veins; in places disseminated to 10-15%			minor quartz veins with oxidized faces; sparse chlorite
19	27	andesite/siltstone, medium green to maroon, fine grained				5-10% po as disseminations and lesser clots			

## Diamond Drill Record

HOLE NO. G86.6 | Page 2 of 10

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		-locally patchy silicification						
27	47	contact with above, sharp,			3-5% po as fine disseminations,			
		highly irregular, embayed,			and coarser crystalline			
		with fingers cutting across			clots (often with bleached			
		laminae up to 20 cm below			rims); sparse semi-massive			
		contact			impregnations of restricted			
		-hornblende porphyritic			extent			
		granodiorite, likely part			-trace subhedral aspy			
		of augite porphyry map unit			-oxidation along partings			
		-15% hornblende partly			and fractures continues			
		altered to chlorite in			to +47°			
		lighter green ground mass						
		with 5% feldspar phenocrysts						
		-minor zones of bleaching						
		and silicification where						
		primary textures gone						
		-34.0-36.4: possible dyke			5-10% medium crystalline			
		or intrusion of different			po as clots and disseminations			
		composition; sharp contacts						
		with above and below;						
		feldspar-augite porphyritic						
		andesite; green-brown colour,						
		distinctly coarser and						

## Diamond Drill Record

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## Diamond Drill Record

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
67	72	mixed intrusive phases, likely close to contact: hornblende -feldspar porphyritic granodiorite, medium grey to green grey, patchy silicification; plus feldspar-augite porphyritic andesite, coarser crystalline, distinct chrome colour with patchy silica and felds- pathization; contacts diffuse and poorly defined -contact with below very irregular and marked by massive po, with fine fingers extending into wall rock, minor cpy in quartz vein running 10 degrees to c.a.			po 2-3% as before with more along irregular veins and smeared along fracture planes			
72	82.1	feldspar augite porphyritic andesite, mainly maroon to green; local irregular light green silicification			2-3% po as medium crystalline veinlets and impregnations, to 3 cm diameter 77" trace cpy			

### Diamond Drill Record

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Diamond Drill Record							HOLE NO. G86.6	Page 5 of 10
Section		ROCK DESCRIPTION	Interval		ALTERATION. MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
82.1	98.2	siltstone, fine grained, light medium grey to brown grey to green grey; well defined laminae from mm to 10 cm scale. variable angles to c.a. but often 10-20 deg. -common microfaults and soft sediment defmt. 84.7-87: hornblende porphyritic andesite, likely finger of main body rather than dyke			to 5-10% po, very finely disseminated, higher in specific laminae but in detail cross-cut; less than 1% py with quartz along partings			minor sporadic quartz veins
98.2	105.2	plagioclase-hornblende porphyritic granodiorite, could be part of augite porphyry map unit; medium grey ground mass with 15-20% feldspar laths; sporadic black finely crystalline sub-rounded xenoliths and in places fine lithic fragments suggest tuff component			3-5% iron sulphides as medium crystalline clots to ground mass impregnations			

## Diamond Drill Record

HOLE NO. G86.6

Page 6 of 10

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
105.2	146.4	augite porphyritic			po 5% as fine disseminations			minor quartz veins discontinuously and at variable angles to c.a., often with chlorite and bleaching and minor po
		andesite; dark green to			and coarser crystalline			
		green grey to faintly			clots with bleached, silicified			
		maroon with subrounded			rims and along fractures			
		augites to 30% in darker			-local areas of irregular			
		green finer crystalline			quartz and chlorite veins,			
		ground mass; lesser and			bleaching with metasomatism			
		variable feldspars			as at 112.9, 113.1, 116-			
					117.6, 123.5-124.6			
					-141.9-142.2: po 10-15%			
					-142.9-145.9: intense			
					po veins marked by more			
					biotite and less augite;			
					likely related to contact			
					-po as massive veins 70-90			
					degrees to c.a., often very			
					irregular though generally			
					less than 1 cm wide; in			
					places approach crackle			
					breccia; po 15-20% of interval			
					with trace cpy			
					-145.3-145.7: massive			
					po with highly angular			
					fragments of wallrock			

## Diamond Drill Record

HOLE NO. G86.6 | Page 7 of 10

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
					themselves fractured with			
					cpx and po infill; 2-3% cpx			
					and 5-10% aspy cement			
					-contact with massive			
					area with walls below			
		-contacts with above and			very sharp, marked by			
		below diffuse, so more			.5 cm silicified zone			
		likely to be an intrusive			-resembles material			
		phase rather than dyke			observed on surface			
146.4	174.5	feldspar hornblende			po 2-3%, as medium crystal			sporadic chloritic and
		porphyritic granodiorite,			line disseminations to			silicified veins to 1 cm.
		likely part of augite			clots with lesser veinlets			often with bleaching
		porphyry map unit with						
		5-10% hornblende and 20-30%			-155.4: minor cpx with po			
		feldspar; medium grey over			in 10 mm vein, 70 degrees			
		all with somewhat darker			to c.a.			
		ground mass; contact placed						
		at first occurrence of this						
		lithology but could have						
		been placed at 149.1, last						
		occurrence of augite porph-						
		yry above; feldspars variably						
		altered; minor xenoliths						
		-contact with below						
		sharp but embayed						

## Diamond Drill Record

HOLE NO. G86.6 Page 8 of 10

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
174.5	195.6	augite feldspar porphyry  with 10% feldspar phenocrysts  and surrounded augites  partly altered to chlorite  in dark green finer crystal-  line ground mass; localized  patchy silicification,  bleaching			2-3% po as medium crystal-  line clots to impregnations  in ground mass and along  fracture planes; minor veins  to 15 mm.			
195.6	205.5	contact with above  sharp with some bleaching  - siltstone, brown grey with  intercalated medium green  to green grey andesite tuffs;  well laminated on mm to 5 cm  scale at 60 degrees to c.a.;  bleached areas extend out  from fractures						
205.5	208.9	hornblende-feldspar  granodiorite as before,  relatively sharp contact  with above and below; could  in fact be monzonite as  matrix darker and altered						

## Diamond Drill Record

HOLE NO. G86.6

Page 9 of 10

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
208.9	211.7	return to siltstone  and tuffs as above						
211.7	225	2 hornblende-feldspar  porphyritic granodiorite; ground mass altered so hard to distinguish individual grains; chloritic in places; very hard to tell if quartz present so could be monzonite			3-5% po as fine disseminations and coarser crystalline clots in ground mass and along fractures with quartz and chlorite; minor massive po veins less than .5cm at 80 degrees to c.a.; sparse py with quartz along fractures			-sparse calcite veins less than 1 cm with chlorite and minor po
225.2	248.2	2 siltstones, medium brown  grey to medium grey with lesser andesite tuffs; at 50 degrees to c.a. laminae -contact with below sharp and regular			po 1-2% very finely disseminated, trace subhedral aspy			minor quartz veins with 5% py along slickensided surfaces
248.2	262.7	2 hornblende granodiorite  as before; sparse feldspar laths; local biotite; could be monzonite			trace aspy, po 1-2% on average but sections to 5%; py with quartz on fractures			

## Diamond Drill Record

HOLE NO. G86.6

Page 10 of 10

LOCATION: L5E, 6+39S		Diamond Drill Record				HOLE NO. G86.7	Page 1 of 6
AZIMUTH: 158 degrees	DIPS - collar 46 °	CONTRACTOR: Beaupre Diamond Drilling				PROPERTY: Georgia	
ELEVATION: 3560'	- m °	LOGGED BY: J.L. Hardy				CLAIM NO. Mascot	
LENGTH: 215'	- m °	DATE: July 6,7, 1986				SECTION NO.	
CORE SIZE: NQ	- 215' 46 °					STARTED: July 4, 1986	
PURPOSE: to test Genie EM at 6+70S at about 30 m depth						COMPLETED: July 5, 1986	

Section	from ft	to ft	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
				from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
0	22	CASING							
pre	22	augite porphyry map unit,				po 1-2% finely disseminated			
		andesite, medium green to							
		blue green, with green-							
		brown areas; individual							
		grains not readily visible							
22	24.4	feldspar-hornblende grano-				py and po 5% as fine			
		diorite, light grey to				disseminations and small			
		brown grey with many				veinlets			
		plagioclase laths, making							
		up bulk of rock; 5% horn-							
		blende to .25 cm, partly							
		altered to biotite; plus							
		biotite finely in matriz							
24.4	48	augite feldspar porphyritic				po 5% as irregular swirls,			
		andesite, shades of medium				impregnations and massive			
		to dark green				to semi-massive along veins			

## Diamond Drill Record

HOLE NO. G86.7

Page 2 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		-irregular coarser biotite			minor cpy			minor irregular calcite,
		rich areas, more brown-grey						lesser quartz veins to
		-generally fine-grained with rounded augites (altered to						patches
		chlorite) to .3 cm making			-26.5-27: massive po			
		up 10-30% of rock and feldspar 5-20%; patchy colour			impregnations to 3 cm long;			
		changes from brownish to			averages 10% over interval			
		greener; localized bleaching			-35.2: 1-3% cpy with			
		and silicification; pervasive			calcite and po in .25 cm			
		chlorite alteration; patchy			veinlet			
		effervescence; in places						
		vague subrounded shapes						
		suggest lithic fragments						
48	63.2	division from above and below difficult, arbitrary			po highly variable as irregular impregnations, approaching			minor calcite veins to influx at variable angles to c.a.;
		on amount of bleaching, silicification and irregular			semi-massive to massive in places, elsewhere more			49.7-50.7: massive replacement into wallrocks with granular
		areas of intrusive: white, finely crystalline ground			vein-like, but generally less than 3 cm wide; also			quartz, chlorite and massive to semi-massive po about 5%,
		mass with variably distinct			2-3% as fine disseminations			1-2% cpy
		euhedral to subhedral			-up to 5% cpy over short			
		hornblende; zone is complex and tectonically disturbed			sections			

## Diamond Drill Record

HOLE NO. G86.7

Page 3 of 6

Section	ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
	or very close to intrusive						
	contact; patchy very fine						
	pinkish alteration, likely						
	biotite as well as chlorite						
	+57: lithic fragments, as			po as medium crystalline			
	well as intrusive patches			massive to semi-massive			
				impregnations; cpy medium			
				crystalline, highly irregular			
				with po or along, large			
				sections 2-3%			
				-51.1-53.6: 20% po in			
				net-like texture, less			
				than 1% cpy			
				-54.2-55: coarser po in			
				mesh as before 25-30%; to			
				3% coarsely crystalline cpy			
63.2	91.7 mixed suite of slightly			py less than 1% finely			
	different non-distinctive			disseminated and along			
	lithologies, likely part of			discontinuous veins; trace			
	augite porphyry map unit;			aspv			
	augite phenocrysts as well						
	as lithic frgaments; generally						
	dark green to brown green						
	with augites merging with						

### Diamond Drill Record

HOLE NO. G86.7

Page 4 of 6

Diamond Drill Record							HOLE NO. G86.7	Page 4 of 6
Section		ROCK DESCRIPTION	Interval		ALTERATION. MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
		ground mass; locally 5% feldspar subhedra; chlorite and biotite alteration patchy but pervasive; open fractures, some with chloritic slickensides common; patchy bleaching but no silicification						
91.7	113.4	light grey to grey green ? intrusive, very silicified, bleached with patchy colour; cannot tell parent, though in places clumps of feldspar laths and crystalline texture suggest intrusive; elsewhere lapilli-sized fragments suggest lapilli tuff			2-3% po as medium crystal-line impregnations -98.6, 99.7-99.9: po with minor cpy -104.2-104.4: 1 cm vein with coarsely crystalline po and 10% cpy -105-106: 5-10% po as irregular veins to disseminations; minor cpy -112.2-113.4: massive po vein subparallel to ca. with some sections of core entirely massive; po 15-20% of interval; cpy 2-3%			irregular discontinuous calcite and quartz veins, most less than .5 cm

## Diamond Drill Record

HOLE NO. G86.7

Page 5 of 6

Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
113.4	149.8	8 augite feldspar porphyritic andesite: dark to medium green to green grey as before with subrounded chloritic augites merging with ground mass; patchy to pervasive biotite and chlorite alteration; sporadic lithic fragments; minor patchy bleaching/ silicification: oxidation continues on some partings			po plus lesser py 2-3% as irregular veins and along partings, also disseminated -131.7-132.7: massive po vein replacing into walls			irregular calcite and quartz veins often 60 c.a.; most less than 1 cm
149.8	163.1	biotite-rich augite feldspar porphyritic andesite; ground mass mostly medium coarsely crystalline biotite; much calcite influx, veining and many slickensides on biotite rich partings; appears sheared, tectonized and splits along foliated planes			2-3% very fine disseminated py -158.6: trace cpy			

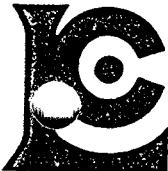
## Diamond Drill Record

HOLE NO.G86.7

Page 6 of 6

**APPENDIX 2: ASSAYS AND ANALYTICAL RESULTS**

# Chemex Labs Ltd.



Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614119-001-A  
INVOICE # : I8614119  
DATE : 27-JUN-86  
P.O. # : NONE  
GAG-G

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Interval	Hole	Comments
		RUSH FA	(FT)	(FT)	
3129 D	236	<0.002	--- 8	14.5 ---	--- G-86.1 ---
3130 D	236	<0.002	--- 14.5	24 ---	---
3131 D	236	0.004	--- 24	29 ---	---
3132 D	236	<0.002	--- 29	34 ---	---
3133 D	236	<0.002	--- 34	39 ---	---
3134 D	236	<0.002	--- 39	44 ---	---
3135 D	236	<0.002	--- 44	49 ---	---
3136 D	236	<0.002	--- 49	54 ---	---
3137 D	236	0.002	--- 54	59 ---	---
3138 D	236	<0.002	--- 59	64 ---	---
3139 D	236	0.002	--- 64	69 ---	---
3140 D	236	0.002	--- 69	74 ---	---

*W. Neftmanini*  
Registered Assayer, Province of British Columbia



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brookbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

Comments:

CC: J. L. HARDY

## CERTIFICATE OF ANALYSIS

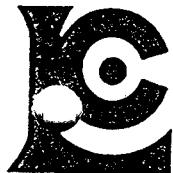
TO : MARK MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614120-001-A  
INVOICE #: I8614120  
DATE : 2-JUL-86  
P.O. #: NONE  
GAG-G

Sample description	Al	Aq	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	U	V	W	Zn			
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm					
3129 D	2.09	0.2	30	410	<0.5	<2	1.49	<0.5	17	50	37	3.45	10	0.52	10	1.25	407	<1	0.23	46	1210	14	<10	91	0.19	<10	<10	103	<10	50	--	--
3130 D	2.94	0.2	30	730	<0.5	<2	2.79	<0.5	22	59	61	4.43	10	1.32	10	1.44	636	<1	0.38	36	1020	14	<10	151	0.24	<10	<10	157	<10	70	--	--
3131 D	3.52	0.2	50	580	<0.5	<2	3.02	<0.5	21	66	44	5.08	10	1.97	10	1.75	684	<1	0.29	36	930	14	<10	149	0.27	<10	<10	195	<10	80	--	--
3132 D	3.52	0.2	190	640	<0.5	<2	4.56	<0.5	24	73	53	5.24	20	1.90	<10	3.06	727	<1	0.37	42	1060	12	<10	219	0.25	<10	<10	182	<10	80	--	--
3133 D	3.77	0.2	300	840	<0.5	<2	5.91	<0.5	19	76	77	4.39	20	1.61	<10	1.61	1171	<1	0.38	42	1210	12	<10	389	0.26	<10	<10	155	<10	70	--	--
3134 D	2.96	0.2	90	430	<0.5	<2	3.27	<0.5	18	46	59	4.37	10	1.54	10	1.21	628	<1	0.29	33	800	10	<10	124	0.24	<10	<10	161	<10	70	--	--
3135 D	2.71	0.2	120	310	<0.5	<2	0.82	<0.5	15	32	45	4.39	<10	1.45	10	1.21	337	1	0.18	29	720	14	<10	70	0.20	<10	<10	113	<10	80	--	--
3136 D	2.24	0.2	40	350	<0.5	<2	0.70	<0.5	13	23	43	4.10	<10	1.24	10	1.18	267	2	0.11	25	670	12	<10	41	0.18	<10	<10	102	<10	50	--	--
3137 D	1.95	0.2	500	590	<0.5	<2	0.92	<0.5	15	29	43	4.43	10	1.58	10	1.23	350	2	0.20	27	760	12	<10	77	0.20	<10	<10	128	<10	60	--	--
3138 D	2.86	0.2	680	220	<0.5	<2	2.30	<0.5	20	34	50	4.37	10	1.32	10	1.08	624	3	0.29	26	860	8	<10	118	0.22	<10	<10	159	<10	100	--	--
3139 D	3.97	0.2	2840	190	<0.5	<2	2.51	<0.5	14	35	45	4.43	10	1.36	10	1.14	455	2	0.37	32	770	16	10	186	0.20	<10	<10	158	<10	90	--	--
3140 D	2.57	0.2	1860	160	<0.5	<2	1.81	<0.5	18	36	66	4.71	10	1.07	10	1.13	497	4	0.24	36	800	12	<10	92	0.18	<10	<10	185	<10	120	--	--

HartBickler

Certified by .....



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614244-001-A  
INVOICE # : I8614244  
DATE : 1-JUL-86  
P.O. # : NONE  
GALLANT

CC: J. HARDY

Sample description	Prep code	Au oz/T RUSH FA	Drill Hole Footage Interval (ft)	Comments	
3141	236	<0.002	-- 74 → 79 --	-- G86.1	--
3142	236	<0.002	-- Box 5A --	--	--
3143	236	0.002	-- Box 5B --	--	--
3144	236	<0.002	-- Box 5C --	--	--
3145	236	<0.002	-- Box 5D --	--	--
3146	236	<0.002	-- 96.3 → 101.2 --	--	--
3147	236	<0.002	-- 101.2 → 106.2 --	--	--
3148	236	<0.002	-- 106.2 → 111.2 --	--	--
3149	236	<0.002	-- 111.2 → 116.2 --	--	--
3150	236	<0.002	-- 116.2 → 121.2 --	--	--
83466	236	<0.002	-- 121.3 → 126.3 --	--	--
83467	236	<0.002	-- 126.3 → 131.3 --	--	--
83468	236	<0.002	-- 131.3 → 134.9 --	--	--
83469	236	<0.002	-- Box 8A --	--	--
83470	236	<0.002	-- Box 8B --	--	--
83471	236	<0.002	-- Box 8C --	--	--
83472	236	<0.002	-- Box 8D --	--	--
83473	236	<0.002	-- 157.5 → 168.5 --	--	--
83474	236	<0.002	-- 158.5 → 161.5 --	--	--
83475	236	<0.002	-- 161.5 → 167.5 --	--	--
83476	236	<0.002	-- 167.5 → 178 --	--	--
83477	236	0.002	-- 178 → 183 --	--	--
83478	236	0.002	-- 183 → 185 --	--	--
83479	236	<0.002	-- 185 → 187.8 --	--	--
83482	236	<0.002	-- 207 → 212.9 --	--	--
83483	236	<0.002	-- 212.9 → 217.9 --	--	--
83484	236	<0.002	-- 217.9 → 222.9 --	--	--
83487	236	0.002	-- leftover core --	--	--

VOL rev. 4/85

.....  
B. Stewart  
Registered Assayer, Province of British Columbia



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

SEM QUANTITATIVE multi element ICP anal.

Nitric Aqua-Ketone digestion of 1.5 gm of material followed by ICP analysis. Sample digestion is incomplete for many minerals. Values reported for Al, Sr, Ba, Fe, Cr, Mn, La, Ni, Co, Ti, V and W will still be considered as semi-quantitative.

TO : MARY MANAGEMENT LIMITED  
1900 - 999 W. HASTINGE ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614245-Q-A  
INVOICE #: 18614245  
DATE: JUL-96  
P.O. #: NODA  
GEORGIA

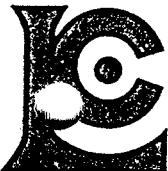
Comments:  
PC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	V	U	W	Zn	
	%, ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
3141	3.03	0.2	1580	240	<0.5	<2	2.02	<0.5	46	37	268	5.56	10	1.36	10	1.39	568	1	0.23	33	860	10	<10	109	0.22	<10	<10	171	<10	90
3142	3.29	0.2	1190	230	<0.5	<2	1.61	<0.5	16	45	80	4.80	10	1.07	10	1.21	368	6	0.32	52	820	12	<10	115	0.14	<10	<10	137	<10	90
3143	3.16	0.2	2190	170	<0.5	<2	2.31	<0.5	20	41	160	4.44	10	1.08	10	1.20	399	3	0.39	39	790	12	<10	140	0.17	<10	<10	162	<10	90
3144	0.58	0.2	1700	290	<0.5	<2	0.37	<0.5	25	51	74	4.32	20	0.96	10	1.39	362	2	1.39	39	790	14	<10	162	0.19	<10	<10	149	<10	70
3145	0.85	0.2	170	200	<0.5	<2	1.28	<0.5	16	49	113	4.62	10	1.26	10	1.20	382	4	0.34	42	800	12	<10	81	1.22	<10	<10	130	<10	100
3146	2.67	0.2	50	80	<0.5	<2	2.52	<0.5	15	43	85	4.62	20	0.66	10	1.15	508	4	0.23	44	770	14	<10	87	0.15	<10	<10	174	<10	110
3147	3.12	0.2	450	120	<0.5	<2	2.30	<0.5	19	52	87	4.69	10	0.77	10	1.23	452	1	0.28	42	810	14	<10	101	0.15	<10	<10	155	<10	90
3148	2.83	0.4	60	100	<0.5	<2	1.83	0.5	16	49	75	4.92	10	0.84	10	1.23	451	7	0.29	48	780	12	<10	91	0.13	<10	<10	148	<10	200
3149	3.19	0.2	390	210	<0.5	<2	1.53	22.0	18	46	68	5.11	10	1.33	10	1.22	407	5	0.34	46	240	22	10	119	0.19	<10	<10	123	<10	2270
3150	3.64	1.0	1660	190	<0.5	<2	3.24	<0.5	17	55	63	5.34	20	1.35	10	1.27	552	5	0.45	52	360	24	<10	185	0.20	<10	<10	195	<10	220
33466	4.01	0.2	280	440	<0.5	<2	1.76	<0.5	18	47	69	5.17	10	1.34	10	1.25	449	5	0.50	53	820	10	<10	155	1.18	<10	<10	172	<10	90
83467	3.10	0.2	150	360	<0.5	<2	0.89	<0.5	18	52	63	5.21	10	1.35	10	1.38	401	3	0.29	44	900	10	<10	76	0.15	<10	<10	147	<10	80
83468	3.69	0.2	260	300	<0.5	<2	1.77	<0.5	17	46	59	4.77	10	1.11	10	1.23	361	5	0.44	45	820	14	<10	132	0.15	<10	<10	146	<10	70
83469	2.99	0.2	120	260	<0.5	<2	1.75	<0.5	18	43	91	5.14	10	1.17	10	1.26	387	10	0.34	53	900	12	<10	120	0.15	<10	<10	120	<10	50
93470	3.68	0.2	170	100	<0.5	<2	3.19	<0.5	18	56	69	4.70	20	1.16	10	1.30	313	3	1.48	50	770	16	<10	148	1.19	<10	<10	159	<10	50
93471	3.93	0.2	150	240	<0.5	<2	3.42	<0.5	17	70	83	5.05	20	1.48	10	1.40	365	4	1.45	57	800	14	<10	157	1.03	<10	<10	194	<10	70
93472	1.97	0.2	30	150	<0.5	<2	1.19	<0.5	15	46	79	4.98	10	1.29	10	1.26	366	7	1.31	54	820	10	<10	105	1.17	<10	<10	179	<10	50
83473	2.74	0.2	2800	160	<0.5	<2	1.30	<0.5	45	68	94	5.04	10	1.42	10	1.42	342	4	0.23	54	760	12	<10	110	0.20	<10	<10	200	<10	70
83474	2.42	1.0	3120	340	<0.5	<2	3.53	<0.5	15	32	60	4.37	20	1.59	<10	1.32	774	1	0.17	28	1390	52	<10	153	0.26	<10	<10	128	<10	240
83475	2.56	0.2	270	620	<0.5	<2	3.06	<0.5	19	39	26	4.21	20	1.79	10	1.51	819	1	0.15	31	1390	8	<10	114	0.38	<10	<10	122	<10	70
93476	1.94	0.2	900	150	<0.5	<2	3.87	<0.5	25	17	22	3.29	20	1.15	<10	0.95	729	4	1.13	34	1020	12	<10	90	1.03	<10	<10	98	<10	60
83477	1.63	0.2	4500	190	<0.5	<2	2.06	<0.5	141	12	38	3.61	10	1.30	10	0.98	625	1	1.13	38	1040	9	<10	55	1.01	<10	<10	98	<10	60
93478	1.43	0.2	2770	140	<0.5	<2	3.21	<0.5	38	35	78	3.22	10	0.95	10	0.93	446	1	1.13	33	1040	10	<10	63	1.02	<10	<10	133	<10	50
83479	2.43	0.2	70	130	<0.5	<2	1.68	<0.5	19	60	95	5.05	10	1.42	10	1.31	315	10	0.20	68	790	12	<10	104	0.36	<10	<10	233	<10	40
83482	2.34	0.2	690	200	<0.5	<2	3.29	<0.5	29	33	42	4.09	20	1.51	<10	1.14	896	2	0.14	33	1160	10	<10	142	0.26	<10	<10	113	<10	70
83483	2.50	1.0	190	130	<0.5	<2	1.53	2.0	15	49	126	4.83	10	0.90	10	1.23	362	4	0.25	45	860	64	<10	85	0.21	<10	<10	231	<10	430
93484	2.08	0.2	30	190	<0.5	<2	0.67	0.5	16	58	22	4.29	10	1.38	10	1.25	357	4	1.13	46	250	2	<10	56	1.22	<10	<10	117	<10	30
83485	0.75	0.2	1280	170	<0.5	<2	0.18	<0.5	28	50	89	4.98	10	1.14	10	1.09	332	7	0.09	51	250	19	<10	113	0.19	<10	<10	135	<10	284

Hart Bickler

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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614246-001-A  
INVOICE # : I8614246  
DATE : 1-JUL-86  
P.O. # : NONE  
GAG-G

CC: J. HARDY

Sample description	Prep code	Au oz/T RUSH FA	Drill Hole Footage Interval (ft)	Comments
3324	236	<0.002	-- 89 → 94 --	-- G-86.2 --
3325	236	<0.002	-- 94 → 99 --	--
3326	236	<0.002	-- 99 → 104 --	--
83480	236	<0.002	-- Box 11A --	-- G-86.1 --
83481	236	0.002	-- Box 11B --	--
83485	236	<0.002	-- 222.9 → 230.4 --	--
83486	236	<0.002	-- 230.4 → 238 --	--
83488	236	<0.002	-- 8 → 16 --	-- G-86.2 --
83489	236	<0.002	-- 16 → 25 --	--
83490	236	<0.002	-- 25 → 33.4 --	--
83491	236	<0.002	-- 33.4 → 38.4 --	--
83492	236	<0.002	-- 38.4 → 43.4 --	--
83493	236	<0.002	-- 43.4 → 49 --	--



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Semi-quantitative multi-element ICP analysis.

Hydride/Optical/EIS detection of Q.I. & W material followed by ICP analysis. Since the detection is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Li, Ti, Ca, La, La, Sr, Na, Er, Th, Ti, W and V can only be considered as semi-quantitative.

Comments:  
by J. HARDY

## CERTIFICATE OF ANALYSIS

THE MARK MANAGEMENT LIMITED  
P.O. BOX 999 W. MARTIN'S ST.  
VANCOUVER, B.C.  
V6C 2W2

CSPT. #: ALB 4047-001-A  
INVOICE #: 1001-1047  
DATE: 7-11-88  
P.O. #: N/A  
DAB-6

Sample description	Al	Aq	As	Ba	Bg	Bi	Ca	Co	Cr	Cu	Fe	Ga	K	La	Mg	Na	Ni	P	Po	Sb	Si	Ti	Th	U	V	W	Zn					
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm						
3324	2.52	0.2	30	200	<0.5	<2	1.16	<0.5	15	51	51	5.31	<10	0.84	10	1.37	742	1	0.15	38	780	10	<10	76	0.21	<10	<10	131	<10	130	--	--
3325	2.31	0.2	20	280	<0.5	<2	0.54	<0.5	15	42	45	4.51	<10	1.29	<10	1.20	644	1	0.12	27	710	8	<10	146	0.21	<10	<10	108	<10	130	--	--
3326	2.42	0.2	30	220	<0.5	<2	0.73	<0.5	15	67	59	4.33	<10	1.12	10	1.27	341	3	0.18	36	740	12	<10	75	0.18	<10	<10	143	<10	130	--	--
83481	2.04	0.2	10	110	<0.5	<2	0.42	<0.5	20	18	31	4.86	<10	0.13	100	1.54	781	2	0.15	14	2700	13	<10	39	0.19	<10	<10	102	<10	66	--	--
33481	1.98	1.6	1840	140	<0.5	<2	1.31	<0.5	52	47	183	4.40	<10	0.84	10	1.04	316	5	0.31	38	770	14	<10	17	0.30	<10	<10	307	<10	50	--	--
83485	2.27	0.2	40	230	<0.5	<2	0.51	<0.5	15	45	54	4.80	<10	1.53	10	1.30	421	2	0.14	26	780	2	<10	39	0.25	<10	<10	164	<10	70	--	--
83486	1.41	0.2	100	90	<0.5	<2	1.32	<0.5	15	9	41	3.08	<10	0.67	10	0.68	502	<1	0.18	11	970	2	<10	52	0.25	<10	<10	103	<10	50	--	--
83488	2.63	0.2	30	70	<0.5	<2	0.93	<0.5	19	39	60	4.47	<10	0.58	10	1.09	479	19	0.32	65	780	16	<10	90	0.11	<10	<10	160	<10	180	--	--
83489	2.01	0.2	60	30	<0.5	<2	1.81	<0.5	18	31	53	4.98	<10	0.31	10	0.99	478	24	0.05	71	750	24	<10	94	0.08	<10	<10	128	<10	70	--	--
83490	2.86	0.2	30	50	<0.5	<2	4.55	<0.5	25	127	34	5.25	<10	0.08	40	2.55	1071	1	0.05	31	2810	16	<10	27	0.02	<10	<10	113	<10	70	--	--
83491	2.20	0.4	90	50	<0.5	<2	1.53	<0.5	20	33	38	6.45	<10	0.39	10	1.22	478	26	0.07	72	940	26	<10	31	0.02	<10	<10	136	<10	30	--	--
83492	2.08	0.4	30	70	<0.5	<2	2.07	<0.5	15	28	60	4.97	<10	0.50	10	1.11	430	18	0.13	60	760	38	<10	125	0.02	<10	<10	120	<10	80	--	--
83493	1.94	0.2	80	70	<0.5	<2	2.40	<0.5	13	32	54	4.20	<10	0.47	10	1.09	476	26	0.09	59	830	40	<10	101	0.02	<10	<10	115	<10	130	--	--

Hart Bickler

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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614248-001-A  
INVOICE # : I8614248  
DATE : 6-JUL-86  
P.O. # : NONE  
GAG-G

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments	
83494	207	<0.002	-- 49 59 --	-- G-86.2	--
83495	207	<0.002	-- 59 64.4 --	--	--
83496	207	<0.002	-- 64.4 69.4 --	--	--
83497	207	<0.002	-- 69.4 74.4 --	--	--
83498	207	<0.002	-- 74.4 78.4 --	--	--



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## CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614249-001-A  
INVOICE #: J8614249  
DATE : 8-JUL-86  
P.O. #: NONE  
GAG-G

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS:  
CC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Na	Ni	P	Ph	Sb	Sr	Ti	Tl	U	V	W	Zn			
	I	ppm	ppm	ppm	ppm	ppm	I	ppm	ppm	ppm	ppm	I	ppm	I	ppm	ppm	I	ppm	ppm	ppm	ppm	I	ppm	ppm	I	ppm	ppm	ppm	ppm			
83494	2.24	0.2	340	110	<0.5	<2	1.32	0.5	24	35	58	5.15	10	0.71	10	0.99	386	24	0.23	57	820	18	<10	81	0.05	<10	<10	102	<10	110	--	--
83495	2.22	0.2	80	100	<0.5	<2	2.02	1.5	17	35	60	5.09	10	0.56	10	1.00	466	22	0.15	52	860	18	<10	83	0.05	<10	<10	92	<10	240	--	--
83496	4.90	0.2	50	110	<0.5	<2	3.15	1.0	15	40	52	4.54	20	0.58	<10	1.08	505	9	0.74	36	920	16	<10	244	0.15	<10	<10	138	<10	140	--	--
83497	2.30	0.2	30	110	<0.5	<2	0.89	0.5	15	58	50	5.21	10	0.80	10	1.18	643	4	0.23	37	910	14	<10	61	0.12	<10	<10	147	<10	160	--	--
83498	3.62	0.2	50	90	<0.5	<2	2.18	2.0	15	55	52	5.42	20	0.68	10	1.14	610	7	0.42	41	940	12	<10	159	0.09	<10	<10	146	<10	170	--	--

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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
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V6C 2W2

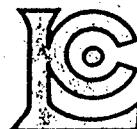
CERT. # : A8614406-001-A  
INVOICE # : I8614406  
DATE : 16-JUL-86  
P.C. # : NONE  
GALLANT GEORGIA

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
00951 E	207	0.146	-- See Table --	--
00952 E	207	0.024	--	--
03327 D	207	<0.002	-- 104 109 --	-- G-86.2 --
03328 D	207	0.002	-- 109 114 --	--
03329 D	207	<0.002	-- 114 119 --	--
03330 D	207	<0.002	-- 119 123.4 --	--
03331 D	207	<0.002	-- 123.4 125.1 --	--
03332 D	207	<0.002	-- 125.1 128.6 --	--
03333 D	207	<0.002	-- 128.6 133.6 --	--
03334 D	207	<0.002	-- 133.6 143.6 --	--
03335 D	207	<0.002	-- 143.6 153.6 --	--
03336 D	207	<0.002	-- 153.6 163.6 --	--
03337 D	207	0.006	-- 163.6 173.6 --	--
03338 D	207	0.002	-- 173.6 183.6 --	--
03339 D	207	0.008	-- 183.6 193.6 --	--
03340 D	207	<0.002	-- 193.6 203.6 --	--
03341 D	207	<0.002	-- 203.6 213.6 --	--
03342 D	207	<0.002	-- 213.6 219.8 --	--
03343 D	207	<0.002	-- 219.8 224.3 --	--
03344 D	207	<0.002	-- 224.3 229.3 --	--
03345 D	207	0.002	-- 229.3 239.3 --	--
03346 D	207	<0.002	-- 239.3 249 --	--
03347 D	207	<0.002	-- 249 252.9 --	--
03348 D	207	<0.002	-- 252.9 254.2 --	--
03349 D	207	<0.002	-- 254.2 269.2 --	--
03350 D	207	<0.002	-- 259.2 270 --	--
03364 D	207	<0.002	-- 269.2 → core --	-- G-86.3 --
03365 D	207	<0.002	-- 270 29.9 --	--
03366 D	207	0.016	-- 29.9 37.3 --	--
03367 D	207	0.020	-- 37.3 39.8 --	--
03368 D	207	0.006	-- 39.8 44.8 --	--
03369 D	207	0.002	-- 44.8 49.8 --	--
03370 D	207	0.002	-- 49.8 54.8 --	--
03371 D	207	0.002	-- 49.8 54.8 --	--
03372 D	207	0.002	-- 59.8 64.8 --	--
03373 D	207	0.004	-- 64.8 74.8 --	--
03374 D	207	0.006	-- 74.8 79.8 --	--
75 D	207	0.004	-- 79.8 84.8 --	--
03376 D	207	<0.002	-- 84.8 89.8 --	--
03377 D	207	<0.002	-- 89.8 94.8 --	--

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Telex: 043-52597

semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 1.5 g of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, St, Ba, Be, Ca, Cr, La, Mg, Ni, Sr, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

TO : MARK MANAGEMENT LIMITER

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.

VUSC 2W2

CERT. #: A8614407-C01-A  
INVOICE #: 10611407  
DATE: 22-JUL-86  
P.O. #: NONE  
GALLANT GEORGIA

COMMENTS:  
Sgt. J. HARDY

Sample Description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mr	Mo	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
00951 E	1.78	1.2 >9999	80 <0.5	124	0.83 <0.5	1047	59	1049	16.79	<10	0.75	10	1.06	362	<1	0.06	62	710	10	<10	63	0.08	<10	<10	132	<10	70	--	
00952 E	0.67	1.4 2960	40 <0.5	<2	0.23 <0.5	70	18	1833	27.58	<10	0.25	<10	0.23	111	<1	0.03	91	500	4	<10	15	0.09	<10	<10	63	<10	70	--	
03327 D	1.94	0.8 110	190 <0.5	<2	1.06	5.5	20	76	89	5.78	10	1.04	10	1.34	670	4	0.23	46	240	16	10	87	1.19	<10	<10	160	<10	430	--
03328 D	2.55	0.6 20	170 <0.5	<2	1.87	2.5	16	78	71	5.34	10	0.80	10	1.30	649	5	0.22	44	940	22	10	94	1.15	<10	<10	189	<10	270	--
03329 D	1.45	0.4 30	150 <0.5	<2	1.32	1.5	16	75	67	5.18	10	0.33	10	1.30	667	3	0.16	40	370	14	<10	71	1.17	<10	<10	167	<10	220	--
03330 D	2.39	0.6 20	200 <0.5	<2	1.04	3.5	17	80	71	5.37	10	0.99	10	1.35	615	5	0.22	50	890	18	<10	77	0.24	<10	<10	283	<10	360	--
03331 D	4.56	0.4 40	110 <0.5	<2	4.26	<0.5	11	27	22	2.03	20	0.16	<10	0.32	438	5	0.53	18	960	6	10	316	0.28	<10	<10	54	<10	90	--
03332 D	2.42	0.2 50	80 <0.5	<2	1.64	2.0	17	62	83	5.26	10	0.75	10	1.31	597	8	0.22	51	910	12	10	84	0.28	<10	<10	273	<10	270	--
03333 D	1.51	0.2 20	40 <0.5	<2	2.07	<0.5	19	38	136	4.29	10	0.20	10	1.11	647	1	0.10	23	1460	4	<10	78	0.23	<10	<10	119	<10	60	--
03334 D	1.42	0.2 20	60 <0.5	<2	2.38	<0.5	15	35	44	3.28	10	0.38	10	0.95	621	1	0.12	19	1360	4	<10	76	0.24	<10	<10	111	<10	56	--
03335 D	1.62	0.2 50	40 <0.5	<2	2.41	<0.5	20	42	90	4.15	10	0.20	10	1.22	754	1	0.09	21	1470	6	<10	75	0.27	<10	<10	131	<10	50	--
03336 D	1.08	0.2 80	50 <0.5	<2	1.55	<0.5	16	26	49	2.62	<10	0.37	10	0.62	412	1	0.13	16	1470	4	<10	63	0.25	<10	<10	87	<10	40	--
03337 D	1.20	0.2 800	50 <0.5	<2	1.70	0.5	17	28	56	2.94	10	0.46	10	0.68	445	1	0.12	17	1430	6	<10	61	0.24	<10	<10	90	<10	40	--
03338 D	1.19	0.2 380	40 <0.5	<2	1.82	<0.5	19	28	80	3.22	10	0.42	10	0.67	423	1	0.10	18	1460	4	<10	52	0.24	<10	<10	88	<10	40	--
03339 D	1.11	0.2 720	40 <0.5	<2	1.65	<0.5	15	29	78	3.11	10	0.44	10	0.68	441	1	0.09	18	1510	4	<10	51	0.24	<10	<10	98	<10	40	--
03340 D	1.41	0.2 30	70 <0.5	<2	1.99	<0.5	16	37	48	3.33	10	0.52	10	0.99	569	1	0.19	19	1260	6	<10	78	0.30	<10	<10	114	<10	40	--
03341 D	1.12	0.2 50	50 <0.5	<2	1.55	<0.5	12	23	40	2.48	<10	0.37	10	0.64	411	1	0.15	14	1940	2	<10	74	0.22	<10	<10	85	<10	30	--
03342 D	1.17	0.2 80	50 <0.5	<2	1.59	<0.5	14	24	72	2.88	10	0.44	10	0.67	402	1	0.14	15	1340	2	<10	81	0.24	<10	<10	89	<10	30	--
03343 D	0.85	0.4 150	20 <0.5	<2	1.17	<0.5	55	19	415	11.56	10	0.23	10	0.31	208	4	0.10	57	1310	6	<10	59	0.22	<10	<10	49	<10	30	--
03344 D	1.23	0.2 160	60 <0.5	<2	1.20	0.5	21	33	177	5.01	10	0.79	20	0.81	360	2	0.09	22	1640	4	<10	47	0.26	<10	<10	77	<10	40	--
03345 D	1.24	0.2 50	50 <0.5	<2	1.77	<0.5	15	27	40	2.76	10	0.51	10	0.66	436	1	0.14	16	1390	2	<10	32	0.24	<10	<10	91	<10	29	--
03346 D	1.08	0.2 40	50 <0.5	<2	1.47	<0.5	12	24	43	2.64	<10	0.38	10	0.61	391	1	0.14	14	1270	3	<10	68	0.26	<10	<10	93	<10	30	--
03347 D	1.28	0.2 60	100 <0.5	<2	1.67	<0.5	19	30	107	4.17	10	0.54	10	0.75	464	1	0.14	21	1420	4	<10	69	0.29	<10	<10	96	<10	40	--
03348 D	1.52	1.2 <10	20 <0.5	<2	1.95	<0.5	64	35	583	21.24	10	0.26	10	0.45	307	3	0.08	93	920	6	<10	91	0.18	<10	<10	96	<10	80	--
03349 D	2.86	0.4 10	190 <0.5	<2	0.92	0.5	16	83	66	5.24	10	1.47	10	1.40	618	6	0.33	51	920	10	<10	119	0.23	<10	<10	305	<10	170	--
03350 D	3.00	0.8 10	130 <0.5	<2	1.19	3.0	15	78	68	5.29	10	1.09	10	1.23	576	4	0.41	43	800	12	10	142	0.19	<10	<10	246	<10	300	--
03364 D	4.92	0.2 10	120 <0.5	<2	2.27	0.5	11	44	9	2.77	10	1.40	10	1.10	513	1	0.21	12	930	3	<10	122	0.15	<10	<10	133	<10	28	--
03365 D	2.94	0.2 90	310 <0.5	<2	12.04	1.0	14	57	35	6.42	10	2.71	<10	2.91	1803	49	0.09	19	1000	10	10	198	0.15	<10	<10	247	<10	30	--
03366 D	1.61	0.8 30	30 <0.5	<2	5.73	1.5	105	38	868	11.84	20	0.40	<10	0.73	573	40	0.05	41	1080	214	10	91	0.13	<10	<10	121	<10	160	--
03367 D	0.97	0.2 10	20 <0.5	<2	1.68	<0.5	19	25	156	2.75	<10	0.28	10	0.42	182	14	0.10	11	1180	2	<10	62	0.22	<10	<10	86	<10	20	--
03368 D	2.01	0.2 40	330 <0.5	<2	1.41	<0.5	16	44	115	4.64	10	1.02	10	1.32	417	3	0.12	24	870	6	<10	52	0.22	<10	<10	150	<10	50	--
03369 D	1.96	0.2 10	160 <0.5	<2	2.60	<0.5	15	54	61	4.17	10	0.38	<10	1.08	682	1	0.07	26	910	4	<10	128	0.25	<10	<10	133	<10	50	--
03370 D	1.92	0.2 30	280 <0.5	<2	2.03	0.5	21	62	128	5.00	10	0.67	<10	1.51	449	1	0.10	22	1030	6	10	91	0.22	<10	<10	154	<10	50	--
03371 D	2.92	0.2 130	340 <0.5	<2	2.89	<0.5	23	85	77	5.42	10	1.07	<10	2.47	568	1	0.11	39	1160	6	10	107	0.15	<10	<10	186	<10	81	--
03372 D	3.39	0.2 110	280 <0.5	<2	1.73	<0.5	20	46	146	4.75	10	0.92	10	1.55	454	2	0.16	24	1520	2	<10	90	0.14	<10	<10	128	<10	50	--
03373 D	1.98	0.2 430	260 <0.5	<2	1.78	<0.5	21	49	135	4.66	10	0.87	10	1.52	418	2	0.12	27	1480	6	<10	83	0.20	<10	<10	126	<10	50	--
03374 D	2.22	0.2 740	360 <0.5	<2	1.49	<0.5	23	70	104	4.62	10	0.92	10	1.45	356	1	0.16	43	1220	4	<10	101	0.28	<10	<10	137	<10	50	--
03375 D	2.31	0.2 20	220 <0.5	<2	2.10	<0.5	21	51	136	4.06	10	0.46	<10	0.93	290	1	0.29	38	1340	6	<1								



# Chemex Labs Ltd.

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212 Brooksbank Ave.  
North Vancouver, B.C.  
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Phone: (604) 984-0221  
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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614406-002-A  
INVOICE # : I8614406  
DATE : 16-JUL-86  
P.O. # : NONE  
GALLANT GEORGIA

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
03378 D	207	0.002	-- 94.8 99.8 --	-- G-86.3 --
03379 D	207	<0.002	-- 99.8 104.8 --	--
03380 D	207	<0.002	-- 104.8 109.8 --	--
03381 D	207	0.002	-- 109.8 114.8 --	--
03382 D	207	<0.002	-- 114.8 119.8 --	--
03383 D	207	0.014	-- 119.8 124.8 --	--
03384 D	207	<0.002	-- 124.8 129.8 --	--
03385 D	207	0.006	-- 129.8 134.8 --	--
03386 D	207	0.008	-- 134.8 139.8 --	--
03387 D	207	0.002	-- 139.8 146 --	--
03388 D	207	0.016	-- 146 154.3 --	--
03389 D	207	0.014	-- 154.3 159.3 --	--
03390 D	207	0.034	-- 159.3 164.3 --	--
03391 D	207	0.016	-- 164.3 169.3 --	--
83147 C	207	0.046	See table	--
83148 C	207	0.016	--	--
83149 C	207	0.106	--	--
83150 C	207	0.074	--	--
83499 C	207	0.002	--	--
83500 C	207	<0.002	--	--

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B. Stewart  
Registered Assayer, Province of British Columbia



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

## COMMENTS:

CC: J. HARDY

TO: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614407-002-A  
INVOICE #: I8614407  
DATE #: 22-JUL-86  
P.O. #: NONE

GALLANT GEORGIA

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	U	V	W	Zn			
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
03378 D	1.80	0.2	30	390	<0.5	<2	1.44	<0.5	22	65	78	4.24	<10	0.52	10	1.29	295	<1	0.19	41	1230	6	<10	103	0.20	<10	<10	132	<10	50	--	--
03379 D	1.57	0.2	10	290	<0.5	<2	0.84	<0.5	24	68	78	4.44	<10	0.77	10	1.18	227	<1	0.14	44	1280	16	<10	54	0.19	<10	<10	138	<10	50	--	--
03380 D	1.54	0.2	10	240	<0.5	<2	0.84	<0.5	24	69	65	4.41	<10	0.79	10	1.30	266	<1	0.16	45	1230	9	<10	49	0.23	<10	<10	150	<10	50	--	--
03381 D	1.80	0.2	140	510	<0.5	<2	1.17	<0.5	36	74	74	4.65	<10	0.66	10	1.49	290	<1	0.15	45	1300	4	<10	70	0.21	<10	<10	154	<10	60	--	--
03382 D	1.80	0.2	30	330	<0.5	<2	0.79	<0.5	36	74	89	5.12	<10	0.99	10	1.54	258	<1	0.14	46	1360	6	<10	55	0.23	<10	<10	164	<10	60	--	--
03383 D	1.63	0.2	30	460	<0.5	<2	0.98	<0.5	24	60	90	4.06	<10	0.60	10	1.21	255	<1	0.16	40	1280	10	<10	78	0.23	<10	<10	129	<10	40	--	--
03384 D	2.42	0.2	20	610	<0.5	<2	1.67	<0.5	25	75	62	4.76	10	0.77	30	1.73	399	<1	0.43	46	2280	10	<10	253	0.23	<10	<10	152	<10	70	--	--
03385 D	1.81	0.2	40	400	<0.5	<2	0.83	<0.5	26	75	74	4.82	<10	0.76	10	1.54	248	<1	0.13	47	1270	8	<10	71	0.21	<10	<10	161	<10	60	--	--
03386 D	1.71	0.2	120	440	<0.5	<2	0.78	<0.5	16	48	65	3.07	<10	0.88	<10	1.16	226	<1	0.15	28	940	24	<10	70	0.19	<10	<10	107	<10	40	--	--
03387 D	1.77	0.2	40	470	<0.5	<2	0.91	<0.5	21	51	76	3.83	<10	0.87	10	1.26	319	<1	0.15	39	1270	4	<10	62	0.15	<10	<10	116	<10	40	--	--
03388 D	1.09	0.2	860	40	<0.5	<2	1.38	<0.5	50	19	776	4.95	<10	0.24	10	0.30	149	1	0.13	25	970	4	<10	62	0.19	<10	<10	70	<10	30	--	--
03389 D	1.40	0.2	210	100	<0.5	2	0.86	<0.5	18	28	150	2.88	<10	0.71	10	0.57	203	3	0.15	18	740	2	<10	52	0.23	<10	<10	105	<10	30	--	--
03390 D	1.84	0.4	5680	120	<0.5	8	0.90	<0.5	242	44	538	8.03	<10	0.98	10	0.86	288	3	0.18	38	840	8	<10	68	0.27	<10	<10	165	<10	70	--	--
03391 D	1.84	0.4	1770	100	<0.5	<2	1.06	<0.5	27	48	202	4.78	<10	0.91	10	0.92	331	2	0.15	30	860	6	<10	67	0.27	<10	<10	197	<10	80	--	--
93147 C	0.56	3.0	>9999	20	<0.5	18	0.15	<0.5	644	16	1459	18.75	<10	0.07	<10	0.28	110	<1	0.01	45	570	16	30	5	0.02	<10	<10	43	<10	50	--	--
83148 C	0.92	0.8	1080	20	<0.5	<2	1.21	<0.5	99	21	733	15.85	10	0.32	10	0.59	329	14	0.08	51	690	6	<10	62	0.12	<10	<10	101	<10	40	--	--
93149 C	1.02	1.2	>9999	120	<0.5	<2	0.38	<0.5	282	10	621	19.51	<10	0.28	<10	0.34	244	<1	0.05	34	600	38	100	179	0.02	<10	<10	32	<10	170	--	--
83150 C	0.41	1.0	1760	10	<0.5	18	0.51	<0.5	99	14	793	9.24	<10	0.04	<10	0.05	112	1	0.01	56	190	8	<10	22	0.06	<10	<10	13	<10	20	--	--
83499 C	2.84	0.6	140	140	<0.5	<2	1.08	0.5	16	72	74	5.57	10	1.09	10	1.20	706	5	0.29	48	890	12	<10	111	0.15	<10	<10	176	<10	170	--	--
83500 C	2.94	0.4	80	280	<0.5	<2	1.08	0.5	14	63	58	4.96	10	1.30	10	1.29	706	2	0.24	35	830	12	<10	270	0.20	<10	<10	158	<10	160	--	--

Certified by *[Signature]*



# Chemex Labs Ltd.

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212 Brooksbank Ave.  
North Vancouver, B.C.  
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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614450-001-A  
INVOICE # : I8614450  
DATE : 16-JUL-86  
P.O. # : NONE  
GALLANT-GEORGIA

CC: J. HARDY

Sample description	Prep code	Au oz/t	Drill Hole Footage Interval (ft)	Comments
3392D	207	0.030	-- 169.3 → 172.2 --	-- G-86.3 --
3393D	207	0.086	-- 172.2 → 175.3 --	--
3394D	207	0.030	-- 175.3 → 180.3 --	--
3395D	207	0.014	-- 180.3 → 185.3 --	--
3396D	207	0.030	-- 185.3 → 195.3 --	--
3397D	207	0.014	-- 195.3 → 205.3 --	--
3398D	207	0.036	-- 205.3 → 213.3 --	--
3399D	207	0.028	-- 213.3 → 214.3 --	--
3400D	207	0.006	-- 214.3 → 218.3 --	--
13851D	207	0.034	-- 218.3 → 49.1 --	-- G-86.4 --
13852D	207	0.008	-- 49.1 → 50.8 --	--
13853D	207	0.028	-- 50.8 → 55.0 --	--
13854D	207	0.036	-- 55.0 → 60.0 --	--
13855D	207	0.010	-- 60.0 → 65.0 --	--
15351D	207	0.002	-- 65.0 → 70.0 --	--
15352D	207	0.002	-- 222.8 → 223.3 --	-- G-86.3 --
15353D	207	0.004	-- 227.3 → 232.3 --	--
15354D	207	0.002	-- 232.3 → 237.3 --	--
15355D	207	0.002	-- 237.3 → 243.0 --	--
15356D	207	0.004	-- 243 → 247.0 --	--
15357D	207	0.002	-- 247 → 257 --	--
15358D	207	0.020	-- 257 → 267 --	--
15359D	207	0.016	-- 267 → 277 --	--
15360D	207	0.006	-- 277 → 297 --	--
15361D	207	<0.002	-- 287 → 297 --	--
15362D	207	0.010	-- 297 → 307 --	--
15363D	207	0.004	-- 307 → 313.1 --	--
15364D	207	<0.002	-- 313.1 → 314.9 --	--
15365D	207	0.002	-- 314.9 → 324.9 --	--
15366D	207	<0.002	-- 324.9 → 334.9 --	--
15367D	207	<0.002	-- 334.9 → 344.9 --	--
15368D	207	0.002	-- 344.9 → 354.9 --	--
15369D	207	0.002	-- 354.9 → 364.9 --	--
15370D	207	<0.002	-- 364.9 → 370.3 --	--
15371D	207	<0.002	-- 370.3 → 371.3 --	--
15372D	207	<0.002	-- 371.3 → 374.5 --	--
15373D	207	<0.002	-- 374.5 → 379.5 --	--
15374D	207	<0.002	-- 379.5 → 388.5 --	--
15375D	207	<0.002	-- 388.5 → 390.5 --	--
15376D	207	<0.002	-- 390.5 → 396.5 --	--

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Registered Assayer, Province of British Columbia

*B. Scott*



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Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Hydride-Aqua-Regia digestion of 1.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Sc, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and Y can only be considered as semi-quantitative.

TO : MARK MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
VBC DWI

CERT. #: A8614451-001-A  
INVOICE #: 18614451  
DATE : 17-JUL-96  
P.O. #: NONE  
GALLANT-GEORGIA

COMMENTS :

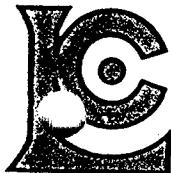
CC: J. HARDY

32

13 14

24

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	Tl	U	V	W	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
33920	1.74	0.4	1110	70 <0.5	4 0.79 <0.5	24	54	279	5.15	10 0.85	10 1.14	307	4 0.11	30	1050	12 <10	42 0.21	<10	<10	240	<10	60	--	--	--	--	--		
33930	0.74	0.6	8930	40 <0.5	22 0.83 <0.5	283	37	834	11.45	10 0.37	10 0.47	150	3 0.04	37	1570	10 <10	21 0.12	<10	<10	51	<10	40	--	--	--	--	--		
33940	1.80	0.4	170	70 <0.5	14 1.56 <0.5	18	77	91	3.63	20 0.97	20 1.19	346	2 0.11	29	1890	10 <10	27 0.28	<10	<10	93	<10	40	--	--	--	--	--		
33950	1.65	0.2	900	70 <0.5	32 1.57 <0.5	36	66	44	2.71	10 0.69	20 0.97	301	3 0.14	28	1870	10 <10	62 0.33	<10	<10	27	<10	40	--	--	--	--	--		
33960	1.59	0.2	2020	80 <0.5	2 1.22 <0.5	55	61	72	2.85	10 0.88	20 0.93	374	1 0.13	25	1760	6 <10	60 0.19	<10	<10	73	<10	40	--	--	--	--	--		
33970	1.72	0.2	300	80 <0.5	2 1.33 <0.5	19	63	58	2.66	10 0.93	20 0.93	270	1 0.16	25	1820	4 <10	74 0.22	<10	<10	76	<10	30	--	--	--	--	--		
33980	1.55	0.2	200	80 <0.5	14 1.58 <0.5	36	61	135	3.16	10 0.82	20 0.91	271	7 0.12	29	2070	6 <10	66 0.25	<10	<10	75	<10	30	--	--	--	--	--		
33990	0.31	0.8	1330	10 <0.5	<2 0.58 <0.5	521	24	1684	39.20	30 0.19	10 0.23	142	40 0.01	176	1000	<2 <10	11 0.03	<10	<10	19	<10	80	--	--	--	--	--		
34000	2.73	0.4	70	150 <0.5	<2 5.14 <0.5	45	101	286	6.90	30 2.03	<10 1.93	952	6 0.11	35	1410	8 <10	27 0.14	<10	<10	158	<10	70	--	--	--	--	--		
138510	1.03	8.0	2610	90 <0.5	<2 0.83 <0.5	370	21	6529	26.17	20 0.43	10 0.44	242	<1 0.05	53	430	8 <10	103 0.06	<10	<10	65	<10	110	--	--	--	--	--		
138520	3.11	0.2	1350	90 <0.5	<2 3.70 <0.5	94	79	598	7.30	30 0.98	<10 1.90	671	2 0.19	24	970	2 <10	95 0.19	<10	<10	222	<10	50	--	--	--	--	--		
138530	2.35	0.2	600	180 <0.5	4 1.91 <0.5	52	41	314	5.13	20 1.46	10 1.58	389	2 0.15	16	2020	6 <10	98 0.25	<10	<10	161	<10	40	--	--	--	--	--		
138540	3.73	0.2	30	500 <0.5	8 2.43 <0.5	31	47	258	6.26	20 1.76	10 1.89	519	<1 0.32	27	2420	8 <10	256 0.31	<10	<10	196	<10	60	--	--	--	--	--		
138550	4.52	0.2	20	360 <0.5	<2 3.10 <0.5	33	54	176	6.02	20 1.52	<10 2.03	502	<1 0.33	31	2550	12 <10	354 0.30	<10	<10	206	<10	50	--	--	--	--	--		
153510	1.72	0.2	100	200 <0.5	<2 3.73 <0.5	32	129	72	4.87	20 2.31	<10 2.31	762	1 0.26	32	1850	14 <10	36 0.25	<10	<10	170	<10	70	--	--	--	--	--		
153520	2.11	0.2	180	140 <0.5	<2 0.06 <0.5	23	70	141	4.38	20 1.70	10 1.54	505	6 0.10	29	1330	10 <10	46 0.21	<10	<10	239	<10	50	--	--	--	--	--		
153530	2.19	0.2	60	110 <0.5	<2 4.20 <0.5	17	102	68	3.82	20 1.85	<10 1.79	647	23 0.06	21	1760	12 <10	37 0.18	<10	<10	157	<10	60	--	--	--	--	--		
153540	2.44	0.2	20	180 <0.5	2 3.15 <0.5	14	86	48	3.70	20 0.03	10 1.82	574	1 0.09	20	1330	8 <10	21 0.18	<10	<10	151	<10	40	--	--	--	--	--		
153550	3.52	0.2	160	190 <0.5	<2 4.64 0.5	28	114	143	5.38	30 1.18	<10 2.48	875	11 0.16	37	1490	70 <10	104 0.16	<10	<10	196	<10	150	--	--	--	--	--		
153560	2.47	0.2	40	200 <0.5	2 2.52 <0.5	19	108	74	4.00	20 1.73	20 1.81	613	1 0.13	33	1880	14 <10	59 0.31	<10	<10	118	<10	60	--	--	--	--	--		
153570	3.17	0.2	60	110 <0.5	<2 2.22 <0.5	19	95	84	3.69	20 1.15	20 1.46	517	2 0.19	32	1870	8 <10	72 0.29	<10	<10	114	<10	50	--	--	--	--	--		
153580	1.66	0.2	80	50 <0.5	4 1.62 <0.5	36	73	130	4.20	20 0.91	20 1.10	392	3 0.09	35	1810	12 <10	51 0.25	<10	<10	86	<10	40	--	--	--	--	--		
153590	1.52	0.2	100	50 <0.5	<2 1.81 <0.5	33	71	122	3.44	10 0.72	20 1.12	409	3 0.07	28	1760	12 <10	50 0.19	<10	<10	91	<10	40	--	--	--	--	--		
153600	2.37	0.2	370	130 <0.5	2 2.98 <0.5	37	98	154	4.52	20 1.48	10 1.67	613	1 0.14	35	1890	42 <10	93 0.25	<10	<10	118	<10	90	--	--	--	--	--		
153610	2.95	0.2	20	350 <0.5	<2 3.20 <0.5	20	122	87	4.59	20 2.23	10 2.08	752	1 0.16	36	2090	16 <10	101 0.30	<10	<10	136	<10	80	--	--	--	--	--		
153620	2.71	0.2	180	140 <0.5	2 3.63 <0.5	28	143	136	4.71	20 1.53	<10 2.10	614	2 0.13	40	1880	20 <10	167 0.24	<10	<10	141	<10	50	--	--	--	--	--		
153630	1.90	0.2	10	30 <0.5	<2 1.90 <0.5	17	102	68	3.41	10 0.82	10 1.39	415	1 0.08	31	1800	10 <10	30 0.22	<10	<10	103	<10	40	--	--	--	--	--		
153640	3.02	0.2	10	310 <0.5	2 3.52 <0.5	27	55	45	4.72	20 0.67	20 0.45	914	<1 0.26	38	2030	12 <10	122 0.30	<10	<10	115	<10	70	--	--	--	--	--		
153650	1.70	0.2	10	40 <0.5	<2 1.19 <0.5	18	84	92	3.28	10 1.02	20 1.30	430	1 0.08	39	2020	56 <10	46 0.20	<10	<10	37	<10	60	--	--	--	--	--		
153660	1.67	0.2	10	70 <0.5	<2 1.36 <0.5	15	72	106	3.05	10 1.07	20 1.01	383	1 0.11	24	2340	6 <10	49 0.21	<10	<10	81	<10	50	--	--	--	--	--		
153670	1.71	0.2	20	70 <0.5	<2 1.36 <0.5	18	66	90	3.26	10 1.10	20 1.01	367	1 0.13	25	2370	8 <10	58 0.23	<10	<10	85	<10	50	--	--	--	--	--		
153680	1.70	0.2	40	60 <0.5	<2 1.48 <0.5	22	76	88	3.58	10 1.10	20 1.13	367	<1 0.11	27	2460	10 <10	68 0.23	<10	<10	97	<10	50	--	--	--	--	--		
153690	2.87	0.2	10	220 <0.5	2 3.54 <0.5	24	113	92	4.98	20 1.24	<10 2.00	706	1 0.10	27	2350	14 <10	109 0.23	<10	<10	149	<10	50	--	--	--	--	--		
153700	3.64	0.2	10	130 <0.5	2 3.75 <0.5	23	115	71	4.38	20 1.75	20 0.64	905	2 0.11	27	2340	19 <10	81 0.25	<10	<10	121	<10	50	--	--	--	--	--		
153710	3.07	0.2	10	13	0.5	2 3.98 <0.5	2	13	7	1.81	10 0.27	20 0.33	442	3 0.07	27	230	10 <10	26 0.01	<10	<10	9	<10	50	--	--	--	--	--	
153720	4.04	0.2	<10	280 <0.5	<2 4.75 <0.5	27	125	17	5.00	20 0.56	10 2.68	1316	1 0.35	43	1960	32 <10	299 0.18	<10	<10	128	<10	110	--	--	--	--	--		
153730	0.80	0.2	<10	10 <0.5	<2 1.01 <0.5	3	17	4	1.71	10 0.24	20 0.37	431	9 0.08	7	230	36 <10	24 0.01	<10	<10	7	<10	30	--	--	--	--	--		
153740	0.69	0.2	<10	10 <0.5	<2 1.00 <0.5	3	17																						



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212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614450-002-A  
INVOICE # : I8614450  
DATE : 16-JUL-86  
P.O. # : NONE  
GALLANT-GEORGIA

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
15377D	207	<0.002	396.5 → 406.8	— G-86.3 —
15378D	207	<0.002	406.8 → 414.3	— —
15379D	207	<0.002	414.3 → 424.0	— —
15380D	207	<0.002	424.0 → 434.0	— —
15381D	207	<0.002	434.0 → 444.0	— —
15382D	207	<0.002	444.0 → 449.9	— —
15383D	207	<0.002	449.9 → 452.0	— —
15384D	207	<0.002	452.0 → 461.3	— —
15385D	207	<0.002	461.3 → 462.9	— —
15386D	207	<0.002	462.9 → 472.9	— —
15387D	207	<0.002	472.9 → 482.9	— —
15388D	207	<0.002	482.9 → 487.6	— —
15389D	207	<0.002	487.6 → 492.9	— —
15390D	207	0.006	492.9 → 503.0	— —
15391D	207	0.002	—	— —
15392D	207	0.012	14 casing → 18.2	G-86.4 —
15393D	207	0.010	19.0 → 24.0	— —
15394D	207	0.086	24.0 → 29.0	— —
15395D	207	0.016	29.0 → 30.0	— —
15396D	207	0.004	30.0 → 31.7	— —
15397D	207	0.040	31.7 → 36.3	— —
15398D	207	0.046	36.3 → 38.3	— —
15399D	207	0.002	38.3 → 42.5	— —
15400D	207	0.020	42.5 → 47.6	— —
			47.6 → 49.1	— —

B. Schwartz  
.....  
Registered Assayer, Province of British Columbia



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Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP anal

etric-Aqua-Regia digestion of 1.0 gm of material followed by ICP analysis. Since digestion is incomplete for many mineral values reported for Al, Si, Ba, Fe, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V will only be considered at semi-quantitative.

## CERTIFICATE OF ANALYSES

TO : MARI MANAGEMENT LIMITED  
1200 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: ASG1-401-GCE-A  
INVOICE #: ICG1-401  
DATE: 17-JUL-86  
P.O. #: NONE  
GALLANT-GEORGIA

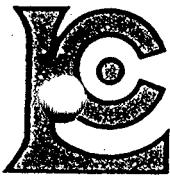
## COMMENTS:

EGI J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bj	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
15377D	3.79	0.2	20	360 <0.5	<2	5.27 <0.5	31	122	34	5.14	30	0.50	<10	3.68	1150	1	0.34	44	2130	14	<10	338	0.23	<10	<10	141	<10	80	--
15378D	2.82	0.2	20	100 <0.5	<2	3.50 <0.5	25	125	115	5.14	30	0.93	20	3.25	881	2	0.06	36	2410	18	<10	116	0.11	<10	<10	124	<10	80	--
15379D	1.99	0.2	20	130 <0.5	<2	6.73 <0.5	27	105	32	4.79	40	0.31	<10	3.59	1369	4	0.13	35	1950	22	<10	373	2.08	<10	<10	111	<10	70	--
15380D	0.63	0.2	<10	30 <0.5	<2	0.90 <0.5	3	19	4	1.47	10	0.38	40	0.19	443	2	0.07	7	180	14	<10	29	0.03	<10	K	8	<10	21	--
15281D	0.52	0.2	<10	10 <0.5	<2	0.60 <0.5	1	12	3	1.18	10	0.29	40	0.05	352	1	0.08	4	70	14	<10	12	0.01	<10	12	31	<10	10	--
15382D	0.48	0.2	<10	<10 <0.5	<2	0.70 <0.5	1	14	3	1.26	10	0.25	30	0.06	379	2	0.06	5	80	10	<10	12	<0.01	<10	10	1	<10	10	--
15383D	3.18	0.2	10	300 <0.5	<2	4.50 <0.5	26	98	35	4.46	30	0.64	10	2.23	940	9	0.31	33	1950	18	<10	284	0.18	<10	<10	119	<10	60	--
15384D	2.19	0.2	20	70 <0.5	<2	3.31 <0.5	24	104	148	4.58	20	0.98	10	1.81	818	3	0.08	32	2320	18	<10	112	0.17	<10	<10	112	10	80	--
15385D	3.92	0.2	10	230 <0.5	<2	5.17 <0.5	30	115	29	5.56	30	0.49	10	2.94	1402	4	0.26	29	2190	52	<10	234	0.16	<10	<10	140	<10	120	--
15386D	0.49	0.2	10	10 <0.5	<2	0.63 <0.5	2	18	6	1.54	10	0.24	30	0.09	308	3	0.05	9	90	20	<10	14	<0.01	<10	10	3	<10	20	--
15387D	0.39	0.2	<10	<10 <0.5	<2	0.73 <0.5	1	18	4	1.46	10	0.21	30	0.05	313	6	0.05	8	60	14	<10	14	0.01	<10	10	1	<10	10	--
15388D	0.46	0.2	<10	<10 <0.5	<2	0.66 <0.5	1	18	3	1.55	10	0.20	30	0.09	297	3	0.05	9	80	18	<10	13	<0.01	<10	10	2	<10	20	--
15389D	3.24	0.2	20	240 <0.5	<2	4.03 <0.5	26	107	52	5.13	30	0.90	20	2.23	940	3	0.25	34	2470	16	<10	234	0.22	<10	<10	135	<10	80	--
15390D	2.37	0.2	10	200 <0.5	<2	2.40 <0.5	20	108	83	4.27	20	1.66	20	1.64	641	2	0.13	34	2480	10	<10	97	0.24	<10	<10	116	<10	60	--
15391D	1.61	0.2	150	60 <0.5	<2	1.55 <0.5	17	31	142	4.16	10	0.55	10	1.00	576	4	0.14	14	1420	12	<10	92	0.17	<10	<10	95	<10	50	--
15393D	1.36	0.2	2350	60 <0.5	<2	1.38 <0.5	50	32	162	3.77	10	0.41	10	0.72	515	2	0.14	12	1040	12	<10	72	0.17	<10	<10	77	<10	36	--
15393D	1.13	0.2	2160	40 <0.5	<2	1.04 <0.5	112	23	1035	4.96	10	0.38	10	0.73	465	1	0.06	15	1110	12	<10	53	0.15	<10	<10	77	<10	40	--
15394D	1.32	0.2	180	50 <0.5	<2	1.42 <0.5	31	24	230	4.06	10	0.58	10	0.85	484	3	0.08	13	1330	12	<10	73	0.22	<10	<10	107	<10	30	--
15395D	2.36	0.2	40	70 <0.5	<2	5.09 <0.5	138	28	804	11.85	20	0.95	<10	1.09	812	31	0.21	18	930	8	<10	82	0.22	<10	<10	115	<10	30	--
15396D	2.58	0.2	230	60 <0.5	<2	3.61 <0.5	23	26	232	3.63	20	1.03	<10	1.09	608	41	0.26	10	1100	8	<10	145	0.30	<10	<10	108	<10	20	--
15397D	1.40	1.2	1630	30 <0.5	<2	2.78 <0.5	155	26	1586	21.92	10	0.62	<10	0.74	343	45	0.13	24	410	12	<10	52	0.10	<10	11	56	<10	30	--
15398D	1.32	0.4	90	30 <0.5	<2	2.77 <0.5	46	58	1003	5.05	10	0.42	<10	0.70	392	6	0.14	13	990	6	<10	89	0.18	<10	<10	95	<10	14	--
15399D	5.09	0.2	1720	200 <0.5	<2	8.31 <0.5	98	125	451	6.81	40	1.92	<10	1.78	1275	1	0.25	12	1620	10	<10	144	0.26	<10	<10	186	<10	40	--
15400D	2.94	2.4	99999	100 <0.5	<2	2.46 <0.5	979	37	3156	16.69	10	0.83	<10	0.75	426	1	0.22	26	810	2	<10	134	0.11	<10	<10	70	40	30	--

Hart Bichler

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**CERTIFICATE OF ASSAY**

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

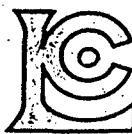
CERT. # : A8614634-001-A  
INVOICE # : I8614634  
DATE : 20-JUL-86  
P.C. # : NONE  
GAG-G

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
3401D	207	0.002	-- 268.7 → 273.7 --	-- Q-86.4 --
3402D	207	0.002	-- 273.7 → 278.7 --	--
3403D	207	0.002	-- 278.7 → 283.7 --	--
3404D	207	0.004	-- 283.7 → 289.5 --	--
3405D	207	<0.002	-- 289.5 → 294.5 --	--
3406D	207	<0.002	-- 294.5 → 299.5 --	--
3407D	207	<0.002	-- 299.5 → 304.5 --	--
3408D	207	0.002	-- 304.5 → 309.5 --	--
3409D	207	0.002	-- 309.5 → 314.5 --	--
3410D	207	<0.002	-- 314.5 → 319.5 --	--
3411D	207	<0.002	-- 319.5 → 322.3 --	--
3412D	207	<0.002	-- 322.3 → 324.5 --	--
3413D	207	<0.002	-- 324.5 → 329.5 --	--
13856D	207	0.024	-- 70 → 72.5 --	--
13857D	207	<0.002	-- 72.5 → 77.3 --	--
13858D	207	0.008	-- 77.3 → 80 --	--
13859D	207	0.002	-- 80 → 85 --	--
13860D	207	0.004	-- 85 → 90 --	--
13861D	207	0.032	-- 90 → 94.5 --	--
13862D	207	0.010	-- 94.5 → 98.4 --	--
13863D	207	0.048	-- 98.4 → 101.3 --	--
13864D	207	0.087	-- 101.3 → 101.5 --	--
13865D	207	0.060	-- 101.5 → 105.5 --	--
13866D	207	0.012	-- 105.5 → 109.3 --	--
13888D	207	0.002	-- 213.6 → 218.6 --	--
13889D	207	0.004	-- 218.6 → 222.6 --	--
13890D	207	0.004	-- 222.6 → 227.6 --	--
13891D	207	0.004	-- 227.6 → 232.3 --	--
13892D	207	0.036	-- 232.3 → 237.3 --	--
13893D	207	0.002	-- 237.3 → 242.3 --	--
13894D	207	0.002	-- 242.3 → 247.3 --	--
13895D	207	0.002	-- 247.3 → 252.3 --	--
13896D	207	0.004	-- 252.3 → 255.6 --	--
13897D	207	0.002	-- 255.6 → 260.6 --	--
13898D	207	0.002	-- 260.6 → 265.6 --	--
13899D	207	0.004	-- 265.6 → 268.3 --	--
13900D	207	0.010	-- 268.3 → 268.7 --	--

VO1 rev. 4/85

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Telex: 043-52597

Semi quantitative multi element ICP analysis

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614635-001-A  
INVOICE #: 18614635  
DATE : 03-JUL-86  
P.O. #: NONI  
GAG-G

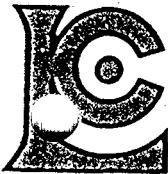
Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Si, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :

CC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ge	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	U	V	W	Zn	
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
3401D	1.40	0.4	50	<0.5	<2	1.89	<0.5	12	20	284	3.49	10	0.58	10	0.77	492	1	0.11	12	1220	16	<10	62	0.23	<10	<10	88	<10	40	
3402D	2.48	0.2	60	80	<0.5	<2	2.96	<0.5	12	24	55	3.62	20	1.00	<10	1.02	682	1	0.26	13	1270	8	<10	80	0.28	<10	<10	109	<10	40
3403D	1.54	0.2	20	40	<0.5	4	3.20	<0.5	11	29	71	3.27	20	0.38	<10	0.98	595	2	0.11	12	1280	10	<10	71	0.21	<10	<10	110	<10	30
3404D	1.48	0.2	30	40	<0.5	4	3.03	<0.5	15	28	108	3.45	20	0.34	<10	0.99	527	1	0.11	14	1310	12	<10	58	0.35	<10	<10	102	<10	30
3405D	1.43	0.2	20	10	<0.5	2	4.08	<0.5	8	28	38	2.34	20	0.24	<10	1.04	442	1	0.13	13	1350	12	<10	91	0.20	<10	<10	105	<10	20
3406D	2.11	0.2	20	30	<0.5	<2	4.63	<0.5	8	32	21	3.53	30	0.40	<10	1.63	600	1	0.12	10	1380	12	<10	99	0.26	<10	<10	148	<10	30
3407D	1.23	0.2	10	10	<0.5	<2	3.51	<0.5	3	27	8	1.16	20	0.22	<10	0.49	227	2	0.19	4	1440	8	<10	82	0.18	<10	<10	68	<10	10
3408D	1.50	0.2	10	40	<0.5	<2	3.23	<0.5	4	34	11	1.94	20	0.48	<10	0.90	371	10	0.19	5	1360	8	<10	72	0.25	<10	<10	93	<10	20
3409D	1.20	0.2	10	10	<0.5	2	2.91	<0.5	5	30	19	1.64	20	0.16	<10	0.65	352	1	0.18	6	1250	10	<10	102	0.27	<10	<10	80	<10	20
3410D	1.10	0.2	10	10	<0.5	<2	2.35	<0.5	4	24	28	0.98	10	0.10	10	0.36	339	<1	0.30	10	2490	12	<10	145	0.19	<10	<10	47	<10	10
3411D	1.50	0.2	10	60	<0.5	<2	2.58	<0.5	11	57	19	2.31	20	0.28	20	1.02	517	17	0.14	22	1830	12	<10	168	0.22	<10	<10	72	<10	40
3412D	3.20	0.2	10	240	<0.5	<2	3.68	<0.5	20	74	17	4.11	30	0.48	30	1.88	1047	7	0.33	29	1420	24	<10	219	0.34	<10	<10	98	<10	60
3413D	0.56	0.2	<10	10	<0.5	<2	0.51	<0.5	1	12	4	1.27	10	0.28	30	0.09	268	1	0.09	3	100	12	<10	14	0.03	<10	<10	3	<10	10
13856D	5.48	0.6	20	480	<0.5	<2	4.17	<0.5	32	75	396	7.81	30	1.98	<10	2.37	620	<1	0.47	34	2770	8	<10	438	0.28	<10	<10	249	<10	60
13857D	3.67	0.2	<10	1010	<0.5	<2	3.86	<0.5	27	144	32	6.09	30	2.35	<10	2.95	963	3	0.19	18	2180	12	<10	320	0.36	<10	<10	170	<10	100
13858D	3.99	0.4	50	670	<0.5	<2	3.69	<0.5	39	167	265	7.31	30	2.04	10	3.20	905	3	0.19	37	2690	10	<10	239	0.35	<10	<10	195	<10	100
13859D	3.46	0.8	30	160	<0.5	<2	3.81	<0.5	21	147	80	5.06	30	2.61	10	2.61	722	2	0.17	37	2380	10	<10	153	0.33	<10	<10	161	<10	50
13860D	2.87	0.6	80	120	<0.5	<2	3.22	<0.5	21	133	107	4.71	20	2.00	10	2.14	638	13	0.14	34	2370	16	<10	147	0.32	<10	<10	144	<10	60
13861D	2.50	0.2	110	110	<0.5	8	2.45	<0.5	21	120	102	4.40	20	1.66	20	1.98	474	7	0.10	31	2150	12	<10	130	0.27	<10	<10	129	<10	40
13862D	2.60	0.8	280	90	<0.5	<2	1.79	<0.5	147	121	862	13.04	20	1.73	20	1.87	413	33	0.09	43	2120	8	<10	99	0.29	<10	<10	139	<10	30
13863D	2.59	1.0	280	150	<0.5	<2	1.64	<0.5	32	104	459	5.59	20	2.03	20	2.02	445	3	0.10	21	2140	4	<10	71	0.31	<10	<10	133	<10	40
13864D	0.43	4.0	>9999	10	<0.5	<2	0.31	<0.5	1346	16	4555	30.31	10	0.08	10	0.33	83	3	0.01	27	<10	<10	<10	51	0.01	<10	<10	23	60	
13865D	4.76	0.4	500	100	<0.5	26	2.60	<0.5	51	80	417	8.60	30	2.38	10	2.91	622	1	0.36	23	2010	<2	<10	251	0.33	<10	<10	279	<10	40
13866D	2.80	0.4	100	170	<0.5	<2	2.52	<0.5	34	47	252	6.15	20	1.27	10	1.84	591	5	0.14	20	1310	4	<10	179	0.22	<10	<10	176	<10	40
13888D	1.38	0.2	20	30	<0.5	<2	2.45	<0.5	13	26	80	4.29	20	0.18	10	0.99	767	1	0.10	12	1180	6	<10	73	0.17	<10	<10	103	<10	40
13889D	1.52	0.2	20	20	<0.5	<2	2.90	<0.5	12	26	83	3.68	20	0.23	<10	0.95	763	2	0.08	11	1070	4	<10	97	0.11	<10	<10	92	<10	30
13890D	1.03	0.2	20	20	<0.5	<2	1.35	<0.5	12	19	100	3.14	10	0.23	10	0.59	366	1	0.09	11	1100	8	<10	47	0.22	<10	<10	68	<10	30
13891D	0.86	0.2	60	30	<0.5	<2	0.99	<0.5	12	18	117	3.03	10	0.36	10	0.45	399	3	0.09	13	1080	9	<10	49	0.19	<10	<10	54	<10	20
13892D	1.91	0.4	8420	100	<0.5	6	1.01	<0.5	79	57	162	5.22	10	1.06	10	1.16	404	7	0.11	35	850	10	<10	50	0.22	<10	<10	206	<10	80
13893D	2.57	0.2	80	130	<0.5	<2	1.35	<0.5	14	41	100	4.77	10	1.01	10	1.10	400	14	0.28	41	830	8	<10	110	0.26	<10	<10	226	<10	90
13894D	2.23	0.2	40	150	<0.5	<2	0.83	<0.5	14	59	99	4.63	10	1.21	10	1.16	389	7	0.19	34	780	8	<10	72	0.24	<10	<10	197	<10	70
13895D	2.49	0.4	50	150	<0.5	<2	1.30	<0.5	18	41	124	5.22	10	1.26	10	1.42	557	5	0.16	27	1180	10	<10	79	0.33	<10	<10	217	<10	90
13896D	2.01	0.4	200	110	<0.5	<2	1.01	<0.5	33	44	319	6.63	10	1.08	20	1.23	412	12	0.13	52	930	6	<10	73	0.28	<10	<10	238	<10	50
13897D	1.15	0.2	30	30	<0.5	<2	1.56	<0.5	9	19	57	2.67	10	0.36	10	0.54	411	1	0.13	10	1060	6	<10	74	0.23	<10	<10	70	<10	50
13898D	1.03	0.2	20	30	<0.5	<2	1.69	<0.5	8	16	60	2.59	10	0.21	10	0.53	452	1	0.12	9	1020	4	<10	71	0.20	<10	<10	58	<10	30
13899D	1.05	0.4	30	30	<0.5	<2	1.58	<0.5	11	14	115	2.76	10	0.24	10	0.51	389	1	0.13	10	1130	10	<10	70	0.21	<10	<10	63	<10	30
13900D	0.61	1.0	140	10	<0.5	<2	0.71	<0.5	231	12	1103	24.52	<10	0.09	10	0.22	136	<1	0.07	59	570	<2	<10	55	0.13	<10	<10	15	<10	10

Hart Bickler  
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212 Brooksbank Ave.  
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Canada V7J 2C1

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Telex: 043-52597

**CERTIFICATE OF ASSAY**

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614632-001-A  
INVOICE # : I8614632  
DATE : 21-JUL-86  
P.O. # : NONE  
GALLANT-GEORGIA

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
13867D	207	<0.002	-- 109.3 → 114.3 --	-- G-86.4 --
13868D	207	<0.002	-- 114.3 → 117.3 --	--
13869D	207	0.012	-- 117.3 → 122.3 --	--
13870D	207	0.016	-- 122.3 → 126.3 --	--
13871D	207	0.002	-- 126.3 → 131.3 --	--
13872D	207	0.006	-- 131.3 → 135 --	--
13873D	207	0.004	-- 135 → 138.3 --	--
13874D	207	0.008	-- 138.3 → 143.7 --	--
13875D	207	0.131	-- 143.7 → 146 --	--
13876D	207	0.014	-- 146 → 151.6 --	--
13877D	207	0.002	-- 151.6 → 156.6 --	--
13878D	207	<0.002	-- 156.6 → 161.6 --	--
13879D	207	<0.002	-- 161.6 → 168.4 --	--
13880D	207	0.002	-- 168.4 → 173.4 --	--
13881D	207	0.002	-- 173.4 → 178.4 --	--
13882D	207	0.006	-- 178.4 → 183.4 --	--
13883D	207	0.006	-- 183.4 → 188.4 --	--
13884D	207	0.002	-- 188.4 → 196.8 --	--
13885D	207	0.002	-- 196.8 → 201.8 --	--
13886D	207	<0.002	-- 201.8 → 206.8 --	--
13887D	207	0.002	-- 206.8 → 213.6 --	--

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Registered Assayer, Province of British Columbia



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## CERTIFICATE OF ANALYSIS

TO : MARY MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6E 2W2

CERT. #: A9614633-001-A  
INVOICE #: 19614633  
DATE : 20-JUL-86  
P.O. #: NONE  
GALLANT-GEORGIA

Semi quantitative multi element ICP data

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Ca, Cr, Ge, Li, Mg, K, Na, Fr, Ti, Ti, W and U can only be considered as semi-quantitative.

Comments:  
CC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Pt	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	In	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
138670	3.32	0.2	30	560 <0.5	<2	4.00	<0.5	28	162	46	5.10	20	0.59	40	2.80	762	<1	0.38	49	2800	8	<10	493	0.25	<10	<10	106	<10	70	--	--
138680	3.46	0.2	30	650 <0.5	<2	3.93	<0.5	30	229	48	5.36	30	0.60	50	3.12	810	<1	0.34	62	3030	8	<10	445	0.25	<10	<10	120	<10	70	--	--
138690	1.65	0.2	90	80 <0.5	<2	2.15	<0.5	16	37	115	3.87	10	0.59	10	1.32	650	5	0.10	16	1230	10	<10	104	0.17	<10	<10	109	10	40	--	--
138700	1.64	0.2	490	50 <0.5	4	2.45	<0.5	21	19	149	3.92	10	0.61	10	0.94	616	3	0.12	10	1030	9	<10	72	0.15	<10	<10	94	<10	46	--	--
138710	3.47	0.2	210	60 <0.5	<2	2.60	<0.5	15	41	124	4.10	10	0.74	10	1.05	456	2	0.23	19	360	8	<10	82	0.13	<10	<10	142	<10	70	--	--
138720	2.10	0.2	30	50 <0.5	<2	2.92	<0.5	14	18	104	3.79	20	0.72	<10	0.92	574	<1	0.17	10	1080	6	<10	73	0.12	<10	<10	89	<10	60	--	--
138730	2.51	0.8	40	60 <0.5	<2	3.29	<0.5	14	23	105	3.82	20	0.95	<10	0.95	582	<1	0.25	10	1060	28	<10	95	0.15	<10	<10	96	<10	60	--	--
138740	2.35	2.6	1170	60 <0.5	<2	3.66	2.0	20	56	116	4.45	20	0.84	<10	1.31	653	5	0.17	28	940	120	<10	203	0.10	<10	<10	170	<10	320	--	--
138750	0.64	4.4	10	20 <0.5	<2	0.73	<0.5	189	39	3582	29.17	<10	0.19	20	0.45	163	<1	0.02	27	560	2	<10	21	0.98	<10	<10	55	<10	50	--	--
138760	1.67	0.2	190	60 <0.5	4	1.54	<0.5	22	69	174	4.19	10	0.58	10	1.16	352	3	0.11	24	960	10	<10	46	0.24	<10	<10	190	<10	50	--	--
138770	1.05	0.2	30	110 <0.5	<2	2.66	<0.5	29	33	5.09	30	0.18	90	1.62	918	2	0.15	12	2920	19	<10	248	0.29	<10	<10	108	<10	70	--	--	
138780	1.98	0.2	20	80 <0.5	<2	2.57	<0.5	21	27	30	5.38	30	0.12	100	1.67	890	2	0.11	12	4500	22	<10	226	0.27	<10	<10	109	<10	70	--	--
138790	2.11	0.2	20	70 <0.5	<2	2.85	<0.5	21	28	29	5.52	30	0.12	100	1.75	899	2	0.09	15	4350	22	<10	228	0.29	<10	<10	113	<10	70	--	--
138800	2.08	0.2	50	170 <0.5	<2	1.67	<0.5	18	59	83	4.69	10	0.61	30	1.32	618	1	0.17	23	1810	16	<10	104	0.34	<10	<10	160	<10	120	--	--
138810	2.30	0.2	140	270 <0.5	<2	2.42	<0.5	23	48	110	5.24	10	1.51	10	1.55	723	2	0.12	17	1670	10	<10	65	0.31	<10	<10	145	<10	110	--	--
138820	1.60	0.2	450	40 <0.5	<2	2.05	<0.5	25	18	170	4.76	10	0.46	20	1.07	459	3	0.08	6	2170	9	<10	62	0.16	<10	<10	94	<10	40	--	--
138830	4.37	0.2	360	200 <0.5	<2	3.09	<0.5	36	59	192	6.03	20	1.20	<10	1.24	792	1	0.29	22	1650	2	<10	140	0.21	<10	<10	198	<10	120	--	--
138840	2.38	0.2	130	80 <0.5	<2	2.58	<0.5	21	56	132	5.23	10	0.44	<10	1.52	613	1	0.15	21	1450	10	<10	106	0.27	<10	<10	189	<10	70	--	--
138850	2.57	0.2	60	110 <0.5	<2	1.25	<0.5	16	82	117	5.49	10	0.95	10	1.32	556	3	0.17	35	890	8	<10	83	0.25	<10	<10	210	<10	100	--	--
138860	2.26	0.2	40	60 <0.5	<2	1.47	1.0	14	61	89	4.27	10	0.64	10	1.10	440	5	0.22	34	730	10	<10	96	0.23	<10	<10	249	<10	150	--	--
138870	2.78	0.2	40	130 <0.5	<2	1.61	<0.5	16	49	114	4.87	10	0.97	10	1.10	491	5	0.30	32	980	5	<10	107	0.25	<10	<10	216	<10	100	--	--

HartBichler

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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614726-001-A  
INVOICE # : I8614726  
DATE : 20-JUL-86  
P.O. # : NONE  
GAG/G

CC: J. HARDY

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
34140	207	0.002	-- 329.5 → 336 --	-- G-86.4 --
34150	207	<0.002	-- 336.6 → 346 --	--
34160	207	<0.020	-- 346.6 → 356.6 --	--
34170	207	<0.002	-- 356.6 → 366 --	--
34180	207	<0.002	-- 366.6 → 376 --	--
34190	207	<0.002	-- 376.6 → 386 --	--
34200	207	<0.002	-- 386.6 → 396 --	--
34210	207	<0.002	-- 396.6 → 406 --	--
34220	207	<0.002	-- 406.6 → 409 --	--
34230	207	<0.002	-- 409 → 419 --	--
34240	207	<0.002	-- 419 → 429 --	--
34250	207	<0.002	-- 429 → 439 --	--
34260	207	0.004	-- 439 → 449 --	--
34270	207	<0.002	-- 449 → 459 --	--
34280	207	<0.002	-- 459 → 469 --	--
34290	207	<0.002	-- 469 → 479 --	--
34300	207	<0.002	-- 479 → 489 --	--
34310	207	0.014	-- 489 → 499 --	--
34320	207	<0.002	-- 499 → 501 --	--

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Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: ASG14737-001-A

INVOICE #: ISG14737

DATE : 08-JUL-86

P.O. #: NONE

GAG/G

COMMENTS :

CC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
3414D	0.43	0.2	10	20 <0.5	<2	0.54	<0.5	2	17	17	1.55	<10	0.24	30	0.05	224	3	0.08	7	90	10	<10	15	0.02	<10	<10	2	<10	10	--
3415D	2.14	0.2	<10	70 <0.5	<2	3.12	<0.5	19	27	30	5.38	30	0.19	80	1.69	862	2	0.06	20	4480	8	<10	118	0.22	<10	<10	107	<10	80	--
3416D	3.10	0.2	10	120 <0.5	<2	2.84	<0.5	19	25	35	5.18	30	0.18	80	1.62	887	3	0.06	20	4110	10	<10	129	0.21	<10	<10	109	<10	80	--
3417D	1.95	0.2	10	70 <0.5	<2	2.73	<0.5	20	26	33	5.39	30	0.10	80	1.71	886	3	0.07	20	4200	16	<10	151	0.23	<10	<10	109	<10	70	--
3418D	1.88	0.2	10	90 <0.5	<2	2.36	<0.5	19	28	36	5.31	30	0.08	80	1.62	820	3	0.07	21	4400	18	<10	198	0.21	<10	<10	100	<10	70	--
3419D	1.92	0.2	10	80 <0.5	<2	2.40	<0.5	19	26	33	5.23	30	0.09	80	1.61	813	2	0.08	20	4290	16	<10	205	0.21	<10	<10	100	<10	70	--
3420D	1.92	0.2	10	70 <0.5	<2	2.40	<0.5	20	26	33	5.22	30	0.10	80	1.63	826	2	0.09	20	4050	18	<10	194	0.20	<10	<10	101	<10	70	--
3421D	2.05	0.2	10	70 <0.5	<2	2.66	<0.5	20	29	34	5.52	30	0.11	80	1.74	863	2	0.09	22	3960	20	<10	218	0.24	<10	<10	111	<10	80	--
3422D	1.80	0.2	10	120 <0.5	<2	2.56	<0.5	20	35	36	5.39	30	0.17	80	1.64	807	3	0.14	22	3620	16	<10	161	0.29	<10	<10	115	<10	70	--
3423D	1.45	0.2	10	30 <0.5	<2	1.49	<0.5	13	70	72	2.99	10	0.43	20	0.98	371	3	0.11	27	1940	6	<10	90	0.18	<10	<10	78	<10	40	--
3424D	1.26	0.2	10	30 <0.5	<2	1.63	<0.5	11	57	48	2.21	10	0.57	20	0.73	248	1	0.14	20	1950	8	<10	66	0.18	<10	<10	60	<10	20	--
3425D	1.57	0.2	10	50 <0.5	<2	2.35	<0.5	15	66	73	2.64	10	0.56	10	1.00	361	1	0.13	22	1700	8	<10	87	0.21	<10	<10	84	<10	30	--
3426D	2.51	0.2	20	20 <0.5	<2	4.22	<0.5	23	154	84	4.75	20	0.24	<10	2.46	778	1	0.06	46	2070	14	10	152	0.24	<10	<10	151	<10	80	--
3427D	2.46	0.2	10	50 <0.5	<2	3.22	<0.5	22	138	103	4.63	20	0.79	<10	2.17	743	1	0.08	45	2170	12	10	156	0.25	<10	<10	138	<10	80	--
3428D	2.05	0.2	20	60 <0.5	<2	2.15	<0.5	19	103	97	3.91	20	1.12	20	1.48	538	1	0.11	37	2080	10	<10	93	0.23	<10	<10	101	<10	60	--
3429D	1.85	0.2	30	40 <0.5	<2	2.17	<0.5	18	93	72	3.81	20	0.73	20	1.45	524	3	0.08	33	1970	10	<10	94	0.20	<10	<10	98	<10	60	--
3430D	1.83	0.2	10	70 <0.5	<2	1.65	<0.5	16	88	88	3.63	20	1.18	20	1.23	435	3	0.10	30	2190	8	<10	79	0.21	<10	<10	96	<10	50	--
3431D	1.74	0.2	20	50 <0.5	2	2.57	<0.5	17	92	102	3.58	20	0.87	10	1.36	467	2	0.06	31	2150	20	<10	92	0.18	<10	<10	94	<10	50	--
3432D	2.22	0.2	20	30 <0.5	<2	2.80	<0.5	19	110	98	4.71	20	0.52	20	1.97	678	2	0.06	37	2220	20	<10	109	0.17	<10	<10	119	<10	80	--

J. Hart-Buchler  
Certified by .....



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## CERTIFICATE OF ASSAY

O : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614851-001-A  
INVOICE # : I8614851  
DATE : 22-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
3433 D	207	0.004	-- 13.2 → 18.4 --	-- C-86.5 --
3434 D	207	0.002	-- 18.4 → 23.4 --	--
3435 D	207	<0.002	-- 23.4 → 28.4 --	--
3436 D	207	<0.002	-- 28.4 → 33.4 --	--
3437 D	207	<0.002	-- 33.4 → 38.4 --	--
3438 D	207	<0.002	-- 38.4 → 43.4 --	--
3439 D	207	<0.002	-- 43.4 → 48.4 --	--
3440 D	207	0.002	-- 48.4 → 53.8 --	--
3441 D	207	0.002	-- 51.8 → 56.8 --	--
3442 D	207	<0.002	-- 56.8 → 61.8 --	--
3443 D	207	<0.002	-- 61.8 → 66.1 --	--
3444 D	207	<0.002	-- 66.1 → 78.1 --	--
3445 D	207	<0.002	-- 78.1 → 88.1 --	--
3446 D	207	<0.002	-- 88.1 → 98.1 --	--
3447 D	207	<0.002	-- 98.1 → 107.8 --	--
3448 D	207	<0.002	-- 107.8 → 111.8 --	--
3449 D	207	<0.002	-- 111.8 → 116.8 --	--
3450 D	207	<0.002	-- 116.8 → 123.5 --	--
15401 D	207	<0.002	-- 123.5 → 128.3 --	--
15402 D	207	<0.002	-- 128.3 → 134.1 --	--
15403 D	207	0.002	-- 134.1 → 144.1 --	--
15404 D	207	<0.002	-- 144.1 → 154.1 --	--
15405 D	207	<0.002	-- 154.1 → 157.8 --	--
15406 D	207	0.016	-- 157.8 → 162.8 --	--
15407 D	207	0.006	-- 162.8 → 168.6 --	--
15408 D	207	<0.002	-- 168.6 → 178.6 --	--
15409 D	207	<0.002	-- 178.6 → 188.6 --	--
15410 D	207	<0.002	-- 188.6 → 198.6 --	--
15411 D	207	<0.002	-- 198.6 → 208.6 --	--
15412 D	207	<0.002	-- 208.6 → 220 --	--
15413 D	207	<0.002	-- 220 → 230 --	--
15414 D	207	<0.002	-- 230 → 238.2 --	--
15415 D	207	<0.002	-- 238.2 → 248.2 --	--
15416 D	207	<0.002	-- 248.2 → 258.2 --	--
15417 D	207	<0.002	-- 258.2 → 268.2 --	--
15418 D	207	<0.002	-- 268.2 → 276 --	--
15419 D	207	0.002	-- start 25 → 8.4 --	--
15420 D	207	0.026	-- footage block --	--
15421 D	207	0.002	-- 15 → 19 --	--
15422 D	207	0.002	-- 19 → 25 --	--

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semi quantitative multi element ICP analysis

TO : MARK MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
VGC 2W2

CERT. #: A8614853-001-A  
INVOICE #: 18614853  
DATE : 28-JUL-86  
P.O. #: NONE  
GAG/G

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and U can only be considered as semi-quantitative.

COMMENTS :

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	In	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
3433 D	2.10	1.0	2450	210	<0.5	4	0.87	<0.5	65	70	145	6.08	10	0.88	10	1.38	513	40	0.12	130	1060	42	<10	45	0.27	<10	<10	282	<10	50	--
3434 D	1.74	0.2	570	100	<0.5	<2	1.67	<0.5	34	42	80	3.83	10	1.07	10	1.18	543	2	0.13	24	1360	14	<10	52	0.30	<10	<10	126	<10	40	--
3435 D	2.19	0.2	40	230	<0.5	<2	3.40	<0.5	20	67	37	4.45	20	1.02	<10	1.66	793	1	0.10	20	1360	12	<10	95	0.29	<10	<10	149	<10	40	--
3436 D	2.17	0.2	50	60	<0.5	<2	3.60	<0.5	22	76	53	5.00	20	0.40	<10	1.90	974	1	0.08	25	1370	12	<10	98	0.27	<10	<10	156	<10	60	--
3437 D	1.82	0.2	130	60	<0.5	4	2.11	<0.5	17	65	45	3.87	10	0.61	10	1.46	621	1	0.09	19	1500	14	<10	60	0.29	<10	<10	138	<10	40	--
3438 D	1.66	0.2	80	80	<0.5	2	1.80	<0.5	13	50	54	3.18	10	0.86	10	1.00	472	1	0.12	16	1390	10	<10	53	0.26	<10	<10	104	<10	40	--
3439 D	1.81	0.2	90	70	<0.5	<2	2.29	<0.5	12	54	36	3.29	10	1.10	<10	1.03	469	1	0.10	17	1390	10	<10	34	0.25	<10	<10	110	<10	40	--
3440 D	2.04	0.2	310	120	<0.5	<2	1.80	<0.5	16	57	111	4.73	10	1.39	10	1.42	579	1	0.11	24	1340	14	<10	46	0.29	<10	<10	145	<10	50	--
3441 D	3.31	0.2	120	130	<0.5	<2	0.90	<0.5	15	74	100	5.39	10	1.15	10	1.39	421	7	0.21	42	980	12	<10	74	0.25	<10	<10	238	<10	100	--
3442 D	2.63	0.8	60	70	<0.5	<2	1.97	<0.5	17	64	110	6.09	20	0.81	10	1.38	423	16	0.39	60	880	26	<10	100	0.16	<10	<10	209	<10	130	--
3443 D	3.13	0.2	60	100	<0.5	<2	1.58	<0.5	20	64	85	6.21	10	0.99	10	1.37	519	23	0.43	65	980	20	<10	126	0.22	<10	<10	220	<10	140	--
3444 D	4.67	0.2	130	140	<0.5	2	2.31	<0.5	15	60	55	4.90	20	1.03	10	1.30	258	20	0.72	46	940	12	<10	204	0.22	<10	<10	195	<10	30	--
3445 D	4.67	0.2	320	180	<0.5	<2	2.04	<0.5	17	59	65	5.42	20	1.25	10	1.32	199	16	0.72	46	890	12	<10	202	0.21	<10	<10	218	<10	20	--
3446 D	4.63	0.2	190	220	<0.5	<2	1.87	<0.5	19	66	78	6.60	20	1.53	10	1.70	254	3	0.53	34	1040	16	<10	172	0.20	<10	<10	166	<10	30	--
3447 D	2.51	0.2	40	280	<0.5	<2	0.69	<0.5	16	64	60	5.31	10	1.26	10	1.46	263	2	0.17	32	870	14	<10	58	0.17	<10	<10	150	<10	50	--
3448 D	2.43	0.2	70	310	<0.5	<2	0.71	<0.5	15	48	59	4.94	10	1.10	10	1.28	213	1	0.23	27	820	12	<10	65	0.17	<10	<10	134	<10	40	--
3449 D	2.39	0.2	20	180	<0.5	<2	0.59	<0.5	13	62	57	4.96	10	1.29	10	1.45	256	2	0.14	31	890	14	<10	39	0.18	<10	<10	150	<10	60	--
3450 D	2.15	0.2	30	110	<0.5	2	0.82	<0.5	14	60	75	4.70	10	0.97	10	1.26	222	3	0.12	35	790	12	<10	72	0.15	<10	<10	175	<10	60	--
15401 D	2.17	0.2	60	130	<0.5	<2	0.96	<0.5	13	49	86	4.66	10	0.83	10	1.27	188	1	0.12	26	820	12	<10	48	0.13	<10	<10	119	<10	30	--
15402 D	2.31	0.2	80	100	<0.5	<2	1.12	<0.5	11	65	113	4.52	10	1.03	10	1.23	226	4	0.17	35	850	12	<10	60	0.15	<10	<10	217	<10	80	--
15403 D	2.67	0.2	60	110	<0.5	<2	1.19	<0.5	13	74	112	4.84	10	0.98	10	1.32	245	4	0.35	23	820	12	<10	86	0.20	<10	<10	202	<10	90	--
15404 D	2.36	0.2	50	140	<0.5	2	0.93	<0.5	13	69	149	4.98	10	1.03	10	1.36	224	2	0.19	31	760	16	<10	53	0.21	<10	<10	168	<10	30	--
15405 D	2.55	0.2	460	140	<0.5	2	1.13	<0.5	16	71	240	5.40	10	1.18	10	1.29	210	4	0.23	32	860	12	<10	71	0.22	<10	<10	187	<10	30	--
15406 D	0.84	0.2	>9999	50	<0.5	<2	1.20	0.5	163	35	126	3.77	<10	0.31	<10	0.29	250	10	0.05	40	940	8	<10	22	0.08	<10	<10	71	<10	10	--
15407 D	0.86	0.2	5020	60	<0.5	<2	0.96	<0.5	45	47	108	2.69	<10	0.45	<10	0.55	192	2	0.04	18	940	6	<10	18	0.12	<10	<10	106	<10	20	--
15408 D	2.58	0.2	150	150	<0.5	<2	0.93	<0.5	13	55	143	4.93	10	1.44	10	1.56	253	2	0.19	24	910	12	<10	60	0.28	<10	<10	167	<10	30	--
15409 D	2.35	0.2	90	160	<0.5	<2	0.41	<0.5	13	50	201	4.95	<10	1.65	10	1.55	207	1	0.09	26	890	10	<10	29	0.25	<10	<10	150	<10	30	--
15410 D	2.34	0.2	50	240	<0.5	<2	0.43	<0.5	14	49	94	4.72	<10	1.61	10	1.52	263	1	0.09	23	870	10	<10	29	0.24	<10	<10	149	<10	20	--
15411 D	2.35	0.2	80	190	<0.5	<2	0.37	<0.5	12	65	76	4.43	10	1.82	10	1.58	205	1	0.09	25	980	10	<10	18	0.28	<10	<10	176	<10	20	--
15412 D	3.62	0.2	70	240	<0.5	<2	1.53	<0.5	14	79	91	4.94	10	1.38	10	1.33	294	3	0.34	32	830	12	<10	131	0.25	<10	<10	184	<10	30	--
15413 D	2.52	0.2	40	280	<0.5	<2	0.46	<0.5	13	66	66	4.99	10	1.69	10	1.49	300	2	0.14	31	780	10	<10	38	0.24	<10	<10	168	<10	30	--
15414 D	2.23	0.2	100	250	<0.5	2	0.57	<0.5	14	59	51	4.21	10	1.29	10	1.28	341	1	0.14	28	740	14	<10	33	0.18	<10	<10	144	<10	40	--
15415 D	3.33	0.2	70	290	<0.5	<2	1.07	<0.5	17	68	62	4.53	10	1.62	10	1.51	268	2	0.37	29	980	12	<10	98	0.25	<10	<10	178	<10	50	--
15416 D	2.94	0.2	50	420	<0.5	2	0.77	<0.5	15	65	54	4.50	10	1.68	<10	1.42	434	1	0.31	27	850	8	<10	64	0.36	<10	<10	211	<10	80	--
15417 D	3.78	0.2	40	480	<0.5	<2	1.56	1.0	16	53	70	5.01	10	1.48	10	1.32	522	3	0.33	27	860	14	<10	159	0.23	<10	<10	203	<10	100	--
15418 D	3.38	0.2	40	330	<0.5	<2	1.47	0.5	18	51	70	4.77	10	1.37	10	1.23	551	3	0.31	35	930	10	<10	107	0.21	<10	<10	226	<10	140	--
15419 D	2.22	0.2	30	120	<0.5	<2	1.36	0.5	17	39	44																				



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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614851-002-A  
INVOICE # : I8614851  
DATE : 22-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Drill Hole footage interval (ft)	Comments		
15423 D	207	0.004	-- 25 → 27 --	-- G-86.6 --		--
15424 D	207	0.002	-- 27 → 32 --	--	--	--
15425 D	207	0.002	-- 32 → 37 --	--	--	--

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B. Schwartz  
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Registered Assayer, Province of British Columbia



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North Vancouver, B.C.  
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Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Hitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

## CERTIFICATE OF ANALYSIS

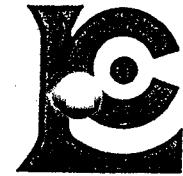
TO : MARK MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8614852-002-A  
INVOICE #: I8614852  
DATE : 28-JUL-86  
P.O. #: NONE  
GAG/6

## COMMENTS :

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	U	V	W	Zn			
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
15423 D	0.74	0.2	10	20	<0.5	<2	0.85	<0.5	23	24	413	3.50	<10	0.25	10	0.35	164	13	0.08	22	960	6	<10	49	0.30	<10	<10	88	<10	10	--	--
15424 D	1.11	0.2	10	30	<0.5	<2	1.32	<0.5	21	16	402	3.28	10	0.33	10	0.55	273	9	0.14	13	1480	8	<10	68	0.32	<10	<10	84	<10	10	--	--
15425 D	1.41	0.2	10	30	<0.5	<2	1.25	<0.5	20	24	421	3.47	10	0.56	10	0.60	340	7	0.14	14	1590	6	<10	77	0.26	<10	<10	68	<10	20	--	--

Certified by ..... *Mark Bickler*



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Phone: (604) 984-0221  
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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

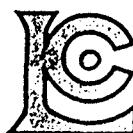
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614907-001-A  
INVOICE # : I8614907  
DATE : 23-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (Ft)	Comments
15426 D	207	0.006	-- 37 → 42 --	-- G-86.6 --
15427 D	207	0.016	-- 42 → 47 --	--
15428 D	207	0.010	-- 47 → 50 --	--
15429 D	207	0.002	-- 50 → 55 --	--
15430 D	207	<0.002	-- 55 → 60 --	--
15431 D	207	0.002	-- 60 → 65 --	--
15432 D	207	<0.002	-- 65 → 67 --	--
15433 D	207	0.002	-- 67 → 72 --	--
15434 D	207	<0.002	-- 72 → 77 --	--
15435 D	207	0.004	-- 77 → 82.2 --	--
15436 D	207	<0.002	-- 82.2 → 87 --	--
15437 D	207	0.002	-- 87 → 92 --	--
15438 D	207	<0.002	-- 92 → 98.3 --	--
15439 D	207	0.006	-- 98.3 → 103.3 --	--
15440 D	207	0.006	-- 103.3 → 105.3 --	--
15441 D	207	0.162	-- 105.3 → 110.3 --	--
15442 D	207	0.014	-- 110.3 → 116.1 --	--
15443 D	207	0.002	-- 116.1 → 117.7 --	--
15444 D	207	<0.002	-- 117.8 → 122.6 --	--
15445 D	207	0.002	-- 122.6 → 127.6 --	--
15446 D	207	<0.002	-- 127.6 → 132.6 --	--
15447 D	207	0.012	-- 132.6 → 137.6 --	--
15448 D	207	0.004	-- 137.6 → 142.6 --	--
15449 D	207	0.014	-- 142.6 → 146.4 --	--
15450 D	207	0.004	-- 146.4 → 151.4 --	--
15451 D	207	0.006	-- 151.4 → 156.4 --	--
15452 D	207	0.006	-- 156.4 → 161.4 --	--
15453 D	207	0.004	-- 161.4 → 166.4 --	--
15454 D	207	0.002	-- 166.4 → 171.4 --	--
15455 D	207	0.004	-- 171.4 → 174.4 --	--
15456 D	207	<0.002	-- 174.4 → 179.4 --	--
15457 D	207	<0.002	-- 179.4 → 184.4 --	--
15458 D	207	<0.002	-- 184.4 → 189.4 --	--
15459 D	207	<0.002	-- 189.4 → 195.6 --	--
15460 D	207	<0.002	-- 195.6 → 200.6 --	--
15461 D	207	<0.002	-- 200.6 → 205.5 --	--
15462 D	207	0.002	-- 205.5 → 208.9 --	--
15463 D	207	<0.002	-- 208.9 → 210.7 --	--
15464 D	207	<0.002	-- 210.7 → 215.7 --	--
15465 D	207	<0.002	-- 215.7 → 220.7 --	--

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Registered Assayer, Province of British Columbia



## **Chemex Labs Ltd.**

Analytical Chemist

Geochemistry

• Registered Assayer

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CERTIFICATE OF ANGLO-ISE

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST  
VANCOUVER, B.C.  
V6C 3W2

CCRT. #: ABC-4909-001-A  
INVOICE #: 10611008  
DATE : 09-JUL-86  
P.O. #: NONE  
GAG/G

Joint substitutive multi-element IP model.

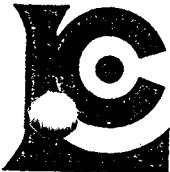
Mitric-Aqua-Precis dissolution of 0.5 gm of material followed by ICP analysis. Since fine-grained minerals are incomplete for many minerals, values reported for Al, Si, Ba, Be, Ca, Cr, Ga, La, Mg, Mn, Sr, Ti, Ti, V and Y can only be considered as semiquantitative.

## COMMENTS

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Cn	Cr	Cu	Fe	Ge	K	Ls	Mg	Mn	N	Ni	P	Pb	Sd	Sr	Ti	U	V	W	Zn	
15426 D	1.30	1.3	10	40	<0.5	<2	1.70	<0.5	30	12	811	4.10	<10	0.19	<10	0.51	279	4	0.17	11	1480	3	<10	117	0.22	<10	75	<10	20
15427 D	1.44	0.6	10	40	<0.5	<2	1.97	<0.5	18	14	371	3.45	<10	0.26	<10	0.72	357	6	0.17	11	1430	4	<10	97	0.30	<10	98	<10	20
15428 D	1.85	0.6	10	60	<0.5	<2	3.03	<0.5	37	52	761	5.32	10	0.98	<10	1.31	470	13	0.15	19	1280	13	<10	62	0.29	<10	10	<10	30
15429 D	3.04	0.4	23	60	<0.5	<2	1.90	<0.5	32	36	392	4.58	10	0.85	16	1.10	334	5	0.22	14	1450	4	<10	91	0.28	<10	10	<10	20
15430 D	3.07	0.3	80	90	<0.5	<2	3.05	<0.5	22	22	203	4.58	10	1.19	10	1.31	362	4	0.23	13	1780	5	<10	163	1.25	<10	10	<10	20
15431 D	2.03	0.2	10	90	<0.5	<2	2.33	<0.5	23	21	311	4.27	10	1.06	<10	1.10	400	5	0.21	13	1770	4	<10	81	0.24	<10	10	<10	20
15432 D	1.77	0.2	20	70	<0.5	<2	1.76	<0.5	32	18	447	4.64	10	0.73	10	0.79	301	1	0.23	15	1730	6	<10	104	0.22	<10	82	<10	20
15433 D	3.01	0.2	10	60	<0.5	<2	1.79	<0.5	22	20	309	4.22	10	0.57	<10	0.94	331	4	0.19	13	1640	6	<10	99	0.25	<10	10	<10	20
15434 D	3.04	0.3	<10	90	<0.5	<2	1.11	<0.5	22	14	251	4.56	10	1.38	10	1.30	310	1	0.17	11	1510	3	<10	64	0.22	<10	10	<10	20
15435 D	3.34	0.2	10	90	<0.5	<2	1.66	<0.5	30	20	219	4.33	10	1.15	10	1.17	412	2	0.22	13	1850	4	<10	80	0.25	<10	10	<10	20
15436 D	1.41	0.2	10	40	<0.5	<2	1.79	<0.5	17	21	286	4.27	10	0.55	<10	0.57	255	2	0.19	19	1120	3	<10	37	0.28	<10	10	<10	20
15437 D	1.57	0.2	10	70	<0.5	<2	0.90	<0.5	16	42	226	5.12	<10	0.91	10	0.86	311	2	0.19	22	860	4	<10	79	0.28	<10	10	<10	20
15438 D	1.33	0.4	10	50	<0.5	<2	1.52	<0.5	22	37	520	4.53	10	0.58	10	0.90	314	8	0.12	20	870	8	<10	57	0.26	<10	10	<10	20
15439 D	1.18	0.2	10	40	<0.5	<2	1.87	<0.5	19	23	252	3.69	10	0.32	<10	0.72	393	1	0.15	16	1580	6	<10	73	0.28	<10	10	<10	20
15440 D	1.22	0.2	10	50	<0.5	<2	1.89	<0.5	18	20	249	3.41	10	0.27	<10	0.54	325	1	0.17	16	1570	4	<10	79	0.20	<10	10	<10	20
15441 D	3.93	0.4	35	100	<0.5	<2	0.55	<0.5	23	38	137	4.56	10	0.90	<10	1.31	455	1	0.36	17	1610	9	<10	159	0.34	<10	10	<10	30
15442 D	3.95	0.4	40	80	<0.5	<2	0.72	<0.5	27	29	319	4.53	10	0.20	<10	1.08	441	5	0.40	20	1620	3	<10	192	0.24	<10	10	<10	30
15443 D	1.49	0.2	20	30	<0.5	<2	2.42	<0.5	11	22	83	2.13	10	0.44	<10	0.51	262	59	0.20	10	1180	1	<10	93	0.16	<10	10	<10	20
15444 D	2.85	0.2	20	90	<0.5	<2	2.52	<0.5	23	25	151	4.29	10	0.93	<10	1.06	454	1	0.40	16	1480	8	<10	180	0.22	<10	10	<10	20
15445 D	3.12	0.2	20	90	<0.5	<2	2.52	<0.5	26	27	202	4.42	10	1.00	<10	1.07	434	1	0.41	17	1550	6	<10	180	0.24	<10	10	<10	20
15446 D	3.96	0.2	10	150	<0.5	<2	0.24	<0.5	34	26	160	4.78	10	1.30	<10	1.27	500	1	0.37	16	1590	5	<10	155	0.36	<10	10	<10	30
15447 D	3.21	0.3	230	60	<0.5	<2	2.19	<0.5	25	35	135	4.56	10	0.82	<10	1.19	446	1	0.28	16	1540	3	<10	87	0.21	<10	10	<10	20
15448 D	3.97	0.2	1540	100	<0.5	<2	0.44	<0.5	65	29	300	6.10	10	0.98	<10	1.20	404	2	0.40	18	1670	11	<10	172	0.20	<10	10	<10	20
15449 D	2.57	0.6	6100	70	<0.5	<2	1.09	<0.5	278	36	906	18.21	10	2.09	10	1.81	344	1	0.12	19	1130	10	<10	55	0.22	<10	10	<10	20
15450 D	1.14	0.2	80	40	<0.5	<2	1.71	<0.5	14	15	161	3.00	10	0.30	10	0.57	287	1	0.17	10	1330	6	<10	91	0.20	<10	10	<10	20
15451 D	0.90	0.3	150	30	<0.5	<2	1.64	<0.5	17	13	178	2.90	<10	0.22	<10	0.40	238	1	0.14	10	1340	4	<10	72	0.21	<10	10	<10	20
15452 D	0.74	0.3	700	20	<0.5	<2	1.39	<0.5	15	12	131	3.39	<10	0.15	10	0.34	314	4	0.12	9	1280	4	<10	65	0.18	<10	10	<10	20
15453 D	0.77	0.2	40	20	<0.5	<2	1.49	<0.5	17	14	136	2.36	<10	0.15	10	0.36	328	5	0.11	10	1310	3	<10	61	0.21	<10	10	<10	20
15454 D	0.31	0.2	20	30	<0.5	<2	1.61	<0.5	17	13	111	3.40	<10	0.15	10	0.37	358	2	0.12	10	1340	1	<10	71	0.22	<10	10	<10	20
15455 D	1.03	0.2	10	20	<0.5	<2	1.59	<0.5	21	15	201	2.91	10	0.23	10	0.37	332	1	0.13	11	1250	4	<10	76	0.24	<10	10	<10	20
15456 D	2.98	0.4	20	40	<0.5	<2	2.94	<0.5	19	27	85	3.99	20	0.59	<10	0.89	456	3	0.40	15	1620	4	<10	227	0.19	<10	10	<10	20
15457 D	2.93	0.2	20	60	<0.5	<2	2.53	<0.5	25	26	135	3.96	10	0.70	<10	0.94	425	1	0.37	16	1570	4	<10	216	0.20	<10	10	<10	20
15458 D	3.32	0.2	10	90	<0.5	<2	1.49	<0.5	29	27	249	4.87	10	1.11	<10	1.17	434	1	0.46	19	1590	4	<10	250	0.22	<10	10	<10	20
15459 D	2.87	0.3	10	60	<0.5	<2	1.62	<0.5	30	31	305	4.98	10	0.64	<10	0.88	437	4	0.46	22	1650	3	<10	238	0.22	<10	10	<10	20
15460 D	3.34	0.2	20	160	<0.5	<2	1.30	<0.5	16	53	166	4.38	10	0.99	10	0.90	263	3	0.27	27	350	3	<10	111	0.28	<10	10	<10	20
15461 D	1.62	0.2	10	70	<0.5	<2	1.15	<0.5	16	34	158	4.33	<10	0.66	10	0.66	312	6	0.22	30	860	6	<10	94	0.29	<10	10	<10	20
15462 D	1.70	0.2	10	40	<0.5	<2	1.85	<0.5	21	18	241	4.25	<10	0.28	10	0.47	237	3	0.24	15	1480	22	<10	449	0.22	<10	10	<10	20
15463 D	0.48	0.2	<10	20	<0.5	<2	0.91	<0.5	7	19	97	1.68	<10	0.13	10	0.18	130	6	0.10	12	890	3	<10	35	0.19	<10	10	<10	20
15464 D	1.49	0.2	10	50	<0.5	<2	1.96	<0.5	27	21	214	3.87	10	0.29	10	0.66	304	4	0.26	16	1670	11	<10	116	0.23	<10	10	<10	20
15465 D	1.27	0.2	10	60	<0.5	<2	2.29	<0.5	29	35	213	4.47	<10	0.54	10	0.85	251	11	0.25	17	1780	11	<10	116	0.23	<10	10	<10	20

Certified by: Frank Schleser

# Chemex Labs Ltd.



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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

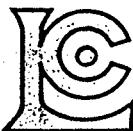
CERT. # : A8614907-002-A  
INVOICE # : I8614907  
DATE : 23-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
15466 D	207	0.002	-- 220.7 225.3 --	-- C-86.6 --
15467 D	207	0.002	-- 225.3 230.3 --	--
15468 D	207	0.002	-- 230.3 235.3 --	--
15469 D	207	0.004	-- 235.3 240.3 --	--
15470 D	207	0.002	-- 240.3 245.3 --	--
15471 D	207	0.002	-- 245.3 248.3 --	--
15472 D	207	0.002	-- 248.3 253.3 --	--
15473 D	207	0.002	-- 253.3 258.3 --	--
15474 D	207	0.002	-- 258.3 262.7 --	--
15475 D	207	<0.002	-- 262.7 267.7 --	--
15476 D	207	<0.002	-- 267.7 272.3 --	--
15477 D	207	<0.002	-- 272.3 275 --	--
15478 D	207	0.002	-- start to 24.4 --	-- G-86.7 --
15479 D	207	0.002	-- 24.4 29.4 --	--
15480 D	207	<0.002	-- 29.4 34.4 --	--
15481 D	207	0.002	-- 34.4 39.4 --	--
15482 D	207	<0.002	-- 39.4 44.4 --	--
15483 D	207	0.002	-- 44.4 46.8 --	--
15484 D	207	0.002	-- 46.8 49.6 --	--
15485 D	207	0.004	-- 49.6 50.7 --	--
15486 D	207	0.008	-- 50.7 55.2 --	--
15487 D	207	0.002	-- 55.2 60.2 --	--
15488 D	207	0.002	-- 60.2 63.3 --	--
15489 D	207	0.004	-- 63.3 68.3 --	--
15490 D	207	0.002	-- 68.3 73.3 --	--
15491 D	207	0.002	-- 73.3 78.3 --	--
00953 E	207	0.056	--	-- SEE TABLE --
00954 E	207	0.010	--	--
00955 E	207	0.040	--	--
00956 E	207	0.002	--	--
00957 E	207	0.002	--	--
00958 E	207	0.004	--	--
00959 E	207	0.012	--	--
00960 E	207	0.006	--	--
00961 E	207	<0.002	--	--
00962 E	207	0.004	--	--
00963 E	207	<0.002	--	--

B. J. Swartes

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Semi-quantitative multi-element ICP anal...1

Hidro-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Cr, Cs, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

T.G.: MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: ABE14308-C.D-A  
INVOICE #: 18014002  
DATE : 29-JUL-86  
P.O. #: NONE  
GAG/B

COMMENTS :

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pt	Sb	Sr	Tl	U	V	W	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
15466 D	1.82	0.2	30	70	<0.5	<2	2.06	<0.5	27	40	301	3.87	<10	0.49	<10	0.80	296	19	0.24	16	1630	8	<10	126	0.35	<10	<10	20	--	
15467 D	2.13	0.2	50	50	<0.5	<2	1.68	<0.5	30	69	184	4.10	<10	0.46	<10	0.57	198	4	0.29	24	1080	8	<10	152	0.31	<10	<10	10	--	
15468 D	2.60	0.2	10	180	<0.5	<2	1.07	<0.5	15	95	117	4.28	<10	1.24	10	1.38	241	3	0.08	22	370	5	<10	115	0.27	<10	<10	20	--	
15469 D	2.34	0.2	30	160	<0.5	<2	1.03	<0.5	15	95	104	4.37	<10	1.09	10	1.39	273	3	0.05	24	770	9	<10	102	0.27	<10	<10	195	<10	
15470 D	2.56	0.2	40	190	<0.5	<2	1.18	<0.5	17	108	114	4.60	<10	1.21	10	1.45	245	3	0.24	25	870	3	<10	110	0.29	<10	<10	210	<10	
15471 D	2.01	0.2	50	130	<0.5	<2	1.43	<0.5	18	87	149	4.16	<10	0.97	10	1.15	286	20	0.20	24	920	8	<10	83	0.29	<10	<10	193	<10	
15472 D	1.87	0.2	10	80	<0.5	<2	2.68	<0.5	15	41	87	2.95	<10	0.52	<10	0.96	397	23	0.29	12	1470	8	<10	127	0.35	<10	<10	135	<10	
15473 D	2.12	0.2	10	80	<0.5	<2	2.72	<0.5	24	42	209	4.15	<10	0.51	<10	1.09	456	4	0.31	14	1590	6	<10	156	0.40	<10	<10	149	<10	
15474 D	1.80	0.2	10	70	<0.5	<2	2.44	<0.5	30	33	170	3.57	<10	0.35	<10	0.83	412	5	0.28	14	1510	5	<10	156	0.35	<10	<10	130	<10	
15475 D	1.75	0.2	10	70	<0.5	<2	1.87	<0.5	17	49	115	5.40	<10	0.41	10	1.15	418	9	0.17	27	930	8	<10	16	93	0.39	<10	<10	240	<10
15476 D	1.44	0.2	10	50	<0.5	<2	1.91	<0.5	17	41	144	4.96	10	0.34	10	1.14	340	5	0.15	29	730	9	<10	100	0.27	<10	<10	193	<10	
15477 D	3.41	0.2	10	70	<0.5	<2	3.29	<0.5	28	67	190	4.67	20	0.67	<10	1.34	563	4	0.47	33	1300	8	<10	283	0.26	<10	<10	147	<10	
15478 D	1.95	0.2	10	160	<0.5	<2	2.67	<0.5	25	30	184	3.92	10	1.15	<10	1.27	555	6	0.19	16	1290	10	<10	96	0.29	<10	<10	136	<10	
15479 D	2.59	0.2	10	140	<0.5	<2	2.96	<0.5	27	33	265	4.52	10	1.10	<10	1.23	531	4	0.30	17	1460	10	<10	166	0.33	<10	<10	127	<10	
15480 D	1.98	0.2	10	40	<0.5	<2	2.75	<0.5	22	27	184	3.56	10	0.50	<10	0.95	410	8	0.26	16	1630	2	<10	134	0.19	<10	<10	93	<10	
15481 D	2.09	0.2	10	70	<0.5	<2	2.74	<0.5	17	30	104	3.61	10	0.91	<10	1.12	434	5	0.21	15	1490	8	<10	146	0.22	<10	<10	117	<10	
15482 D	2.32	0.2	10	70	<0.5	<2	2.32	<0.5	19	32	102	3.25	10	0.74	<10	1.04	445	6	0.20	17	1340	6	<10	149	0.21	<10	<10	112	<10	
15483 D	3.37	0.2	10	100	<0.5	<2	5.39	<0.5	11	35	33	3.07	20	0.88	<10	1.27	584	8	0.42	11	1560	12	<10	167	0.24	<10	<10	132	<10	
15484 D	3.17	0.2	20	30	<0.5	<2	3.86	<0.5	34	28	471	2.97	20	0.32	<10	0.65	323	1	0.30	14	1640	12	<10	157	0.16	<10	<10	68	<10	
15485 D	4.08	0.2	150	60	<0.5	<2	20.76	<0.5	193	52	428	8.57	80	0.96	<10	2.20	1288	1	0.03	43	1030	18	<10	410	0.05	<10	<10	46	<10	
15486 D	3.98	2.6	20	20	<0.5	<2	5.39	<0.5	114	48	1734	10.27	30	0.44	<10	0.78	442	1	0.51	67	1690	20	<10	133	0.22	<10	<10	51	<10	
15487 D	3.16	0.2	70	20	<0.5	<2	6.92	<0.5	30	73	123	4.10	30	0.17	<10	1.74	1940	3	0.08	22	1350	24	<10	169	0.17	<10	<10	140	<10	
15488 D	1.94	0.2	10	30	<0.5	<2	4.69	<0.5	11	60	35	3.12	20	0.32	<10	1.42	962	3	0.17	19	1180	12	<10	116	0.20	<10	<10	147	<10	
15489 D	2.77	0.2	20	40	<0.5	<2	4.83	<0.5	16	85	41	4.95	20	0.40	<10	2.31	1329	4	0.15	25	1050	16	<10	118	0.24	<10	<10	194	<10	
15490 D	2.63	0.2	<10	50	<0.5	<2	4.46	<0.5	17	96	65	4.41	20	0.52	<10	2.35	823	9	0.21	24	1470	12	<10	136	0.28	<10	<10	190	<10	
15491 D	2.34	0.2	<10	180	<0.5	<2	2.79	<0.5	13	67	33	3.61	10	1.08	<10	1.80	488	8	0.27	22	1140	4	<10	118	0.27	<10	<10	138	<10	
00953 E	0.23	1.4	820	20	<0.5	<2	0.62	0.5	19	256	1174	5.00	10	0.11	<10	0.14	350	1	0.02	11	110	3	<10	15	0.04	<10	<10	19	<10	
00954 E	3.06	0.2	540	140	<0.5	<2	0.95	0.5	39	88	295	11.25	10	1.48	10	2.12	1082	4	0.11	31	1730	4	<10	58	0.33	<10	<10	216	<10	
00955 E	1.43	1.2	2130	110	<0.5	<2	0.38	0.5	43	62	1962	12.97	10	1.37	10	0.96	363	1672	3	0.05	17	960	5	<10	36	0.19	<10	<10	101	<10
00956 E	0.38	1.2	100	<10	<0.5	<2	0.25	<0.5	381	24	2019	31.01	30	0.02	<10	0.27	167	24	0.03	49	250	16	<10	7	0.08	<10	<10	15	<10	
00957 E	0.99	1.4	<10	10	<0.5	<2	1.31	<0.5	162	22	2177	17.06	<10	0.12	<10	0.60	299	2	0.12	18	1100	2	<10	33	0.27	<10	<10	70	<10	
00958 E	0.40	0.8	10	30	<0.5	<2	0.40	<0.5	167	39	1489	14.72	<10	0.24	<10	0.23	60	1	0.02	17	880	8	<10	7	0.17	<10	<10	39	<10	
00959 E	1.08	1.0	10	50	<0.5	<2	0.39	<0.5	21	49	790	9.96	10	0.67	10	0.66	399	23	0.05	16	610	14	<10	12	0.27	<10	<10	143	<10	
00960 E	3.57	0.6	340	46	<0.5	<2	0.22	<0.5	11	139	79	14.14	10	0.05	10	0.81	106	1	0.01	37	1510	4	<10	16	0.01	<10	<10	40	<10	
00961 E	3.65	1.6	10	210	<0.5	<2	0.67	<0.5	69	558	125	5.20	<10	1.25	20	4.09	102	1	0.01	342	1440	4	<10	17	0.27	<10	<10	76	<10	
00962 E	0.82	1.2	40	50	<0.5	<2	0.87	<0.5	62	33	1262	9.88	<10	0.36	10	0.45	376	2	0.05	15	980	4	<10	23	0.25	<10	<10	59	<10	
00963 E	1.64	0.8	130	70	<0.5	<2	1.00	<0.5	32	35	401	6.34	10	0.80	10	0.92	384	5	0.14	16	1440	4	<10	59	0.29	<10	<10	130	<10	

Certified by: Hart Bichler



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212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ASSAY

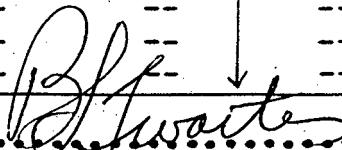
TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8615040-001-A  
INVOICE # : I8615040  
DATE : 29-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Drill Hole Footage Interval (ft)	Comments
15492 D	207	<0.002	-- 78.3 → 83.3 --	-- G-86.7 --
15493 D	207	<0.002	-- 83.3 → 88.3 --	--
15494 D	207	<0.002	-- 88.3 → 91.7 --	--
15495 D	207	<0.002	-- 91.7 → 96.7 --	--
15496 D	207	0.036	-- 96.7 → 101.7 --	--
15497 D	207	0.012	-- 101.7 → 106.7 --	--
15498 D	207	<0.002	-- 106.7 → 112.3 --	--
15499 D	207	<0.002	-- 112.3 → 113.5 --	--
15500 D	207	<0.002	-- 113.5 → 118.5 --	--
15501 D	207	0.002	-- 118.5 → 123.5 --	--
15502 D	207	<0.002	-- 123.5 → 128.5 --	--
15503 D	207	<0.002	-- 128.5 → 133.5 --	--
15504 D	207	<0.002	-- 133.5 → 138.5 --	--
15505 D	207	<0.002	-- 138.5 → 143.5 --	--
15506 D	207	0.012	-- 143.5 → 148.0 --	--
15507 D	207	<0.002	-- 149.8 → 154.8 --	--
15508 D	207	<0.002	-- 154.8 → 159.8 --	--
15509 D	207	<0.002	-- 159.8 → 163.1 --	--
15510 D	207	<0.002	-- 163.1 → 168.1 --	--
15511 D	207	<0.002	-- 168.1 → 173.1 --	--
15512 D	207	<0.002	-- 173.1 → 178.1 --	--
15513 D	207	<0.002	-- 178.1 → 183.1 --	--
15514 D	207	<0.002	-- 183.1 → 188.1 --	--
15515 D	207	<0.002	-- 188.1 → 193.1 --	--
15516 D	207	<0.002	-- 193.1 → 198.1 --	--
15517 D	207	<0.002	-- 198.1 → 203.1 --	--
15518 D	207	<0.002	-- 203.1 → 208.1 --	--
15519 D	207	<0.002	-- 208.1 → 213.1 --	--
15520 D	207	<0.002	-- 213.1 → 215 --	--
00964 E	207	<0.002	--	-- See Table --
00965 E	207	<0.002	--	--
00966 E	207	<0.002	--	--
00967 E	207	0.150	--	--
00968 E	207	0.084	--	--
00969 E	207	0.138	--	--
00970 E	207	0.232	--	--
00971 E	207	0.020	--	--
00972 E	207	0.014	--	--
00973 E	207	0.016	--	--
00974 E	207	0.032	--	--

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Registered Assayer, Province of British Columbia



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Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals, values reported for Al, Si, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

TO : MARK MANAGEMENT LIMITED  
1000 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
WEC DWD

CERT. #: A8615041-001-A  
INVOICE #: ISM15041  
DATE : 31-JUL-86  
P.O. #: NCHE  
GAG/G

COMMENTS :

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Si	Tl	U	V	W	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
15492 D	2.18	0.2	30	80 <0.5	2	4.52 <0.5	13	101	40	3.36	20	0.62	<10	1.97	892	3	0.12	23	1180	20	<10	106	0.18	<10	<10	157	<10	50	--
15493 D	1.75	0.2	30	20 <0.5	2	3.65 <0.5	16	81	86	3.13	10	0.33	<10	1.32	575	3	0.14	25	790	18	<10	85	0.20	<10	<10	101	<10	40	--
15494 D	1.91	0.2	10	30 <0.5	2	2.24 <0.5	9	53	21	2.56	10	0.49	<10	0.99	339	1	0.24	21	780	14	<10	99	0.22	<10	<10	84	<10	40	--
15495 D	1.38	0.2	10	10 <0.5	<2	2.93 <0.5	7	49	33	2.00	10	0.12	<10	0.79	549	8	0.15	17	910	24	<10	102	0.21	<10	<10	81	<10	36	--
15496 D	0.82	0.2	20	<10 <0.5	4	3.13 <0.5	16	43	143	2.13	10	0.11	<10	0.40	274	27	0.14	21	1030	42	<10	76	0.21	<10	<10	64	<10	40	--
15497 D	0.98	0.2	10	10 <0.5	2	3.08 <0.5	45	33	412	4.40	10	0.13	<10	0.51	314	36	0.13	30	1250	20	<10	75	0.17	<10	<10	67	<10	30	--
15498 D	2.21	0.2	20	50 <0.5	<2	2.71 <0.5	18	33	99	3.45	10	0.46	<10	0.95	424	49	0.31	20	1500	14	<10	160	0.22	<10	<10	113	<10	30	--
15499 D	1.15	3.4	30	10 <0.5	<2	1.81 <0.5	175	29	2467	16.99	<10	0.13	<10	0.70	320	3	0.09	81	1000	4	<10	79	0.15	<10	<10	60	<10	100	--
15500 D	2.57	0.2	20	60 <0.5	2	2.92 <0.5	20	40	76	3.99	20	0.70	<10	1.22	530	4	0.32	20	1460	18	<10	162	0.25	<10	<10	125	<10	50	--
15501 D	2.87	0.2	200	50 <0.5	6	4.74 <0.5	24	49	105	4.90	20	0.52	<10	1.74	941	1	0.25	21	1490	26	<10	172	0.23	<10	<10	164	<10	50	--
15502 D	2.98	0.2	20	80 <0.5	4	2.92 <0.5	21	44	59	3.96	20	0.81	<10	1.35	525	1	0.42	19	1330	12	<10	229	0.27	<10	<10	137	<10	40	--
15503 D	3.17	0.2	20	100 <0.5	<2	2.98 <0.5	51	38	154	6.23	20	0.87	<10	1.26	528	<1	0.45	28	1610	12	<10	235	0.28	<10	<10	137	<10	30	--
15504 D	2.98	0.2	20	150 <0.5	<2	2.21 <0.5	22	32	54	4.18	10	1.31	<10	1.32	486	<1	0.37	17	1570	10	<10	175	0.27	<10	<10	130	<10	40	--
15505 D	2.72	0.2	20	100 <0.5	<2	2.53 <0.5	26	38	143	4.63	10	0.95	<10	1.26	533	3	0.28	20	1600	12	<10	126	0.27	<10	<10	137	<10	30	--
15506 D	2.49	0.2	50	160 <0.5	6	2.63 <0.5	31	35	162	4.32	10	0.86	<10	1.06	427	1	0.34	21	1540	12	<10	163	0.22	<10	<10	108	<10	30	--
15507 D	3.10	0.2	20	390 <0.5	2	4.18 <0.5	28	222	68	4.35	20	1.90	<10	2.55	677	9	0.15	116	1650	14	<10	128	0.32	<10	<10	151	<10	40	--
15508 D	3.42	0.2	90	90 <0.5	<2	4.88 <0.5	24	133	127	5.95	20	0.89	<10	2.77	1222	1	0.06	95	1400	28	<10	97	0.15	<10	<10	186	<10	20	--
15509 D	3.59	0.2	120	600 <0.5	<2	4.65 <0.5	36	363	38	5.53	20	1.72	20	3.33	1050	<1	0.15	128	2140	24	<10	197	0.28	<10	<10	144	<10	70	--
15510 D	2.66	0.2	30	130 <0.5	<2	3.75 <0.5	31	73	405	4.57	20	0.95	<10	1.37	657	1	0.33	35	1630	16	<10	154	0.28	<10	<10	149	<10	40	--
15511 D	2.30	0.2	10	100 <0.5	2	2.11 <0.5	21	35	94	3.90	10	0.98	<10	1.00	463	5	0.29	17	1560	8	<10	118	0.25	<10	<10	128	<10	30	--
15512 D	1.97	0.2	30	90 <0.5	<2	3.49 <0.5	31	36	236	4.18	10	0.75	<10	0.95	534	8	0.25	19	1490	14	<10	100	0.22	<10	<10	129	<10	30	--
15513 D	3.39	0.2	20	100 <0.5	<2	2.53 <0.5	35	38	149	4.32	10	0.81	<10	1.05	564	4	0.32	22	1590	14	<10	126	0.25	<10	<10	144	<10	30	--
15514 D	2.76	0.2	20	120 <0.5	3	2.47 <0.5	32	33	92	2.69	10	0.90	<10	1.02	527	1	0.37	20	1640	10	<10	160	0.20	<10	<10	118	<10	30	--
15515 D	2.62	0.2	20	80 <0.5	<2	3.03 <0.5	22	37	165	4.12	10	0.78	<10	1.28	654	3	0.30	20	1500	12	<10	156	0.28	<10	<10	139	<10	50	--
15516 D	2.75	0.2	20	90 <0.5	<2	3.18 <0.5	25	40	166	4.51	20	0.87	<10	1.44	662	5	0.31	19	1790	12	<10	157	0.27	<10	<10	167	<10	40	--
15517 D	2.38	0.2	20	90 <0.5	<2	2.22 <0.5	24	35	202	4.21	10	0.83	<10	1.22	582	6	0.25	17	1680	8	<10	109	0.23	<10	<10	137	<10	40	--
15518 D	2.72	0.2	10	80 <0.5	3	2.53 <0.5	22	32	135	4.06	10	0.80	<10	1.19	600	1	0.31	16	1600	9	<10	166	0.22	<10	<10	122	<10	40	--
15519 D	3.70	0.2	20	80 <0.5	<2	3.27 <0.5	23	38	139	4.42	20	0.67	<10	1.37	742	1	0.31	18	1650	10	<10	167	0.25	<10	<10	145	<10	40	--
15520 D	3.72	0.2	30	90 <0.5	<2	3.25 <0.5	24	40	150	4.43	20	0.76	<10	1.46	767	1	0.37	19	1590	12	<10	153	0.22	<10	<10	141	<10	40	--
00964 E	0.12	1.2	350	<10 <0.5	44	0.06 <0.5	609	15	2031	29.25	70	<0.01	<10	0.06	51	9	0.01	81	220	74	30	2	0.01	<10	<10	200	<10	10	--
00965 E	1.07	0.2	730	70 <0.5	<2	0.42 <0.5	60	28	307	5.91	<10	0.66	<10	0.63	195	4	0.07	16	1030	10	<10	23	0.18	<10	<10	113	<10	10	--
00966 E	0.91	0.2	40	110 <0.5	<2	0.21 <0.5	49	49	623	22.85	<10	0.25	10	0.53	192	3	0.02	15	1600	42	<10	82	0.17	<10	<10	53	<10	10	--
00967 E	0.11	2.4	3380	<10 <0.5	28	0.09 <0.5	324	13	5336	29.25	30	<0.01	<10	0.06	111	1	<0.01	68	<10	30	1	<0.01	<10	<10	41	10	10	--	
00968 E	0.12	1.0	9999	<10 <0.5	96	0.03 <0.5	582	37	1906	29.24	100	<0.01	<10	0.04	153	9	<0.01	64	230	54	30	1	<0.01	<10	<10	256	<10	20	--
00969 E	0.13	1.2	6290	<10 <0.5	74	0.07 <0.5	451	17	4268	29.24	90	<0.01	<10	0.06	27	9	<0.01	92	180	92	30	1	<0.01	<10	<10	250	<10	20	--
00970 E	0.03	2.2	500	<10 <0.5	26	0.31 <0.5	149	13	4921	22.47	<10	<0.01	<10	0.02	186	4	<0.01	22	<10	43	<10	41	<0.01	<10	<10	41	<10	10	--
00971 E	0.25	0.2	210	20 <0.5	38	0.12 <0.5	229	19	1377	29.23	40	<0.09	<10	0.12	50	4	<0.01	50	240	44	10	3	0.03	<10	<10	4	70	<10	--
00972 E	0.11	2.4	370	<10 1.5	72	0.03 <0.5	239	18	6232	29.26	110</																		



# Chemex Labs Ltd.

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North Vancouver, B.C.  
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Telex: 043-52597

## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

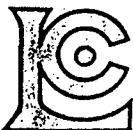
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8615040-002-A  
INVOICE # : I8615040  
DATE : 29-JUL-86  
P.O. # : NONE  
GAG/G

Sample description	Prep code	Au oz/T	Comments
00975 E	207	0.070	--- See Table ---
00976 E	207	0.022	---
00977 E	207	0.098	---
00978 E	207	0.048	---
00979 E	207	1.524	---
00980 E	207	1.120	---
00981 E	207	0.080	---
00982 E	207	0.328	---
00983 E	207	0.008	---
00984 E	207	0.006	---
00985 E	207	0.004	---
00986 E	207	0.004	---
00987 E	207	<0.002	---
00988 E	207	0.002	---
00989 E	207	<0.002	---
00990 E	207	<0.002	---
00991 E	207	<0.002	---
00992 E	207	<0.002	---
00993 E	207	<0.002	---
00994 E	207	<0.002	---
00995 E	207	<0.002	---
00996 E	207	0.004	---
00997 E	207	0.112	---
00998 E	207	0.004	---
00999 E	207	0.002	---
01000 E	207	0.002	---
16401 E	207	0.026	---
16402 E	207	0.156	---
16403 E	207	0.002	---
16404 E	207	<0.002	---
16405 E	207	0.010	---

VOL rev. 4/85

*B. Swartes*  
Registered Assayer, Province of British Columbia



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Analytical Chemists

Geochemists

Registered Assayers

212 Brookbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Co, Cr, Cs, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8615041-000-A  
INVOICE #: I8615041  
DATE: 31-JUL-86  
P.O. #: NONE  
GAG/G

COMMENTS:

Sample description	Al	As	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	#	ppm	ppm	ppm	ppm	ppm	#	ppm	ppm	ppm	ppm	ppm	#	ppm	#	ppm	ppm	#	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
00975 E	1.11	0.2	1320	30	<0.5	14	0.30	<0.5	34	12	593	5.20	<10	0.42	<10	0.74	272	7	0.06	7	790	10	<10	24	0.10	<10	<10	72	<10	22	--
00976 E	0.96	0.2	80	40	<0.5	32	0.43	<0.5	13	16	351	5.85	<10	0.76	<10	0.63	186	4	0.05	4	1210	<2	<10	25	0.17	<10	<10	88	<10	12	--
00977 E	0.25	3.4	>9999	10	<0.5	<2	0.17	<0.5	1441	6	5026	31.07	<10	0.08	10	0.09	46	<1	0.03	23	700	<2	20	9	0.03	<10	10	8	<10	28	--
00978 E	0.14	2.0	140	<10	<0.5	<2	10.08	<0.5	94	20	2732	23.20	40	<0.01	<10	0.03	618	<1	<0.01	19	220	<2	<10	<1	0.01	<10	<10	9	<10	18	--
00979 E	0.64	7.2	70	10	<0.5	160	2.30	<0.5	420	8	3739	36.41	20	0.06	<10	0.54	231	<1	<0.01	44	250	<2	<10	46	<0.01	<10	10	23	<10	24	--
00980 E	0.90	3.2	>9999	20	<0.5	1126	0.28	<0.5	1397	42	1926	23.57	10	0.11	<10	0.61	228	1	0.01	64	790	16	10	12	0.05	<10	40	72	<10	34	--
00981 E	1.04	0.2	>9999	20	<0.5	36	0.64	<0.5	146	16	356	12.82	10	0.47	<10	0.53	176	6	0.12	44	970	<2	70	46	0.05	<10	<10	54	<10	16	--
00982 E	0.50	0.4	>9999	<10	<0.5	72	3.28	<0.5	1223	13	2398	20.66	20	0.01	<10	0.06	377	<1	0.02	34	410	<2	10	<1	0.01	<10	<10	22	<10	16	--
00983 E	0.53	3.0	1140	20	<0.5	<2	0.30	<0.5	507	8	3852	23.41	10	0.03	<10	0.26	172	<1	0.04	34	850	<2	<10	12	0.10	<10	10	38	<10	78	--
00984 E	1.29	1.2	360	60	<0.5	<2	1.04	<0.5	157	31	1829	9.11	10	0.35	10	0.64	324	2	0.13	15	1390	<2	<10	57	0.19	<10	<10	73	<10	72	--
00985 E	1.16	0.3	100	70	<0.5	<2	1.12	<0.5	19	19	168	4.51	10	0.43	10	0.59	254	409	0.12	9	2010	4	<10	52	0.20	<10	<10	82	<10	22	--
00986 E	1.97	0.4	330	60	<0.5	<2	0.83	<0.5	19	58	438	7.69	10	0.54	10	1.57	397	5	0.05	36	660	104	<10	53	0.19	<10	<10	165	<10	364	--
00987 E	1.09	0.2	70	10	<0.5	<2	19.22	<0.5	8	38	43	2.49	40	0.09	<10	0.90	1982	2	0.03	9	540	18	10	1399	0.03	<10	<10	81	<10	42	--
00988 E	2.88	0.2	70	340	<0.5	<2	1.72	<0.5	15	42	70	5.74	10	0.99	10	1.33	558	2	0.11	20	900	6	<10	91	0.15	<10	<10	141	<10	72	--
00989 E	2.32	0.2	90	90	<0.5	<2	1.51	<0.5	15	36	98	5.38	10	0.63	10	1.22	401	4	0.11	24	860	<2	<10	69	0.15	<10	<10	180	<10	44	--
00990 E	0.64	0.2	40	56	<0.5	<2	6.18	<0.5	37	81	109	6.18	30	0.19	<10	2.34	1033	1	0.08	36	1400	<2	<10	219	0.19	<10	<10	243	<10	74	--
00991 E	2.40	0.2	260	110	<0.5	<2	2.29	<0.5	14	51	62	4.52	10	0.77	10	1.22	420	2	0.13	28	740	6	<10	82	0.15	<10	<10	182	<10	62	--
00992 E	1.96	0.2	140	60	<0.5	<2	2.09	<0.5	13	41	77	4.99	10	0.35	10	1.19	427	3	0.08	30	740	12	<10	96	0.07	<10	<10	180	<10	78	--
00993 E	2.00	0.2	70	30	<0.5	<2	3.14	<0.5	11	59	131	4.81	20	0.20	10	1.34	461	2	0.05	25	940	4	<10	123	0.05	<10	<10	171	<10	54	--
00994 E	2.99	0.2	160	60	<0.5	<2	4.22	<0.5	32	275	80	5.27	20	0.22	<10	3.34	614	<1	0.02	219	1100	12	<10	139	0.12	<10	<10	109	<10	86	--
00995 E	2.00	0.2	70	20	<0.5	<2	2.92	<0.5	12	58	57	4.23	20	0.12	<10	1.29	380	2	0.04	26	640	2	<10	41	0.03	<10	<10	140	<10	58	--
00996 E	3.28	0.2	100	30	<0.5	<2	9.11	<0.5	17	99	66	3.80	30	0.05	<10	2.19	656	1	0.01	28	2140	8	<10	178	0.13	<10	<10	99	<10	46	--
00997 E	1.21	2.8	3830	10	<0.5	34	5.43	<0.5	172	49	3439	7.43	20	0.10	<10	0.87	493	1	0.05	22	1000	82	<10	61	0.07	<10	<10	76	<10	292	--
00998 E	0.86	0.2	60	<10	<0.5	2	25.36	<0.5	8	42	52	1.52	40	<0.01	<10	0.88	1783	1	<0.01	9	310	16	<10	827	0.01	<10	<10	43	<10	36	--
00999 E	1.97	0.2	50	50	<0.5	<2	10.94	<0.5	17	97	62	3.64	30	0.11	<10	2.08	975	1	0.03	32	1780	8	<10	346	0.16	<10	<10	102	<10	46	--
01000 E	1.73	0.2	50	30	<0.5	<2	10.36	<0.5	18	50	77	3.71	30	0.06	<10	1.77	1209	1	0.03	21	1240	14	<10	320	0.04	<10	<10	86	<10	46	--
16401 E	0.44	0.6	140	10	<0.5	10	23.46	<0.5	11	29	1034	3.53	40	0.15	<10	0.45	1379	1	0.01	8	220	14	<10	422	0.02	<10	<10	24	<10	32	--
16402 E	1.08	7.4	2980	70	<0.5	14	1.20	<0.5	122	46	4107	7.38	10	0.35	10	0.66	347	18	0.09	27	950	4	<10	36	0.17	<10	<10	90	<10	154	--
16403 E	3.08	0.2	160	1940	<0.5	<2	3.17	<0.5	71	239	165	6.70	30	1.16	90	2.98	1322	1	0.05	136	6570	6	<10	392	0.16	<10	<10	175	<10	110	--
16404 E	0.13	3.0	<10	20	<0.5	<2	0.12	<0.5	400	8	2103	39.53	<10	0.02	<10	0.12	311	1	<0.01	959	410	<2	<10	10	0.01	<10	20	2	<10	14	--
16405 E	0.87	0.4	20	70	<0.5	<2	0.15	<0.5	16	18	578	7.47	<10	0.25	<10	0.43	206	20	0.02	32	810	<2	<10	21	0.10	<10	<10	80	<10	22	--

Certified by ... *Hart Bichler*...



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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

ROSSLAND MOTEL  
P.O. BOX 729  
ROSSLAND, BC

V6G 1Y0

CERT. # : A8613453-001-A  
INVOICE # : I8613453  
DATE : 16-JUN-86  
P.O. # : NONE  
GALLANT-GEORGIA

✓ CC: J. HARDY

Sample description	Prep code	Cu %	Au FA oz/T	See Table		
83112C	207	--	0.071	--	--	--
83113C	207	--	0.173	--	--	--
83114C	207	--	0.004	--	--	--
83115C	207	--	0.008	--	--	--
83116C	207	--	<0.003	--	--	--
83117C	207	--	0.020	--	--	--
83118C	207	--	0.016	--	--	--
83119C	207	--	0.008	--	--	--
83120C	207	--	<0.003	--	--	--
83121C	207	--	0.006	--	--	--
83122C	207	0.26	0.026	--	--	--
83123C	207	0.41	0.038	--	--	--
83124C	207	0.41	0.037	--	--	--
83125C	207	0.38	0.049	--	--	--
83126C	207	0.40	0.007	--	--	--
83127C	207	--	<0.003	--	--	--
83128C	207	--	0.005	--	--	--
83129C	207	0.60	0.020	--	--	--



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## CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1W2

CERT. #: A8613155-011-A

INVOICE #: 18613155

DATE : 30-JUN-86

P.O. #: NONE

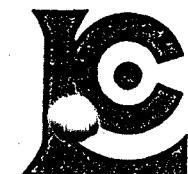
GALLANT-GEORGIA

ROSSLAND MOTEL  
P.O. BOX 729  
ROSSLAND, B.C. V0G 1Y0

REC'D: J. HARDE

Sample description	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	AlnO	LOI	Sb ppm	As ppm	Bi ppm	Cd ppm	Cu ppm	Ge ppm	Pb ppm	Sc ppm	Ag ppm	Tl ppm	U ppm	Zn ppm
831170	76.84	13.26	1.94	0.19	0.14	2.82	5.68	0.030	<0.01	0.02	0.72	0.3	70	0.1	0.1	15	12	18	1	0.1	0.6	3.9	13

.....certified by *J. Harde*



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## CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. # : A8614201-001-A  
INVOICE # : I8614201  
DATE : 27-JUN-86  
P.O. # : NONE  
GALLANT-GEORGIA

ATTN: J. HARDY

Sample description	Prep code	W ppm	Sn ppm	Ga ppm	Comments
83112 C	214	1	1	1	-- See Table --
83113 C	214	1	1	10	--
83121 C	214	4200	1	2	--
83122 C	214	580	1	1	--
83123 C	214	12	1	1	--
83124 C	214	660	1	1	--
83125 C	214	1	1	1	--
83126 C	214	1	1	1	--
83127 C	214	3	1	7	--
83128 C	214	360	1	9	--
83129 C	214	1	1	9	--

Certified by .....

Hart Bickler

VOI rev. 4/85



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Semi quantitative multi element ICP analysis

Hitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and Y can only be considered as semi-quantitative.

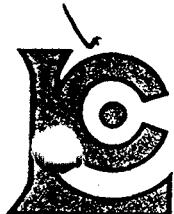
TO : MARK MANAGEMENT LIMITED  
1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

CERT. #: A8613454-001-A  
INVOICE #: 18612454  
DATE : 20-JUN-86  
P.O. #: NONE  
GALLANT-GEORGIA

COMMENTS:  
CC: J. HARDY

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	U	V	W	Zn	
	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
83112C	0.64	0.8	>9999	50	<0.5	<2	0.22	<0.5	340	14	492	19.91	<10	0.19	<10	0.30	115	1	0.05	7	460	10	150	76	0.05	<10	21	<10	20	
83113C	1.36	1.4	9400	60	<0.5	12	0.62	<0.5	221	37	1329	6.19	<10	0.55	10	0.71	306	15	0.13	34	670	12	<10	34	0.13	<10	97	<10	40	
83114C	3.38	0.2	360	170	<0.5	<2	1.38	<0.5	17	91	149	4.90	<10	0.85	10	1.22	549	3	0.36	24	950	16	<10	133	0.29	<10	10	268	<10	60
83115C	2.58	0.2	410	50	<0.5	<2	0.72	<0.5	38	60	75	4.61	10	0.44	<10	1.26	1629	11	0.18	9	210	14	<10	116	0.06	<10	10	314	<10	20
83116C	0.86	0.6	160	10	<0.5	<2	0.16	<0.5	8	37	107	3.79	<10	0.08	<10	0.64	317	1	0.09	5	400	10	<10	11	0.08	<10	10	69	<10	10
83117C	0.45	0.2	60	10	<0.5	<2	0.02	<0.5	2	9	13	1.16	<10	0.22	20	0.05	144	<1	0.05	3	120	24	<10	3	0.01	<10	<10	4	<10	10
83118C	2.07	0.2	90	130	<0.5	<2	0.54	<0.5	16	67	79	4.49	<10	1.02	<10	1.29	401	4	0.14	32	740	22	<10	48	0.25	<10	<10	228	<10	90
83119C	2.65	0.4	60	240	<0.5	<2	0.83	<0.5	12	56	51	3.90	<10	1.17	10	1.13	346	3	0.15	23	750	14	<10	78	0.24	<10	<10	177	<10	60
83120C	2.49	0.4	110	110	<0.5	<2	0.69	<0.5	14	71	61	5.09	<10	0.58	10	1.25	488	3	0.18	27	910	16	<10	78	0.18	<10	<10	163	<10	130
83121C	0.18	2.2	3410	10	<0.5	<2	0.18	<0.5	653	18	2753	22.50	<10	0.02	<10	0.07	306	20	0.02	13	200	214	<10	9	0.01	<10	<1	640	10	--
83122C	0.57	1.2	7130	<10	<0.5	<2	0.30	<0.5	1984	11	2157	27.82	50	<0.01	<10	0.18	151	10	0.02	110	250	28	10	8	0.01	<10	<10	5	570	10
83123C	0.29	3.6	380	30	<0.5	<2	0.19	<0.5	621	16	3341	27.83	60	0.01	<10	0.10	127	8	0.01	70	360	44	20	12	0.01	<10	<10	5	160	10
83124C	0.61	1.4	7400	<10	<0.5	6	0.33	<0.5	2056	15	2303	27.82	60	<0.01	<10	0.20	162	13	0.02	120	290	38	20	8	0.01	<10	<10	8	670	20
83125C	0.15	2.6	2300	<10	4.5	48	0.16	<0.5	680	15	3419	27.83	110	<0.01	<10	0.06	104	15	<0.01	107	430	92	40	3	0.01	<10	<10	7	340	20
83126C	0.36	4.8	250	<10	<0.5	16	0.19	<0.5	638	17	3464	27.83	80	<0.01	<10	0.11	207	9	0.01	142	370	60	30	3	0.01	<10	<10	6	220	10
83127C	1.86	0.6	90	100	<0.5	<2	0.28	<0.5	32	57	227	6.38	<10	1.27	10	1.14	231	7	0.14	28	840	12	<10	47	0.19	<10	<10	278	<10	30
83128C	3.20	1.6	160	230	<0.5	<2	0.59	0.5	29	44	185	6.84	10	0.77	10	1.07	679	6	0.12	17	1400	492	<10	31	0.22	<10	<10	139	200	250
83129C	1.01	7.6	1320	40	<0.5	<2	0.80	0.5	30	28	5867	4.97	<10	0.17	10	0.49	330	1	0.09	19	840	16	<10	41	0.12	<10	<10	36	80	--

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## CERTIFICATE OF ASSAY

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2W2

cb Rossland Motel  
P.O. Box 729  
Rossland, BC

CERT. # : A8614056-001-A  
INVOICE # : I8614056  
DATE : 9-JUL-86  
P.O. # : NONE  
GALLANT-GEORGIA

CC: J. HARDY ✓

V0G 1Y0

Sample description	Prep code	Cu %	Au oz/t	Comments		
83130C	207	--	0.064	-- See Table --	--	--
83131C	207	--	0.002	--	--	--
83132C	207	0.29	0.004	--	--	--
83133C	207	0.50	0.092	--	--	--
83134C	207	0.22	0.044	--	--	--
83135C	207	0.24	0.022	--	--	--
83136C	207	0.25	0.020	--	--	--
83137C	207	--	0.002	--	--	--
83138C	207	0.17	1.780	--	--	--
83139C	207	0.43	0.022	--	--	--
83140C	207	0.34	0.092	--	--	--
83141C	207	0.15	0.276	--	--	--
83142C	207	0.13	0.004	--	--	--
83143C	207	0.16	0.054	--	--	--
83144C	207	0.21	0.006	--	--	--
83145C	207	0.52	0.054	--	--	--
83146C	207	0.16	0.112	--	--	--

VOL rev. 4/85

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Telex: 043-52597

## CERTIFICATE OF ANALYSIS

100 MARKET AGREEMENT LIMITS

1000 - 9TH & W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 2A2

CERT. #: ABC.4351-01-4-1  
LABORATORY: TGS-1  
DATE: 6-21-86  
P.O. #: NONE  
GALLANT, GEORGIA

100 MARKET AGREEMENT LIMITS

100 MARKET AGREEMENT LIMITS

This certificate is issued for the analysis of a sample of material received on 6-21-86. Since the composition is incomplete for many minerals, this report is not considered to be quantitative.

Roseland Motel

P.O. Box 729

Roseland BC V0G 1Y0

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cr	Cu	Fe	Ga	K	Li	Mg	Na	P	Pb	Si	Ti	V	W	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
83130 C	0.51	0.4 >9999	80 <0.5	18 0.54 <0.5	445	7 54 3.31 <10	0.34 <10	0.20	159	1 0.02	16 1670	30 <10	44 0.09 <10	10 47	39 20	<10	<10	<10	<10	30	<10	
83131 C	1.56	0.3 200	70 <0.5	<2 1.58 <0.5	23	49 124 3.55 10	0.15	20 0.94	325	1 0.18	31 1570	6 <10	160 0.22 <10	10 90	10 30	<10	<10	<10	<10	30	<10	
83132 C	1.36	1.6 30	111 <0.5	<2 0.50 <0.5	115	32 2486 16.03	10 0.35	10 0.50	310	44 0.03	61 370	2 <10	45 0.22 10	10 100	10 50	<10	<10	<10	<10	50	<10	
83133 C	0.32	1.4 >9999	10 <0.5	<2 0.22 <0.5	404	15 2911 36.30	10 0.05	10 0.16	112	1 0.02	56 460	2 <10	10 0.04 10	10 10	10 50	<10	<10	<10	<10	50	<10	
83134 C	0.35	1.6 >9999	50 <0.5	<2 0.12 <0.5	605	16 1750 35.69	10 0.19	10 0.30	120	1 0.01	55 530	2 <10	10 0.03 10	10 10	10 50	<10	<10	<10	<10	50	<10	
83135 C	0.15	1.2 1800	<10 <0.5	<2 0.15 <0.5	1957	16 1864 34.12	10 0.04	<10 0.09	185	1 0.01	32 240	2 <10	2 0.01 <10	10 5	10 70	<10	<10	<10	<10	70	<10	
83136 C	0.05	0.2 440	<10 <0.5	<2 0.10 <0.5	157	9 1903 54.86	20 0.03	<10 0.05	77	1 0.01	98 300	2 <10	4 0.01 <10	10 41	10 100	<10	<10	<10	<10	100	<10	
83137 C	2.31	0.2 100	170 <0.5	<2 0.34 <0.5	14	55 88 4.66	10 1.05	10 1.22	551	1 0.15	22 830	6 <10	47 0.16 <10	10 146	10 90	<10	<10	<10	<10	90	<10	
83138 C	0.24	3.1 >9999	10 <0.5	<2 0.46 <0.5	2350	9 1341 25.08	10 0.31	10 0.18	145	1 0.01	111 490	2 <10	3 0.01 10	10 10	10 30	<10	<10	<10	<10	30	<10	
83139 C	0.48	1.8 1336	40 <0.5	<2 0.47 <0.5	69	35 3702 15.33	10 0.15	10 0.15	125	2 0.11	23 1010	2 <10	21 0.22 10	10 90	10 60	<10	<10	<10	<10	60	<10	
83140 C	0.39	3.0 >9999	30 <0.5	<2 0.31 <0.5	975	19 2860 33.35	10 0.11	10 0.14	115	1 0.05	88 640	2 <10	10 0.04 10	10 22	10 20	<10	<10	<10	<10	20	<10	
83141 C	1.15	1.4 >9999	70 <0.5	152 1.05 <0.5	680	29 1268 11.23	10 0.89	10 0.66	271	3 0.06	20 940	8 10	35 0.06 <10	10 104	10 50	<10	<10	<10	<10	50	<10	
83142 C	0.13	0.2 290	<10 <0.5	<2 0.20 <0.5	511	13 912 44.28	10 0.04	<10 0.08	79	2 0.01	221 670	2 <10	6 0.04 <10	10 3	10 80	<10	<10	<10	<10	80	<10	
83143 C	1.79	1.6 530	30 <0.5	<2 1.07 <0.5	91	29 1418 12.67	10 0.28	10 0.37	153	3 0.27	26 910	2 <10	64 0.12 <10	10 52	10 40	<10	<10	<10	<10	40	<10	
83144 C	1.20	1.4 240	60 <0.5	<2 0.30 <0.5	129	34 1670 29.59	10 0.41	<10 0.48	174	3 0.03	90 560	2 <10	10 0.03 10	10 91	10 30	<10	<10	<10	<10	30	<10	
83145 C	0.31	6.8 3230	40 <0.5	<2 1.04 <0.5	199	17 4474 19.31	10 0.30	10 0.33	393	1 0.04	32 710	1 0.04	25 0.01 10	10 160	10 160	<10	<10	<10	<10	160	<10	
83146 C	0.19	1.1 >9999	20 <0.5	<2 0.36 <0.5	2071	10 1302 27.80	10 0.08	10 0.08	121	3 0.04	41 630	2 <10	24 0.03 10	10 5	10 70	<10	<10	<10	<10	70	<10	

HartBichler

NELSON

FAME REPORT (E101) 15743



Province of  
British Columbia

Ministry of  
Energy Mines and  
Petroleum Resources

ASSISTANT MINISTER

TITLE PAGE LAMINATED

TYPE OF REPORT/SURVEY(S)

GEOLOGICAL; GEOPHYSICAL; DRILLING

REPORT NO.

108,327.59

AUTHOR(S)

J.L. Hardy

SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED

Jan. 26/87

YEAR OF WORK

PROPERTY NAME(S)

GEORGIA

COMMODITIES PRESENT

B.C. MINERAL INVENTORY NUMBER(S) IF KNOWN 82F/SW - 100, 149, 150, 151

Mining Division Trail Creek

NTS

82F/4W

LATITUDE 49° 5' 30"

LONGITUDE 117° 46' 37"

NAME(S) AND NUMBER(S) OF ALL MINERAL TENURES IN GOOD STANDING (WHEN WORK WAS DONE) THAT FORM THE PROPERTY (E.G. SAMPLES, TAX DEFS, ETC.) (12 UNITS), PHOENIX (LOT 17061), MINERAL LEASE M 123, MINING OR CERTIFIED MINER, LICENSE ML 12 (CLAIMS INVOLVED).

see back

OWNER(S)

(1) M. & C. Delich

(2) M.-M. Butoras

(3) C. Sideco

(4) Gallant Gold Mines Ltd.

MAILING ADDRESS

OPERATOR(S) Name(s) Company paying for the work

(1) Gallant Gold Mines Ltd.

(2)

MAILING ADDRESS

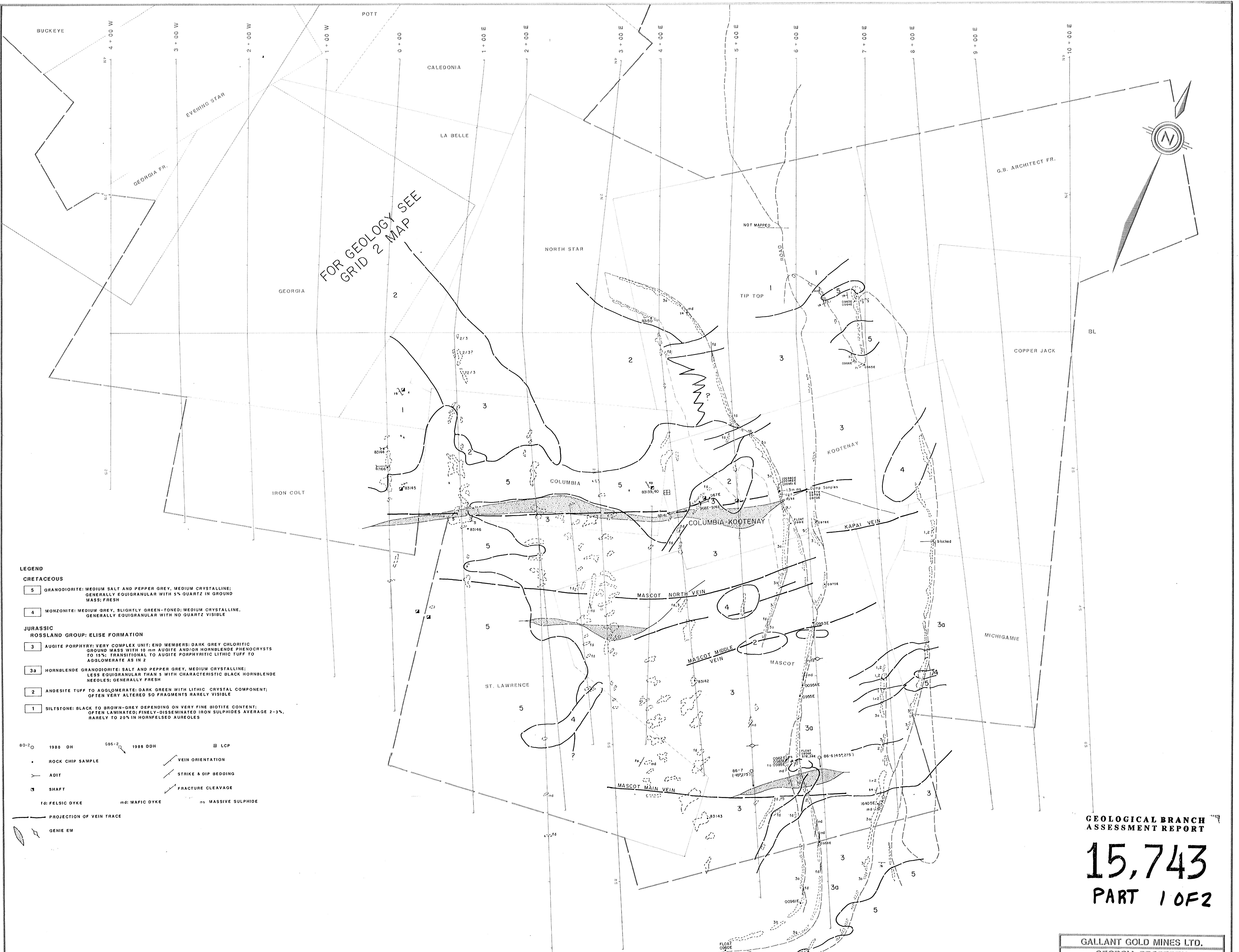
SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Carboniferous and Jurassic metasedimentary and metavolcanic rocks are cut by Jurassic, Cretaceous and Tertiary intrusions. Widespread weak mineralization is apparently associated with an irregular Rossland monzonite stock. High grade gold occurs in steeply dipping fractures with stringers and disseminations of iron sulphides and chalcopyrite.

REFERENCES TO PREVIOUS WORK

A.R. 15743, 15865, 15432, 14236, 8971

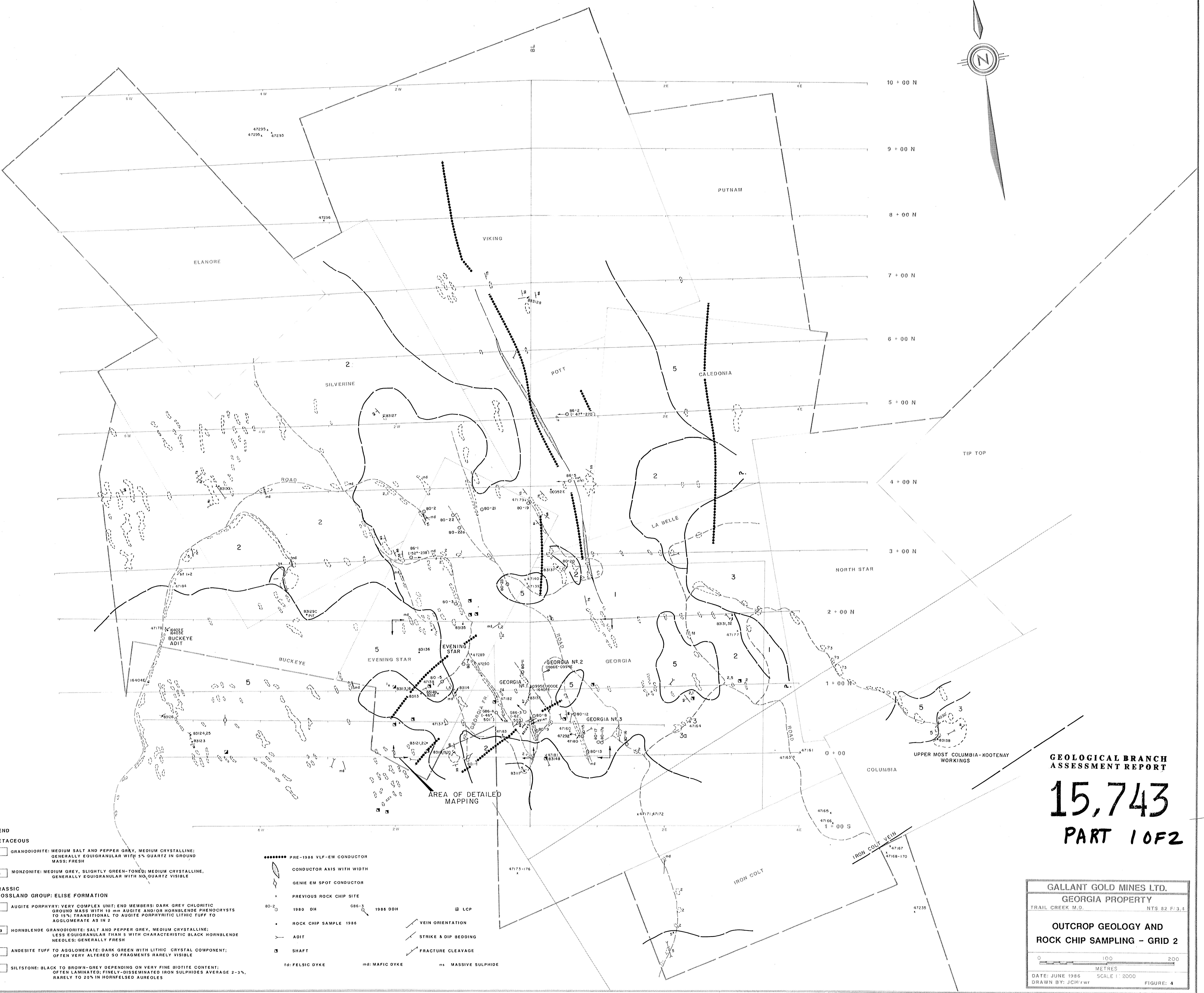
TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPURTAINED		
<u>GEODETIC</u> (scale, area)					
Ground	<u>GEOL</u> 1:2000	625 ha			
Photo		"			
<u>GEOPHYSICAL</u> (line-kilometres)					
Ground	<u>MAGG</u> 30.0 km				
Magnetic	<u>EMGR</u> 30.0 km	HLEM			
Electromagnetic					
Induced Polarization	<u>IPOL</u> 4.0 km				
Radiometric					
Seismic					
Other					
Airborne					
<u>GEOCHEMICAL</u> (number of samples analysed for ...)					
Soil					
Silt					
Rock	<u>ROCK</u> 94; multielement				
Other					
<u>DRILLING</u> (total metres; number of holes; size)					
Core	<u>DIAD</u> 694.0m; 7 holes; NA				
Non-core					
<u>RELATED TECHNICAL</u>					
Sampling/assaying	<u>SAMP</u> 485; multielement				
Petrographic					
Mineralogic					
Metallurgic					
<u>PROSPECTING</u> (scale, area)					
<u>PREPARATORY/PHYSICAL</u>					
Legal surveys (scale, area)					
Topographic (scale, area)					
Photogrammetric (scale, area)					
Lime/grid (kilometres)					
Roast, focal access (kilometres)					
Trench (metres)					
Underground (metres)					
<u>FOR MINISTRY USE ONLY</u>					
Value work done (from report)	108,327.59	NAME OF PAC ACCOUNT		TOTAL COST	108,327.59
Value of work approved		DEBIT	CREDIT	REMARKS:	
Value claimed (from statement)					
Value credited to PAC account					
Value debited to PAC account					
Accepted _____ Date Feb 26/88	Map No. 15743				
				Information for ③	

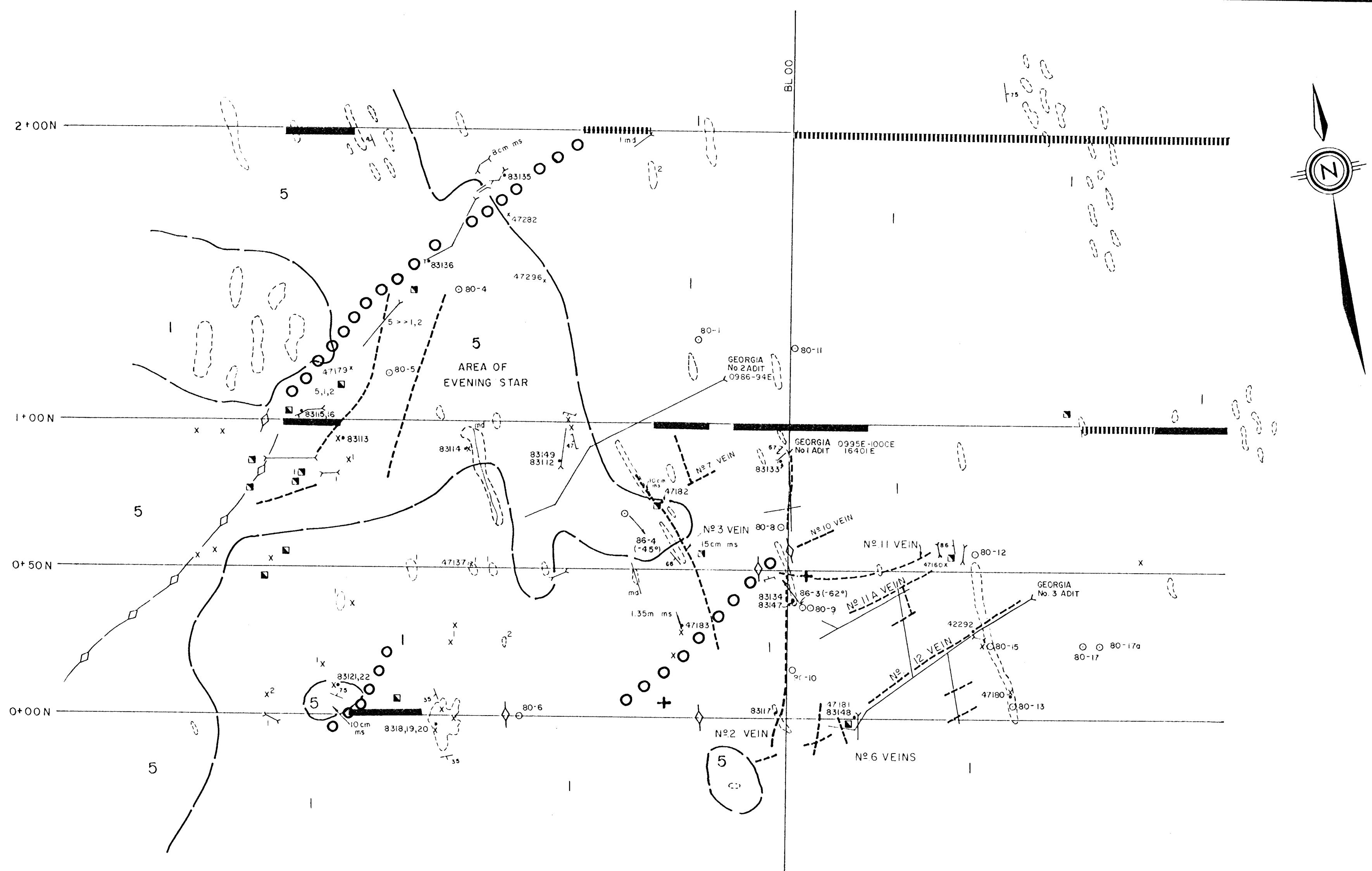


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,743**  
**PART 1 OF 2**

GALLANT GOLD MINES LTD. GEORGIA PROPERTY TRAIL CREEK M.D. NTS 82 F/3,4		
OUTCROP GEOLOGY AND ROCK CHIP SAMPLING - GRID 1		
0 100 200 METRES DATE: JUNE 1986 DRAWN BY: JCH/rwr SCALE 1: 2000 FIGURE: 3		





## LEGEND

CRETACEOUS

- 5 GRANODIORITE: MEDIUM SALT AND PEPPER GREY, MEDIUM CRYSTALLINE;  
GENERALLY EQUIGRANULAR WITH 5% QUARTZ IN GROUND  
MASS; FRESH

4 MONZONITE: MEDIUM GREY, SLIGHTLY GREEN-TONED; MEDIUM CRYSTALLINE,  
GENERALLY EQUIGRANULAR WITH NO QUARTZ VISIBLE

JURASSIC

ROSSLAND GROUP: ELISE FORMATION

3 AUGITE PORPHYRY: VERY COMPLEX UNIT; END MEMBERS: DARK GREY CHLORITIC  
GROUND MASS WITH 10 mm AUGITE AND/OR HORNBLENDE PHENOCRYSTS  
TO 15%; TRANSITIONAL TO AUGITE PORPHYRITIC LITHIC TUFF TO  
AGGLOMERATE AS IN 2

3a HORNBLENDE GRANODIORITE: SALT AND PEPPER GREY, MEDIUM CRYSTALLINE;  
LESS EQUIGRANULAR THAN 5 WITH CHARACTERISTIC BLACK HORNBLENDE  
NEEDLES; GENERALLY FRESH

2 ANDESITE TUFF TO AGGLOMERATE: DARK GREEN WITH LITHIC CRYSTAL COMPONENT;  
OFTEN VERY ALTERED SO FRAGMENTS RARELY VISIBLE

1 SILTSTONE: BLACK TO BROWN-GREY DEPENDING ON VERY FINE BIOTITE CONTENT;  
OFTEN LAMINATED; FINELY-DISSEMINATED IRON SULPHIDES AVERAGE 2-3%

○ 1980 DH  
• ROCK CHIP SAMPLE  
→ ADIT  
□ SHAFT

1986 DDH

图 4-3

222 PRE 1986 VII

[www.industrydocuments.ucsf.edu/docs](http://www.industrydocuments.ucsf.edu/docs)

**STRONGLY ANOMALOUS**

 VEIN ORIENTATION  
 STRIKE & DIP BEDDING  
 FRACTURE CLEAVAGE

----- PROJECTION OF VEIN TRACE

+ VLF-EM CROSS OVER (1986)

| GENIE-EM CONDUCTOR

**STRONGLY ANOMALOUS IP**

**G E O L O G I C A L B R A N C H**  
**A S S E S S M E N T R E P O R T**

**15,743**

PART 1 OF 2

# GALLANT GOLD MINES LTD.

# **GEORGIA PROPERTY**

**DETAILED GEOLOGICAL MAPPING  
AND SAMPLING**

GEORGIA / EVENING STAR. AREA

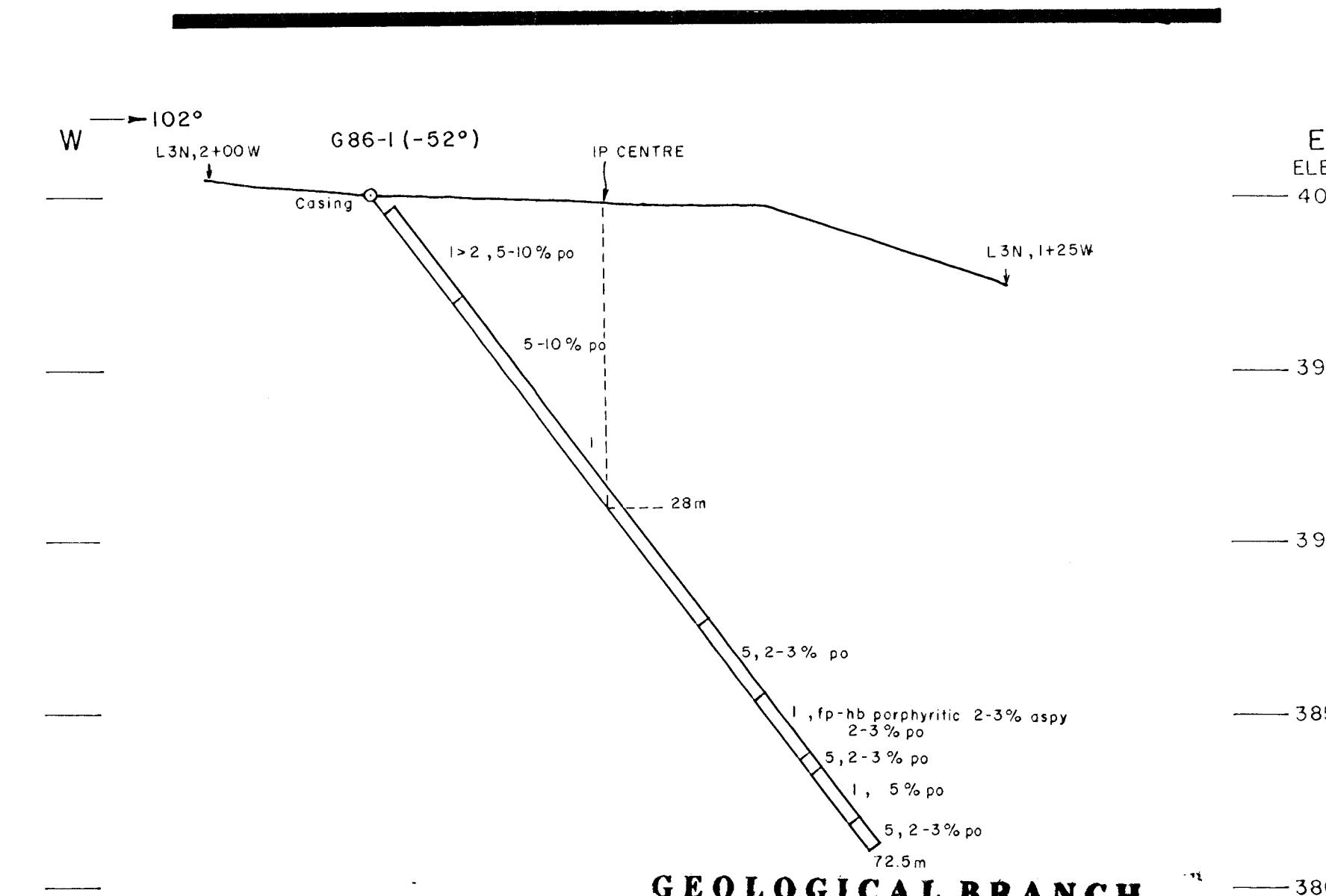
A scale bar with markings at 0, 10, 20, 30, 40, and 50. Below the scale, the word "METRES" is printed.

DATE NOV. 86  
DRAWN JCH RWR

SCALE 1:1000

**FIGURE 5**

CONDUCTORS  
 'IP CENTRE L3+65W  
 GENIE EM CENTRE, NONE  
 VERTICAL DIP



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

CONCLUSIONS

IP LIKELY RESULTS FROM PYRRHOTITE-BEARING SILTSTONES

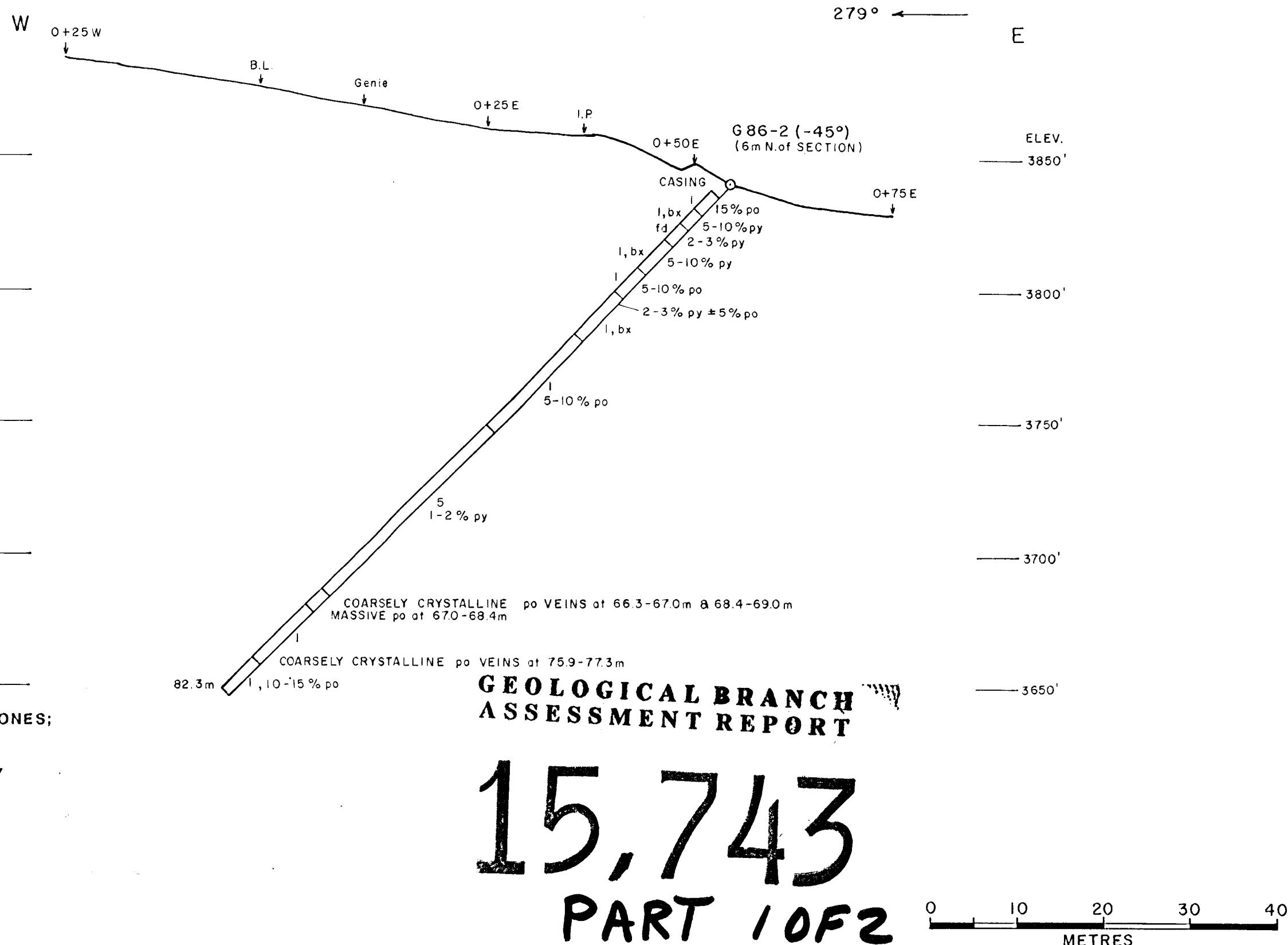
**15,743**  
**PART 1 OF 2**

0 10 20 30 40  
METRES

<u>LEGEND:</u>	
CRETAEOUS	
5	GRANODIORITE
4	MONZONITE
JURASSIC	
ROSSLAND GROUP	
ELISE FORMATION	
3	AUGITE PORPHYRY
3a	HORNBLENDE GRANODIORITE
2	ANDESITE TUFF TO AGGLOMERATE
1	SILTSTONE
fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY ANOMALOUS

GALLANT GOLD MINES LTD.
GEORGIA PROPERTY
TRAIL CREEK M.D.-B.C. NTS:82F/4
VERTICAL CROSS SECTION
DDH G86-1 L3N
BY:J.H./rwr
DATE:JULY 1986
FIGURE: 6.1

CONDUCTORS  
I.P. CENTRE: 0+37.5SE  
GENIE EM CENTRE: 0+12E



CONCLUSIONS  
IP MAY BE EXPLAINED BY po RICH SILTSTONES;  
GENIE CENTRE HIT AT 50m DEPTH,  
HOLE MAY HAVE PASSED UNDER ANOMALY

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,743**  
**PART 1 OF 2**

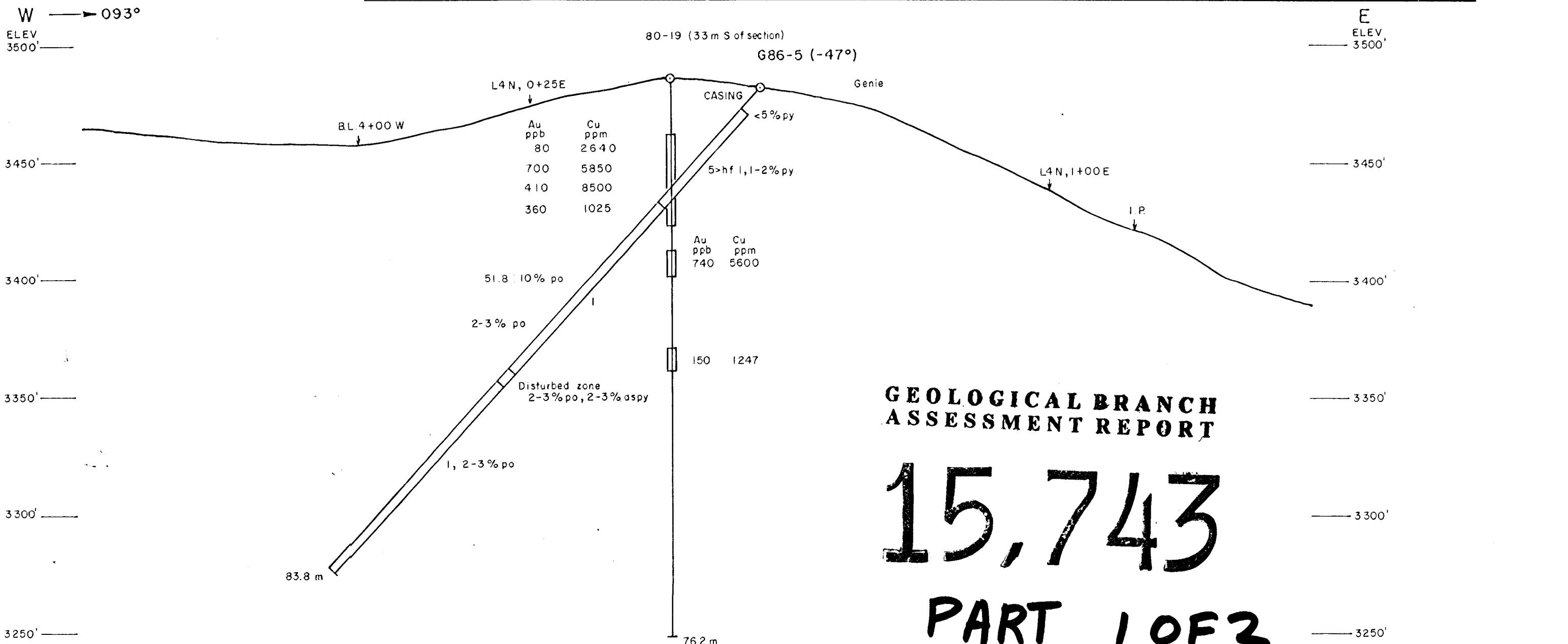
<u>LEGEND:</u>	
CRETACEOUS	
5	GRANODIORITE
4	MONZONITE
JURASSIC	
ROSSLAND GROUP	
ELISE FORMATION	
3	AUGITE PORPHYRY
3a	HORNBLENDE GRANODIORITE
2	ANDESITE TUFF TO AGGLOMERATE
1	SILTSTONE
fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY ANOMALOUS

<b>GALLANT GOLD MINES LTD.</b>
<b>GEORGIA PROPERTY</b>
TRAIL CREEK M.D.-B.C. NTS:82F/4
<b>VERTICAL CROSS SECTION</b>
<b>DDH G86-2 L5N</b>
BY: J.H./rwr
DATE: JULY 1986
FIGURE: 6.2

CONDUCTOR  
IP 1+12E  
GENIE EM 0+72E

CONCLUSIONS

1. MODERATELY ANOMALOUS IP RESULTS FROM SILTSTONES  
CONTAINING VARIABLE Fe SULPHIDES



LEGEND

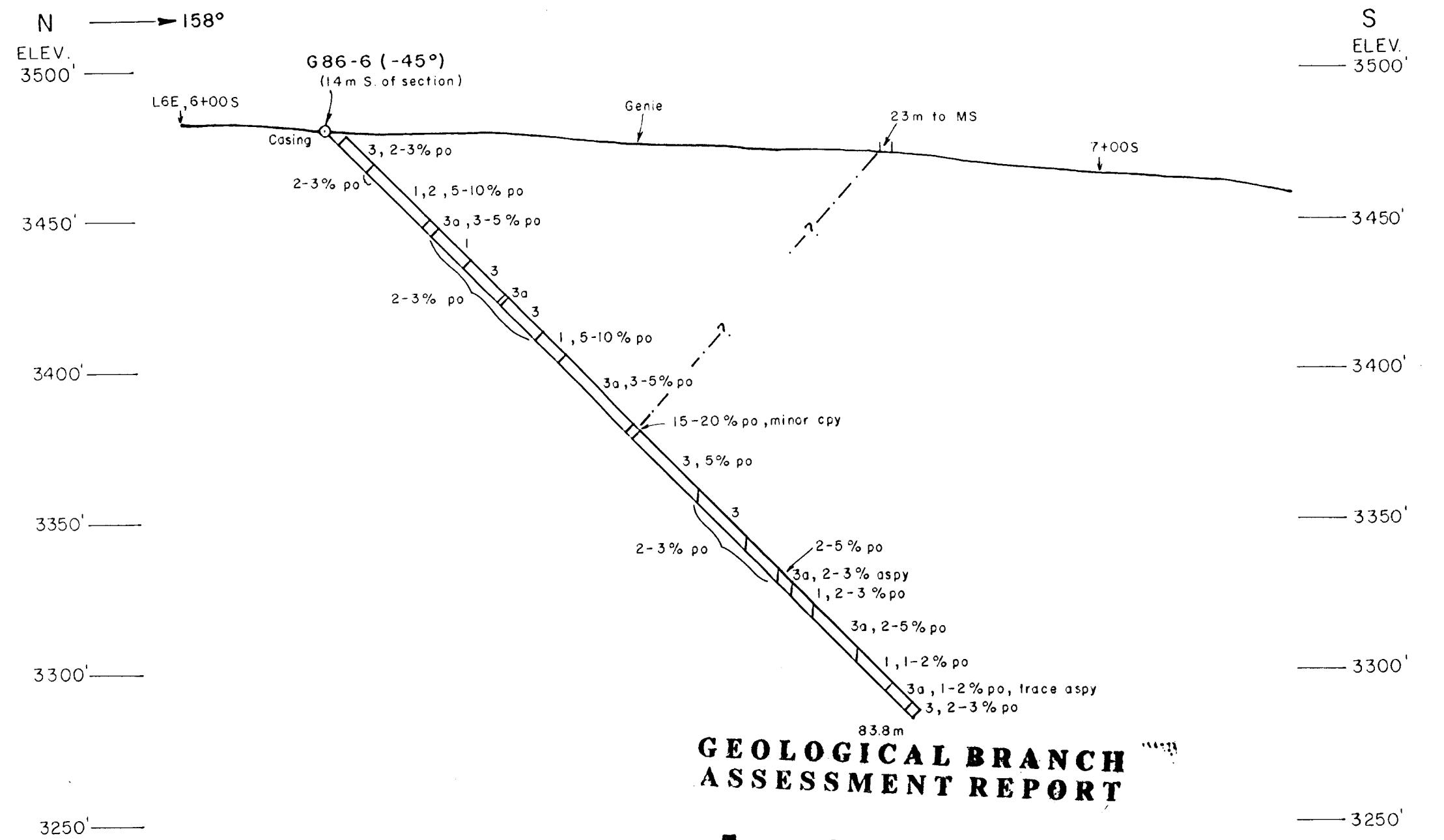
CRETACEOUS	
5	GRANODIORITE
4	MONZONITE
JURASSIC	
ROSSLAND GROUP	
ELISE FORMATION	
3	AUGITE PORPHYRY
3a	HORNBLENDE GRANODIORITE
2	ANDESITE TUFF TO AGGLOMERATE
1	SILTSTONE
fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY ANOMALOUS

GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY  
TRAIL CREEK M.D.-B.C. NTS:82F/4  
VERTICAL CROSS SECTION  
DDH G86-5 L4N  
BY: J.H./rwr  
DATE: JULY 1986  
FIGURE: 6.5

CONDUCTOR  
GENIE EM AT 6+50S

CONCLUSION

1. GENIE ANOMALY UNDERLAIN BY MASSIVE SULPHIDE LENS  
AT 45m IN HOLE



LEGEND:

CRETACEOUS	
5	GRANODIORITE
4	MONZONITE
JURASSIC	
ROSSLAND GROUP	
ELISE FORMATION	
3	AUGITE PORPHYRY
3a	HORNBLENDE GRANODIORITE
2	ANDESITE TUFF TO AGGLOMERATE
1	SILTSTONE
fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY ANOMALOUS

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,743

PART 1 OF 2

0 10 20 30 40  
METRES

GALLANT GOLD MINES LTD.

GEORGIA PROPERTY

TRAIL CREEK M.D.-B.C. NTS:82F/4

VERTICAL CROSS SECTION

DDH G86-6

BY: J.H./rwr

DATE: JULY 1986

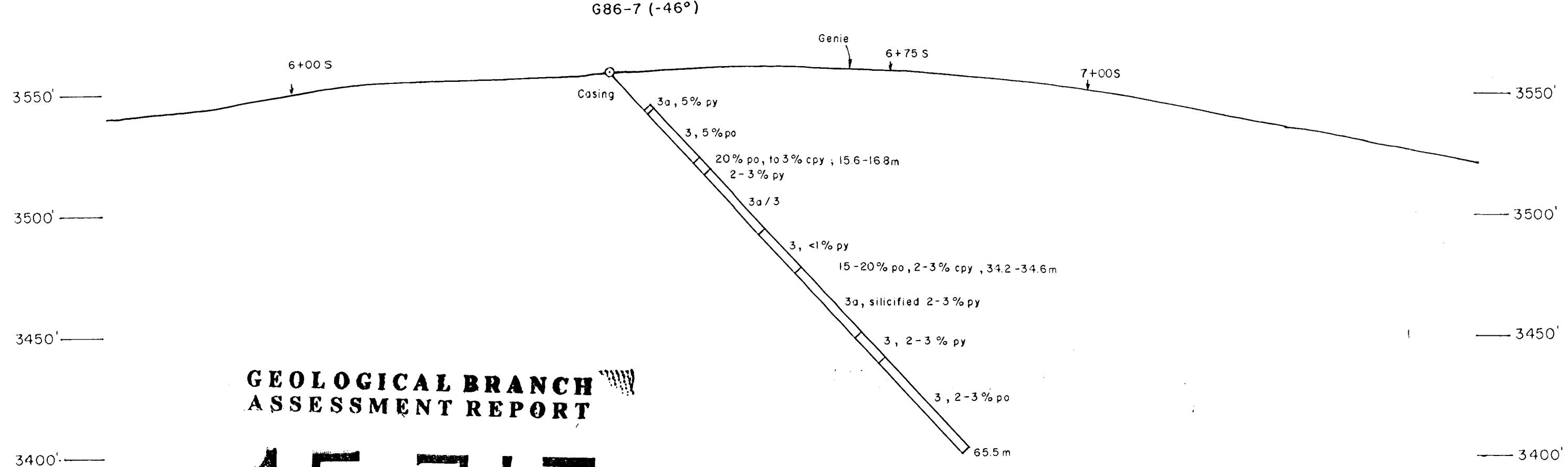
FIGURE: 6.6

CONDUCTOR CENTRE  
GENIE AT 6+70S

CONCLUSIONS

1. GENIE ANOMALY NOT WELL EXPLAINED BY SILICIFIED 3a, 2-3% py
2. BULK OF HOLE WITHIN AUGITE PORPHYRY MAP UNIT

N → 158°  
ELEV.  
3600'



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

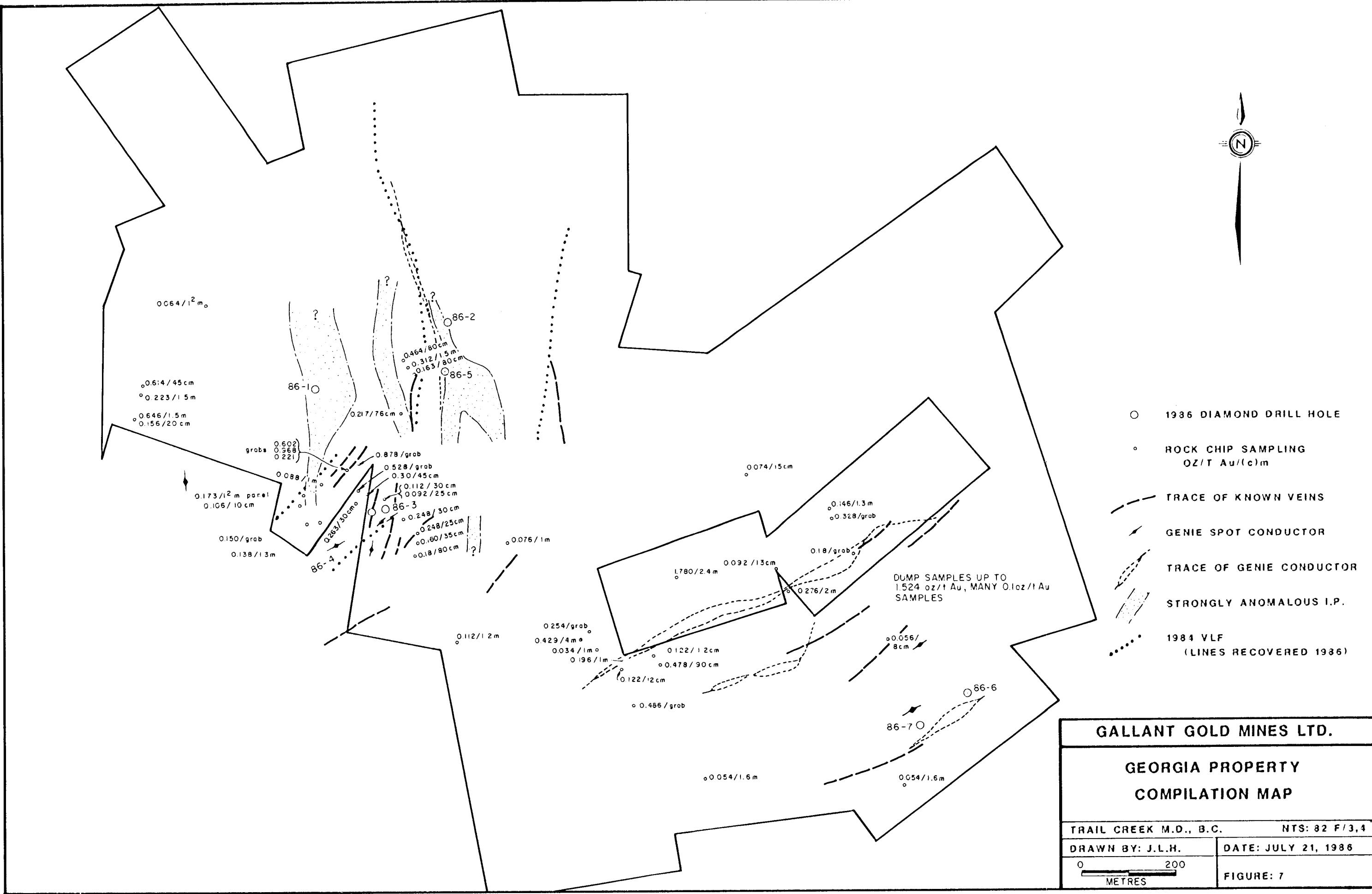
15,743  
PART 1 OF 2

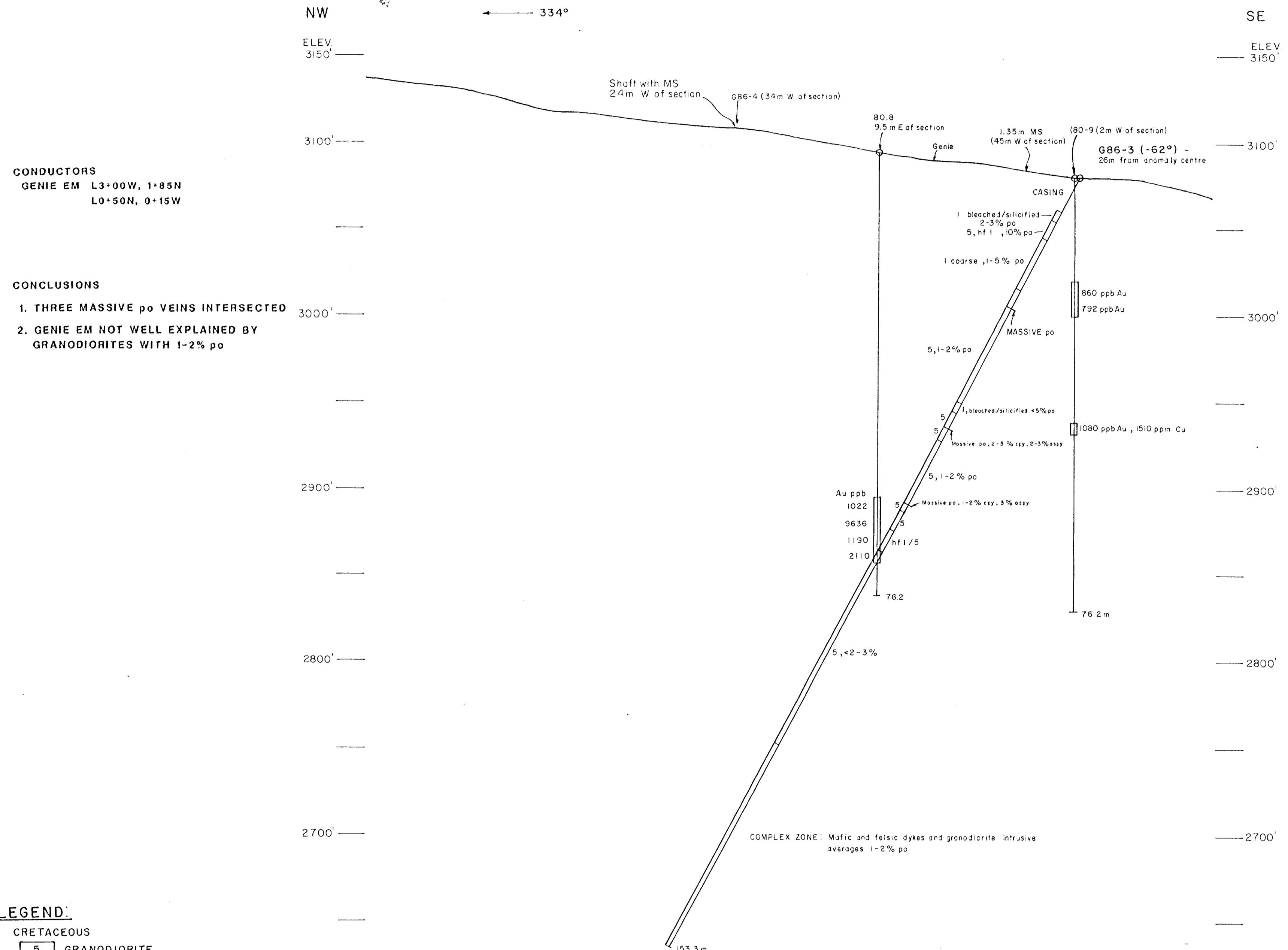
LEGEND:

CRETACEOUS	
5	GRANODIORITE
4	MONZONITE
JURASSIC	
ROSSLAND GROUP	
ELISE FORMATION	
3	AUGITE PORPHYRY
3a	HORNBLENDE GRANODIORITE
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fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY ANOMALOUS

0 10 20 30 40  
METRES

GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY  
TRAIL CREEK M.D.-B.C. NTS:82F/4  
VERTICAL CROSS SECTION  
DDH G86-7 L5E  
BY: J.H./rwr  
DATE: JULY 1986  
FIGURE: 6.7





# **GEOLOGICAL BRANCH ASSESSMENT REPORT**

**15,743**

**PART 1 OF 2**

fd	FELSIC DYKE
md	MAFIC DYKE
bx	BRECCIA
hf	HORNFELSED
hb	HORNBLENDE
MS	MASSIVE SULPHIDE
IP	MODERATELY STRONGLY [redacted]

A horizontal scale bar representing distance in metres. It features numerical markings at 0, 10, 20, 30, and 40. The word "METRES" is centered below the scale.

**GALLANT GOLD MINES LTD.**  
**GEORGIA PROPERTY**  
TRAIL CREEK M.D.-B.C. NTS:82F/4

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**VERTICAL CROSS SECTION**

**DDH G86-3**

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