

# Shangri-La Minerals Limited

87-211-15851

GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

ON THE

DEACON CREEK GROUP OF MINERAL CLAIMS (DEAC PROJECT)

**FOR** 

Owner/Operator:

QUESNEL AREA, CARIBOO MINING DIVISION BRITISH COLUMBIA

NTS 93B/16EAND 93G/1E

NORTH LATITUDE:

WEST LONGITUDE: 122°42' /3'

BY

JAMES S. FALCONER, P.Eng. CHRIS BALDYS, B.Sc. J.C. GRAHAM, B.Sc., M.Eng. SUB-RECORDER RECEIVED

APR 2 1987

VANCOUVER, B.C.

SHANGRI-LA MINERALS LIMITED

FILMED

VANCOUVER, BRITISH COLUMBIA

28 JUNE 1986

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#### SUMMARY

A combined geological, geophysical, and geochemical reconnaissance of the Deac Project claims held by Glider Resources Inc., was conducted by Shangri-La Minerals Limited from April 22 to May 29, 1986 and from June 20th to 24th, 1986. The claims are situate in the Cariboo Mining Division, approximately 15 km east of Quesnel, B.C.

Geological mapping shows that the claims are underlain by alkaline intrusives, andesites and related tuffs and breccias, basalts, debris flows, and argillites. Sulphide and associate gold mineralization is present within the argillites and a syenite stock.

Geophysical studies have revealed the presence of strong northwesterly trending electromagnetic conductors emanating from the intrusive stock which may be attributed to sulphide mineralization. Electromagnetic conductors outlined in an area of volcanics interbedded with argillites may also reflect sulphide mineralization. Magnetic results reflect the various lithologies and geological structure.

Soil geochemistry reveals some anomalous concentrations of gold, copper, and zinc around and within the syenite stock.

It is recommended that a second phase of exploration be undertaken to expand the surveyed area and to assess the grade and geometry characteristics of the target areas and to test them by diamond drilling.

Respectfully submitted at Vancouver, B.c.

Names S. Falconer, P.Eng.

28 June 1986.

# PART A

#### Introduction

From April 22 to May 29, and from June 20 to 24th, 1986, an initial phase of exploration was performed on the Deacon Creek Group of claims. A geological survey was conducted over the Deac 1-10 claims, and magnetometer, VLF-EM and geochemical surveys were conducted over the Deac 2, 3 and 10 mineral claims.

The results of these surveys are presented in this report.

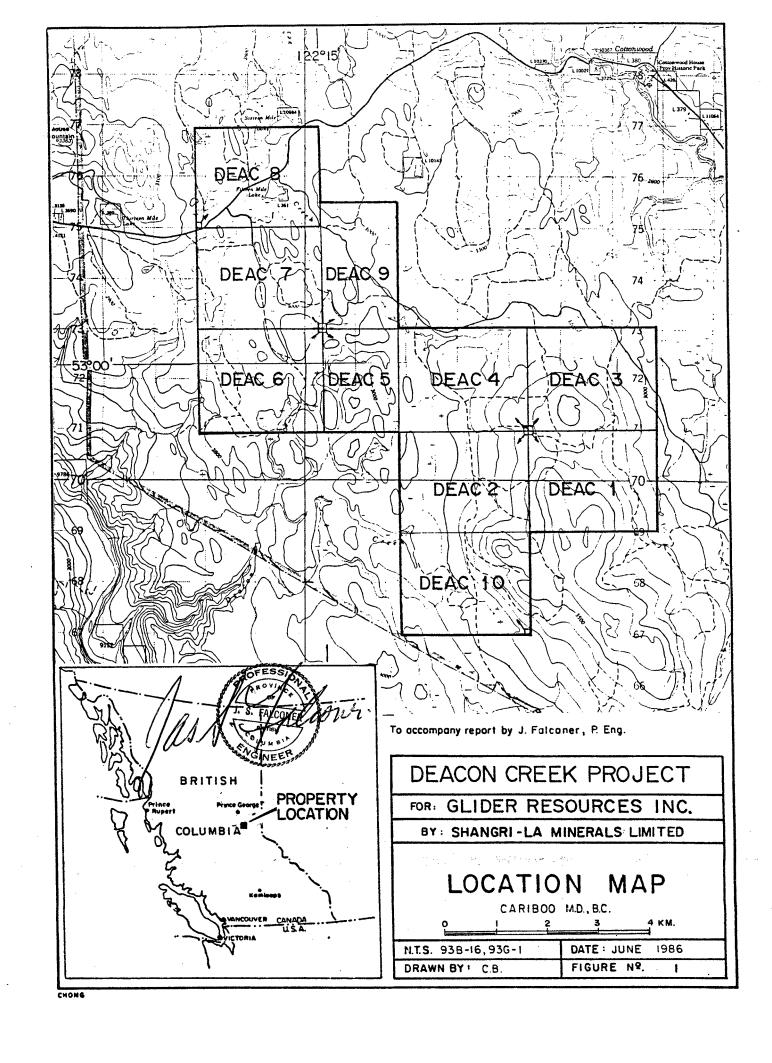
# **Property Status**

The Deacon Creek Group consists of ten modified grid system claims. Particulars are as follows:

NAME		RECORD NO.	MINING DIVISION	ANNIVERSARY	AREA
Deac	#1	7592	Cariboo	22 Apr/87	20 units
Deac	#2	7591	Cariboo	22 Apr/87	20 units
Deac	#3	7589	Cariboo	22 Apr/87	20 units
Deac	#4	7590	Cariboo	22 Apr/87	20 units
Deac	#5	7588	Cariboo	22 Apr/87	12 units
Deac	#6	7586	Cariboo	22 Apr/87	20 units
Deac	#7	7585	Cariboo	22 Apr/87	20 units
Deac	#8	7584	Cariboo	22 Apr/87	20 units
Deac	#9	<b>75</b> 87	Cariboo	22 Apr/87	15 units
Deac	#10	7653	Cariboo	5 May/87	20 units

# Location, Access, Topography

The claims are located approximately 15 km east of Quesnel, B.C. Access is best via Highway 26 from Quesnel, B.C. Numerous roads and tracks traverse the



property.

The claims cover relatively flat lying ground, straddling Deacon and Frye Creeks, which flow into the Quesnel and Cottonwood Rivers. Elevations range between 850 and 1065 metres above sea level.

# History

The Quesnel area was first explored by placer miners in the mid-1800's, and since then placer gold has been winnowed from many of the creek beds. Although no published history on the Deac claims is available, there are numerous copper and gold showings in the area.

Chalcopyrite, tetrahedrite, and bornite carrying precious metals, are present on nearby Mouse Mountain (4 km west of Deac #9). The mineralization occurs in and adjacent to syenitic intrusive rocks. A small shipment of ore containing 1,129 kg of copper, 31 gms of gold, and 311 gms of silver was made in 1956.

Gabriel Resources Inc. is currently developing their Abhau property, some 20 km to the north of the Deac claims. Here, stringer and massive sulpides coincident with VLF-EM conductors are present in cherty argillite within an augite porphyry flow. Mineralization consists of pyrite, pyrrhotite, chalcopyrite, sphalerite, galena, and associated gold and silver.

#### PART B SURVEY SPECIFICATIONS

#### Grid

The survey grid was controlled by four north-south baselines, each one 4 km long. The LCP of the Deac 1, 2, 3, and 4 claims was used as the benchmark. Crosslines were located at right angles to the baselines every 100 m and stations were marked with Tyvex tags every 25 m using compass, clinometer and hip chain. This type of grid is anticipated to remain usable for several years and will

facilitate follow-up studies.

A total of 16 km of baseline and 102.5 km of crossline were established.

## VLF-EM Survey Method.

The survey was conducted using two Sabre Electronics, Model 27, V.L.F. Electromagnetometers. This instrument acts as a receiver only. It utilizes the primary electromagnetic fields generated by the United States Navy V.L.F. marine communication stations. These stations operate at frequencies between 15 and 25 KHz and have a vertical antenna current resulting in a horizontal primary field. Thus, this V.L.F.-E.M. measures the dip angle of the secondary field induced in a conductor.

For maximum coupling, a transmitter station located in the same geological strike and/or the strike of possible conductors is selected since the direction of the horizontal eletromagnetic field is perpendicular to the direction of the transmitting station. In this case, the transmitter at Seattle, Washington was used.

Readings were taken at 25 m intervals along the crosslines of the survey grid. The data was filtered as described by D.C. Fraser, Geophysics Vol. 34, No. 6. The advantage of this method is that it removes the DC and attenuates long spatial wavelengths to increase resolution of local anomalies. It also phase shifts the dip angle by 90° so that the cross over and inflections are transformed into peaks that yield contourable quantities.

The VLF-EM survey results are presented on Figure 2. A total of 102.5 line-km were surveyed.

# Magnetometer Survey Method

The survey was conducted using an EDA Instruments Ltd. Omni Plus PPM-350

Proton Precession Magnetometer and Base Station Magnetometer, and a Scintrex MP-2 Proton Precession Magnetometer. Both field magnetometers were used on separate parts of the grid. These instruments measure the magnitude of the total magnetic field of the Earth. Corrections for diurnal variations were made using the base station magnetometer, and values were calculated relative to the base station locality. Diurnal variations ranged between 17 and 38 gammas during the survey period.

Readings were taken at 25 m intervals along the crosslines of the survey grid. A total of 102.5 line-km were surveyed.

The survey results are presented on Figures 3a and 3b.

# Geochemical Survey Method

A total of 1057 soil samples, 7 heavy mineral concentrates, and 19 rock samples were collected from the Deac claims. Two rock samples (DK16R, DK15R) and one stream sediment sample (DK02T) were collected outside of the claim block (300 m north of the Dec #9, 300 m west of the Deac #9 and 800 m west of the Deac #10 claim line, respectively. Soil samples were taken from the "B" horizon at depths of 15-50 cm using a cast iron mattock. Samples of no less than 200 grams were placed in Kraft paper gusset bags and sun dried before selection and shipment to the laboratory. The heavy mineral concentrates were collected by screening and panning a 10 gallon sample down to a 1 kg sample using a No. 8 mesh screen. These were further screened using a No. 20 mesh at the laboratory. A total of 310 of the soil samples, as well as the 7 heavy mineral concentrates and 21 rock samples were analyzed by Acme Analytical Laboratories Ltd. using an induction coupled plasma spectrophotometer and atomic absorption (for gold). Samples not analyzed are being warehoused by Shangri-La Minerals Limited.

#### PART C GEOLOGY

# Regional Geology

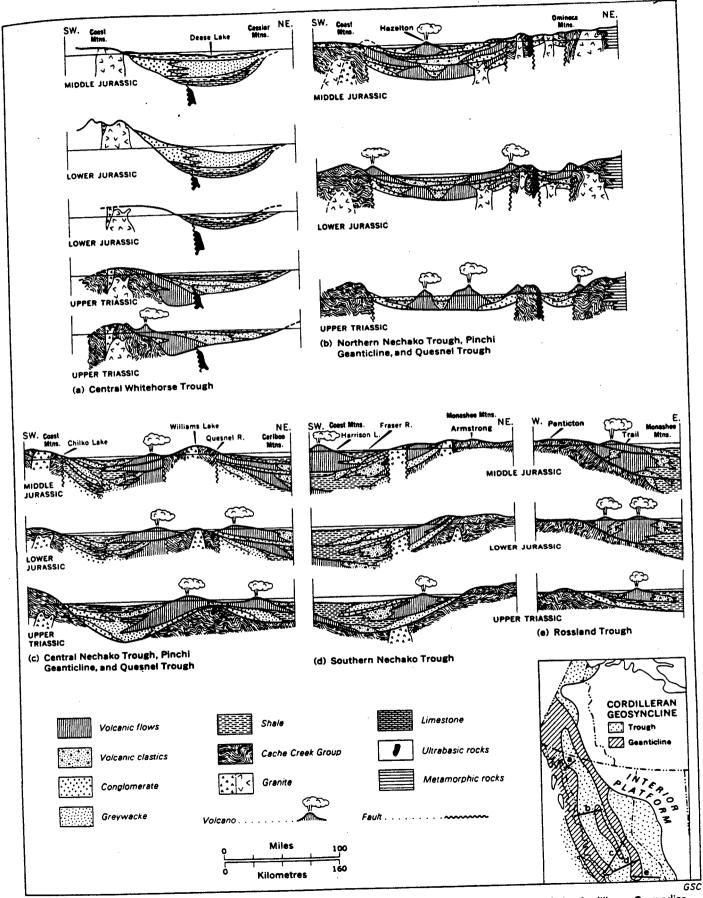
The local geologic units and structures on the property are a part of the Quesnel Belt, also referred to as the Quesnel Trough, which constitutes a subordinate tectonic division of the Intermontane Belt. It is embraced by the Pinchi Fault to the west and the Omineca Crystalline belt to the east. The Pinchi Fault is probably a long-lived feature; it contains slices of blue schist and eclogite of Late Triassic age and may have been active as a strike-slip fault late in the Mesozoic Era.

In the Quesnel Belt, Early Paleozoic and Precambrian rocks are exposed beneath widespread Upper Triassic Takla Group basic to intermediate volcanic flows and pyroclastic rocks and argillaceous sedimentary rocks. This arc-type volcanism persisted into the Early Jurassic in the south (Figure 5). Coeval granitic plutons are spatially related and include porphyry copper deposits. The Lower Jurassic is the last marine sequence as uplift coincident with the rise of the Omineca Crystalline Belt excluded the sea from the area. Mid-Cretaceous acidic plutons occur along the eastern side of the belt and extend into the Omineca Crystalline Belt. Block faulting with northwesterly and northeasterly trends and/or folding is characteristic.

#### Surficial Geology

An abundance of glacial sediments obscures bedrock exposure on the property. The area was overridden by the Fraser ice sheet which in its final stages entered the area from the west and south (Coast Mountain Ice) and from south and southeast (Cariboo Mountain Ice). Glacial features – particularly drumlins, glacial grooves, eskers and esker complexes, and melt-water channels – are abundant throughout the area delineating the direction of flow N10°E. Thickness of glacial silt, clay, sand and gravel varies from 1 m on the east to tens of meters in the central and west part of the property.

# REGIONAL STRUCTURAL GEOLOGY



Diagrammatic restored sections across Whitehorse, Nechako, Quesnel, and Rossland Troughs of the Cordilleran Geosyncline from Upper Triassic to Middle Jurassic times (Souther and Armstrong, 1966; Campbell, 1966).

# Local Geology

Five general types of rock units were identified in the mapped region of the property. These included alkaline intrusives, andesites and related tuffs and breccias, basalts, debri flows and argillites. The sequence of the volcanic and sedimentary rocks is a part of the Early Mesozoic Takla Group.

# Syenite Porphyry and Related Rocks

In the southeastern portion of the grid, the syenite stock outcrop occurs as a rocky hill that dominates the area. The composition of the intusive ranges from syenite to monzonite with quartz syenite as the prevailing type. The rock is generally coarse-grained and possesses a very characteristic porphyritic texture of large elongated phenocrysts of feldspar. Alkali feldspar is the main constituent of the rock. A little quartz (up to 10%), plagioclase and alkaline types of dark minerals (aergine, alkali amphibole) are present. On the edges of the stock rocks with trachitic texture were encountered. The presence of large rectangular phenocrysts of sanidine in a light greenish aphanitic groundmass indicates relatively rapid cooling with respect to the syenite stock. The trachyte may form narrow dykes and sills around the stock. Other intrusive members on the property include diorite and monzonite. A small exposure of these rocks was mapped approximately 200 m north of the main outcrop. The monzonite is a medium-grained, green to grey rock containing xenoliths of volcaniclastic rocks and up to 5% sulphides. This rock changes gradationally to a dark diorite that varies from medium-grained equigranular to porphyritic with plagioclase phenocrysts. They may also contain inclusions of altered volcaniclastic rocks. Syenite stocks and plugs are most likely coeval to Takla Group rocks whereas monzonites and diorites are later intrusions of Early Cretaceous age? (Naver Intrusions).

#### Andesites and related Tuffs and Breccias

Volcanic rocks in the area are mainly andesites, andesite porphyries, tuff breccias, and crystal-lithic tuffs some of which have clearly been hornfelsed and variably fenitized. Andesitic rocks are believed to be the main geologial component on the property. All of the outcrops in the northwest part of the claim block were mapped as andesite porphyries, tuffs and breccias. No attempt has been made to differentiate andesitic rocks on the property becuse of the lack of rock exposure. They are part of the Upper Triassic? and Lower Jurassic? package of the Takla Group along with volcanoclastics, basalts and argillites which were recorded on the property.

Andesites are dark green and dark purple to black, often possessing a porphyritic texture. One of the thin section specimens is a hornblende-plagioclase porphyritic andesite; the hornblende is pseudomorphic after original pyroxene phenocrysts. Another volcanic flow rock is an altered andesite with up to 15-20% secondary pyrrhotite. It contains mainly fine-grained, altered? plagioclase and clinopyroxenes. Andesitic tuff breccias have a glassy groundmass with scattered clinopyroxene crystals and big lithic fragments of volcanics. This is a typical texture of rocks formed in an explosive environment. The rock also has 10% secondary carbonates of hydrothermal origin.

A few thin section descriptions indicate volcanosedimentary environment for rocks that contain lensoidal fragments of greywacke (10%), pyroxene phenocrysts (15%), white grains of plagioclase (30-40%), chlorite (5-10%), opaque minerals and fine-

grained glassy groundmass (5-10%). This rock is an andesitic crystal-lithic tuff and is quite common in the northern part of the claim block. Some of the hornfelsed rocks on the contact with the syenite stock are either fine-grianed volcaniclastics or bedded silty greywacke that were metamorphosed by the intrusive.

#### Basalts

The occurrence of basalts on the property is limited to one outcrop in the southwest portion of the grid. The rock is black, dense, with no minerals identifiable in hand specimen. Typical columnar jointing is present.

#### Debris Flow

Twenty meters north from the basalt outcrop, an exposure of debris flow was mapped. Contact between these two units has an approximately NW-SE direction. The rock consists of big clasts of lava bombs, pumice and other volcanics cemented by a soft argillaceous mass of sedimentary origin (mudflows?).

# Argillites

Argillites are a fairly abundant rock type on the west part of the property. They cover most of the Deac #4 claim and extend to the western portion of the grid. They commonly occur as intercalations within andesitic volcanics trending in a northwesterly direction.

The term "argillite" is being used for black, fine-grained, detrital rocks of argillaceous character. No thin sections have been analyzed, so very little can be said about their mineralogy. It appears, though, that they are cherty on the grid area and become

more black and softer in the northeastern part of the claim block due to a higher content of carbonaceous matter. They generally have a well-marked bedding plane fissility.

#### Structure

The lack of exposure on the property has hindered attempts to determine geological structures. However, detailed investigaton of the large outcrop of syenite stock has outlined two shear zones on the southeastern corner of the grid. One fault trending roughly 340°-350° follows a ravine, and contains slices and patches of altered tuffs and volcaniclastic rocks of considerable size (up to 50 m diameter). Minor amounts of silicified fault(?) breccias were found in the ravine. The structural origin of these "windows" of rocks from greater depth within the intrusive stock is probably quite complex and has not been clearly understood by the author. A second fault strikes 330° and dips to the northeast. Alteration of the syenite, and parallel and diagonal quartz veining are associated with this shear.

Float of fault breccia containing fragments of cherty argillites was found on the southwestern portion of the grid. Assuming that the fault follows a ravine in that area, it would strike NNW-SSE. Strongly fractured and sulphide mineralized volcanics occur in outcrop close to the assumed fault line. Signs of tectonic movements were recorded in outcrops of argillites and andesitic volcanics on the northeastern part of the grid, on Deac #4 and west of Deac #9 claim. Strongly fractured zones, slickensides, limonite, hematite and sometimes calcite fracture fillings were present, indicating displacements mainly in a NW-SE direction.

#### Alteration and Mineralization

Four types of alteration are present on the property. These include silcification, fenitic alteration, K-silicate alteration and carbonatization.

Silicification occurs in the form of quartz veins and pervasive replacement of groundmass in volcanic and volcaniclastic rocks. Barren, grey, coarse-grained

quartz veins are common within the syenite stock, but they are not a product of hydrothermal processes. Quartz veins associated with the shear zones in the southeastern part of the grid were hydrothermally altered. These quartz veins, less than 8 cm wide, are limonite-stained, vuggy, and medium to coarse-grained. Wallrocks have undergone strong alteration. There is significant development of K-feldspars and a little amount of clay and tourmaline(?). The rocks are moderately limonitic and yellowish stained. Arsenopyrite occurs occasionally. Drusy quartz with pyrite cubes, as well as blebs of galena, were found in float among syenitic rocks.

Patchy volcanics and volcaniclastics, associated with another fault in this area, have a considerable amount of secondary silica that replaces a fine-grained matrix (up to 50%). Sericite and saussurite, as alteration products of feldspars, may also be present. Green pyroxene (aergine) occurs in the form of tiny veinlets and indicates sodium metasomatism in a contact aureole of the syenite stock (fenitic alteration). This type of alteration is more likely associated with thermal metamorphism since most of the rocks from this area have been clearly hornfelsed, exhibiting textures of static recrystallization. Finely disseminated pyrite and pyrrhotite comprise up to 15-20% of the rock volume in this area. A small amount of galena has also been found.

Carbonatization occurs as fracture fillings and irregular veinlets in andesitic tuffs and breccias, especially in the shear zones. Minor amounts of magnetite, hematite and manganese oxides may also be present. Carbonate alteration (15-20%) of andesites in the form of interstitial calcite filling angular spaces between minerals was recorded during thin section studies.

Of the 21 rock samples collected and analyzed, 7 yielded values greater than 30 ppb Au, including two with values of 1020 and 1500 ppb Au.

Samples from the area of altered and sheared rocks within the syenite stock, in the southeastern corner of the grid, returned only slightly increased values of gold with the best sample from the hanging wall of the fault (156 ppb Au - sample DK

DKO7R).

The best samples were collected just off the northern edge of the grid (1020 ppb Au-DK16R). Sample DK11R was a strongly silicified volcanic(?) rock with pyrite and arsenopyrite mineralization. Sample DK16R was strongly sheared, silicified and limonite/hematite stained andesite or argillite with, some secondary carbonate and sericite(?).

Rock samples on the property contain high values of Cu and Zn. The highest values were 4323 ppm (0.43% Cu) (Sample DK11R) and 2705 ppm (0.27% Zn) (Sample DK18R).

# Discussion of Geology

There are three areas of interest indicated by the results of the geological investigation.

The first area of interest is centered around and south of rock sample DK16R, which yielded the highest gold values encountered in the analyses of the rock samples - 1500 ppb. This area is designated as Target 1 on the Target Locations Map (Figure 8). No bedrock was observed in this area, but the float observed was altered and sheared. It is possible that there is a mineralized fault zone in this area which contains gold.

The second area of interest (Target 2) includes the northeastern portion of the grid area. Two float samples collected within the target area show significant gold values - 1020 and 50 ppb (DK11R and DK18R, respectively). A few bedrock exposures observed indicate that the area is underlain by interbedded andesites and argillites with remnants of banded sulphide mineralization, indicating concentrations of sulphides at depth.

The third area of interest (Target 3) is in the southeastern corner of the grid area, which is dominated by a syenite stock. There are two N-S

trending shear zones present (see Figure 4b), with alteration zones. Volcanic rocks are associated with the eastern shear zone, which is occasionally quite heavily mineralized (DKO9R, 15-20% pyrrhotite, 30 ppb Au). The western shear zone showed significant gold values (DKO7R, 156 ppb Au; DKO8R, 47 ppb Au). A sample of mineralized volcanic rock between the two shear zones also showed a significant gold value (DK10R, 5-10% pyrrhotite, 58 ppb Au). The faults seem to have been conduits for mineralizing fluids which carried gold.

## Discussion of Geophysical Results

# **VLF-EM Survey**

There are several quite strong northwesterly trending VLF-EM conductors on the property. The southeast corner of the grid (Target 3) is particularly interesting, with strong conductors emanating from the vicinity of the syenite stock. The conductors trend along the strike of the shear zones observed in the stock (see Discussion of Geology, above), and likely indicate structures and/or mineralization associated with the shear zones. From the length of the major conductor in the southeast corner, it seems likely that one of the shear zones extends northwesterly from the stock approximately 1 km.

The northeast corner of the grid (Target 2) also has strong conductors which trend northwesterly. The rock types there are believed to be andesite interbedded with argillite, with remnants of banded sulphide mineralization. The northwesterly trend of the conductors probably reflect the strike of bedding planes.

#### Magnetometer Survey

The values of the magnetic field strength measured over the grid

area vary in general from about 57,600 to about 58,200 gammas - a fairly moderate range of 600 gammas. The data show (Figure 3a) a pronounced regional gradient trending from a low in the southwest to a high in the northeast, with several strong local highs and lows in between. One of the strongest highs corresponds to a basalt outcrop (1800 W, 1800 S). The geologic interpretation of a fault in the southwest is supported somewhat by the fairly abrupt northwesterly trending 100 gamma change between about 1600 - 1700W from L1800S to L2700S.

The general magnetic low in the southwest corresponds to an area with one outcrop - either a volcanic or a volcaniclastic - while the high in the northeast corresponds to an area thought to be composed of andesite with evidence of banded sulphides interbedded with argillite. The northnorthwesterly trending features in the northeast probably reflect the strike of the bedding.

The anomalously high values in the southeast correspond to an intrusive stock, composed primarily of syenite but with some diorite and quartz monzonite, with mineralized volcanics. The magnetic highs are probably due to the presence of pyrrhotite. This is in the Target 3 area.

#### Discussion of Geochemical Results

The soil geochemistry has located one area of weak to moderate gold anomalies in the southeastern portion of the grid (Fig. 6a) in the Target 3 area. Of the samples collected in this area, ll showed greater than 20 ppb Au, including 5 samples values with greater than 100 ppb Au. This area is underlain by the syenite stock in contact with volcanic and sedimentary rocks. The anomalous values are erratic and there seems to be no obvious correlation with the pyrrhotite-rich alteration zone in the southeastern corner. However, two anomalous values follow the shear zone where quartz veining and strong potassium silicate alteration was observed. Other values are scattered along the contact of the intrusion.

Geochemistry results have also shown increased content of zinc and slightly anomalous values of copper around and within the syenite stock (Fig. 6c,6d).

Values of arsenic and antimony are below the anomaly range and the maximum silver content was 1.1 ppm (Fig. 6b).

Since only 310 soil samples were analyzed out of 1057 collected on the property, no finite conclusions about soil geochemistry can be drawn. The anomalous values in the area of the syenite stock in particular may be a part of a greater zone.

#### PART D

#### Conclusions and Recommendations

There are at least three areas that have potential for precious metal mineralization on the property. These are shown on the Target Location Map (Figure 8).

# Target 1

The Deac #9 claim, where altered and sheared rocks in float just north of the property produced the highest rock analysis values of the program (1500 ppb Au).

# Target 2

The northeast corner of the grid. Strong VLF-EM conductors and magnetic anomalies were outlined by geophysical surveys. The rocks there are interbedded andesites and argillite, with remnants of banded sulphide mineralization. One float sample produced 1020 ppb Au and 0.54% Cu.

# Target 3

The southeast corner of the grid. Generally anomalous values of Au, Zn and Cu'in soils and rocks and strong VLF conductors emanating from the vicinity of the intrusive stock make this area particularly interesting.

The target areas have not been numbered on the basis of priority or potential.

It is recommended that the present survey grid be expanded in order to conduct magnetic, VLF-EM, and geochemical surveys over a portion of the remainder of the claims and to locate the source of the anomalous float found in the area. Soil samples currently held in storage should also be analyzed.

An induced polarization and resistivity survey over the northeast and southwest portions of the present survey grid would give further definition to the zones of interest found there. Favourable locations should then be trenched (in areas of shallow overburden) and tested by a number of short drill holes.

# Estimated cost of Proposed Exploration Program

Diamond Drill Tests, allow Expansion of Grid, say VLF-Em Survey, say Magnetometer Survey, say Soil Sampling and Analyses - say 200 samplees at \$20/sample	\$	50,000 3,000 8,000 8,000 4,000
Geochemical Analyses on selected previously		
collected soil samples - say 200 samples		2 500
at \$12.50/sample		2,500
Induced Polarization and Resistivity Survey, allow		12,000
Geological Support, allow		7,000
Trenching, Bulldozing, allow		8,000
Assays, allow		10,000
Engineering, Supervision, Report, allow		7,500
Contingencies, say		5,000
Total:	\$ ==	125,000

Contingent upon favourable results from the proposed exploration program, additional exploration work and diamond drilling will be necessary in order to determine geometry and grade characteristics of the best target areas. A sum of up to \$ 250,000 should be allocated for the next phase of exploration.

Respectfully submitted at Vancouver, B.C.

S. FALCONER

James S. Falconer, P.Eng.

28 June 1986.

#### REFERENCES

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Economic Geology Report No. 1 Ch. VIII/Geology of Western Canada

Carter, N.C. (August 17, 1985)

Geological Report on the Government Creek, Yardley Lake and Abhau Properties Gabriel Resources Inc. Prospectus APPENDIX A

COST BREAKDOWN OF PHASE I PROGRAM

# APPENDIX A

# COST BREAKDOWN OF PHASE I PROGRAM

Baseline establishment: 16 km @ \$450/km	\$ 7,200.00
Crosslines: 102.5 km @ \$100/km	10,250.00
VLF-EM Survey: 102.5 km @ \$150/km	15,375.00
Magnetometer Survey: 102.5 km @ \$150/km	15,375.00
Geological Mapping & Sampling:	3,000.00
Heavy Mineral Sampling: 7 samples @ \$150/each	1,050.00
Soil Sampling: 1057 samples @ \$7.00/sample	7,399.00
Thin Section preparations and descriptions: 11 @ \$75/each	825.00
Geochemical Analyses: 310 soils @ \$10.75 21 rocks @ \$14.75 6 platinum assays @ \$8.00 each 7 heavy mineral samples @ \$26 1 stream sediment sample @ \$14.75	3,332.50 309.75 48.00 182.00 14.75
Computer Generated Geophysical Survey Colour Maps	1,500.00
Report preparation, Drafting & Copying	2,000.00
Engineering and Interpretation	2,000.00
Total cost:	\$ 69,861.00

APPENDIX B
CERTIFICATES

#### CERTIFICATE

- I, James Selkirk Falconer, of Vancouver, British Columbia, do hereby certify:
- I am a Consulting Professional Engineer to Shangri-La Minerals Limited, 200-675 West Hastings Street, Vancouver, British Columbia, V6B 4Z1.
- 2) I am a Registered Professional Engineer in the Province of British Columbia, Alberta and Ontario.
- I graduated with a degree of Engineer of Mines from the Colorado School of Mines in 1969.
- 4) I have practised my profession for seventeen years.
- 5) This report is based on a personal property examination conducted on June 2, 1986 and on an evaluation of privately and publicly held data pertaining to the said property, as well as field data collected by a Shangri-La Minerals Limited crew.
- I hold no direct or indirect interest in the property described herein, or in any securities of Glider Resources Inc., or in any associated companies, nor do I expect to receive any.
- 7) This report may be utilized by Glider Resources Inc. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

lames S. Falconer

28 June 1986

#### CERTIFICATE

I, James Campbell Graham of the City of Burnaby in the Province of British Columbia, do hereby certify:

- I am a Consulting Geophysical Engineer with the firm of Shangri-La Minerals Limited at 200-675 West Hastings Street, Vancouver, B.C., V6B 4Z1.
- I graduated in 1985 from the Colorado School of Mines, Golden, Colorado, with a M.Eng. in Geophysical Engineering and in 1982 with a B.Sc. in Geophysical Engineering.
- 3) I have been involved in numerous mineral exploration programs since 1975.
- This report is based upon fieldwork carried out by this author and a Shangri-La Minerals Limited crew in May and June 1986.
- I hold no direct interest or indirect interest in the property or in any securities of Glider Resources Inc., or in any associated companies, nor do I expect to receive any.

This report may be utilized by Glider Resources Inc. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

James Campbell Graham, B.Sc., M.Eng.

27 June 1986

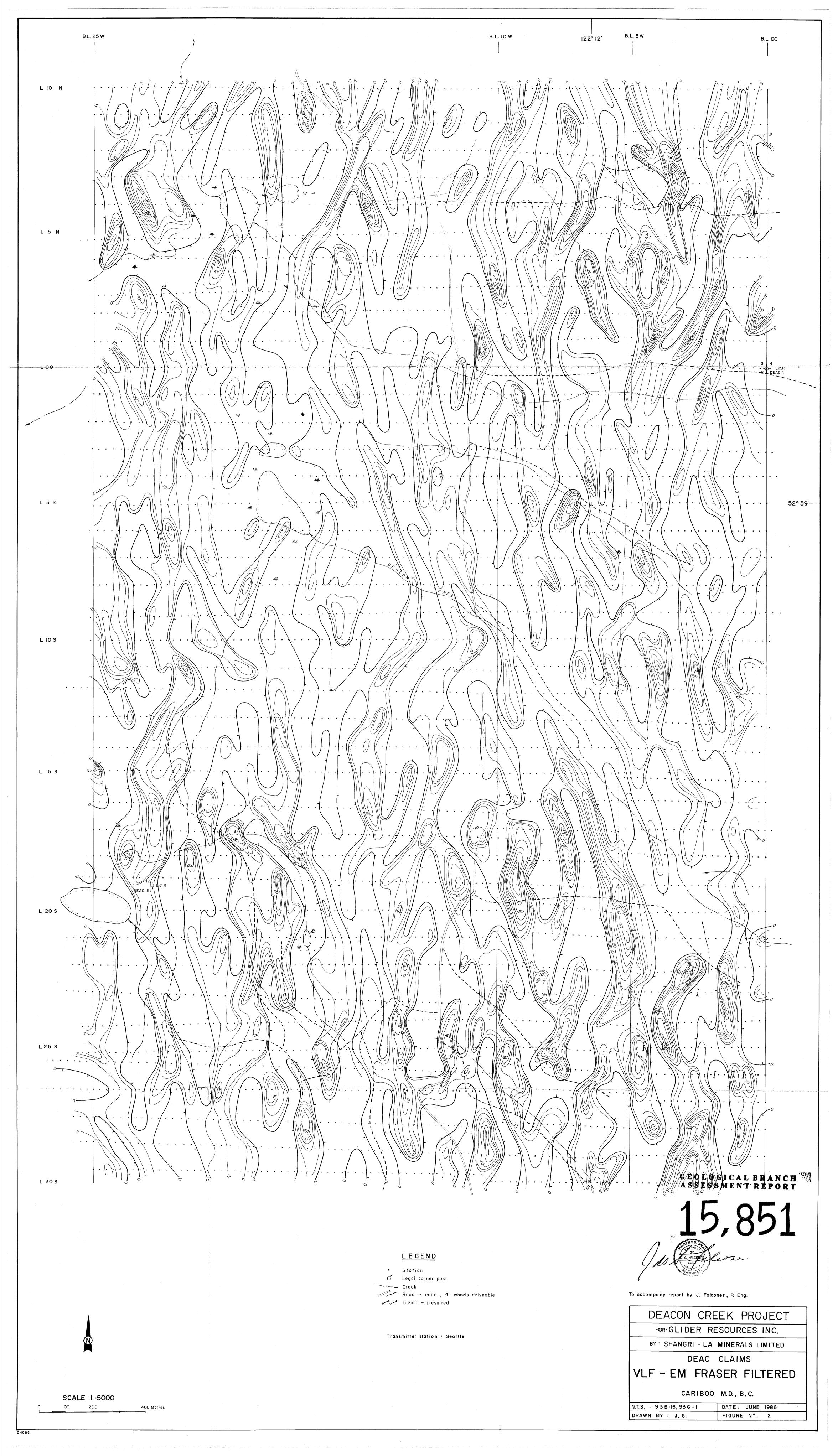
## CERTIFICATE

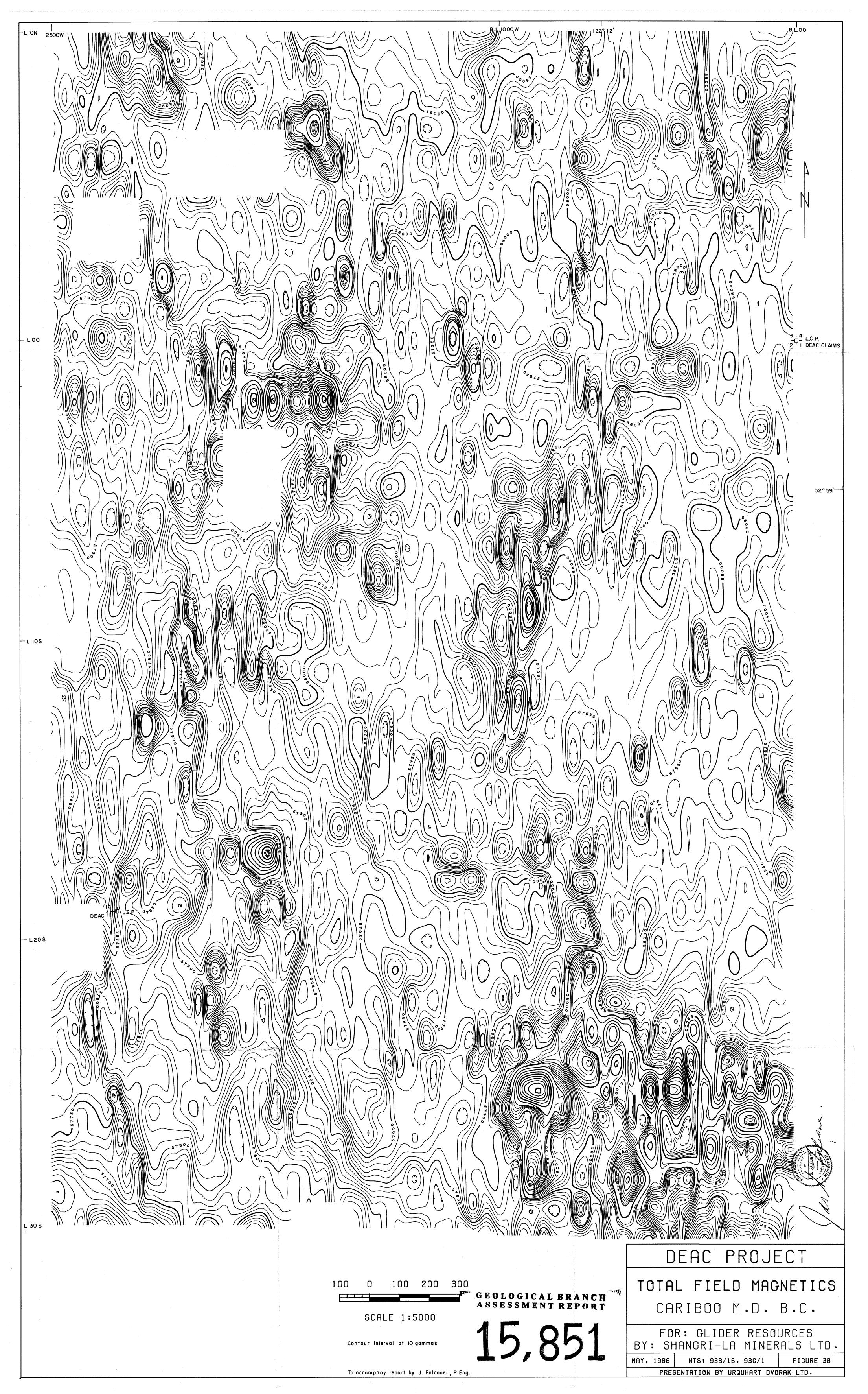
- I, Christopher Baldys, do hereby certify:
- 1. I am a Consulting Geologist with the firm of Shangri-La Minerals Limited, 200-675 West Hastings Street, Vancouver, British Columbia, V6B 4Zl.
- 2. I graduated in 1980 from the University of Mining and Metallurgy, Cracow, Poland with Honours B.Sc. in Geology.
- 3. I have been involved in mining geology from 1980 to 1983 and in mineral exploration in the Canadian Cordillera since 1983.
- 4. This report is based on field work carried out by this author and a Shangri-La Minerals Limited crew from April 22 to May 29, 1986 and June 20-24, 1986.
- 5. I have no direct interest in the property or in any securities of Glider Resources Inc., nor do I expect to receive any.
- 6. This report may be utilized by Glider Resources Inc. for inclusion in a Prospectus or Statement of Material Facts.

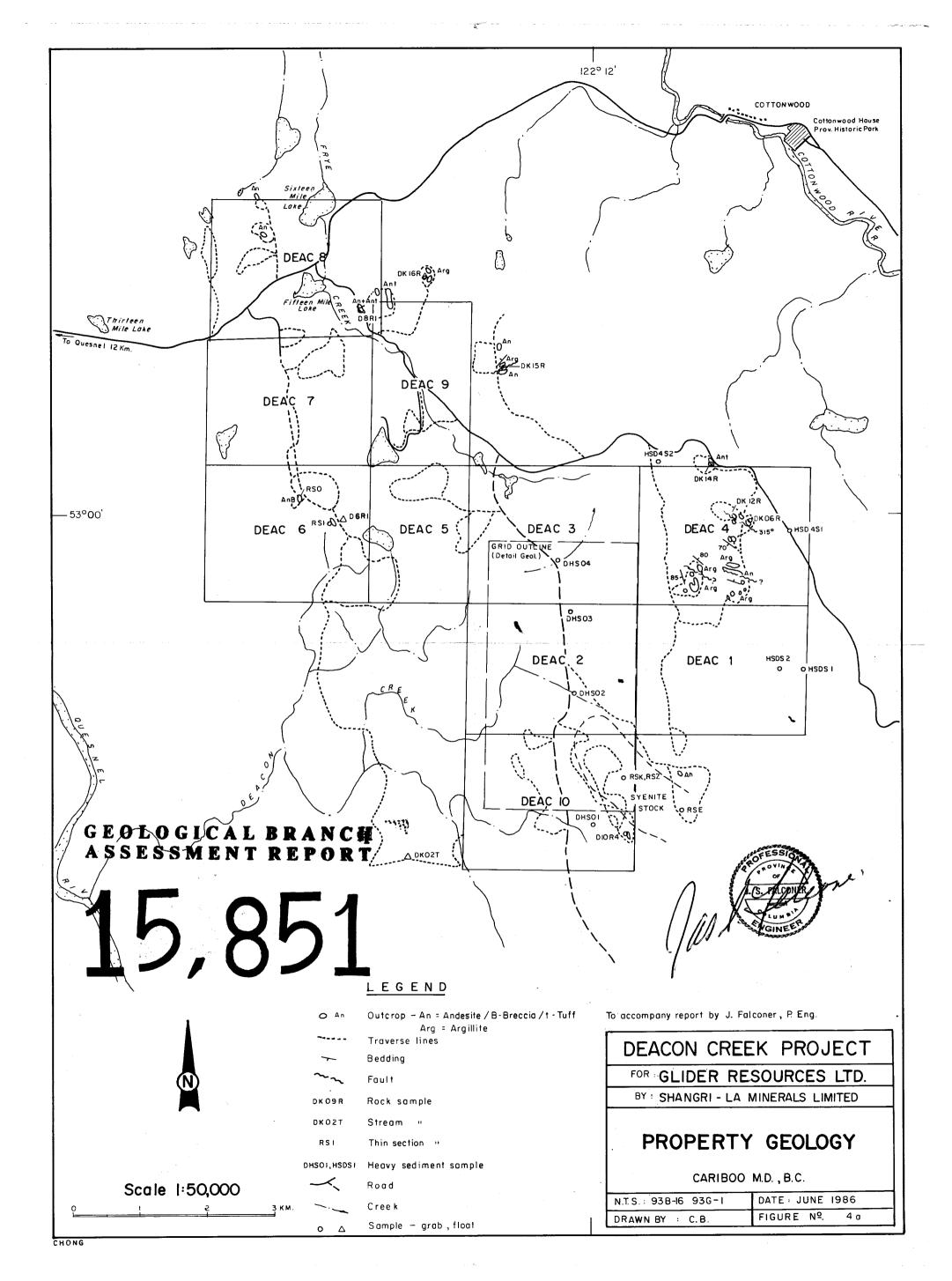
Respectfully submitted at Vancouver, B.C.

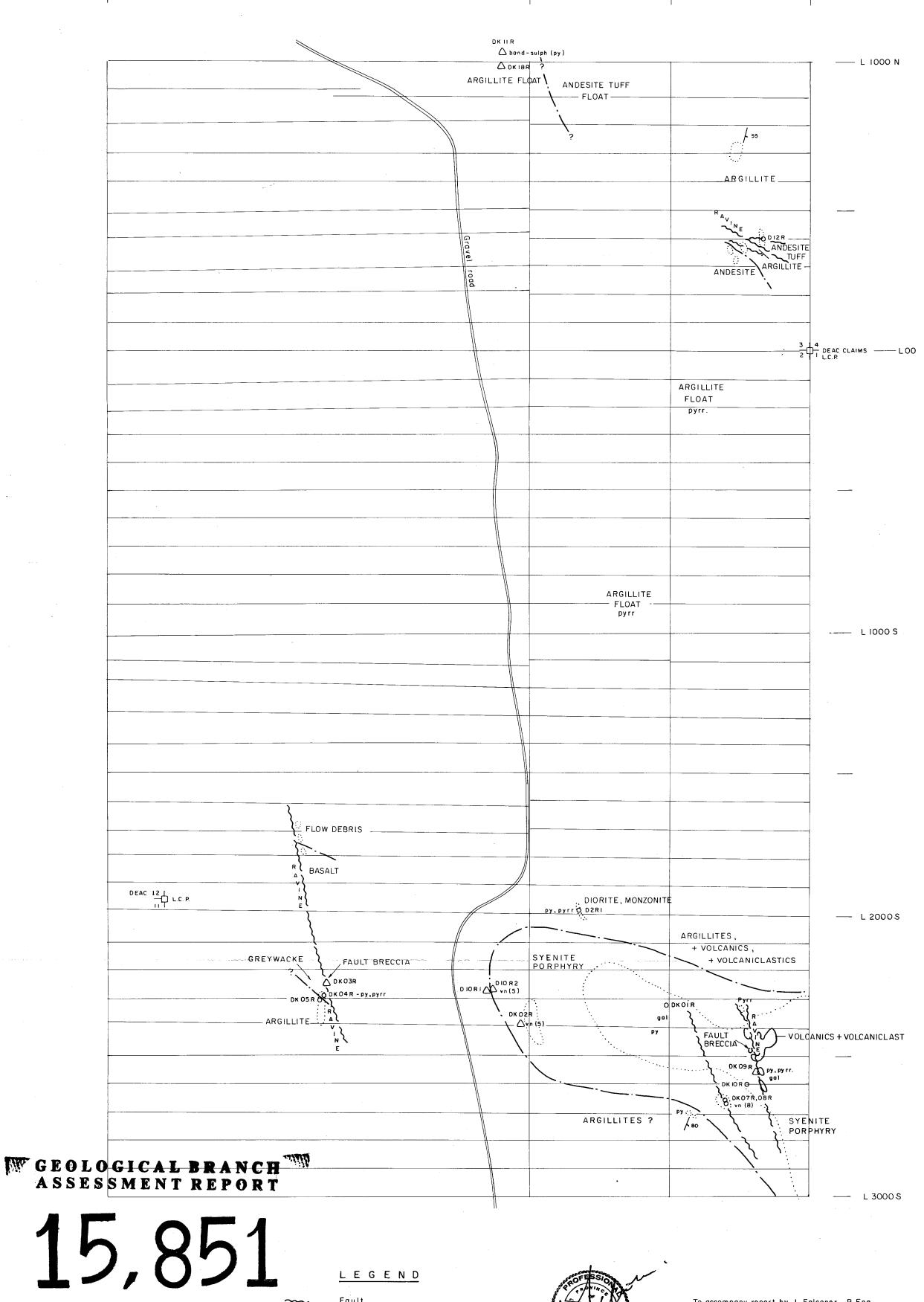
Christopher Baldys, B.Sc.

28 June 1986.









B.L.IOW

T.L. 5 W

B.L.00

B.L. 25 W



Outcrop

Contact Rock samples (grab, grab float)

Pyrite

Pyrrothite pyrr

gal

vn (5) Veining, 5cm thick band, sulph. Banded sulphides

SCALE 1:10,000

500 METRES



To accompany report by J. Falconer, P. Eng.

DEACON CREEK PROJECT

FOR: GLIDER RESOURCES LTD. BY: SHANGRI - LA MINERALS LIMITED

> GRID AREA **GEOLOGY**

CARIBOO M.D., B.C.

N.T.S. 93B46, 93G-1 DATE: JUNE 1986 DRAWN BY: C.B. FIGURE Nº.

