1984

ASSESSMENT REPORT

ON THE

GEOCHEMICAL SURVEYS

06/86

ON THE MT. GRANT CREEK PROPERTY

JO 44 -47, 55 - 58 and 64 - 67

OMINECA MINING DIVISION, BRITISH COLUMBIA

55° 37' N, 125° 30'W N.T.S. 93N/11 and 12

OWNER: ARKLATEX PETROLEUM CORPORATION
MOUNT GRANT MINES LTD

OPERATOR: GOLDEN PORPHYRITE LTD.

F. MARSHALL SMITH P. ENG.
Golden Porphyrite Ltd.

SEPTEMBER 1985

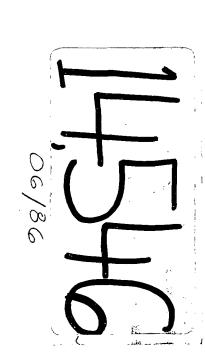


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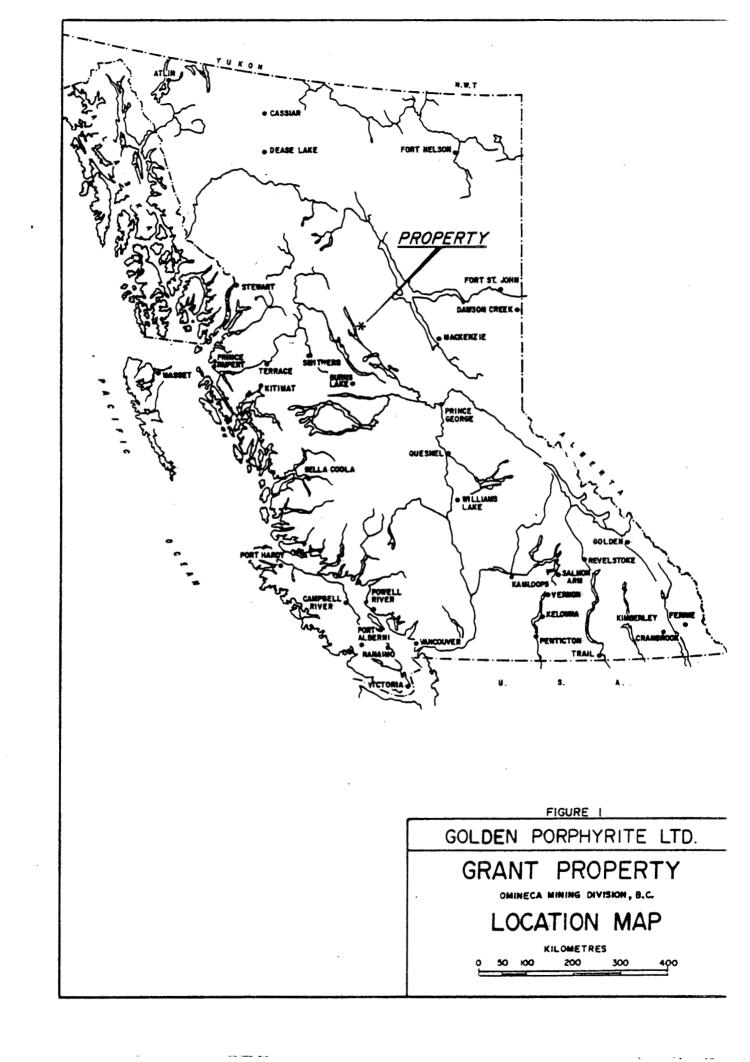
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GEOLOGICAL BRANCH ASSESSMENT PERCET

14,546



INTRODUCTION

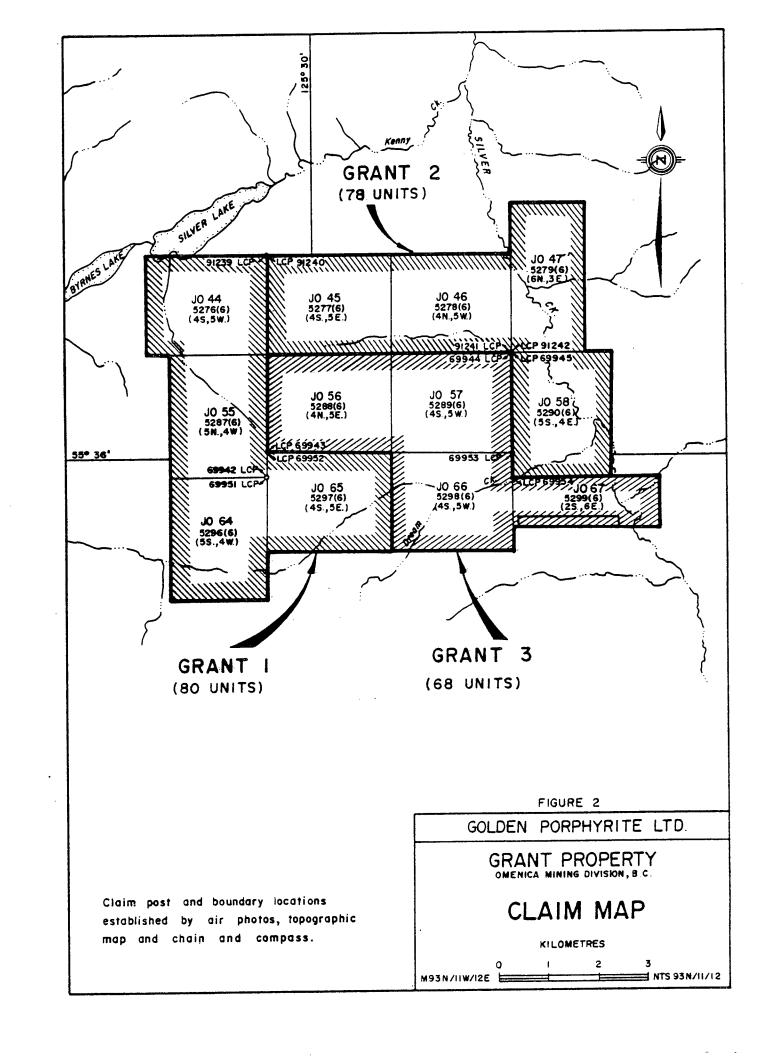
The Mount Grant property, consisting of claims Jo 44-47, 55-58 and 64-67 (230 units) is located 35 km northeast of Takla Landing and 145 km northeast of Smithers in the Omineca Mining Division. Its National Topographic Survey location is 93 N/11/12 at 55° 37' north latitute and 125° 30' west longitude, (fig.1).

The property is accessible by a four-wheel drive road from the nearest settlement, Takla Landing, on the B.C. Rail Line. The property was evaluated using a Hughes 500 D helicopter based at Takla Landing, a return trip taking 30 minutes.

The property is characterized by an east-west trending ridge up to 1,700 m above sea level with an unnamed creek flowing east into the northerly draining Silver Creek. Low lying ground is present along the Silver Creek Valley at about the 1,000 m level. The treeline is at about the 1,600 m elevation with alpine vegetation above and mixed conferous vegetation, alpine fir and spruce, on valley sides and bottoms. Outcrop exposure is restricted to ridge crests, with maximum exposure present on north facing slopes.

Extensive gold placer workings are present on the Silver Creek, 7 km to the north of the property. The recorded production from Silver Creek combined with Kenny Creek is 642 oz of gold. Active operations continue to this day.

With the recent development of a new gold occurrence model involving large tonnage low grade deposits, the owner, Arklatex Petroleum Corporation, contracted Golden Porphyrite Ltd., to locate the source rocks of the placer gold found in many of the surrounding creeks. Rocks belonging to the Permo-Triassic Cache Creek Group, outcrop within and around the claim block and conform to this model. This model and the gold found in Silver Creek make this property ideal for gold exploration.



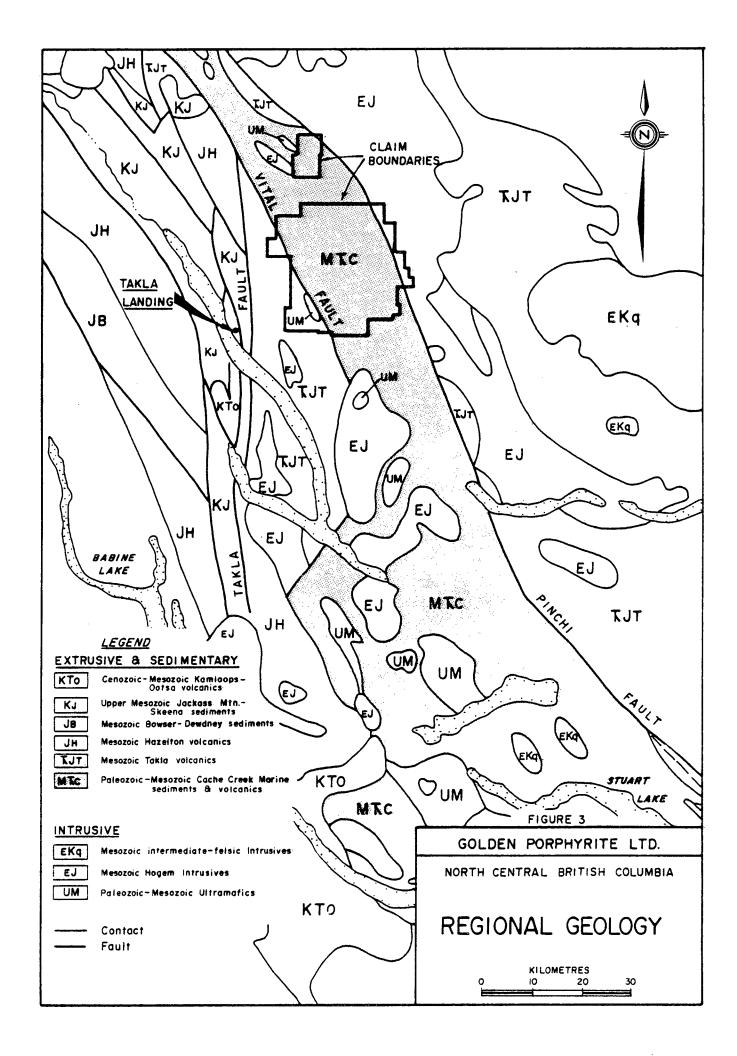
In 1983 the area was geologically mapped and prospected over an area of approximately 57 km2. A total of 6 heavy sediment, 56 geochemical rock chip and 521 soil samples were collected.

Two heavy sediment samples returned values of 5.0 on a scale of 1-10. Two values of 40 ppb Au were obtained in soil samples. Anomalous silver results were obtained in 10 soil locations concentrated in the south-west part of the property, values between 1.0 and 3.1 ppm Ag were found.

For grouping purposes in 1983 the Mt.Grant property was divided into three groups, Grant 1, Grant 2, and Grant 3, (fig.2).

The 1984 work program was done by Golden Porphyrite personnel in July and October. The work was supervised by Mr. H. Macfarlane and directed by Mr. F. M. Smith, P.Eng.

Work was peformed in all three Grant groups.



GEOCHEMICAL SURVEY

A total of 9 rockchip samples were taken in October. One heavy sediment sample was taken in July and 8 Heavy sediment samples were taken during the fall program (Appendix A). Analysis for gold and silver was conducted at Chemex Labs, 212 Brooksbank Avenue, North Vancouver, B.C. All samples were dried and ring pulverized to -100 mesh. (Appendix C)

Rocks:

In the process of prospecting a total of 9 1-kg rock chip samples were taken and are described in Appendix B. These samples were analyzed by Chemex Labs for gold and silver.

No anomalous rock chip samples were found.

Heavy Sediments:

A total of 9 heavy sediment samples were collected in the summer and fall of 1984 (fig. 5). For each sample approximately 0.5 m3 of material was processed and a 2-4 kg subsample was sent for analysis to Chemex Labs, (Appendix C). The collection of these heavy sediment samples is a much more difficult and time consuming process than the normal sampling methods. One Heavy sediment sample may take two men a day or more to collect. The extra cost however is more than offset by the usefulness of the sample.

Anomalous Heavy Sediments were obtained from several creeks on the property.

HS 0200 located 100 m above the bridge on grant Creek returned a value of 15,000 ppb Au. HS 0201 at 240 ppb Au on an upper tributary of Grant creek define a specific and very high anomalous zone on the creek.

 ${\rm HJ}$ 0108 located in a creek above the road returned a value of 840 ppb ${\rm Au}$.

 ${
m HS}$ 0228 located @ 1085 m elevation on Dream Creek returned a value 140 ppb ${
m Au}$.

CONCLUSIONS

The Anomalous heavy sediments with values to 15,000 ppb Au require more detailed sediment sampling with soil sampling upslope from the anomalous values in order to locate the site where the gold is getting into the creek. Trenching to reveal outcrop will be necessary.

The heavy sediment samples are very good specific locations for the source of the gold. Samples with no signifigant gold generaly run $\langle 5 \rangle$ ppb Au. Samples taken near, but not in an anomally run up to \pm 100 ppb Au. Samples that are anomalous and signifigant run above 500 ppb Au and sometimes up to several thousand ppb Au. The program defined some very good gold targets.

RECOMMENDATIONS

Complete the heavy sediment sampling program on the remainder of the unsampled drainages. Follow up the anomalies with prospecting, soil and rock geochemistry, and then trenching of mineralized or anomalous zones.

BLOCK 6 Mount Grant Mines Ltd Detailed Cost Analysis

AKHURST, K BUNKER, D CHOMACK, B COFFIN, D CROCKFORD, B DEBOCK, E FRENCH, L FRENCH, M GUNNING, M HOLOPAINEN, O MACFARLANE, I NELLES, D SANDHU, P SAUNDERS, B STEPHENS, CC STEPHENS, JM WHITMORE, N	14.3 4.8 12.3 12.6 10.4 44.3 16.0 13.4 20.0 46.0	\$12.50 \$10.50 \$15.63 \$15.63 \$17.50 \$11.00 \$11.00 \$11.00 \$11.00 \$18.75 \$15.63 \$9.38 \$12.50 \$15.63 \$11.00	\$13.01 \$0.00 \$120.73 \$54.19 \$78.03 \$250.00 \$52.52 \$135.56 \$138.78 \$114.89 \$529.82 \$0.00 \$126.00 \$250.00 \$469.48 \$244.49 \$250.00 \$1487.28 \$1487.28	Field Work
		Wage Total	\$6730.13	· ·
BILLITS BILLIT/DAYS ROOM & BOARI		\$28.70	TOTAL R & B	\$783.75
ASSAYING	SOILS \$8.10	O ROCKS \$9.68	8 H.S. \$18.90	\$239.94
DRAFTING EQ. RENT EQ. REP. SUPPLIES TRANSPORT HELICOPTER FUEL	_	9 Uhaul Tlr. 1 \$420.00	Light plant	\$239.94 \$2217.80 \$1003.97 \$25.89 \$1072.43 \$760.94 \$109.36 \$285.00
OFFICE MOB/DEMOB	Ground & F	ixed wing		\$1082.69 \$159.99
			Total Report	\$14471.89 \$750.00
			Add Overhead	\$15221.89 \$1522.19
				\$16744.08

CERTIFICATE

- I, F. Marshall Smith, do hereby certify that:
- 1. I am a consulting geologist and geochemist with offices at 218-744 West Hastings Street, Vancouver, British Columbia.
- 2. I am a graduate at the University of Toronto with a degree of B.Sc., Honors Geology.
- 3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- 4. I have practiced my profession continuously since 1967.
- 5. This report is based on reports by personel working under my direction for the owners and operators of the property and two examinations of the claims in 1984.
- 6. I have no interest in the shares of the named company or in any of the companies with contiguous property to the property described in this report but I do have an interest in Golden Porphyrite Ltd.

F. Marshall Smith, P.En September 12, 1985.

OLUME'S

MOUNT GRANT MINES LTD

GEOCHEM RESULTS

1984 WORK PROGRAM

W.O.	#		: A8417554			
Samp.	le			Ag	ppm	Au ppb
desc	rip	tion		Ac	qua F	R FA+AA
T406	RN	0100			0.1	5
T406	RN	0101			0.1	<5
T406	RN	0102			0.2	<5
T406	RN	0103			0.1	<5
T406	RN	0104			0.1	< 5
T406	RN	0105			0.1	<5
T406	RN	0106			0.1	<5
T406	RN	0107			0.1	<5
T406	RN	0108			0.1	< 5
T406	НJ	0108			0.2	840
T406	HS	0200			0.2	15000
T406	HS	0201			0.2	240
T406	НS	0202			0.2	<20
T406	HS	0214			0.2	40
T406	HS	0215			0.2	40
T406	HS	0216			0.2	< 20
T406	HS	0228			0.2	140

ROCKCHIP DISCRIPTIONS

5

Sample #

ppm Ag ppb Au

T406 RN 0100

0.1

Argillite, black very fine grained fissile in creek gully

T406 RN 0101

0.1 <5

Andisitic Tuff Medium green fine grained, locally phylitic.

< 5

< 5

T406 RN 0102

0.2

Contorted quartz dolomitic veined fissile phyllitic shale.

T406 RN 0103

0.1

Blochy andesitic tuff, med green.

T406 RN 0104

0.1 <5

Shale - Argillite

T406 RN 0105

0.1 <5

Andisitic tuff med green fine grained.

T406 RN 0106

0.1 <5

Almost vertical sheets of shale in bank on creek side.

T406 RN 0107

0.1 <5

Folded shales striking 170°

T406 RN 0108

0.1 <5

Andisitic tuff med green fine grained, locally phylitic.

ANALYSIS PROCEDURE

SOILS

Analysis for gold and silver was conducted at Chemex Labs, 212 Brooksbank Avenue, North Vancouver, B.C. All samples were dried and ring pulverized to -100 mesh.

<u>Gold:</u> 5.0 g samples were ashed @ 800 degrees C for one hour, digested with aqua regias to dryness and taken up in 25% HCl. The gold was then extracted as the bromide complex into MIBK and analyzed using atomic absorption techniques with a detection limit of 10 ppb.

<u>Silver:</u> A 1.0 g portion of sample was digested in aqua regia (3:1 HCl-HNO3) for approximately 2 hours. The digested sample was cooled and made up to 25 ml with distilled water. The solution was then mixed and solids allowed to settle. Silver was determined by atomic absorption techniques using background correction on analysis with a detection limit of 0.1 ppm.

ROCKS:

In the process of mapping 1-kg rock chip samples were taken in July, 1984, (Appendix B). These samples were analyzed by Chemex Labs for gold and silver. All samples were dried, crushed and a subsample ring pulverized to approximately -100 mesh.

Gold: 10.0 g samples were fused with the addition of 10m mg of Au free Ag metal and cupelled. The silver bead was parted with dilute HNO3 and then treated with aqua regia. The salts were dissolved in dilute HCl and analyzed for Au on an atomic absorption spectro-photometer with a detection limit of 5 ppb for Au.

Silver: was analyzed as described above for soils.

Heavy Sediments

For each field processed sample approximately 0.5 m3 of material was processed and 2-4 kg subsamples were sent for analysis to Chemex Labs. The subsamples were floated in Tetrabromoethane to isolate mineral with a specific gravity greater than 2.93 ± 0.1 g/cm3. This fraction was then dried, magnetically separated and ring pulverized to -100 mesh. Samples were then analyzed for gold and silver as described above for soils.

