1984

ASSESSMENT REPORT

ON THE

GEOCHEMICAL SURVEY

ON THE QUARTZITE CREEK PROPERTY

JO 7 - 9, 15 - 17, 23 - 24, AND 30 - 31

OMINECA MINING DIVISION, BRITISH COLUMBIA

55° 41' N, 125° 41'W N.T.S. 93N/12

OWNER: ARKLATEX PETROLEUM CORPORATION

QUARTZITE CREEK MINES LTD

OPERATOR: GOLDEN PORPHYRITE LTD.

F. MARSHALL SMITH P. ENG.

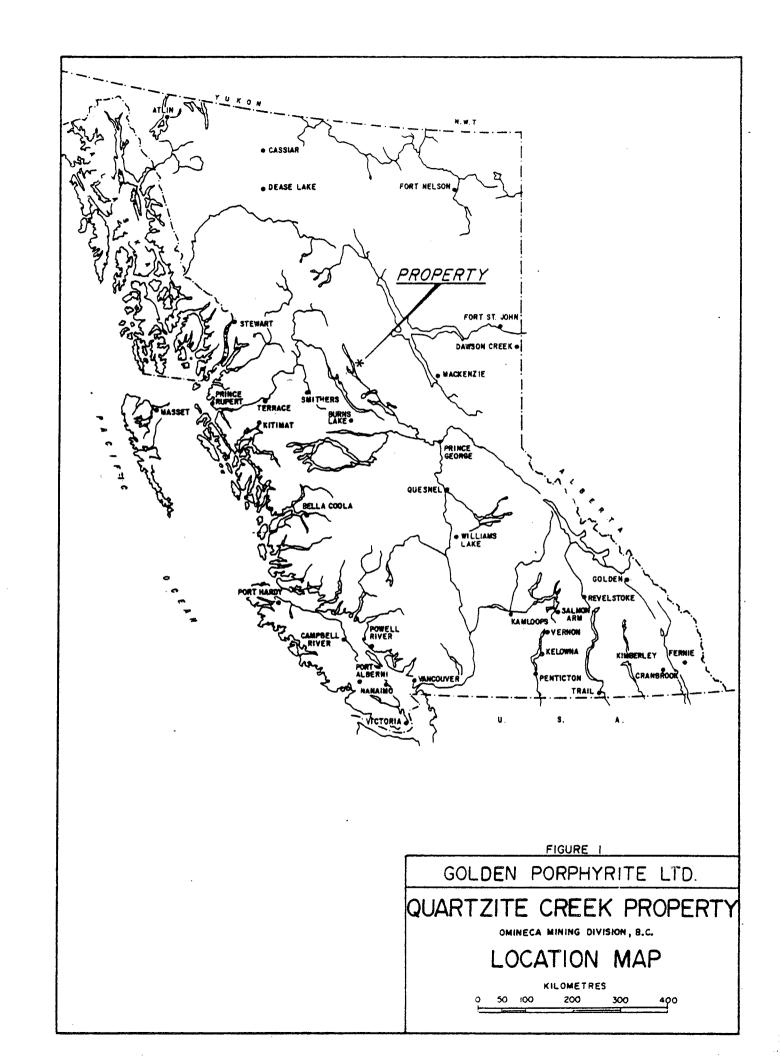
Golden Porphyrite Ltd.

SEPTEMBER 1985



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GEOLOGICAL BRANCHE ASSESSMENT REPORT	



### INTRODUCTION

The Quartzite Creek property, consisting of claims Jo 7-9, 15-17, 23-24 and 30-31 (200 units) is located 25 km northeast of Takla Landing and 135 km northeast of Smithers in the Omineca Mining Division. Its National Topographic Survey location is 93 N/12 E at 55 $^{\circ}$  41' north latitute and 125 $^{\circ}$  41' west longitude, (fig.1).

The property was evaluated using a Hughes 500 D helicopter based at Takla Landing, a return trip taking 22 minutes.

The Property encompasses the headwaters of Quartzite Creek, rising from an elevation of 1,500 m above sea level and flowing north within a steeply incised valley. A series of north-south and east-west trending ridges up to 1,900 m above sea level with cirque basin below, characterize the southern margin of the property. The treeline is at about the 1,600 m level with alpine vegetation above and mixed coniferous 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.

Quartzite Creek has had a history of placer gold mining since the 1930's. The main workings on the creek are situated 2.4 km above the confluence with Fall River, approximately 3 km to the north of the property. The recorded production to 1950 is 435 ounces of gold and active operations continue to this day.

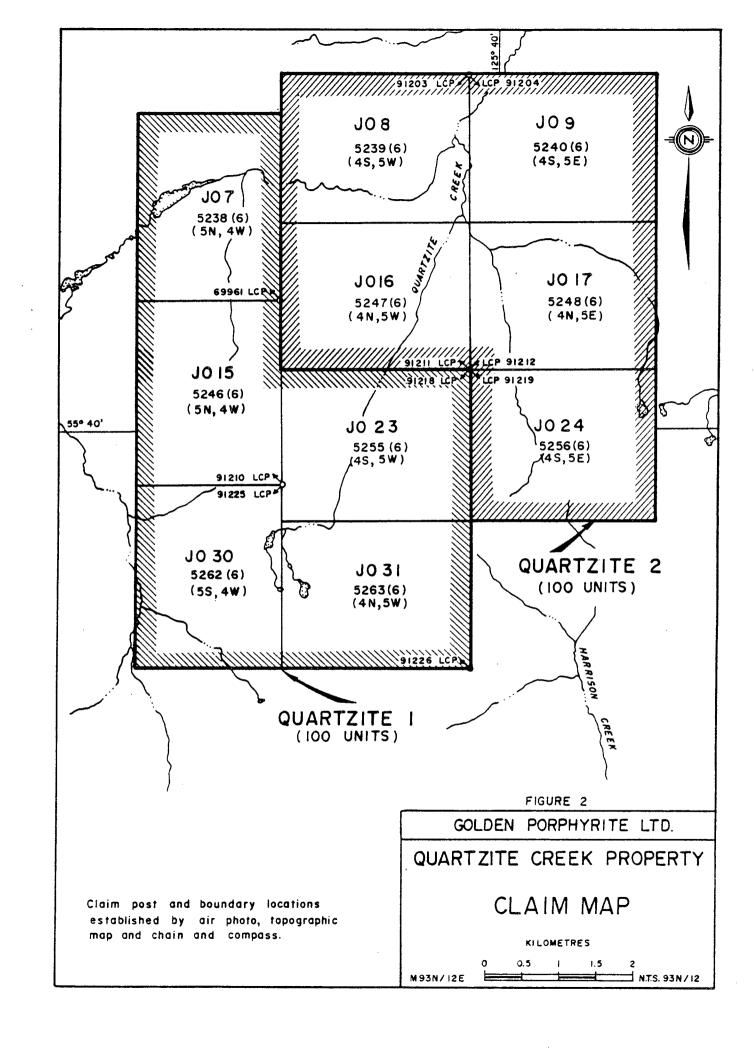
With the recent development of a new gold occurrence model involving large tonnage low grade deposits, the owner, Arklatex Petroleum Corporation, contracted Golden Porphyrite Ltd., to locate the source rocks of the placer gold found in many of the surrounding creeks. Rocks belonging to the Permo-Triassic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

During the 1983 field program 395 soil samples were collected and analyzed. 133 rock chip and 8 heavy sediment samples were also collected and analyzed. Anomalous results were obtained from soils in three areas on the property. Two areas returned good rock chip anomalies and two heavy sediments taken in Quartzite Creek were anomalous.

In 1983 for grouping purposes the Quartzite Creek property was divided into two groups, Quartzite Creek 1, and Quartzite Creek 2, (fig.2).

The 1984 work was done by Golden Porphyrite personnel supervised by Mr. H. Macfarlane and directed by Mr. F. M. Smith, P.Eng. The area was geologically prospected over an area of approximately 50 km2. A total of 39 geochemical rock chip, 97 soil and 3 heavy sediment samples were collected.

Work was divided evenly between groups Quartzite 1 & 2.



### GEOCHEMICAL SURVEY

A total of 39 rockchip, 3 Heavy sediment and 97 soil samples (Appendix A) were taken and sent to Chemex Labs North Vancouver for analysis. All samples were dried and ring pulverized to -100 mesh. (analytical procedure Appendix C)

## Rocks:

In the process of prospecting a total of 39 1-kg rock chip samples were taken in July 1984 and are described in Appendix B. These samples were analyzed by Chemex Labs for gold and silver.

Three geochemical rock chip samples were found to be anomalous. RJ 0023 found in an area of great interest returned a value of 1990 ppb Au. RN 0020 and RN 0021 returned values of 210 and 15 ppb Au respectively. These were all found in JO 7.

#### Heavy Sediments:

A total of 3 heavy sediment samples were collected in July of 1984 (fig. 5). For each sample approximately 0.5 m3 of material was field processed and a 2-4 kg subsample was sent for analysis to Chemex Labs. 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. However the extra cost is more than offset by the usefulness of the sample.

Anomalous Heavy Sediments were obtained from one creek on the property.

HS 0085 located in the north-west corner of JO 9 returned a value of 200 ppb Au. HS 0087 at 800 ppb Au approximately 500 m down stream from HS 85 shows the presence of gold in this area.

## SOILS

A group of 18 anomalous soils returned values from 10 to 30 ppb  $\rm Au$ . They were found around a knoll in the north-west corner of  $\rm JO$  7.

#### CONCLUSIONS

The Knoll area in JO 7 shows good promise and should have follow up work to determine if there is a large anomaly in this area. The combined results of the heavy sediment, soil and rock-chip sampling has located several good targets for follow up detailed mapping and trenching.

## RECOMMENDATIONS

A two phase program is recommended.

Phase I would consist of follow up heavy sediment sampling with detailed upslope soil sampling. Trenching to reveal outcrop and the geochemical testing of the outcrop will determine if Phase II, Diamond drilling should be done.

	RS/WKD 10.1 3.5	RATE \$12.50 \$10.50	Camp s	27-30 setup \$26.01 \$0.00	
CHOMACK, B COFFIN, D CROCKFORD, B DEBOCK, E	11.8 6.9 12.5 8.0	\$15.63 \$15.63 \$12.50 \$17.50	;	\$184.24 \$108.38 \$156.06 \$0.00	\$0.00 \$0.00 \$0.00 \$140.00
FRENCH,L FRENCH,M GUNNING,M HOLOPAINEN,C MACFARLANE,H	8.0 8.0 7.1 10.2 29.0	\$11.00 \$11.00 \$11.00 \$11.00 \$18.75		\$88.00 \$88.00 \$78.03 \$45.78 \$394.49	\$0.00 \$0.00 \$0.00 \$66.00 \$150.00
NEWMAN, P SANDHU, P SAUNDERS, B STEPHENS, CC	4.0 5.5 0.0 33.1	\$15.63 \$9.38 \$12.50 \$18.75		\$0.00 \$52.03 \$0.00 \$619.91	\$62.50 \$0.00 \$0.00 \$0.00
STEPHENS, JM VEZINA. J WHITMORE, N	30.6 0.0 8.0	\$11.00 \$9.38 \$9.53	May J	\$336.40 \$0.00 \$13.01 une Bal	\$1860.47
				pTotal	\$2190.34
			BENIF	Wages ITS	\$6566.75 \$985.01
BILLITS BILLIT/DAYS	15 23.88		_	Total	\$7551.76
ROOM & BOARD	·	\$28.70	TOTAL	R & B	\$685.40
	OILS \$8.10 97	ROCKS \$9.68	8 H.S.	\$18.90 3	\$1630.13
DRAFTING EQ. RENT GI EQ. REP. SUPPLIES TRANSPORT	M Jimmy				\$1848.99 \$1149.90 \$381.00 \$2108.84 \$1289.35
HELICOPTER FUEL OFFICE MOB/DEMOB G ROCK CRUSHER	3.20	\$420.00 xed wing	HR.		\$1344.00 \$240.00 \$2144.00 \$458.22 \$1860.00
KOOK OKOONZK			Total Repor	t	\$22691.59 \$750.00
			Add O	verhead	\$23441.59 \$3516.24
					\$26957.83

#### 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.Eng.

September 12, 1985.

## QUARTZITE CREEK MINES LTD

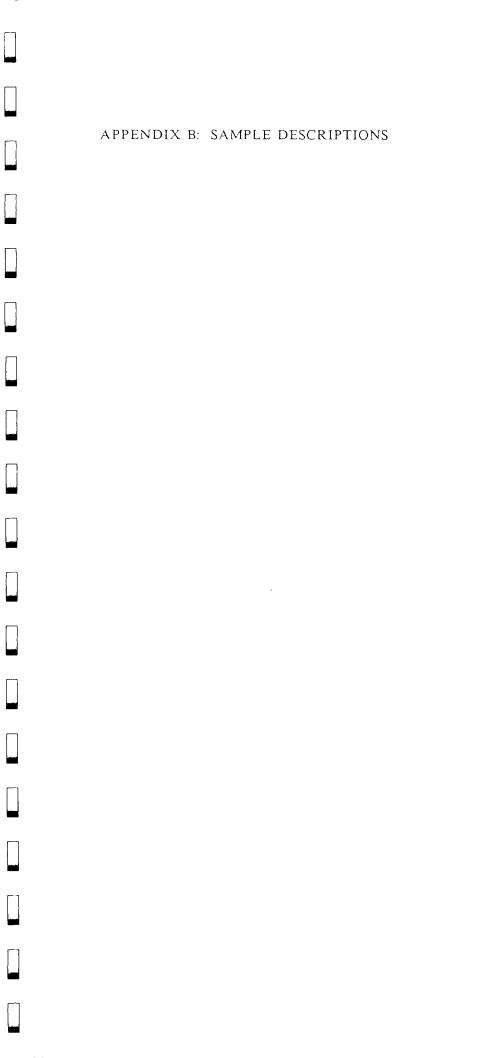
## GEOCHEM RESULTS

## 1984 WORK PROGRAM

rec #	sample description	Ag ppr Aqua-F	
29	T403 HS0085	0.6	200
30	T403 HS0086	1.2	<20
31	T403 HS0087	1.4	800
32	T403 RA-0009		<5 <5
33	T403 RA-000 T403 RD0009	Ø.1	\5 \5
34 70	T403 RD0009 T403 RD0010	0.1	√5 √5
35 36	T403 RD0010	0.1	< <b>5</b>
36 37	T403 RD0012	0.1	5
38	T403 RD0012	0.2	<b>₹</b> 5
39	T403 RD0014	0.1	⟨5
40	T403 RD0015	0.1	₹5
41	T403 RD0016	0.1	<b>√S</b>
42	T403 RD0017		<5
43	T403 RD0018	0.1	₹5 -
44	T403 RH-000	5 0.1	<5
45	T403 RH-000	6 0.1	<5
46	T403 RH-000		<5
47	T403 RJ0007		<5
48	T403 RJ0008		<5 €
49	T403 RJ0009		5
50	. T403 RJ0010		5
51	T403 RJ0011	0.1	5
52	T403 RJ0012	0.1	<5 <5
53	T403 RJ0014		<b>₹</b> 5
54 55	T403 RJ0017		<5 <5
55 50	T403 RJ0017	Ø.1	\a {5
56 57	T403 RJ0021 T403 RJ0022	Ø.1 Ø.1	\5 <5
58	T403 RJ0023		1,990
59	T403 RJ0024		5
5Ø	T403 RJ0025		<b>₹</b> 5
51	T403 RJ0026		₹5
62	T403 RJ0027		⟨\$
63	T403 RN-002		210
54	T403 RN-002	1 0.1	15
65	T403 RN-002	2 0.1	5
88	T403 RN-002	4 3.2	40
67	T403 RN-002		₹5
68	T403 RN-002		<5
69	T403 RW0276	0.1	₹5
70	T403 RX0001	0.4	10
71	T403 SJ0015	Ø.1	<10
72	T403 SJ0016	0.1	<10

	,	A AA	<i>(</i> , _ , _ , _ , _ , _ , _ , _ , _ , _ , _
	sample	Au-AA	Ag ppm
rec #	description	ррь	Aqua-R
7.77	T403 SW0245	<10	Ø.i
73	T403 SW0246	<10	0.1
74		<10	0.1
75	T403 SW0247		
75	T403 SW0248	<10	Ø.1
77	T403 SW0249	10	0.1
78	T403 SW0250	<10	0,1
79	T403 SW0251	< 100	0.1
80	T403 SW0252	<10	Ø.1
18	T403 SW0253	<10	Ø.1
82	T403 SW0254	<10	0.1
83	T403 SW0255	<10	0.1
84	T403 SW0256	<10	0.1
85	T403 SW0257	19	0.1
			0.1
86	T403 SW0258	<10	
87	T403 SW0259	20	0.1
88	T403 SW0250	20	0.1
. 89	T403 SW0251	<10	0.1
90	T403 SW0262	< 100	0.1
31	T403 SW0263	<10	0.1
92	T403 SW0264	< 1 Ø	0.1
93	T403 SW0265	<10	0.1
94	T403 SW0266	10	0.1
95	T403 SW0267	<10	0.1
9 <b>6</b>	T403 SW0268	<10	0.1
	T403 SW0269	10	0.1
97		<10	0.1
98	T403 SW0270		
99	T403 SW0271	<10	0.1
100	T403 SW0272	<10	0.1
101	T403 SW0273	<10	0.1
102	T403 SW0274	10	0.1
103	T403 SW0275	20	0.1
104	T403 SW0277	<10	Ø.1
105	T403 SW0278	< 10	0.1
106	T403 SW0279	30	0.1
107	T403 SW0280	<10	0.1
108	T403 SW0281	<10	0.1
	T403 SW0282	10	0.1
109		<10	Ø.1
110	T403 SW0283		
111	T403 SW0284	<10	Ø. 1
112	T403 SW0285	<10	0.1
113	T403 SW0286	<10	Ø. i
114	T403 SW0287	<10	Ø.1
115	T403 SW0288	10	0.1
116	T403 SW0289	< 1 Ø	Ø.i
117	T403 SW0290	<10	Ø.1
118	T403 SW0291	<10	0.1
119	T403 SW0292	<10	0.1
120	T403 SW0293	<10	0.1
	T403 SW0294	20	Ø.1
121			
122	T403 SW0295	<10	Ø.1
123	T403 SW0296	<10	0.1
1.24	T403 SW0297	<10	0.1
129	T403 SW0298	<10	0.1
128	T403 SW0299	< 10	Ø.1
127	T403 SW0300	20	Ø.i

	•				
*	sample	Au-AA	Ag ppm		
rec #	description	dqq	Aqua-R		
, 55 "		; []			
128	T403 SW0301	<10	0.1		
129	T403 SW0302	20	Ø.1		
130	T403 SW0303	10	0.1		
131	T403 SW0304	<10	0.1		
132	T403 SW0305	<10	Ø.9		
133	T403 SW0306	<10	0.1		
	T403 SW030B	<10	0.1	•	
134		<10	0.1		
135	T403 SW0308	20	0.1		
136	T403 SW0309			•	
137	T403 SW0310	<10	0.1		
138	T403 SW0311	<10	Ø. i		
139	T403 SW0312	<10	0.1		
140	T403 SW0313	<10	2.1		
141	T403 SW0314	<10	0.1		
142	T403 SW0315	<10	0.1		
143	T403 SW0316	<10	Ø. 1		
144	T403 SW0317	20	0.1		
145	T403 SW0318	<10	0.1		
146	T403 SW0319	20	Ø.1		
147	T403 SW0320	20	0.1		
148	T403 SW0321	<10	0.1		
	sample	Ag ppm	Au-AA		
rec #	description	Aqua-R	dad		
149	T403 SZ0446	0.1	<10		ÿ
150	T403 SZ0447	0.1	<10		
151	T403 SZ0448	0.1	<10		
152	T403 SZ0449	0.1	<10		
153	T403 SZ0450	0.1	< 1 Ø		
154	T403 SZ0452	0.1	10		
155	T403 SZ0453	0.1	<10		
156	T403 SZ0454	0.1	<10		
157	T403 SZ0455	0.1	<10		
158	T403 SZ0456	Ø.1	<10		
159	T403 SZ0457	Ø.1	< 10		
	e sum l s	Au-AA	Ag ppm		
	sample	nu-nn ppb	ng ppm Aqua-R		
rec #	description	րկս	пцаа-п		
160	T403 SZ0458	<10	0.1		
161	T403 SZ0459	<10	0.4		
162	T403 SZ0460	<10	0.2		
163	T403 SZ0461	20	0.5		
164	T403 S20462	<10	0.3		
165	T403 SZ0463	<10	0.3		
		٠.			
		·			



PROJECT: JAKLA. QUALTZITECK.

YEAR:

COLLECTOR:

SHIPMENT #:

DATE SHIPPED:

DATE RECEIVED:

LE SEQUENCE DATE LINE	% ock 50 i l 11. 5.	GEOCHEM Au   Ag	REMARKS
1007	V	4.5	Flow banded dante +g+z+ fsp pheno
008	V	4,0	I.F. IR + 1-270 pg/
009	•	۷,0	Arzillete, Se Stained
010	V	410	I.F. IR Deecia with Mn Cement Matrixe
011	<u>'</u>	۷.00	Arzillate Te Stained
0.2	/	4,0	Argellut +912 veinlets Archente/and tuff +3-5% pyrr. IF iR (dache) argulat contact
013	- V	414	Archente and tuff + 3-5/2 pyr.
014	/	40	IFIR (duche) angillate contact
015		2,0	
H002		210	
		,	
			GEOLOGICAL BRANCH
			ASSESSMENT REPORT
			1 1 101

SAMPLE RECORD

PROJECT:

DATE SHIPPED: SHIPMENT #:

DATE RECEIVED:

TAKLA . QUARTZITE CK COLLECTOR:

YEAR:

R EMA R K S	Palphylite floot	antico with K. Chalco and pyrite - 5/ab sorph	Light coloured flow surface - grab sough	Parphynte flort	Lean wide glasses on peopling to outsign (grite, challes	Paply the flow in phyllit spinax 5cm wich -girls	As were space sime size - glab simple	Parale Tulk?	FEEL !! (" Some 1 grade	Callwear argulate -2-370 Prote	Mineulized grants dan conjulites.	Alt green and be rich, from sheer much mr.	As above	Mr rich silicipion orgility.	Te ruch silverfred orgility from edge of shed 2000	Beached silicoins - pass to plan char object 2	Posple Tuff much Mn Staining	Silicous considite with some pigit	poss bleached out perphysite below orgillite.	17H green and from Sween zone	2
GEOCHEM	39 001	39 (3)	90)	3000	<b>39</b> 00	3 4 (00)	39 8:				ç	0,7	710	710	2)7	7,0	0)7	40	9	0,>	
й оск 5011 1.5.	>	>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5	>	>	>			>											
7 A 3 H 1 C 1 H E C 1		5-1419 IS-00 W	5 July 1625m		5144 1550m	1375m	14ch 1350										S				
DATE	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3413	7 7 7 6	2475	5/WL	, with	- 5. T.W.C.										JUMB				-
SAMPLE SEQUENCE (TOTAL)		0 0 0 V	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ACD 23	AND LE	いしつとく	36001	5 00 F	J 00 J	× -	D 000	1 00 C	0012	00 13	3.00	Dols	900	LICO	Nook	0000	

## SAMPLE RECORD

PROJECT: TAKLA · QUARTZITE CK

YEAR:

COLLECTOR:

SHIPMENT #:

DATE SHIPPED:

DATE RECEIVED:

MPLE SEQUENCE (TOTAL)		LINE LINE	300 k Soil 1.5.	GEO Au	CHEM Ag	REMARKS
N0020	5 July		V	100	66	Porphyrte floot
N0021	STULN	15°70m	<u> </u>	100	66	and outrop with K. chalco and parte - grab somp
NSO 22	5 July	1625m		100	606	Light colored floor outriof - grab simple
NW 23	5 July	160011		(00	W	Parphynte float
NOD 24	,	1550m		joo	طاما	Lean wide gtz vein on perphyrte outrop Pyrete, d
N0025	1	1315m	<b>V</b>	(40	66	Parkyrete flow in phyllite approx 5cm wide -glad
NO026		1350	<u> </u>	iso	اعلانا	As above sproc some size - grab sample
A006						Purple Tuff?
J 00 17A						IFAR " 17/2 some egute.
178			V			Calcareon arallet -2-370 Pyrote.
D 009				410	2	Mineralized grant 2 dam orgalites.
P 041				4,0	)	Att green ands. Fe sich, from shear much mo.
D012				410		As above
DO 13				4,0	)	Ma rich scheifted orgettite.
D014				خررت	>	Te not siliciped orgillite from edge of shear zor
D015				1,0		Bleached silicons - pass tall from edge of stear?
DOIL	Jun3	0		410	2	Purple Tuff much ma steining.
D017				40	5	Silicons crallite with some pyrite
D0018				ئر	0	poss bleached out porphyrate below orgalite.
D0010				1	0	Alt. green and from Shew zone

#### 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.

 $\underline{Gold:}$  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 HC1 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  $2.93 \pm 0.1$  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.

