



GOLDEN PORPHYRITE LTD.

1983

ASSESSMENT REPORT

ON THE

GEOLOGICAL AND GEOCHEMICAL SURVEYS

ON THE HARRISON CREEK PROPERTY

JO 32, 41, 51 and 52

OMINECA MINING DIVISION, BRITISH COLUMBIA

55° 38' N, 125° 38' W  
N.T.S. 93N/11 and 12

OWNER: BROADOAK INVESTMENTS INC. 75%  
UNISTAR TECHNOLOGIES CORP. 25%

OPERATOR: GOLDEN PORPHYRITE LTD.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,294

H.S. ~~Reefariane~~, M.Sc.  
Golden Porphyrite Ltd.

JUNE 1984



TABLE OF CONTENTS

	Page
INTRODUCTION .....	1
GEOLOGICAL SURVEY .....	3
GEOCHEMICAL SOIL SURVEY .....	5
HEAVY SEDIMENT SURVEY .....	7
CONCLUSIONS .....	8
COST STATEMENT .....	9
QUALIFICATIONS .....	10

APPENDIX A: GEOCHEMICAL SAMPLE RESULTS

APPENDIX B: ROCKCHIP SAMPLE DESCRIPTION

LIST OF ILLUSTRATIONS

	Figure
LOCATION MAP	1
CLAIM MAP	2
REGIONAL GEOLOGY	3
LOCAL GEOLOGY	4
ROCKCHIP GEOCHEMICAL & HEAVY SEDIMENT SAMPLING LOCATION PLAN	5
SOIL GEOCHEMICAL LOCATION PLAN (Au)	6
SOIL GEOCHEMICAL LOCATION PLAN (Ag)	7



**PROPERTY**

**GOLDEN PORPHYRITE LTD.**  
**HARRISON CREEK PROPERTY**  
 OMINECA MINING DIVISION, B.C.  
**LOCATION MAP**

KILOMETRES  
 0 50 100 200 300 400



INTRODUCTION

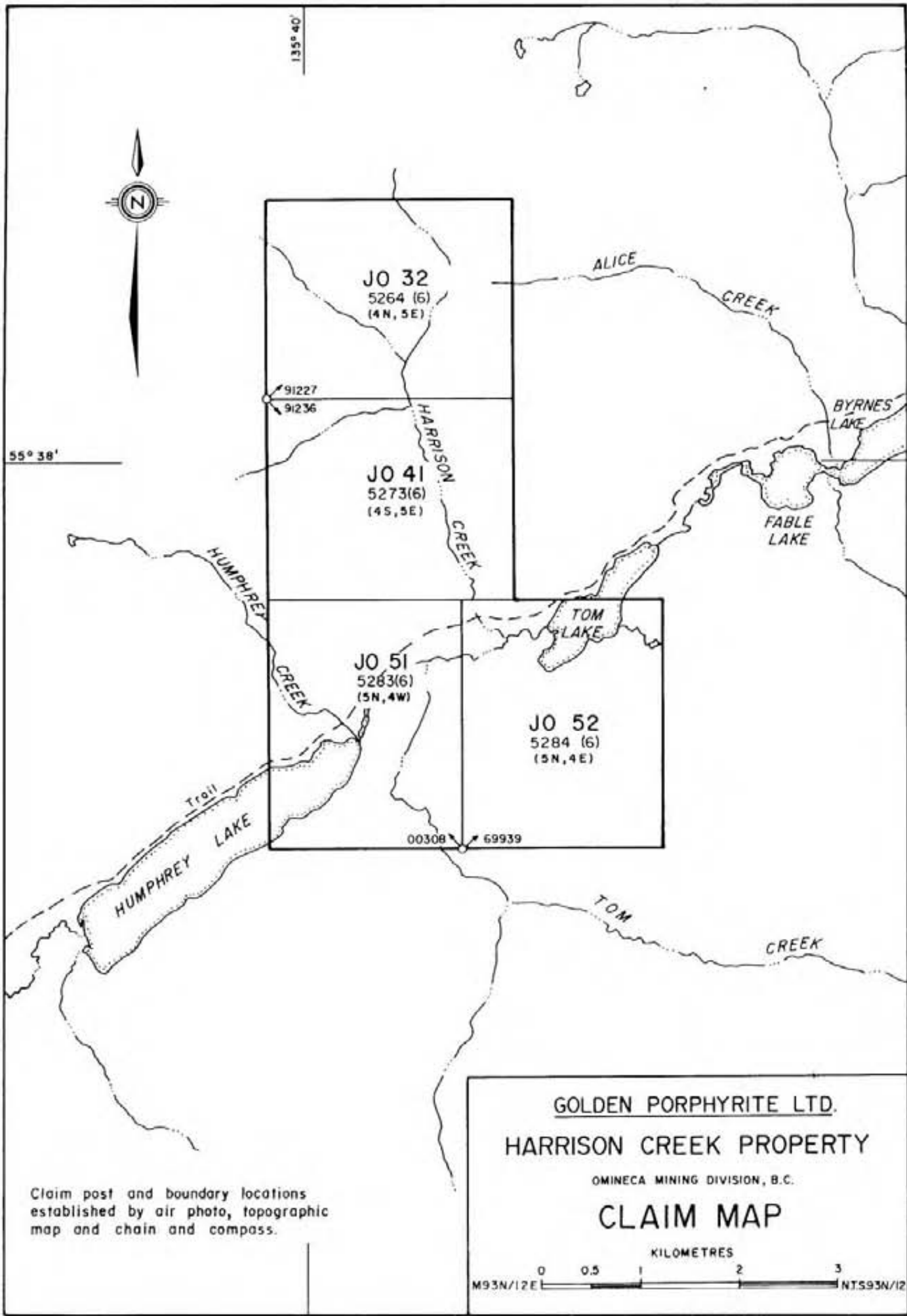
The Harrison Creek property, consisting of claims Jo 32,41, 51 and 52 (80 units) is located 25 km northeast of Takla Landing and 135 km northeast of Smithers in the Omineca Mining Division. Its National Topographic Survey location is 93 N/12 E at 55° 38' north latitude and 125° 38' west longitude, (fig 1).

The Property is accessible by a summer four-wheel drive road from the nearest settlement, Takla Landing, a one and a three quarter hour drive under poor road conditions. The property was evaluated using a Hughes 500 D helicopter based at Takla Landing, a return trip taking 20 minutes.

The boundary encompasses Harrison Creek, a creek draining south from an elevation of approximately 1,550 m to 1,000 m into Kenny Creek. Kenny Creek and a series of lakes, of which Humphrey and Tom Lakes are partly within the property boundary, are within a broad southwest-northeast trending glacially modified valley. The Harrison Creek valley is thickly forested with mixed coniferous vegetation, alpine fir and spruce, on valley sides and bottoms. Outcrop exposure is limited.

Harrison Creek has had a long history of placer gold mining since 1870, one year after the initial discovery of gold in the district. The main workings on the creek were situated at about 1.25 km above its confluence with Kenny Creek. The recorded placer production to 1947 is 232 ounces of gold and active operations continue to this day.

A two post mineral claim had been staked at the confluence of Harrison and Kenny Creeks. However, no record of work performed was found and the claim lapsed long ago.



55° 38'

135° 40'



Claim post and boundary locations established by air photo, topographic map and chain and compass.

**GOLDEN PORPHYRITE LTD.**  
**HARRISON CREEK PROPERTY**  
 OMINECA MINING DIVISION, B.C.  
**CLAIM MAP**

KILOMETRES

0    0.5    1    2    3

M93N/12E NT593N/12E

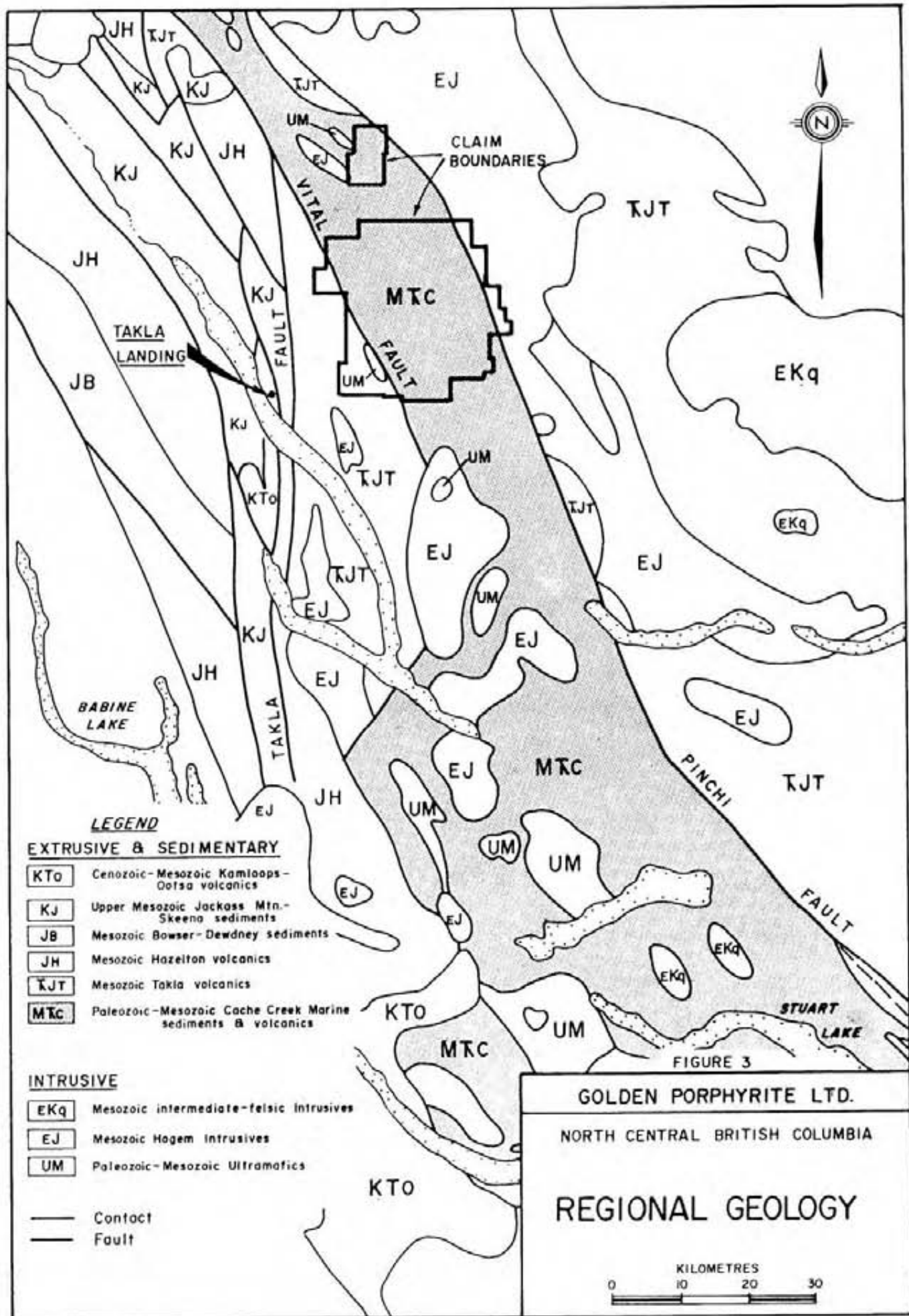


With the recent development of a new gold occurrence model involving large tonnage, low grade deposits, the owners, Broadoak Investments Inc. 75% and Unistar Technologies Corp. 25%, contracted Golden Porphyrite Ltd., to locate the source rocks of the placer gold found in Harrison Creek. Rocks belonging to the Permo-Triassic Cache Creek Group outcrop within and around the claim block and conform to this model. This and the gold found in Harrison Creek make this property ideal for gold exploration.

The work was performed by Golden Porphyrite personnel supervised by Mr. H. Macfarlane and directed by Mr. F.M. Smith, P.Eng. The area was geologically mapped and prospected over an area of approximately 20 km<sup>2</sup>. A total of 2 geochemical rock chip and 141 soil samples were collected.

The Harrison Creek property consists of the following claims:

<u>Claim Name</u>	<u>No. Units</u>	<u>Tag No.</u>	<u>Owner of Record</u>	<u>Date Located</u>	<u>Date Recorded</u>	<u>Record No.</u>
Jo 32	20	91227	Broadoak Investments	09.06.83	21.06.83	5264
Jo 41	20	91236	Inc. 75%	09.06.83	21.06.83	5273
Jo 51	20	00308	Unistar	11.06.83	21.06.83	5283
Jo 52	20	69939	Technologies Corp. 25%	11.06.83	21.06.83	5284







## GEOLOGICAL SURVEY

### Regional Geology

The property is situated in the Omineca Tectonic Belt of the Canadian Cordillera. It lies approximately midway between the Vital and Pinchi faults and is underlain by the Permo-Triassic Cache Creek Group, first mapped in this area in the early 1940's by the Geological Survey of Canada and later in 1974. The Cache Creek Group consists of highly deformed phyllite, chert and argillite with local greywacke and contains discontinuous bodies of carbonate and metavolcanic rocks. This group is separated from the Jurassic Hogem Batholith by the Pinchi Fault, (fig. 3).

### Local Geology

The Harrison Creek property was geologically mapped and prospected at a scale of 1:20,000 predominantly along ridge crests and slopes, over an area of 20 km<sup>2</sup>.

Units of the Cache Creek Group present within the Harrison Creek property are: cherty argillite, limestone, phyllite and tuff. The cherty argillite member is grey-black in colour, is frequently interlaminated with chert on a 1 - 10 mm scale and may be transitional to the argillite and chert units. The cherty argillite displays well developed foliation parallel or sub-parallel to the original bedding. The limestone occurs as thinly bedded to massive units 300 - 400 m wide in surface exposure and is grey to black in colour, recrystallized, dolomitic in part and probably micritic in origin.





The phyllite units are green, grey to black in colour and frequently display foliation parallel, or at an acute angle to the bedding. Alternate lamination of chert and phyllite on a 1 - 10 mm scale, occurs locally. Tuff occurs as green to black units fine to medium grained, vesicular, vuggy and probably andesitic in origin. Foliation is well developed in part and is parallel or sub-parallel to the original bedding where seen.

A stratigraphic sequence for the Cache Creek Group present on this Property has yet to be determined.

Most of the Cache Creek Group units strike north to northwest with a predominantly steep westerly dip. Bedding and foliation are parallel or sub-parallel with the latter thought to have developed parallel to the north-south fold axes. Folding has resulted in the formation of antiforms and synforms. The phyllites and tuffs are isoclinally folded in part and appear to have behaved incompetently with respect to the more competent limestones.

The Cache Creek Group units have undergone low grade regional metamorphism of the greenschist facies. This has resulted in the recrystallization of the limestone and the alteration of the original argillaceous sediments to argillite and phyllite. Studies by the Geological Survey have revealed that the andesitic volcanic units now contain tremolite + albite + chlorite + sphene ± epidote ± glaucophane ± stilpnomelane ± calcite ± dolomite ± white mica.

GEOCHEMICAL SURVEY

A total of 141 soil samples were collected using the constant contour method around areas previously geologically mapped, prospected and showing signs of economic potential according to the model. Soil samples were taken from the "B" horizon at 50 m. intervals along a line of constant elevation. Once extracted the soil was described and sealed in a wet-strength kraft bag for analysis. The average sample depth was approximately 20 cm. Analysis for gold was conducted at Min-En Labs, 705 West 15th Street, North Vancouver, B.C. All samples were dried and crushed in a ceramic plated pulverizer to - 100 mesh. Five (5) gram portions were then pretreated with a 5%  $\text{HNO}_3$  and 70%  $\text{HClO}_4$  mixture for one hour, digested with aqua regia, twice to dryness and taken up to 100 ml in 25%  $\text{HCl}$ . Gold was then extracted as a bromide complex into Methyl Iso Butyl Ketone and analyzed via atomic absorption with a 5 parts per billion (ppb) detection limit.

In the process of mapping a total of 2 1 kg rock-chip samples were taken (see Appendix B). These samples were also analyzed by Min-En Labs for gold using the above procedure.

At a later date, all sample pulps were analyzed for silver by Chemex Labs, 212 Brooksbank Avenue, North Vancouver, B.C. Silver analysis required 1 gram portions of each sample to be digested in a 20%  $\text{HClO}_4$  - 4%  $\text{HNO}_3$  mixture for approximately 2 hours. The digested sample was then cooled and made up to 25 ml with distilled water. The solution was then mixed and solids were allowed to settle. Silver concentration was then determined using corrected atomic absorption techniques with a detection limit of 0.1 parts per million, (ppm).



An anomalous gold geochemical soil value of 100 ppb was obtained from an area close to the western margin of the property above Humphrey Creek. Further slightly anomalous soil values of 35 and 40 ppb were obtained from valley slope to the east of Harrison Creek. The rock chip samples taken were found not to be anomalous. Analysis of the samples for silver did not reveal any anomalous values.



### HEAVY SEDIMENT SAMPLING

Heavy sediment samples were taken at two localities on the Property and approximately 0.2 m<sup>3</sup> of material was processed at sample #14 and 0.75 m<sup>3</sup> of material at #42 (fig. 5). The concentrate in each case was panned down and a value on a scale from 0 to 10 was assigned dependent upon the numbers of 'colours' present. An absence of 'colours' would characterize the 0 end member and 100 to 200 'colours' the 10 end member of this scale.

The sample location on Humphrey Creek (#14) was assigned a value of 4, and that on Harrison Creek (#42), was assigned a value of 0. This sample locality is presumed to be above the source of the gold draining into this creek. Limited access and lack of suitable landing sites for the helicopter precluded a detailed heavy sediment survey during this program.



CONCLUSIONS

The 1983 reconnaissance program revealed the presence of an area with anomalous gold values. This area is thought to be one of the sources of the placer gold draining into Humphrey Creek.

A detailed program of heavy mineral sampling, soil sampling and geological traverses are required during the next field season. This program will be designed to determine the sources of the placer gold being recovered from Harrison Creek and to investigate the anomalous soil geochemical values.

DETAILED COST STATEMENT

WAGES:	2 people @ \$200/day inc benefits for 3.9 days	\$ 780.00
	6 people @ \$115/day inc benefits for 16.78 days	1,929.83
	2 people @ \$143.75/day inc benefits for 5.0 days	718.75
	4 people @ \$57.5/day inc benefits for 7.0 days	402.50
	2 people @ \$92/day inc benefits for 2 days	<u>184.00</u>
		<u>\$ 4,015.08</u>
SAMPLES:	2 rocks @ \$7.25 Au	14.50
	141 soils @ \$6.75 Au	951.75
	143 rocks & soils @ \$1.96 Ag	<u>280.00</u>
		<u>\$ 1,246.25</u>
ROOM:	28.5 man days @ \$11.30/man day	<u>\$ 322.13</u>
BOARD:	28.5 man days @ \$17.40/man day	<u>\$ 495.98</u>
HELICOPTER:	Hughes 500D for 3.55 hours @ \$550/hour (incl. fuel)	<u>\$ 1,950.08</u>
GROUND AND FIXED WING TRANSPORT	Vancouver to Project area and return	<u>\$ 675.43</u>
EQUIPMENT	Purchase, rental and repair and consumables	<u>\$ 834.36</u>
OFFICE	Drafting, mapping, interim report preparation and office overhead	<u>\$ 1,196.62</u>
MANAGEMENT FEE		<u>\$ 1,073.59</u>
TOTAL		<u><u>\$11,809.52</u></u>



QUALIFICATIONS

I, H.S. Macfarlane, do hereby certify:

1. That I am a geologist with business office at #403-750 West Pender Street, Vancouver, B.C. V6C 2T7 and employed by Golden Porphyrite Ltd.
2. That I am a graduate in geology of the University of London (B.Sc. Honours, 1976) and of the University of Leicester (M.Sc., 1981).
3. That I am a Member of the Institution of Mining and Metallurgy, London, and a Registered Chartered Engineer with the Engineering Council, London.
4. That I have practiced by profession as a geologist for the past seven years.
5. That I personally supervised the field work and assessed the data resulting from the geological and geochemical surveys on the Jo 32, 41, 51 and 52 mineral claims.

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H.S. Macfarlane, M.Sc.

Dated at Vancouver, British Columbia, this 11<sup>th</sup> day of June, 1984.





GOLDEN PORPHYRITE LTD.

A P P E N D I X A

Geochemical Sample Results



PROJECT NO:

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7W 1T2  
PHONE (604) 980-5814

DATE: Au

1983.

ATTENTION:

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppt
5	10	15	20	25	30	35	40	45	50	55	60	65
86	90	95	100	105	110	115	120	125	130	135	140	145
G-204												45
05												5
06												5
07												5
08												5
09												5
10												5
11												5
G-212												

CERTIFIED BY 



Golden Porphyrite

GEOCHEMICAL ANALYSIS DATA SHEET



3-1

PROJECT NO

Takla Phase 1

MIN - EN Laboratories Ltd.

DATE

205 WEST 15th ST. NORTH VANCOUVER B.C. V7W 1T2  
PHONE (604) 930-5514

ATTENTION:

Sample Number	Mg ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb		
8	85	90	95	100	105	110	115	120	125	130	135	140	145	150
G174							15							
175							09							
176							03							
177							03							
178							05							
179							07							
180							12							
181							10							
182							13							
183							11							
184							06							
185							06							
186							15							
187							03							
188							04							
189							08							
190							05							
191							12							
192							08							
193							05							
194							04							
195							04							
196							06							
197							05							
198							04							
199							08							
200							04							
201							07							
202							05							
G203							07							

CERTIFIED BY



# GEOCHEMICAL ANALYSIS DATA SHEET



PROJECT No. \_\_\_\_\_

MIN - EN Laboratories Ltd.

DATE: Aug

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1983

ATTENTION: \_\_\_\_\_

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
G 174							•					5
175							•					10
176							•					25
177							•					5
178							•					5
179							•					10
180							•					5
181							•					10
182							•					5
183							•					10
184							•					5
185							•					5
186							•					<5
187							•					<5
188							•					<5
189							•					5
190							•					<5
191							•					5
192							•					5
193							•					<5
194							•					5
195							•					10
196							•					10
197							•					5
198							•					5
199							•					5
200							•					<5
201							•					5
202							•					<5
G 203							•					5

*[Handwritten signature]*

CERTIFIED BY \_\_\_\_\_





















COMPANY Golden Porphyrite

# GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15TH ST. NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

DATE:

PROJECT: Takla Phase 1

ATTENTION:

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
5	10	15	20	25	30	35	40	45	50	55	60	65
85	90	95	100	105	110	115	120	125	130	135	140	145
K84							0.5					
K102							0.2					
103							0.4					
104							0.5					
105							0.8					
106							0.5					
107							0.4					
108							0.4					
109							0.3					
110							0.7					
110A							0.2					
111							1.4					
112							0.6					
113							1.2					
114							0.3					
115							0.5					
116							0.2					
117							0.1					
118							0.2					
119							0.3					
120							0.2					
121							0.4					
122							0.2					
K123							0.3					
							.					
							.					
							.					
							.					
							.					
							.					
							.					
							.					

CERTIFIED BY: *[Signature]*

GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT NO.

MIN - EN Laboratories Ltd.

705 WEST 15th ST. NORTH VANCOUVER B.C. V7M 1L1  
PHONE (604) 980-5514

DATE

ATTENTION M. Smith

Sample Number	Mo	Cu	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
85	90	95	100	105	110	115	120	125	130	135	140	145
K 84							.					1.5
K 102							.					5
103							.					5
104							.					<5
105							.					5
106							.					10
107							.					5
108							.					5
109							.					5
110							.					5
110A							.					5
111							.					10
112							.					5
113							.					5
114							.					5
115							.					5
116							.					5
117							.					5
118							.					5
119							.					<5
120							.					5
121							.					10
122							.					5

*[Handwritten Signature]*









GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

DATE:

ATTENTION:

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
D311							0.7								
312							0.6								
313							1.0								
314							0.3								
315							0.9								
316							0.6								
317							0.3								
318							0.4								
319							0.3								
320							0.5								
321							0.2								
322							0.5								
323							0.5								
324							0.6								
325							0.6								
326							0.5								
327							1.0								
328							0.8								
329							0.6								
330							0.3								
D331							0.5								
							.								
							.								
							.								
							.								
							.								
							.								
							.								
							.								
							.								
							.								

*Eric Swales*





GEOCHEMICAL ANALYSIS DATA SHEET

DATE: Aug 1981

PROJECT No.: \_\_\_\_\_

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

ATTENTION: M. Smith

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
81	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
D 311							.					5			
312							.					5			
313							.					20			
314							.					10			
315							.					10			
316							.					5			
317							.					15			
318							.					10			
319							.					20			
320							.					10			
321							.					40			
322							.					10			
323							.					15			
324							.					5			
325							.					15			
326							.					5			
327							.					20			
328							.					5			
329							.					10			
330							.					15			
331							.					5			
B-54							.					15			

CERTIFIED BY: [Signature]



**GOLDEN PORPHYRITE LTD.**

A P P E N D I X B

Rock Chip Sample Descriptions



H 42      Quartz Rich Phyllites

B 54      Phyllite



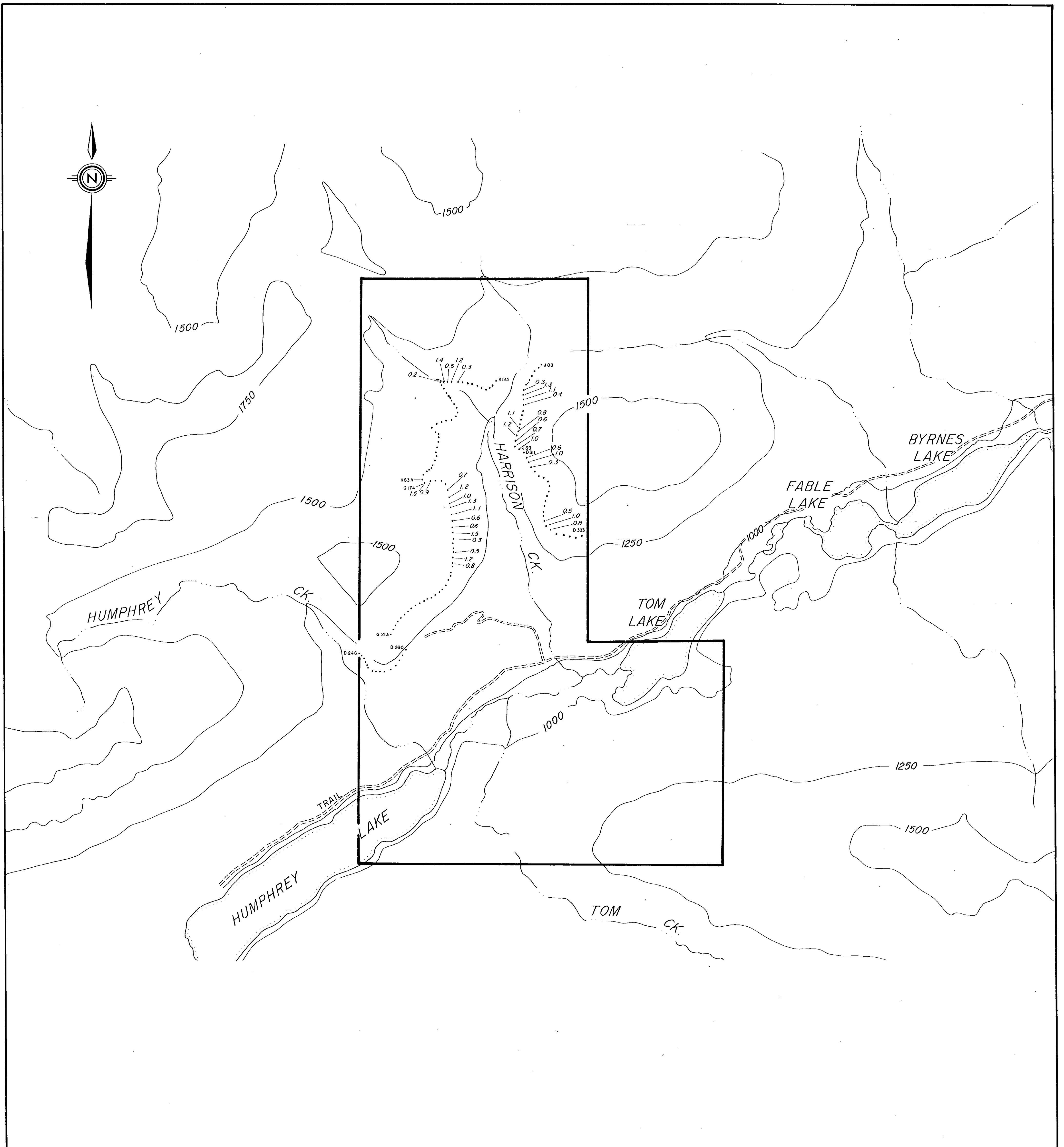


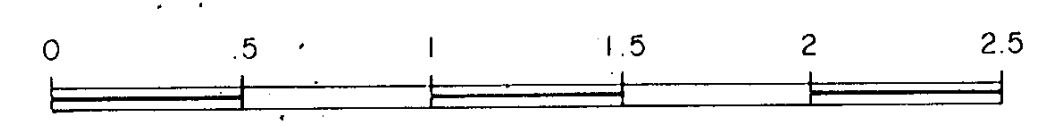
FIGURE 7

GOLDEN PORPHYRITE LTD.

HARRISON CREEK PROPERTY

SOIL GEOCHEMICAL LOCATION  
PLAN

SCALE IN KILOMETRES

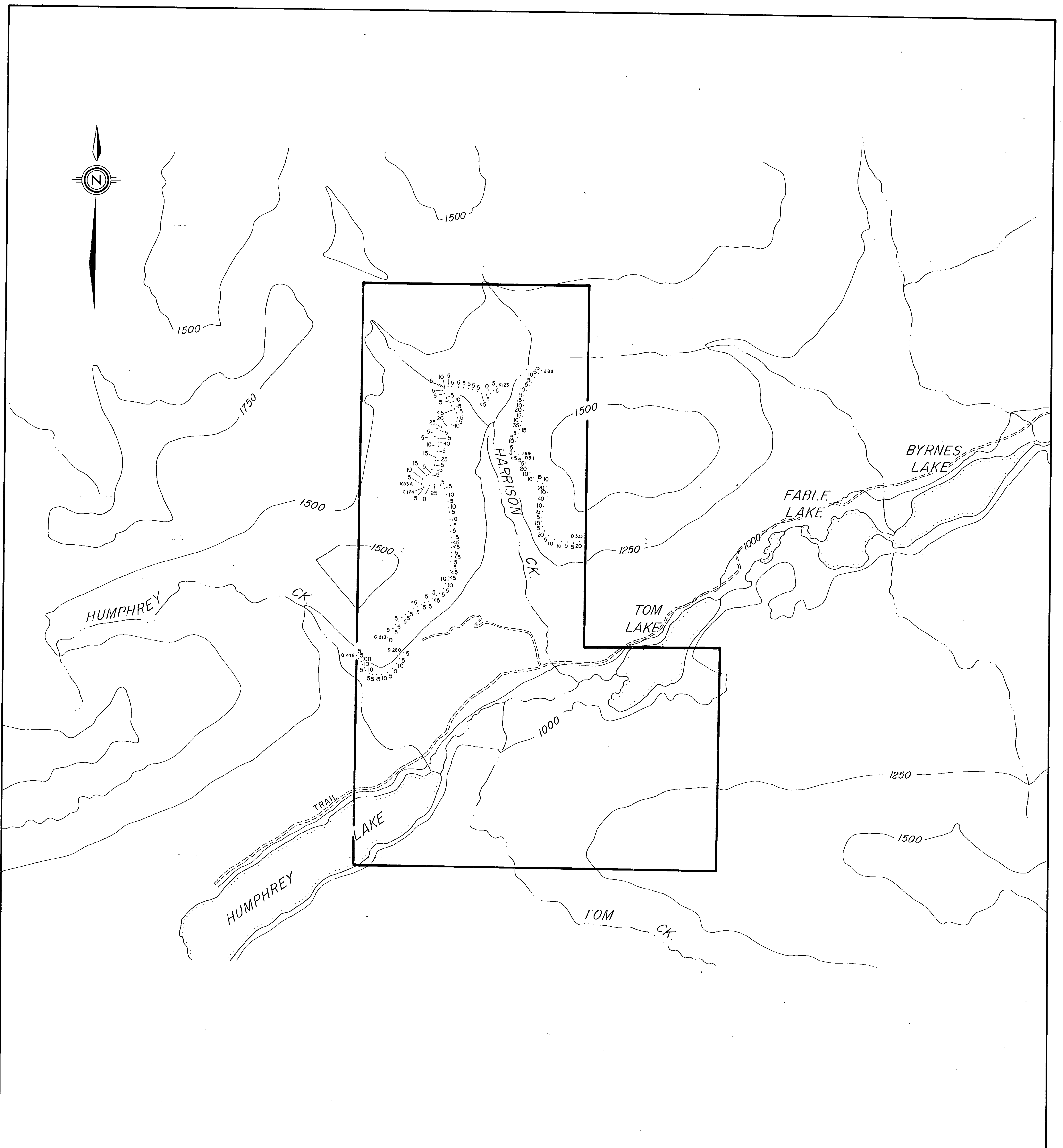


LEGEND

- 1.2 - Ag (ppm) (Only anomalous values plotted)
- 0333 - Soil Sample Number
- 0 - Indicates sample missing.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,294



**LEGEND**

- 20 - Au (ppb)
- 0333 - Soil Sample Number
- 0 - Indicates sample missing.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,294**

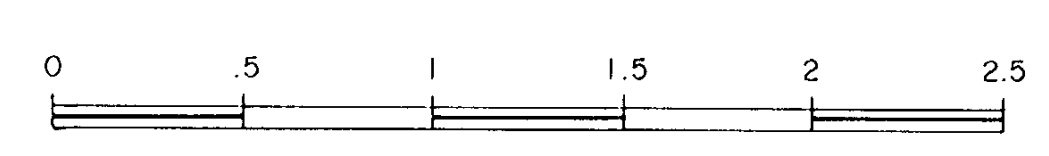
FIGURE 6

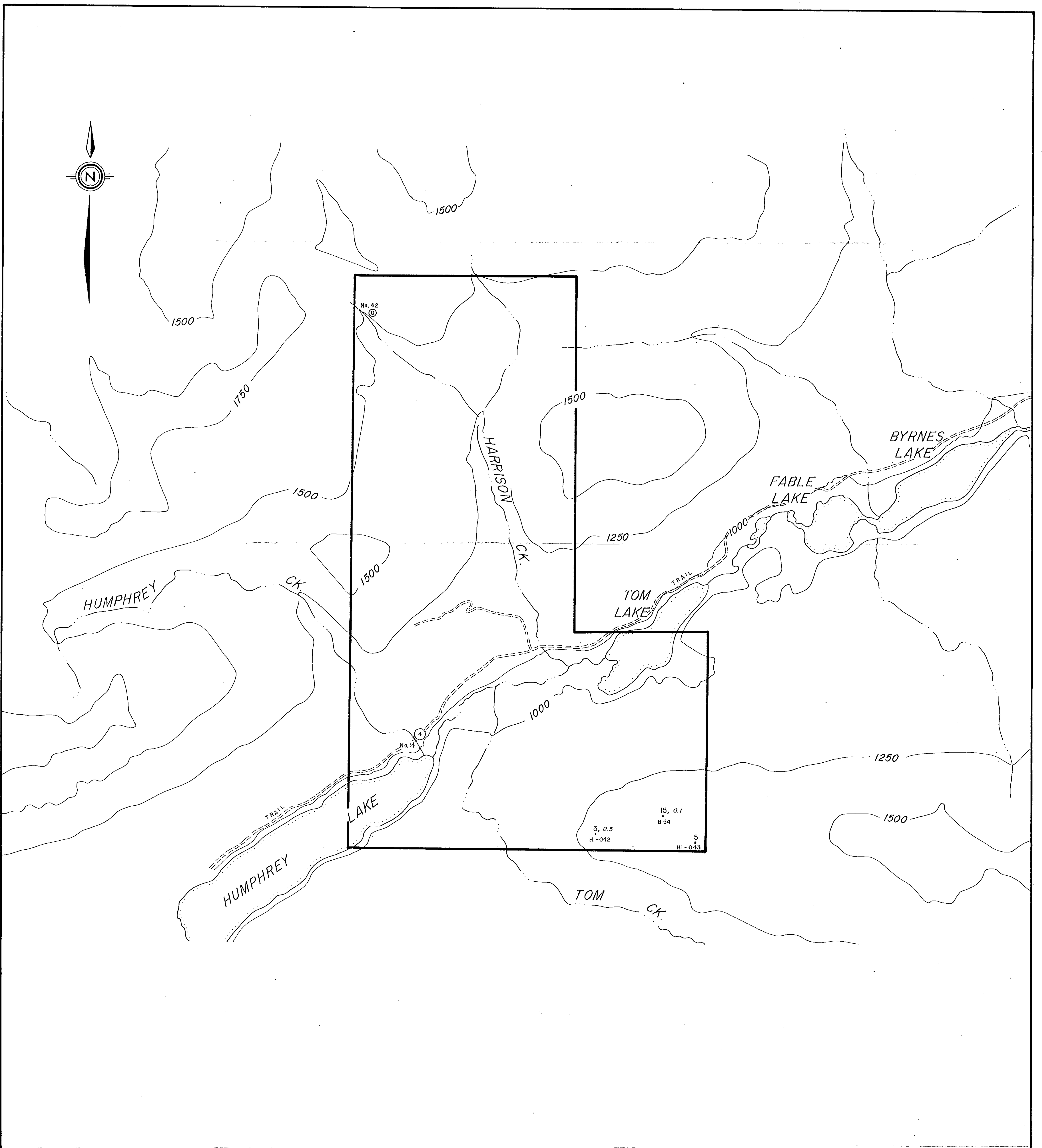
GOLDEN PORPHYRITE LTD.

**HARRISON CREEK PROPERTY**

**SOIL GEOCHEMICAL LOCATION  
PLAN**

SCALE IN KILOMETRES





**LEGEND**

5, 0.7 Au (ppb), Ag (ppm)  
 HI-042 Rockchip sample number

④ Heavy Sediment Sampling Location  
 No. 14 Scale of Au from 1 to 10  
 Sample number

Scale of Au  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**12,294**

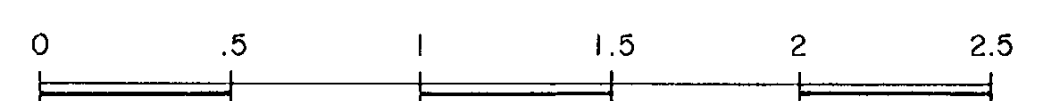
FIGURE 5

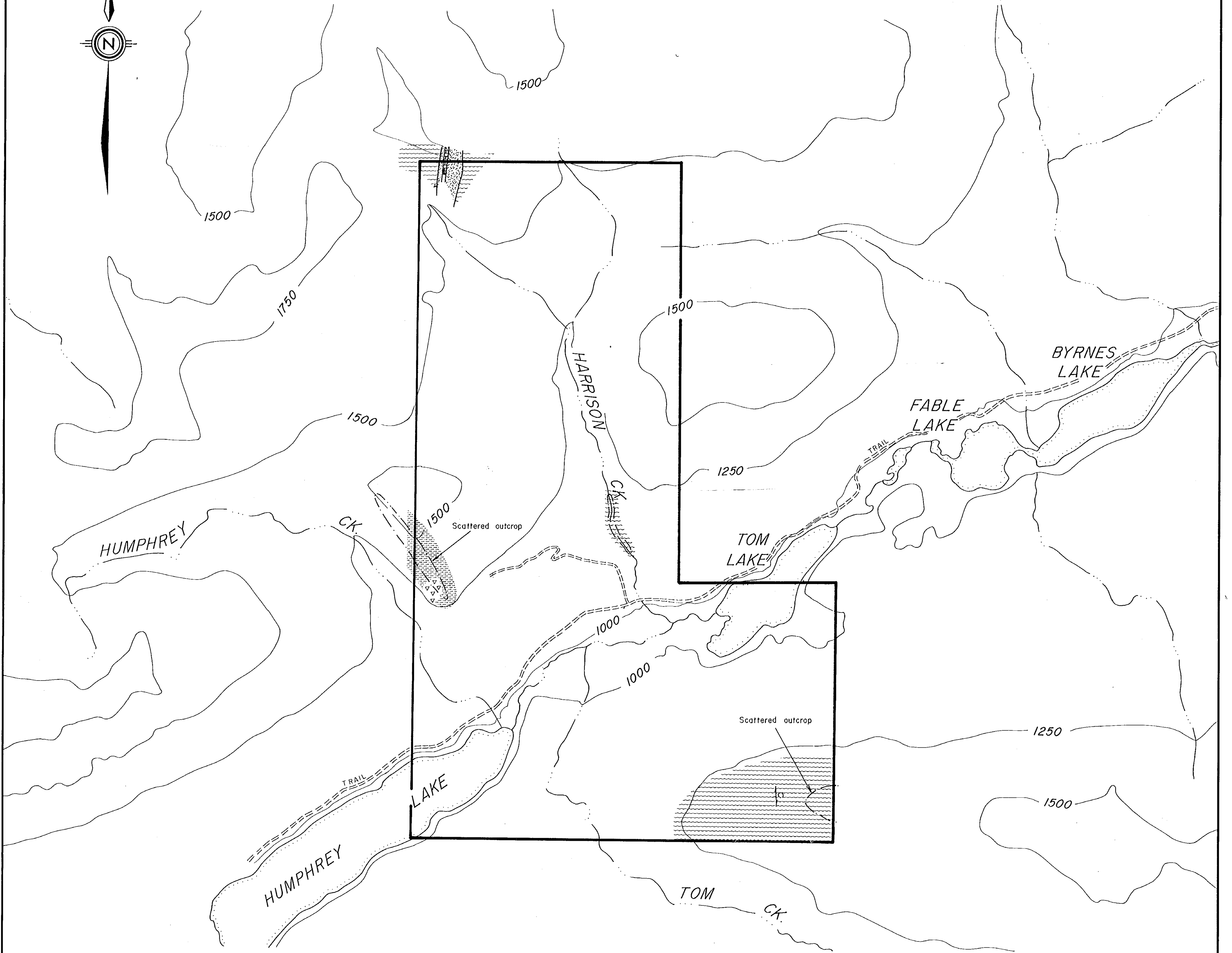
GOLDEN PORPHYRITE LTD.

**HARRISON CREEK PROPERTY**

**ROCK CHIP GEOCHEMICAL AND  
 HEAVY SEDIMENT SAMPLING  
 LOCATION PLAN**

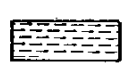
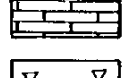
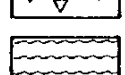


SCALE IN KILOMETRES









STRATIGRAPHY

CACHE CREEK GROUP  
PERMO-TRIASSIC

-  Cherty Argillite, locally phyllitic
-  Limestone, micritic, in part recrystallized.
-  Intermediate-felsic igneous floats
-  Phyllite, locally cherty or quartz rich
-  Tuff, locally intercalated with limestone or phyllite

SYMBOLS

-  Bedding; with amount of dip
-  Bedding; vertical
-  Foliation; with amount of dip
-  Foliation; vertical

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,294





-  Geological Contact - very uncertain
-  - uncertain
-  - observed
-  Outcrop

FIGURE 4

GOLDEN PORPHYRITE LTD.

HARRISON CREEK PROPERTY

GEOLOGY

SCALE IN KILOMETRES

