GEOCHEMICAL REPORT LARRY GROUP

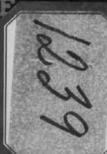
93 L 10 miles South of Smithers, B.C. 54°, 127°, S. E.

Franklin L. C. Price, P. Eng.

COPPER QUEEN EXPLORATIONS LTD. Aug. 7 to Sept. 30, 1967.

FRANKLIN L. C. PRICE

Professional Mining Engineer VANCOUVER 5, CANADA



GEOCHEMICAL REPORT

LARRY GROUP

93 L 10 miles South of Smithers, B.C. 54°, 127°, S.E. Franklin L. C. Price, P. Eng.

COPPER QUEEN EXPLORATIONS LTD. Aug. 7 to Sept. 30, 1967.

FRANKLIN L. C. PRICE PROFESSIONAL MINING ENGINEER

318 THE BURRARD BUILDING . VANCOUVER 5, CANADA . TELEPHONE 685-6733 . AREA CODE 604 . CABLE PRICEO VANCOUVER

206 HOOKER HOUSE . 7 ANGEL PLACE . SYDNEY, AUSTRALIA . TELEPHONE 28-4613 . CABLE PRICEO, SYDNEY

October 12th, 1967

Copper Queen Explorations Ltd. 1690 West Broadway, Vancouver 9, B. C.

Dear Siri

At the request of your Board of Directors, I visited your Smithers property on July 26th. 1967, for a preliminary examination of your claim group. The result of that trip warranted additional geological study and a geochemical survey and this further exploration has now been completed.

The results of the geochemistry clearly indicate copper mineralization across several claims and further testing is required. My report together with certain recommendations is attached.

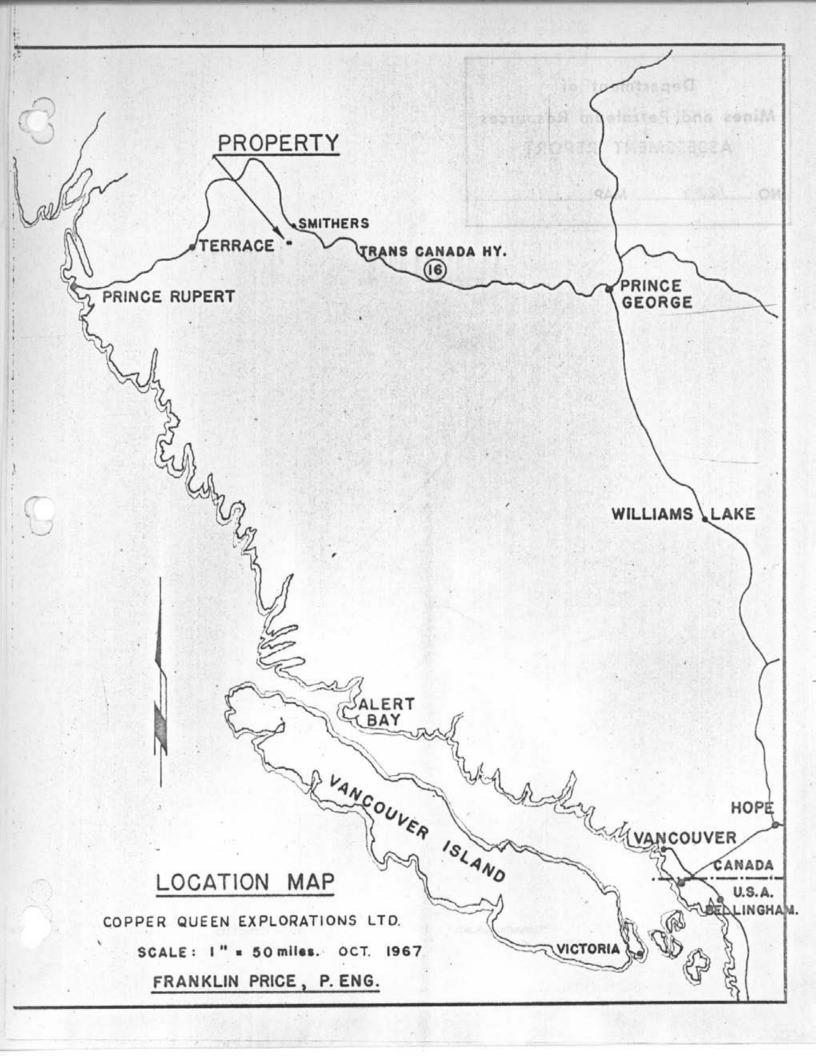
Respectfully submitted,

Franklin L. C. Price, P. Eng.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
LOCATION AND ACCESS	2
HISTORY	3
MINERAL CLAIMS IN THE GROUP	5
GEOLOGICAL SETTING	
Regional Geology	7
Geology	8
Sampling	12
GEOCHEMICAL EXPLORATIONS	14
RECOMMENDATIONS	16
BIBLIOGRAPHY	17
CERTIFICATE OF QUALIFICATION	18
50 병원 시간 이 그 나는 것은 사용된 경우는 경우나 없으면 먹으니	

Hips # 1 Location Map # 2 Plain Map # 3 Leochemical Survey : # 4 Base Line Control & Plain Overlay



INTRODUCTION

The Winfield Creek copper prospect has been known for nearly fifty years, but prospecting has been limited because of the elevation and the poor accessibility. A few years ago a new road was built from Telkwa to within six miles of the claim area. A Vancouver group acquired a block of nearly 70 claims and guided prospecting has been carried on since early 1966.

A geochemical survey was carried out over much of the claim area in 1967 and the results of that work have indicated target areas for detail geological study and diamond drilling. Additional work in the area is warranted and is outlined in the recommendations of this report.

LOCATION AND ACCESS

The claims are located near the headwaters of Winfield Creek, a tributary of the Telkwa River, nearly 15 air miles southwest of Smithers, in central British Columbia. The area is nearly 400 miles north of Vancouver, B.C. The exact location of the centre of the claim area may be defined as 54° 42' north latitude and 127° 29' west longitude. The elevation of the small camp on the property (Stock 2) was checked by the altimeter to read 5, 300 feet above sea level. The collar of the shaft was read at 5, 175 feet.

Access to the claims is best made by helicopter. There is a permanent helicopter base at Smithers and it is only a ten minute flight to the camp. It is possible to drive to the camp with a 4-wheel drive vehicle. A good gravel road extends up the Telkwa Valley from Telkwa. Seventeen miles from the town of Telkwa a branch road north to the micro wave station is used for 6-1/2 miles. A bush road, only used by 4-wheel drive trucks, is built from the micro wave road to the claims, a distance of 6 miles, totalling 29-1/2 miles from Telkwa.

The claims are all located in the Omineca Mining Division.

HISTORY

The occurrence of copper has been known for over fifty years near

Mt. Leach at the headwaters of Winfield Creek. It is reported that

the only underground work was done in 1917. A shaft was completed
about 50 or 75 feet deep along a narrow mineralized shear, then an
adit was collared 95 feet below and about 225 feet west. It is believed
that the adit never reached the area below the shaft, but was driven
nearly 100 feet. There is a newspaper report (Omineca Herald, 1917)
that 12 tons of copper ore were mined from the shaft and hauled down
to Telkwa by horseback. According to local stories the assays of that
shipment were 42% copper, 10 os. silver, and 0.40 os. of gold.

The property remained dormant until the late fifties when an attempt was made to diamond drill the area near the shaft. A local prospector drilled less than 100 feet in two holes, however, no core was recovered or sent out for appraisal. The property was again dormant for several years.

Within the last few years a new road was built to telephone repeater station just six miles away. The road provided access and more prospecting was done in the area. Several small copper outcrops were located in 1966, and a small gas drill was used to blast trenches across mineralized areas. A crawler tractor was then moved to the claim

area and several bedrock cuts were completed into the altered rhyolite and andesite sones.

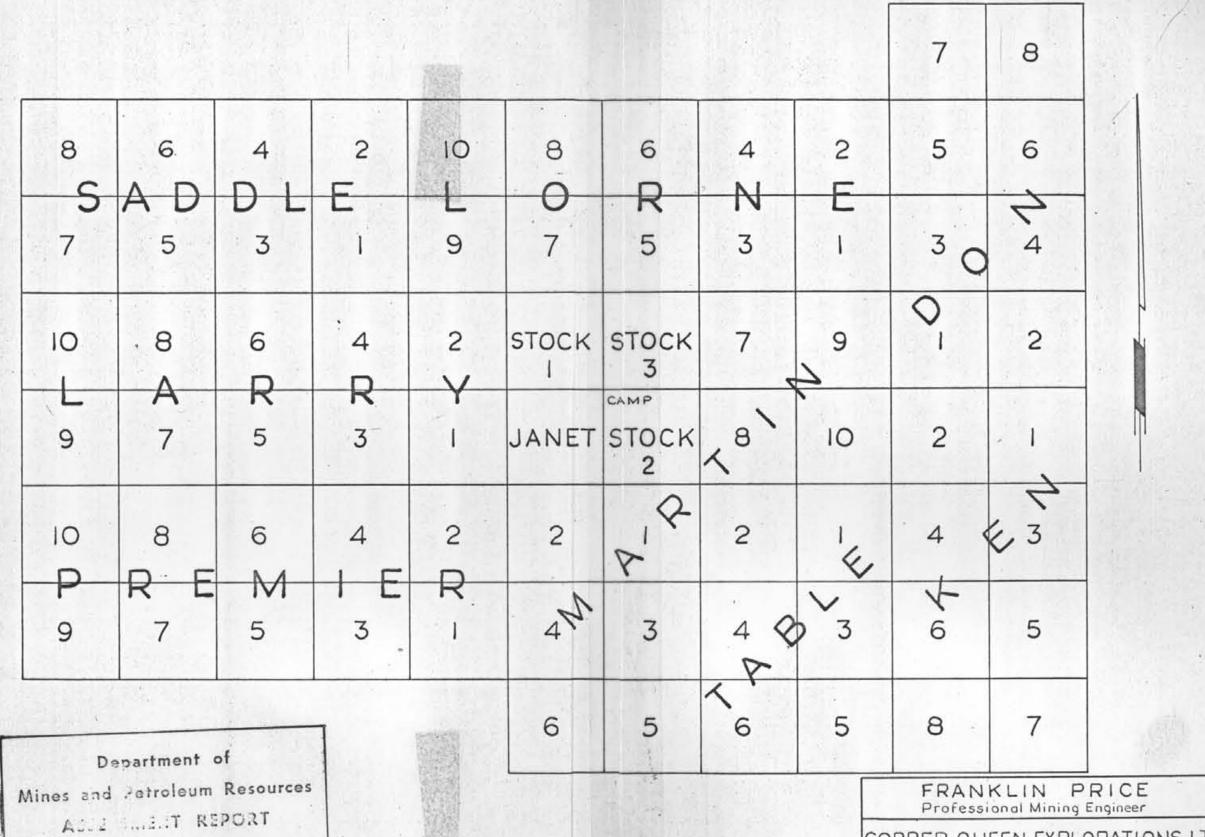
During July, 1967, this engineer visited the area and recommended a reconnaissance geological survey together with a geochemical survey over interesting sones. This work has now been completed.

MINERAL CLAIMS IN THE GROUP

The Winfield Creek group of claims held by the company is made up of the following claims:

Claim	Record Number	Date of Exp	ration
Janet	32894	September 6	th, 1968
Stock 1	13231	11 7	7th, "
" 2	13232	" "	11 .11
" 3	13233		H . H
Lorne 1	43562	September	14th, 1968
" 2	43563	**	
" 3	43564	"	11 11
** 4	43565	- 11	
" 5	43566	"	H H
" 6	43567		11 11
" 7	43568		11 11
" 8	43569		11 11
11 9	43570		H H
" 10	43571		и и
Larry 1	35464	March 28th	1968
" 2	35465	11 11	
11 3	35466	11 11	
" 4	35467	. 11 11	• 1
11 5	35468	# #	41
" 6	35469	11 11	**
" 7	35470	H H	11
" 8	35471	и и	**
11 9	35472	11 11	11
" 10	35473		"
Premier 1	47293	February 13	sth, 1968
" 2	47294		
" 3	47295		. / 11
н 4	47296		
" 5	47297	11 1	1 11
	47298		1 11
" 6 " 7 " 8	47299		
" 8	47300		1 11
" 9	47301	11 1	1 11
" 10	47302		1 11

Claim	Record Number	Date of Expiration
Ken 1	47303	February 13th, 1968
" 2 .	47304	н н н
. 3	47305	и и и
11 4	47306	
" 5	47307	
" 6	47308	
" 7	47309	, н н н
" 8	47310	н н п
Don 1	47311	February 13th, 1968
" 2	47312	
" 3	47313	11 11 11
. 11 4	47314	
" 5	47315	и и и
" 6	47316	
" 7	47317	
" 8	47318	n u
Table 1	47319	February 13th, 1968
" 2	47320	" " "
" 3	47321	
" 4	47322	H H H
" 5	47323	
" 6	47324	" " "
Saddle 1	47325	February 13th, 1968
vn 2 .	47326	11 11 11
11 3	47327	11 (11 11
n 4	47328	
11 5	47329	
** 6	47330	
11 7	47331	
" 8	47332	
Martin 1	49995	June 19th, 1968
" 2	49996	
" 3	49997	
" 4	49998	
11 5	49999	
" 6	50000	W 11 11 11 11 11 11 11 11 11 11 11 11 11
" 7	50001	и и и
" 8	50002	
" 9	50003	
" 10	50004	11 41 44



NO. 1239 MAP 2

COPPER QUEEN EXPLORATIONS LTD SMITHERS PROJECT CLAIM MAP

SCALE :- DIAGRAMATIC

OCT. 1967

These claims are held by location and, as far as this engineer could see, they were properly staked. Several claim posts were checked at the time of my visit. Those checked were found to have the proper tags and were properly marked. The mining recorder's records were not checked as the company has retained counsel to ensure the property is free and clear. All information pertaining to the character of ownership in the properties studied has been accepted as presented by Copper Queen Explorations Ltd.

REGIONAL GEOLOGY

The area is one with mountainous relief. The broad valleys have an elevation of nearly 1, 500 feet, while the mountains are 3,000 feet.

The main peak in the area, Hudson Bay Mountain, is only 12 miles from Smithers and has an elevation of 3,600 feet. Sedimentary and volcanic rocks, locally known as the Hazelton group, make up both the mountains and the uplands south of Smithers. Andesite, dacite and rhyolite make up most of the volcanic types and sandstones, argillite and shales make up the sedimentary rocks in the Hazelton group. These rock types were all found on the claim area.

Mesozoic rocks of the Hazelton group make up nearly all of the Smithers area and the age has been classed as early middle Jurassic to lower Cretaceous. The Hazelton group is believed to be made up of two sedimentary divisions and three volcanic divisions with a combined thickness of nearly 16,000 feet. There have been reported fifty known vein deposits on Hudson Bay Mountain. These veins are largely confined to the volcanic flows and the tuffs, except one that is in a limestone, and a very few small veins in stocks of granodicrite.

The regional geology was studied by the company's field geologist before he started the field mapping work over the claim area. This was done in order that the rocks and types could be correlated into the Hazelton group.

GEOLOGY

Generally the attitude of the rocks is that of a strike bearing true north and a dip to the east. The general stratigraphy is that of rhyolite porphyry overlain by andesite lava in turn overlain by more rhyolite porphyry (porphyry interbedded to some extent with quartaite and arkose). Minor intrusions of andesite, rhyolite flows, white felsite, and basalt have been observed in the overlying rhyolite porphyry.

A reconnaissance geological survey was made over a portion of the claim area to determine, if possible, the continuation of the copper mineralization observed on claims Janet and Larry Three. An East-West base-line was established nearly eight thousand feet from the Martin Nine to the Larry Six claim, and then a base-line was established south for 4,500 feet to the centre of the Table group.

The geology was mapped along this line and for nearly one thousand feet on each side except where talus or overburden masked the rock.

The northwest of the property is dominated by Mt. Leach that is capped by an andesite lava (strike N 15° E. Dip 21° S.E.) interbedded by a tuff overlying porphyry. Two minor copper outcrops were observed along the southwest slope of the mountain. Both contained malachite in association with andesite. The outcrops were not large

and the mineralization could only be traced about ten feet in trench
with copper carbonate staining another ten feet. Samples were taken
that assayed:

No.	Copper %
RS 1	 0.60
RS 2	0.20

An outcrop just N. E. of station 46 in the Mt. Leach area showed malachite float above the outcrop. The bedrock source of this copper could not be located up the hill. It would appear that there is a zone of mineralization along the southwest edge of the andesite capping of Mt. Leach. Prospecting was done in the area without success; thus, soil sampling was done to try and locate the source of the mineralized float.

Area Five on the geochem survey was made to check the rock types along the flank of Mt. Leach. However, it is the opinion of this engineer that the rocks were exposed and that a constant soil cover was impossible, therefore, the soil assay results would be higher and erratic.

A large body of andesite porphyry with a minor basalt dyke northwest of Mt. Leach was mapped but with no evidence of copper mineralization. The area for 1,000 feet on each side of Winfield Creek is covered with soil cover and could not be geologically mapped, but a portion of the

area was checked with soil sampling.

The main mineralized sone is on the southern portion of the Stock One claim. This none has been partially opened by a shaft with the collar at 5,175 feet, and by an adit 225 feet west, with the adit portal at 5,080 feet. The underground workings are all caved. This mineralized area is apparently fault gouge material that was mineralized by post faulting flows. The copper mineralization is along the andesite and the white felsite and is limited from 5 to 7 feet. Samples taken at the time of my visit were assayed to show:

No.	Footage	Copper %
17, 767	5 ft.	2.92
17,768	5 ft.	0.32

Sample No. 17767 was taken across the best portion of the showing and Sample No. 17768 was adjoining that sample and was 5 feet into the andesite. This sampling was not encouraging as it showed the copper to be narrow and limited to the fault area, however the later soil sampling has altered the size of the copper mineralized area.

The rock types along the base-line down the centre of the Martin Table groups show rhyolite porphyry lying conformably with interbeds of arkose and quartilte, with a general attitude of strike N 5° W and dip of 30° to the east. A series of rhyolite flows and altered andesite sills

were located, examined and sampled on claims Table 3 and 4. Minor copper mineralization was located here and the area was checked by a pattern of geochemical samples. Rock samples were also taken that indicated below marginal grade. (The details under sampling).

Further south on claims Table 5 and 6 the outcrops of altered rhyolite and rhyolite were mapped but without copper present. Near the centre of Table 5 an outcrop of rhyolite porphyry and conglomerate were noted with copper mineralization. This area was also sampled but showed low copper content.

SAMPLING

The property has been sampled by several engineers with channel samples as well as character samples. The results of the known sampling has been tabulated below.

The sampling by H. W. Agnew in September, 1966 reads:

"A five foot wide mineralized zone within the volcanic rocks including a 1 foot wide quartz vein at this point contains chalcocite mineralization through the 4 feet of wall rock within the shear zone. The quartz vein which apparently supplied the bulk of the "high grade" shipment in 1917, is at this point quite sparsely mineralized, no doubt any "high grade" bunches of ore were removed when making up the shipment. Nevertheless, mineralization of the mineralized zone less the quartz vein appeared to be worth sampling. A four foot chip sample (No. 94678) of the mineralized shear zone assayed 5.5% copper per ton. The only minerals identified were chalcocite with minor malachite.

Two opencuts have exposed the structure above the shaft, the first 25 feet above and about 50 feet to the southeast of the shaft is badly caved in but some chalcocite mineralization was evident over a narrow width.

The second open cut 15 feet vertically higher and 20 feet further to the southeast of the first opencut is about 10 feet long and exposes about 1-1/2 feet of well mineralized volcanic rock at the extreme northeast end of the trench at which point it disappears under the overburden. A grab sample of representative mineralization from this open cut assayed 4.02% copper (No. 94677)."

July 26th, 1967, Franklin Price cut three samples:

Sample Number	Width	Cu	Claim	Location
17765	Grab	0.45%	Larry 3	In small trench Near portal of Adit Above Shaft Above Shaft, (Andesite next five feet to above sample)
17766	Grab	0.45%	Stock 1	
17767	5 Ft.	2.92%	Stock 1	
17768	5 Ft.	0.32%	Stock 1	

August, 1967 Geologist Peter Gleba took many character samples:

Sample Num!	ber	Width	Cu	Claim
6002			0.60	Larry 4
6003			0.20	Larry 6
6005		6 FT.	0.05	Table 3
6006	415	20 FT.	0.22	Table 3
5007		35 FT.	0.12	Table 3
6009		25 FT.	0.25	Table 3
6010		25 FT.	0.20	Table 3
6011		25 FT.	0.14	Table 3
6012		25 FT.	0.40	Table 3
6013		25 FT.	0.17	Table 3
6014		40 FT.	0.17	Table 3
6015		40 FT.	0.37	Table 5
6016		40 FT.	0.17	Table 5
6017		50 FT.	0.15	Table 5
6018		27 FT.	0.27	Table 5
6019		20 FT.	0.15	Table 5
6020		30 FT.	0.17	Table 5
6021		30 FT.	0.10	Table 5

GEOCHEMICAL EXPLORATIONS

Seven hundred soil samples cut in August, 1967, were sent to

Vancouver for appraisal on an atomic absorption spectrophotometer

with interesting results.

Control was established with long east-west and north-south survey lines. Stations were pegged every three feet along the line and every 100 feet in the geochemical areas. Samples were cut every 100 feet and their results reported on a map drawn to the scale of 1" to 200 feet. The geochemical exploration was carried out together with a geological survey and as mineralization was found a 100 foot grid was marked out and soil samples taken. Five areas were selected by the geologist and these areas are shown on the base-line control map.

The results clearly show an anomalous zone 200 feet wide and over 2,000 feet long in the centre of Stock one mining claim and extending into the centre of the Janet claim. The sone runs north-south parallel to the quartitie vein and downhill from it. The trend of the hillside along this zone is sloping downward S 55° E. It would not be possible for a small copper showing uphill to contaminate this much soil and also as the slope is to the south-east the mineralization causing the anomaly must have some lateral extent.

It is interesting to check the geochemical map near the centre of Area

Two and see how each sample on lines 9, 10 and 11 show readings

generally above 100 parts per million of copper. Also that there is

not one high reading on line 12 showing a distinct cut off of the anomaly.

Also it is interesting to check the accuracy of soil sampling to note

that on lines 7 and 8 the downhill contamination from the shaft workings

is recorded. (Cross Line 2 North).

The other areas tested did show high copper readings, but the readings are mostly taken from near bedrock where high and erratic copper background may be expected. Therefore until a detail ground study is made of the other areas, it is suggested that exploration be concentrated in the centre of area two.

RECOMMENDATIONS

It is recommended that a sum of fifty thousand dollars (\$50,000.00) be allocated for mineral exploration on the Winfield Creek group of claims in the Smithers area. This work to be used to check the anomalous some on the stock I claim and to complete a more detailed geological survey of the rest of the claim group.

The work would be to establish a small camp for four to six men and have tractor dozer cut some bedrock trenches across (east-west) the zone in the centre of geochem area two. These trenches should establish the type of mineralization present and allow a better study of the attitude of the rocks. This would enable the engineer to direct the diamind drill into the zone to obtain the best intersection.

The budget could set up along these guide lines:

\$ 10,000.00
 1,000.00
5,000.00
20,000.00
2,500.00
1,500.00
5,000.00
5,000.00
s

\$ 50,000.00

BIBLIOGRAPHY

Map 44 - 23:

Smithers, British Columbia, Preliminary Geological map issued by Geological Survey, Canada, 1944.

Kindle, E.D.

1954 Mineral Resources, Hazelton and Smithers Geological Survey, Canada. Mem. 223

Agnew, H. W.

Private Report for Copper Queen Explorations, September 16th, 1966.

CERTIFICATE OF QUALIFICATION

I, Franklin Langworthy Carr Price, do hereby certify

that:

- I am a practising mining engineer with offices at 318
 Burrard Building, 1030 West Georgia Street,
 Vancouver 5, British Columbia.
- I am a graduate of the New Mexico School of Mines, and have been granted the degree of Bachelor of Science in Mining Engineering.
- 3. I have been practising my profession as a Mining Engineer for 20 years.
- 4. I am a member of the Association of Professional
 Engineers of British Columbia, Certificate Number
 4576.
- 5. I hold licence number 0209800 in the State of Washington as a Professional Engineer.
- 6. I personally visited the property on July 26th, 1967.
- 7. I have no interest, direct or indirect, in the properties or securities of Copper Queen Explorations Ltd.

Vancouver, B. C. October 12th, 1967 James John

SUB - MINING RECORDER RECEIVED

MAR 28 1968

M.R. # 19064 \$

VANCOUVER, B. C.

d Q.B. Mamer.

Mineral work performed on LARRY GROUP - 1967.

WAGES -

Aug. 6 to Aug 29 - Peter Gleba	\$	424.00	
Aug. 6 to Aug 29 - Greg McConnell		507.07	
Aug. 6 to Aug 25 - Merv. Stade		334.15	
Professional fee paid to Franklin Price		200.00	
Drafting maps		88.00	
Paid Biometals for A. A. Spectrophotometer	:		
Analysis		924.00	-
	\$2	,477.22	

Declared before me at the city

Vancouver, in the

Province of British Columbia, this

March, 1968, A.D. day of

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia.

Sub-mining Recorder

SUB - MINING RECORDER RECEIVED

MAR 2 8 1968

M.R. #19064 \$

VANCOUVER, B. C.

d. aB manner

Mineral work performed on LARRY GROUP - 1967.

WAGES -

Aug. 6 to Aug 29 - Pete	r Gleba	\$	424.00
Aug. 6 to Aug 29 - Gre			507.07
Aug. 6 to Aug 25 - Mer	v. Stade		334.15
Professional fee paid to	Franklin Price		200.00
Drafting maps			88.00
Paid Biometals for A.	A. Spectrophotometer	9	
	Analysis	_	924.00
		\$2	477 22

Declared before me at the city of amounts, in the Province of British Columbia, this 28 7 day of march, 1968, A.D.

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia. Sub-mining Recorder

FRANKLIN L. C. PRICE

PROFESSIONAL MINING ENGINEER

318 THE BURRARD BUILDING . VANCOUVER 5, CANADA . TELEPHONE 685-6733 . AREA CODE 604 . CABLE PRICEO VANCOUVER
206 HOOKER HOUSE . 7 ANGEL PLACE . SYDNEY, AUSTRALIA . TELEPHONE 28-4613 .. CABLE PRICEO, SYDNEY

May 22, 1968

Mr. G.H. Beley, Mining Recorder, Box 340, Smithers, B.C.

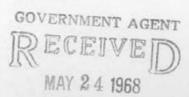
Re: LARRY GROUP OF CLAIMS.

Dear Sir,

Your letter addressed to Copper Explorations has been turned over to me for attention. We greatly appreciate knowing that your Department reads the reports that we have completed for assessment work and we regret the typographical error on page 14, as it should have read "Stations were pegged every 300 feet".

The additional information that is required concerning our soil sampling will be answered in outline form:

- 1. The sample was taken with small hand spades.
- 2. We believe that this was taken from the (a) soil horizon. There was very little organic material in the samples.
- 3. The samples were packed in a No. 1 Duplex paper bag, and shipped to Vancouver to a chemical laboratory.
- The samples were dried in an oven at 250° F. and the material then screened through a 60-mesh screen. Only the fines were used for appraisal.
- 5. The tests were made in a chemical laboratory in Vancouver.
- The samples were processed by the hot acid extraction method and tested with an Evans Atomic Absorption Spectrophotometer.



We trust that this information will be sufficient for you, However, should you desire additional information, please write us again in Vancouver.

Yours very truly,

Franklin L.C. Price.

flcp/e

cc: Mr. L. McNeal

