

4191

DOLMAGE CAMPBELL & ASSOCIATES LTD.
CONSULTING GEOLOGICAL & MINING ENGINEERS
100 GUINNESS TOWER
VANCOUVER 1, B.C.

GEOCHEMICAL REPORT

on the

TEL MINERAL CLAIMS

Nos. 29-38 and 51-60

Claim Sheet No. 93L/10W

TELKWA RIVER AREA

Omineca Mining Division, B. C.

54°28'N. Lat., 127°37'W. Long.

Owner of Claims

Tyee Lake Resources Ltd. (N.P.L.)

Supervision and Report by:

D. D. Campbell, Ph.D., P.Eng.

Work completed between July 21, 1972 and August 11, 1972

February 19, 1973

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO	4191 MAP

TABLE OF CONTENTS

	PAGE:
INTRODUCTION	1
GEOLOGICAL SETTING	2
GEOCHEMISTRY	3
Sampling and Assaying Techniques	
Interpretation of Results	
CONCLUSIONS	4
Recommendations	
APPENDIX 1 - Statutory Declaration	
2 - Statement of Labour Costs	

LIST OF ILLUSTRATIONS

	Following Page:
#1 Figure 1 Location Map	1
#2 Figure 2 Property Location and Regional Geology	2
#3 Figure 3 1972 Soil Geochemistry	3

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INTRODUCTION

A geochemical soil survey was carried out on the Tel mineral claims by Mr. R. B. Findlay and Mr. C. R. Saunders of Dolmage, Campbell and Associates under the direction of the writer. The survey was conducted between the period July 21 and August 11, 1972. Access to the property was accomplished by helicopter from Smithers.

The claims, Tel 29-38 and 51-60, are located in the Telkwa Range of mountains 30 miles southwest of Smithers, B. C. in west central British Columbia at the headwaters of the Telkwa River ($58^{\circ} 28' N$, $127^{\circ} 37' W$). The property extends from the canyon of the Telkwa River, elevation 2750 feet, to the top of Mt. Janssens, elevation 5800 feet. It is forested at lower elevations and alpine-pastured above 4000 feet elevation.

Whitehorse

YUKON

NORTHWEST TERRITORIES

Department of
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 ASSESSMENT REPORT
 NO. **4191** MAP #1

BRITISH

ALBERTA

Prince Rupert

Smithers



TEL CLAIMS

Prince George

Edmonton

COLUMBIA

Vancouver

UNITED STATES

D. D. Campbell
 PROFESSIONAL
 PROVINCE OF
 D. D. CAMPBELL
 BRITISH
 ENGINEER

DOLMAGE - CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

TYEE LAKE RESOURCES LTD.
VANCOUVER, CANADA

TELKWA RIVER COPPER PROPERTY

LOCATION MAP

DWG. G72-860

SCALE: 1 inch = 120 miles

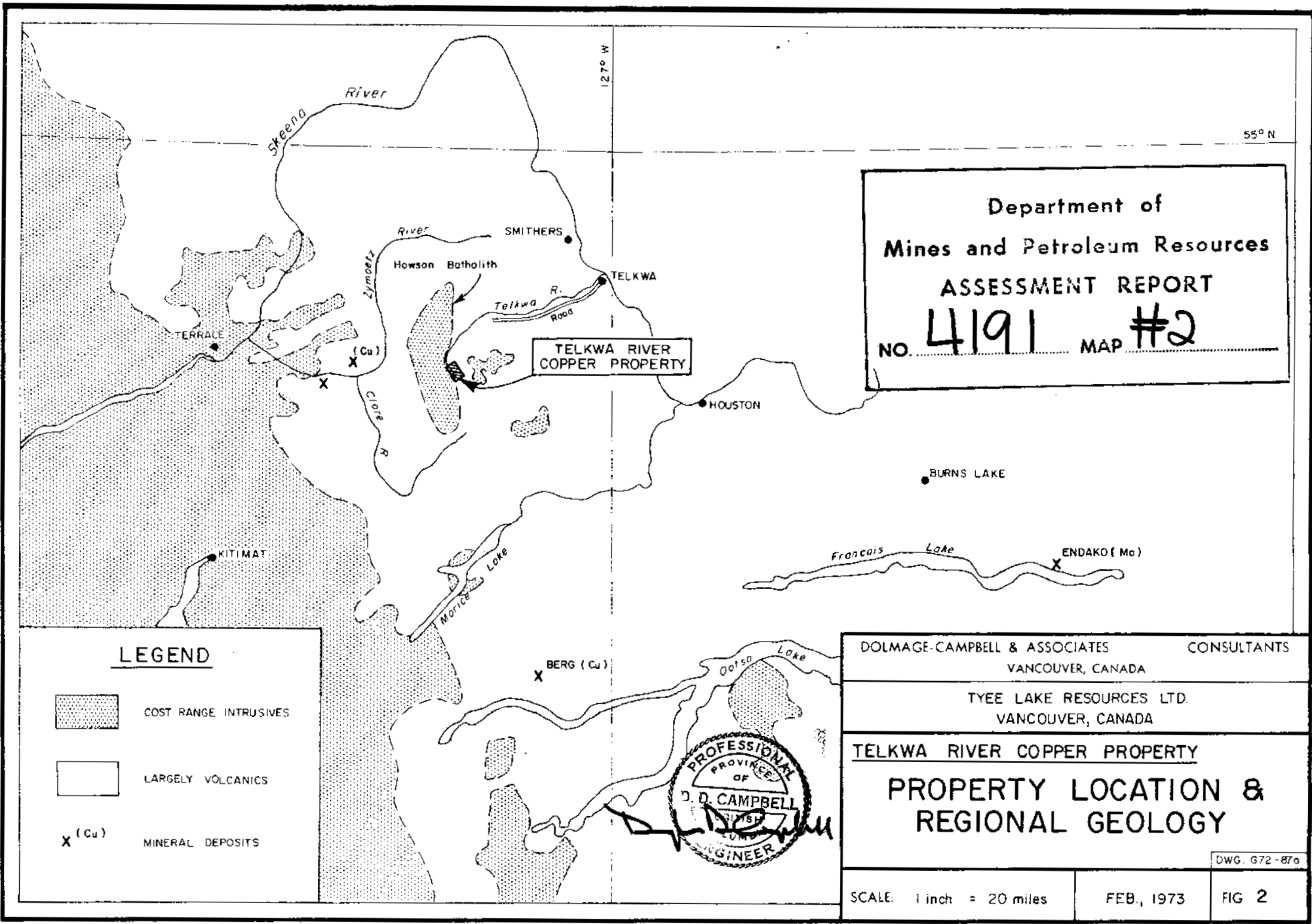
FEB, 1973

FIG. 1

GEOLOGICAL SETTING




The Telkwa River property is underlain by volcanic rocks of the Hazelton Group of Jurassic Age. Immediately west of the property, across the Telkwa River, the glacier-capped mountains are underlain by the Howson Batholith, which is an outlier of the Coast Range Batholithic Complex whose eastern contact lies 20 miles due west of the Telkwa River property. The Hazelton Group volcanic rocks in this region are generally gently to steeply eastward dipping and are folded where they are adjacent to intrusive rocks. Throughout the Tyee property area the volcanics strike northerly and dip gently to the east; however dips of the volcanic rocks steepen to the west as the Howson Batholith is approached on the west side of the Telkwa River.

The composition of the volcanic rocks on the property is generally andesitic and the rocks are pyroclastic in origin. Lithologies include tuffs, agglomerates with lesser amounts of chert, breccias, metasediments, syenite and diorite dykes.



Department of
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 ASSESSMENT REPORT
 NO. 4191 MAP #2

LEGEND

-  COST RANGE INTRUSIVES
-  LARGELY VOLCANICS
-  MINERAL DEPOSITS

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
 VANCOUVER, CANADA

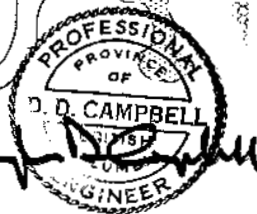
TYEE LAKE RESOURCES LTD.
 VANCOUVER, CANADA

TELKWA RIVER COPPER PROPERTY

PROPERTY LOCATION & REGIONAL GEOLOGY

DWG. G72-87a

SCALE: 1 inch = 20 miles FEB, 1973 FIG 2



GEOCHEMISTRY

The soil survey was carried out over an area in the centre of the property, (figure 3). A total of 102 soil samples were collected on seven lines spaced at approximately 500 foot intervals. Samples were taken at 200 foot stations on the lines which were flagged.

SAMPLING & ASSAYING TECHNIQUES:

Soil samples were taken by first digging a hole with a mattock; a small handful of soil was then taken and packaged in a standard high wet-strength brown kraft paper sample bag. Wherever possible, samples were taken from the "B" soil horizon. If the "B" horizon could not be reached the samples were taken from the "A" horizon and noted as such. The samples were sent to Chemex Labs Ltd. in North Vancouver for analysis.

At the assay laboratory the samples were dried at 110°F and then sieved to -80 mesh consistency through a nylon and stainless steel sieve. One-half gram of the dry pulp was weighed into a calibrated test tube and 3 mls. of perchloric acid and 1 ml. of nitric acid was added. The samples were digested initially at low heat and then at a temperature of 203°C. Digestion time was two to three hours. The digested samples were cooled, made up to 25 ml. volume with distilled water and the solutions thoroughly mixed. Analysis for copper was then done by Atomic Absorption procedures.

The results of the copper soil assays were interpreted visually.

INTERPRETATION OF RESULTS:

As shown on Figure 3 a copper soil anomaly has been defined by values in excess of 100 ppm copper. The anomaly trends north-south in direction, covers an area 2000 feet in length and 400 feet in width. The anomaly is limited in all directions.

Values within the anomaly range in value from 104 ppm to 2080 ppm copper, averaging 524 ppm. A core area of values in excess of 200 ppm copper extends for approximately 1000 feet in length.

CONCLUSIONS

Copper mineralization occurs on the TEL claim group in silicified, feldspathized, and pyritized pyroclastic members of the Hazelton volcanic rocks on the property. No mineralization has been found in the immediate vicinity of the soil anomaly defined by the geochemical survey, due to overburden cover. Because of the presence of numerous copper occurrences on and peripheral to the TEL property the determination of the cause of the soil anomaly is clearly warranted. The anomaly has the areal extent to possibly represent the surface manifestation of a sizeable copper deposit in the underlying rock.

RECOMMENDATIONS:

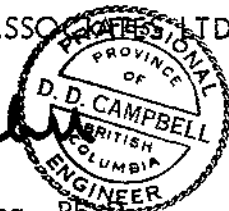
The writer proposes that the following program be implemented with a view to determining the nature of the bedrock underlying the anomaly.

- 1) Carry out detailed soil sampling over the anomaly in order that it be more precisely defined.
- 2) Initial a diamond drill program to test the bedrock. Three 300 foot holes (900 feet total) should be sufficient to assess the anomaly.

Respectfully submitted by,
DOLMAGE CAMPBELL & ASSOCIATES LTD.



Douglas D. Campbell, P.Eng., Ph.D.



DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of TYEE LAKE RESOURCES LTD. (N.P.L.)
TEL Claim Group

I, Douglas D. Campbell

of #1000 - 1055 West Hastings Street,
Vancouver 1, B. C.

in the Province of British Columbia, do solemnly declare that

Expenditures for the work performed on the TEL Claim Group between July 21, 1972
and August 11, 1972 are as follows:

Wages - 10-man-days	\$ 975.00
Maintenance - 10 man-days @ \$13.92	\$ 139.20
Assay & Freight - 102 samples	\$ 110.16
Transportation - Helicopters - Bell 206B - 2.15 hr. @ 258/hr	\$ 580.50
- Truck - G.M.C. - 3 days	\$ 69.83
Typing, Secretarial, Draughting	\$ 150.00
Supervision & report	\$ 650.00
	<u>\$ 2674.69</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of
the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *5th*
day of *Feb.* *1973*, A.D. *D. D. Campbell*

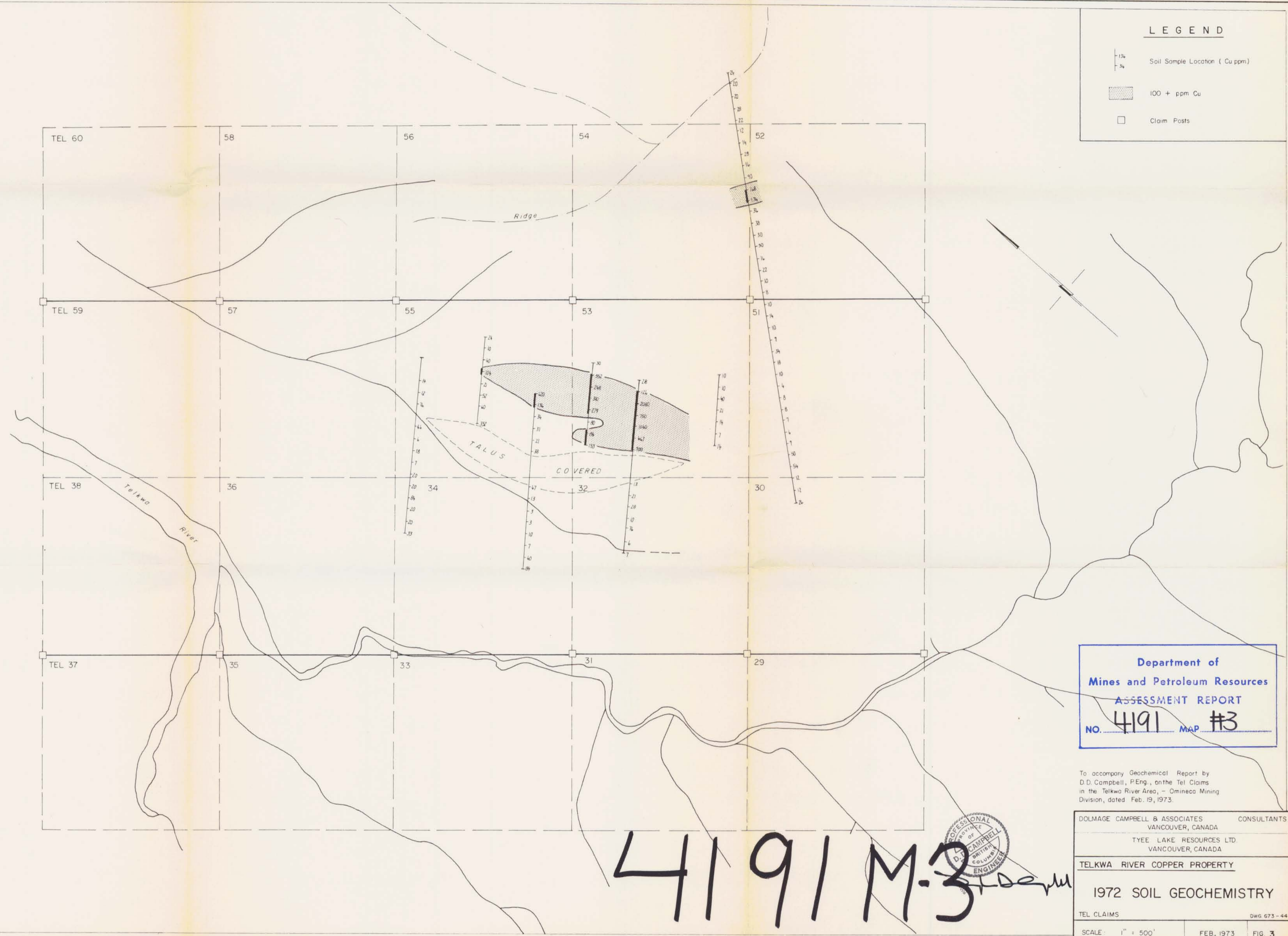
Gene Turner
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub-mining Recorder

APPENDIX NO. 2STATEMENT OF LABOUR COSTS

R. B. Findlay	- 1000 - 1055 West Hastings Street, Vancouver 1, B. C. July 21st to 24th and August 9th to 11th, 1972, 7 days @ \$75.	\$ 525.00
C. R. Saunders	- 1000 - 1055 West Hastings Street, Vancouver 1, B. C. August 9th to 11th, 1972, 3 days @ \$150.	<u>\$ 450.00</u>
	10 man-days TOTAL	\$ 975.00

LEGEND

-  Soil Sample Location (Cu ppm)
-  100 + ppm Cu
-  Claim Posts



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Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. **4191** MAP **#3**

To accompany Geochemical Report by
 D.D. Campbell, P.Eng., on the Tel Claims
 in the Telkwa River Area, - Omineca Mining
 Division, dated Feb. 19, 1973.

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 VANCOUVER, CANADA

TYEE LAKE RESOURCES LTD.
 VANCOUVER, CANADA

TELKWA RIVER COPPER PROPERTY

1972 SOIL GEOCHEMISTRY

TEL CLAIMS DWG 673-44

SCALE: 1" = 500' FEB, 1973 FIG 3

4191 M-3

