

3349

GEOPHYSICAL REPORT 2  
UNITED 2 - 5 MINERAL CLAIMS  
51°120'NE, 14 miles N.W. of Little Fort, B. C.  
Kamloops M. D., British Columbia  
for  
UNITED COPPER CORPORATION LIMITED  
by *W.S. Read*  
W. S. Read, B.Sc., P. Eng.  
860 Younette Drive, West Vancouver, B. C.  
September 12, 1971 -  
October 25, 1971

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3349 MAP

WAYLAND S. READ, B.SC., P.ENG.

AREA CODE 604—TELEPHONE 922-1347

*Consulting Geologist*

860 YOUNETTE DRIVE, WEST VANCOUVER, B.C., CANADA

October 25, 1971

**The Board of Directors,  
United Copper Corporation Limited,  
1800 - 505 Burrard Street,  
Vancouver 1, B. C.**

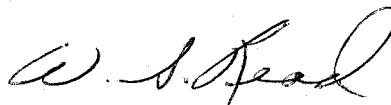
**Gentlemen:**

**At your request, I have extended and filled in detail  
of the grid and magnetometer survey started in 1970 on your  
United 2-5 mineral claims.**

**This has outlined the magnetic anomalies in much  
greater detail.**

**The report with the data and conclusions is herewith  
attached.**

**Yours very truly,**



**W.S. Read, P. Eng.**

**wsr/e  
att.**

**GEOPHYSICAL REPORT**

**UNITED 2 - 5 MINERAL CLAIMS**

**51° 120° N. E.**

**14 miles N. W. of Little Fort, B. C.**

**in the**

**KAMLOOPS MINING DIVISION**

**Province of**

**British Columbia, Canada**

**for**

**UNITED COPPER CORPORATION LIMITED**

**by**

**W. S. Read, B. Sc., P. Eng.  
860 Younette Drive,  
West Vancouver, B. C.**

**October 25, 1971**

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### APPENDIX I - CERTIFICATE OF ASSAY

#### MAPS:

- 11 (1) Magnetometer Survey 1 inch = 100 feet
- 2 (2) Magnetometer Contour Plan 1 inch = 100 feet
- 3 (3) Composite Plan 1 inch = 20 feet

LOCATION:

The property is located immediately south of Deer Lake, approximately 14 miles northwest of Little Fort, B.C. It is at about north latitude  $51^{\circ} 31.5'$  and west longitude  $120^{\circ} 23'$  on the Clearwater map sheet 92 P/9W of the National Topographic System, in the Kamloops Mining Division, British Columbia, Canada. The elevation of the United 2 - 5 mineral claims (the survey area) ranges between 4,500 and 4,800 feet above mean sea level.

ACCESS:

The United Claims are accessible from B.C. Highway 24 that runs between Little Fort and 100 Mile House. The turnoff on the new logging road is about 11.7 miles west of Little Fort immediately west of the turnoff marked by a sign giving directions to Aurora Lake Fishing Resort.

The claims and campsite at Deer Lake are about 7.5 miles north of this turnoff. Paved highway leads from Vancouver through Kamloops to Little Fort. The total distance from Vancouver to the survey area is about 350 miles.

CLAIMS HELD BY COMPANY:

The Company has advised that they hold the following 59 claims:

<u>Claim</u>	<u>Tag No.</u>	<u>Record No.</u>	<u>Anniversary Date</u>
Silver 1 - 6	664785 - 790	54734 - 39	April 13
Silver 7 - 15	663601 - 609	54740 - 48	April 13
Silver 18 - 28	663612 - 622	54751 - 61	April 13
Silver 40 - 44	663634 - 638	54773 - 777	April 13
Silver 109 - 112	699183 - 186	68645 - 648	April 1
May 1 - 4	780571 - 574	61215 - 218	October 12
S P 1 - 6	780565 - 570	61209 - 214	October 12
Bill 2 Fr.	841592	66018	September 15
United 1 - 7	574769 - 75	91854 - 860	September 28
United 8, 9 Fr., 10 Fr.	573489 - 491	91861 - 863	September 28
Bill 1, 3, 4	573492 - 94	91864, 65, 66	September 28

This report covers work done on the United 2 - 5 mineral claims.

HISTORY:

From the number of old claim posts encountered during staking, line cutting and magnetometer surveying, the ground covered by the United 2 - 5 mineral claims has been of interest for many years.

Briefly, the gold showing at Deer Lake, covered by the United 2 claim was reported to have been discovered in 1930, optioned by Premier Gold Mining Company, Limited, then tested by surface open pitting and underground workings from a shallow adit. Gold values up to 12 ounces per ton on the surface did not extend the 18 feet down to the adit workings and the option was dropped.

The vein fault or shear on the wall of the surface pit appeared to intersect the tunnel in the area where the tunnel branched to the south (see composite plan). Although the tunnel walls were very dirty, mineralization in the form of pyrrhotite, magnetite and pyrite was noted, but did not appear to be as extensive as in the surface workings.

GEOLOGY:

The area of the survey is shown on Geological Survey of Canada map 3 - 1966 Bonaparte River, scale 1 inch = 4 miles, as being underlain by Upper Triassic rocks of the Nicola group composed of augite andesite flows and breccia, tuff, argillite, greywacke and grey limestone.

The fine grained, hard, light grey dyke (?) rock found immediately north of the gold prospect is not shown in this unit and may belong to the Upper Triassic or Lower Jurassic, fine to medium grained, pink to brown and grey syenite and monzonite.

Outcrops of grey banded limestone were noted during the geophysical survey. This is favourable for replacement type mineral deposits. No detailed geological mapping has been done by United Copper Corporation in this area to date.

The magnetic anomalies appear to be related to skarn zones. In the adjoining area these zones have contained magnetite, pyrrhotite and pyrite with varying amounts of chalcopyrite and high surface gold samples reported from old records on the gold prospect on the United 2 claim. The high magnetic variation in the mineralized area should make the magnetometer a very useful tool in discovering and tracing this type of mineral deposit.



PROGRAMME:

The programme between September 12 and October 25, 1971 consisted of extending and filling in detail on the survey started in 1970.

The 2,850 foot transit baseline which was established in 1970, about 1,800 feet south of Daer Lake and extended at S 50° E to the west shore of a small lake, along the location line of the United 2 - 7 mineral claims, was used as the control for the survey.

An additional 19,725 feet (3.74 miles) of line was completed and surveyed bringing the total for this section to 7.73 miles.

The tunnel and surface of the Lakeview mine workings were correlated with a tape and compass survey and tied in to the grid.

LINE CUTTING:

Picket crosslines were filled in at 200 foot intervals. The picket lines were driven the distances as shown on the accompanying maps. Line of sight was cleared with axe and chain saw; the lines blazed and stations marked every 100 feet. Slope corrections were made when chaining the distances for the stations. Distances for readings between the 100 foot intervals were determined by pacing as were distances extending beyond the cut lines.

Line cutting and surveying were slowed down in much of the survey area due to winter logging and the resultant slash and windfalls which hampered progress.

MAGNETOMETER SURVEY:

Type of Magnetometer:

A Sharpe fluxgate magnetometer, model MF-1, serial number 803331 was used for this survey. This is a hand held instrument requiring only coarse levelling and is not significantly affected by orientation.

The magnetometer measures the vertical component of the earth's magnetic field to 5 gammas on the lowest scale range. The full scale ranges vary progressively from a minimum of plus or minus 1,000 gammas to a maximum of plus or minus 100,000 gammas. The values can be read directly from the scale.

Temperature compensations have been built into the instrument and the only necessary correction to the readings is for the diurnal variation. The variation in each survey loop is assumed to be linear and is determined by subtracting the initial and final readings at any control point. The correction added to each reading in the loop is the product of the total diurnal variation of the loop and the ratio of time elapsed up to the time of reading over the total time elapsed for the loop.

Field Procedure:

In the 1970 survey the instrument was set for the area as established by the survey on the adjoining Silver claims. Station 32 + 00 E on the old baseline "A" was used as the starting control point. The new baseline "G" was surveyed, corrections in the readings made

for diurnal variation and the stations at the junction of the crosslines with the baseline were used as control points for each survey loop.

Readings were taken every 25 feet on the crosslines being surveyed in 1971 to give close detail, as the anomalous areas gave a wide variation in readings over short distances. Diurnal variation was low and corrections were treated linearly in respect to elapsed time.

Results:

The corrected readings were plotted on base maps to a scale of 1 inch = 100 feet. Readings were plotted as gammas relative to 32 + 00 E on baseline 'A' of the adjoining area so that extensions and comparisons can be made directly.

Some very high and very low anomalous readings were recorded. From field observations and study of the plotted data, close line spacing and short line intervals are necessary to fully outline these anomalous zones. Significant zones can be missed by lines on the conventional 400 foot reconnaissance spacing. Detailed fill-in is required where there is an indication that this situation could exist.

The corrected readings were hand contoured at intervals of plus and minus 0, 500, 1000, 5,000, 10,000, 20,000, 40,000 and 80,000 gammas.

Line 2 + 00 E to the north was relatively flat and did not extend anomalies from either 0 + 00 or 4 + 00 E. The area enclosed

from line 0 to 8 + 00 east and 600 to 1700 north which contains the Lakeview mine workings had some very high and low anomalous readings, but the anomalies did not extend to the next grid line 200 feet to either side. A line to the north at 5 + 00 E would determine if there is a relationship between the anomaly at the Lakeview workings on line 4 + 00 E at about 1150 north and line 6 + 00 E between 600 and 850 north.

The most significant result from the extension of the survey was the outlining of the anomaly, that is mostly south of the baseline between lines 8 + 00 E and 20 + 00 E. It appears to be about 1600 feet long and from 150 to 700 feet wide running in an east-west direction. The anomaly terminates or abruptly changes direction between line 18 + 00 E and 20 + 00 E. The lines east of this, both to the north and south, are quite flat.

The soil in the anomalous areas would appear to be quite suitable for soil sampling for copper.

The anomalies appear to be made up of several polar bodies. The rapid change along the line from background to readings going back and forth from extreme highs to extreme lows is interpreted to be caused by quite steeply dipping parallel structures giving a sheeting effect. The magnetic effect of these bodies in many cases appears to cut off quite sharply along strike.

CONCLUSIONS:

The magnetometer survey has established grid control over most of the United 2 - 5 mineral claims.

An anomalous area has been outlined that is quite strong and much larger than that found in the area of the old mine workings.

The soil in the anomalous areas appears to be suitable for geochemistry. Soil sampling for copper and geological mapping would be the next step in exploring these anomalous areas.

PERSONNEL

Wayland S. Read, P. Eng., Mining and Geological Consultant,  
860 Younette Drive,  
West Vancouver, B. C.

F. L. Schram, Chainsawman, Nanaimo, B. C.

G. Richmond, Assistant, 3rd year Geology student,  
West Vancouver, B. C.

BIBLIOGRAPHY

B. C. Min. Mines - Annual Reports:

1930 p. A 191

1931 p. A 105

B. C. Dept. of Mines Bul. No. 1, 1932 p. 68.

Jury, R. G., Geophysical Report, Sept. 25, 1968.

Read, W. S., Geophysical Report, United 2 - 5  
Mineral Claims, October 22, 1970.

CERTIFICATE OF QUALIFICATIONS

I, Wayland Stuart Read, of 860 Younette Drive, West Vancouver,

B.C., do hereby certify that:

1. I am a practising mining geologist and my address is 860 Younette Drive, West Vancouver, B.C.
2. I am a graduate in geology from Acadia University, Wolfville, Nova Scotia, and have been granted the degree of Bachelor of Science in Geology and have engaged in practising my profession for the past twelve years.
3. I am a member of the Association of Professional Engineers of British Columbia and the Yukon Territory, a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
4. I have no interest in the securities of the United Copper Corporation Limited, nor in the property held by them and discussed in this report.
5. This report is based on my personal work on the property between September 12 and 21, 1971.

Respectfully submitted,



Wayland S. Read, B.Sc., P.Eng.  
Consulting Geologist.

860 Younette Drive,  
West Vancouver, B.C.

October 25, 1971.



TIME AND COSTS

EXTENSION AND FILLIN, LINE CUTTING AND

MAGNETOMETER SURVEY - UNITED 2-5 MINERAL CLAIMS

<u>Personnel</u>	<u>Dates 1971</u>	<u>Wages</u>	
W.S. Read	Sept. 12 - 21	\$ 1,150.00	
	Office: Sept. 23 - Oct. 25	400.00	
F. L. Schram	Sept. 12 - 22	412.50	
G. Richmond	Sept. 14 - 20	224.49	
			<u>\$ 2,186.99</u>

Rental equipment and expenses:

Truck	\$ 190.53	
Magnetometer	165.00	
Assaying	8.00	
Chain Saw	45.00	
Engineering Supplies	35.00	
Food and accommodation	264.00	
Chargeable expenses, printing, draughting, report, etc. etc.	108.00	<u>815.53</u>
		<u>\$ 3,002.52</u>

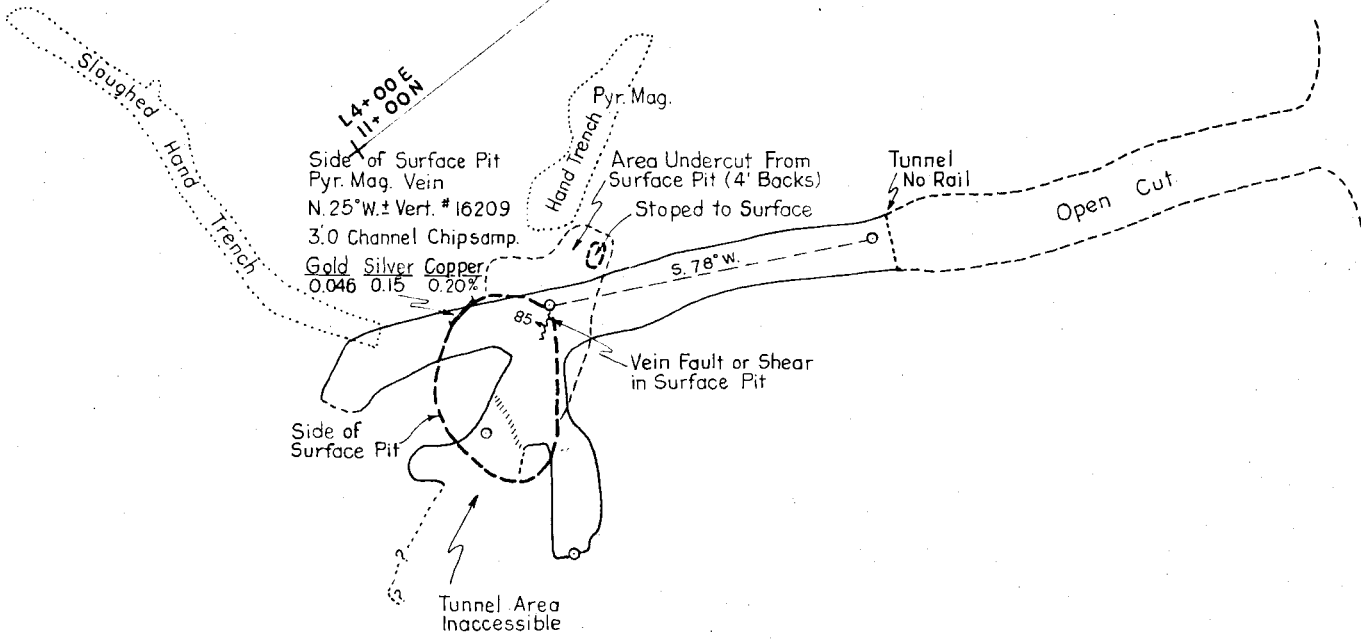
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO 3349 MAP #3

KEEP ROAD

CUT LINE

L4+00 E  
 12+00 N

Trench



Side of Surface Pit  
 Pyr. Mag. Vein  
 N. 25° W. ± Vert. # 16209  
 3.0 Channel Chipsamp.  
 Gold Silver Copper  
 0.046 0.15 0.20%

Area Undercut From  
 Surface Pit (4' Backs)  
 Stopped to Surface

Tunnel  
 No Rail

Open Cut

Vein Fault or Shear  
 in Surface Pit

Side of  
 Surface Pit

Tunnel Area  
 Inaccessible

Pyr.  
 Mag.  
 Py.  
 in Dump



Tape and Compass.  
 Some deflection due  
 to Magnetite.

**COMPOSITE PLAN**  
**LAKEVIEW MINE WORKINGS**  
**PART OF SURFACE AND UNDERGROUND**

0    Scale    20

---

Drawn: W.S.R./J.W.    Date: September 1971

WAYLAND S. READ, P.Eng. Consulting Geologist, W. Vancouver



**BONDAR-CLEGG & COMPANY LTD.**

geochemists • assayers • analytical chemists

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

PHONE: 988-5315

TELEX: 04-54554

**CERTIFICATE OF ASSAY**

TO **W.S. Read**

**Report No.: A 21-687**

**860 Younette Dr.**

**Samples Rec'd: 27/9/71**

**West Vancouver, B.C.**

**Results Completed: 1/10/71**

I hereby certify that the following are the results of assays made by us upon the herein described **Ore** samples.

MARKED	GOLD		SILVER	Copper							TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent		
16209	0.046		0.15	0.20							

APPENDIX I

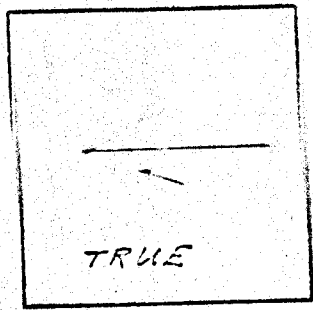
NOTE:  
Rejects retained two weeks  
Pulps retained three months  
unless otherwise arranged.

Gold & Silver values reported on these sheets  
have not been adjusted to compensate losses and  
gains inherent in fire assay methods.

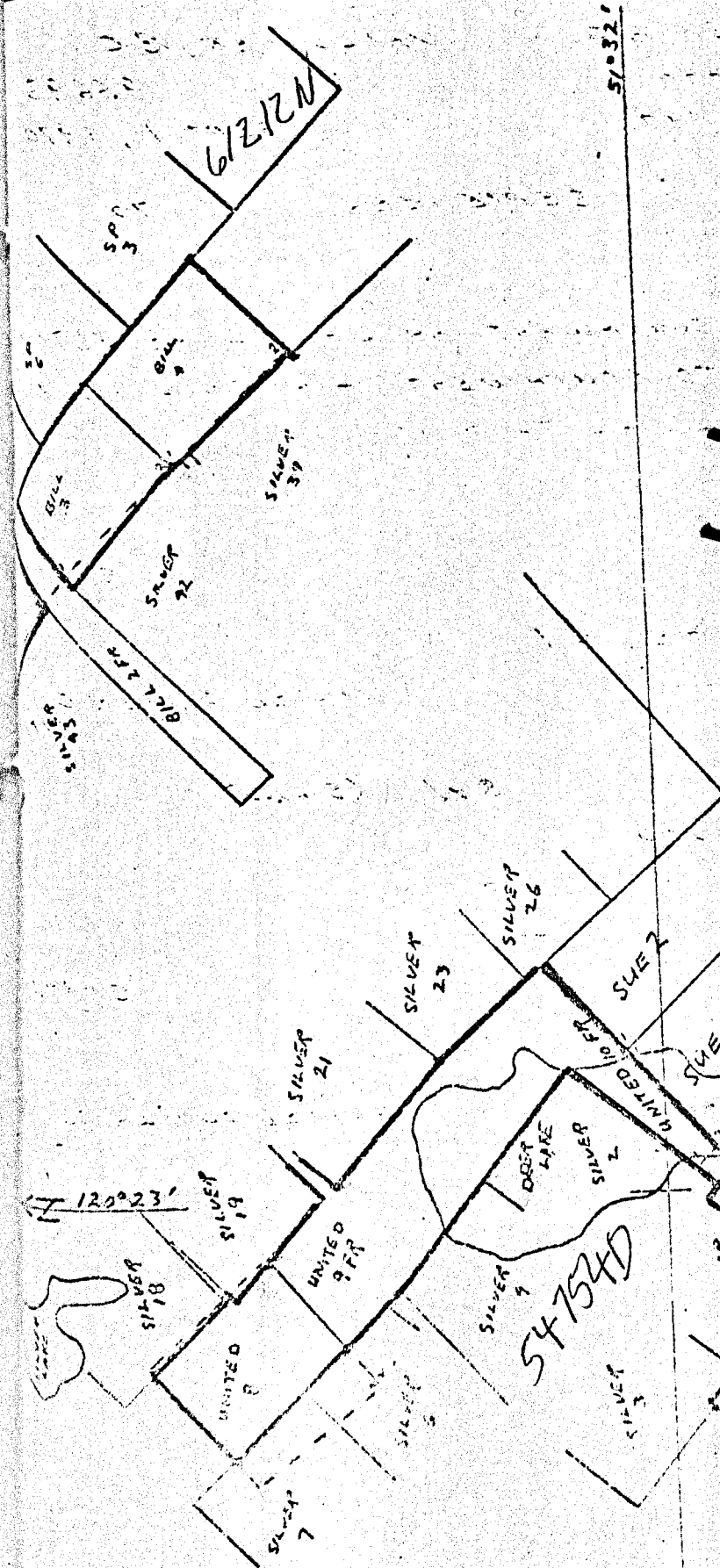
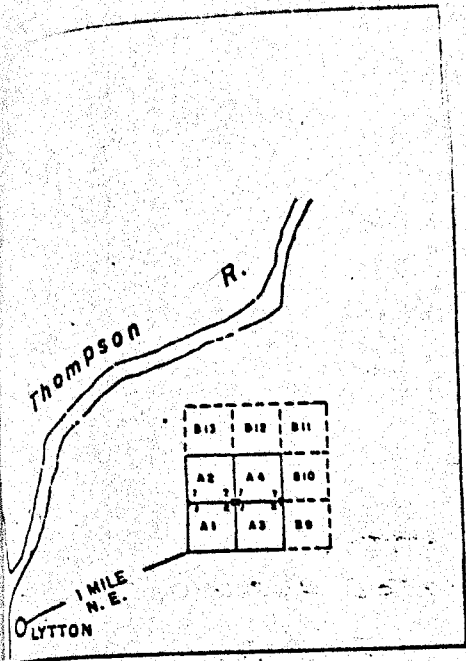
Gold calculated at \$..... per ounce

Registered Assayer, Province of British Columbia

Claims must be laid by direction  
 and distance, or by bearing, preferably  
 by distance, and by reference to  
 some permanent point or printed  
 map of the district. Relationship of  
 previously located claims should also  
 be shown.  
 N.B. — The sketch for a group of  
 claims may be placed on one affidavit.



INDICATE NORTH  
 (True or Magnetic)

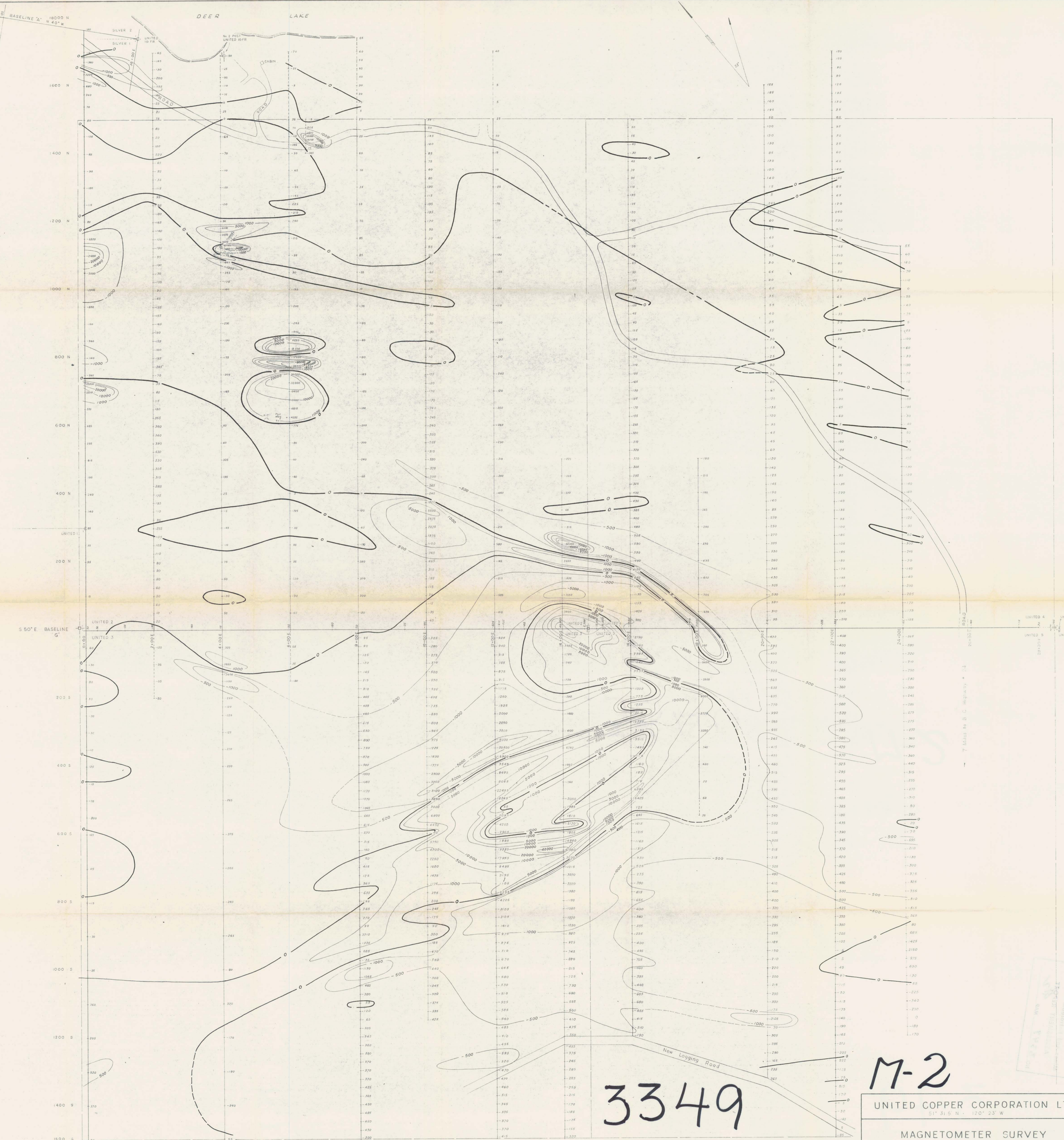


3349  
 M-3

MAP 30m  
 91854-91866 (m)

91854-66  
 Kamloops  
 30  
 Sept 30  
 Feb 15  
 44  
 1365100





3349

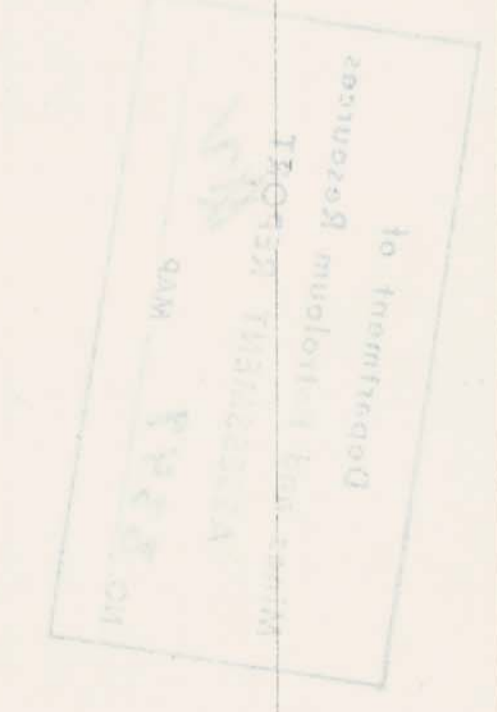
M-2

Note: To accompany Geophysical Report  
by W.S. Read, P. Eng.  
Dated October 25, 1971

UNITED COPPER CORPORATION LTD.  
51° 31.5' N - 120° 23' W

MAGNETOMETER SURVEY

SCALE 1" = 100'		No <b>2</b>
DRAWN BY J.W.	REVISED Oct 25, 1971	
DATE OCT 22, 1970		
WAYLAND S. READ Consulting Geologist West Vancouver B.C.		







M-1

3349

Note -  
To accompany Geophysical Report  
by W.S. Read, P. Eng  
Dated October 25, 1971

UNITED COPPER CORPORATION LTD. <small>51° 31' 5" N 120° 23' W</small>	
MAGNETOMETER SURVEY	
<small>Scale in Feet</small> <small>0 10 20 30 40 50 60 70 80 90 100</small>	
DRAWN BY: J.W. DATE: OCT 22, 1970	REVISED: Oct 25, 1971 WAYLAND S. READ Consulting Geologist West Vancouver, B.C.
No	1

UNITED COPPER CORPORATION LTD.  
 1100 WEST 113TH STREET  
 VANCOUVER, BRITISH COLUMBIA  
 V6A 4K6