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624

A REPORT

ON THE

SYL AND JAY GROUPS OF MINERAL CLAIMS

Kamloops
ASHCROFT M.D.

LAT. 53°17' LONG. 121°00'

Submitted to

Kamloops Copper Consolidated (1964)

By

Joseph Sullivan, P. Eng.

November 12, 1964

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MAP FOLDER:

1 SYL GROUP SHEETS 1, 2 and 3 *1a, 1b, 1c*
 2 JAY GROUP SHEETS 1, 2 and 3 *2a, 2b, 2c*

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <i>624</i> MAP

A REPORT
ON THE
SYL AND JAY GROUPS OF MINERAL CLAIMS
ASHCROFT M.D.
LAT. 53° 17' LONG. 121° 00'

INTRODUCTION:

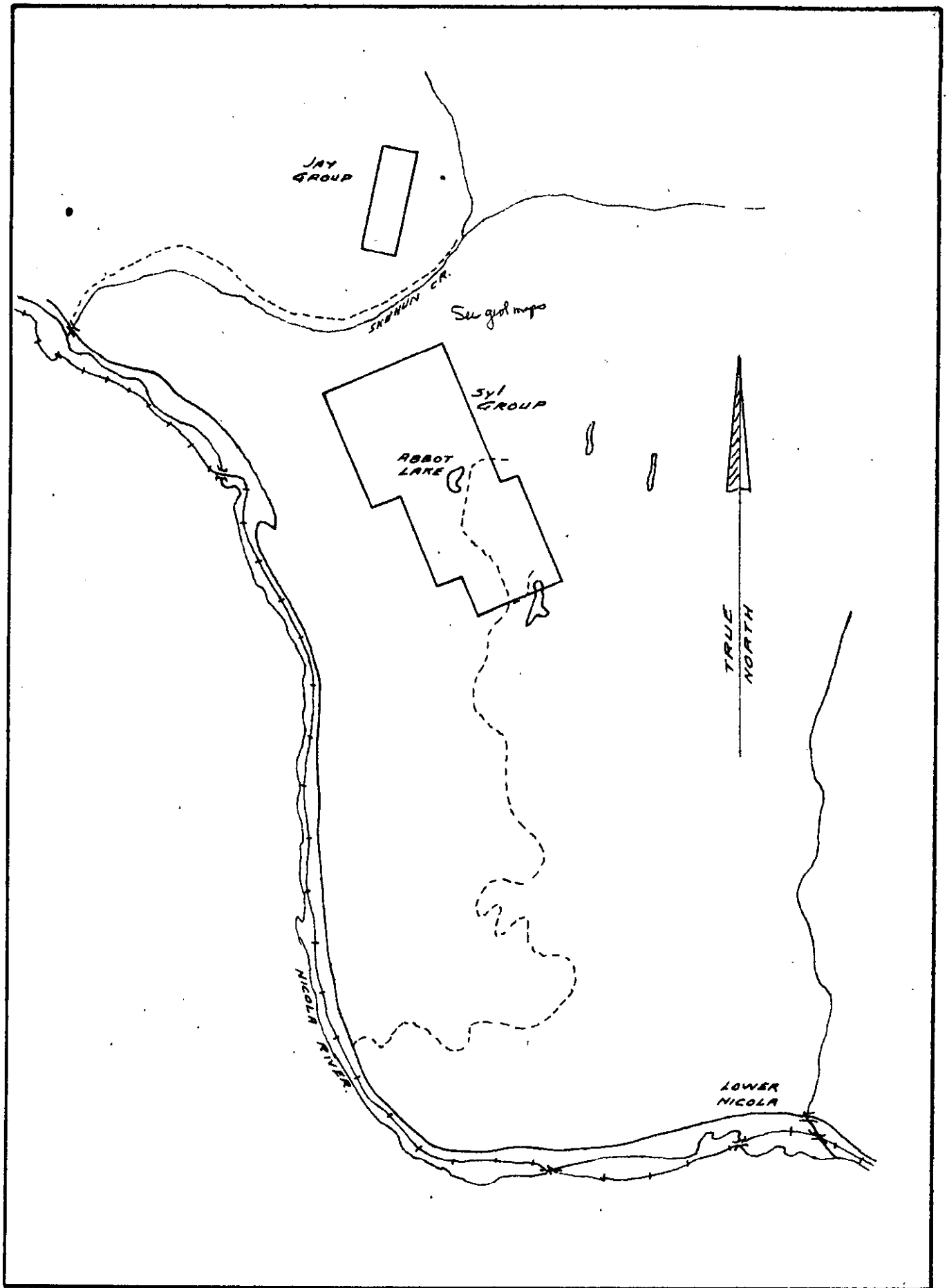
These properties were reported by the writer in May 1964. At that time a program of geophysical and geological mapping was proposed for certain portions of both claim groups.

During August, September, and October of this year these proposed surveys were conducted under the writer's supervision. The following context is a report on the final results.

LOCATION AND ACCESSIBILITY:
(Lat. 53°17' Long. 121°00')

The claims lie in the Ashcroft Mining Division, 15 air miles northwest of Merritt, B.C. The best approach is by truck westerly from Merritt on highway No. 8. The turn onto the property is to the northwest at the Dot ranch 20 miles from Merritt.

A location sketch has been included herein following this page.



Syl AND JAY GROUP.
LOCATION SKETCH
 $1'' = \frac{1}{2} \text{ MI.}$ NOV, 1964.

STATUS OF THE PROPERTY:

The Syl Group consists of 88 located claims named the Syl Nos. 1 to 88. The Jay Group, off the northeast corner of the Syls, has 12 full-sized located claims named the Jay Nos. 1 to 12 and two internal fractions named the Weeds Nos. 1 and 2.

Kamloops Copper Consolidated (1964) is the recorded owner of all these properties.

SURVEY CONTROLS:

On each of the claim groups a series of picket lines were cut through the bush to form grids. Base lines were run as a "backbone" for cross-sectional lines. The cross lines were spaced 400 feet apart with stations set at 100 foot intervals.

The Syl Group has 8,000 feet of base line and 44,000 feet of eastwest cross line centered in the area of the Syl No. 38 claim. The Jay Group has 14,000 feet of base line and 49,000 feet of cross line centered in the area of the Jay No. 6 claim.

GENERAL GEOLOGY:

The underlying rocks have a granitic texture. They are chiefly medium to coarse grained granodiorites and quartz diorites but include granite and gabbro in their various tran-

sitional phases.

The G.S.C. Map 886A has these formations mapped as a Coast Intrusion with a probable variety of ages.

SYL GROUP:

(A map of each survey is included in the folder of this report.)

1) Local Geology:

All the exposures examined are a medium grained grey to pink granite containing biotite and hornblende. Magnetite is present in varying amounts as an accessory mineral. Weak jointing and some shearing exist, but with no apparent pattern. With the exception of minor amounts of epidote, the rock is unaltered.

2) Magnetometer Survey:

A weak, irregular anomaly was outlined in the southeast corner of the grid on the Syl No.5 and the north end of the Syl No. 7. Five scattered high readings, ranging 1,100 to 1,650 gammas above the background, comprise the entire zone.

3) Geochemical Survey:

Samples of the clay overburden were taken from under the humus at each station on the grid. The rubeanic acid method was used as a test for the presence of copper. Ninety percent of the samples gave no reaction. Only at the south end of the grid were positive results found. These, like the magnetometer readings, were irregular and did not outline an anom-

alous zone.

JAY GROUP:

(A map of each survey is included
in the folder of this report)

1) Local Geology:

Four rock types were recognized during the surface mapping. The most common is a grey medium grained granite with varying amounts of quartz. Within the granite are coarse grained felspar porphyry dykes up to 100 feet in width. There is pegmatitic pink felspar as narrow dykes and stringers. Finally, there is an occasional outcrop of ^{aplite} ~~ap~~lite.

Shearing and schistosity are present in most outcrops. These features, with the dykes, stringers, and pegmatitic material, have a general northwest trend and a steep northeast dip.

Biotite, chlorite, and epidote are common in the areas of most intense shearing. Minor amounts of bornite and chalcopyrite are exposed in both disseminated form and in fractures. All these minerals tend to localize in the granite close to the felspar porphyry dykes.

2) Magnetometer Survey:

Several anomalous zones were outlined by this survey. The most outstanding is a northwest trending magnetic high through the center of the Jay No. 5. To its east is an accom-

panying magnetic low.

An interesting low zone on Jay No. 1 trends north-westerly for 1,000 feet away from a small exposure of chalcoppyrite and bornite.

On Jay No. 2 a small irregular low zone overlies a series of northwest trending gullies. No sulphide was noted in the area, but there is considerable fracturing and epidote present.

On Jay No. 8 several magnetic lows follow the north-westerly trend of exposed copper sulphides and a series of felspar porphyry dykes.

The above mentioned anomalies are the most prominent. Several more small magnetic low areas are present.

3) Geochemical Survey:

Positive copper areas were found by sampling the soil. As on the Syl Group, each sample was taken at the magnetometer station and tested with the rubeanic acid method. There was a marked tendency for the positive readings to cluster on the low magnetic zones, particularly on the Jay Nos. 1 and 8 claims.

CONCLUSIONS:

The area surveyed on the Syl Group did not produce attractive magnetic zones on which to continue the exploration.

It was noted that the granite contained magnetite as an accessory mineral without apparent relationship to the sulphides of copper. A slight increase in the magnetite content in one locality would be sufficient to cause scattered high points as recorded by the magnetometer on the Syl No. 5.

The geochemistry did not outline an anomalous area, but did show an increase in copper ions to the south. It would be justified therefore, to prospect south of the map area for any changes in the local geology. If any significant changes are recognized, the exploration could be continued.

The area surveyed on the Jay Group produced at least four attractive zones with the magnetics and/or the geochemistry. These zones are further enhanced by the presence of copper sulphides. This is an attractive setting and the work should be continued.

RECOMMENDATIONS:

It would be impractical to prospect on the Syl Group at this time of the year, for the important area is in the order of 5,000 feet A.S.L. and snow can be expected at any time. That portion of the project can be deferred until the 1965 season.

However, the Jay Group is at lower elevation and it is more likely that some useful steps can be made. Surface trenching and a Geomag Survey are recommended as the next phase

of the exploration. Trenching will permit a look at the bedrock and any surface expression that anomalies may have. This work should be started immediately, before the frost penetrates the surface.

Briefly, the Geomag involves a survey making accurate measurements of the magnetic fields inclination and declination components. Since the theory is that the readings result from current flow in conductive bodies, they are related to the effective impedance of the body. The system measures the relative impedance neatly and quickly. It is necessary that the sulphide percentage of the deposit be of different impedance than the country rock.

The Geomag system has proven successful in outlining the large low grade copper bodies at Bethlehem Copper Mines and for this reason is recommended here.

In the event that the stripping and the Geomag show favourable results, the program should enter the exploratory diamond drilling stage. It is recommended therefore that a suitable amount of money be set aside for a small surface drilling program, say in the order of 5,000 feet. This would enable the exploration to be continuous^{ed} as long as the results are favourable.

COST SUMMARY OF THE RECOMMENDED PROGRAM:

The cost of the recommendations for the Jay Group may be summarized as follows:

Geophysics and Stripping:

1. Additional line cutting, 4 miles @ \$75.00 per line mile	\$ 300.00	
2. Casual labour and general pros- pecting - 2 men for 2 months	1,900.00	
3. Board and room for 2 men for 2 months	300.00	
4. Transportation 2 months @ \$300.00 per month	600.00	
5. Bulldozing @ \$20.00/hr. for 75 hrs.	1,500.00	
6. Geomag survey @ \$400.00 per line mile for 8 line miles	3,200.00	
7. Engineering fees and expenses	<u>2,000.00</u>	\$ 9,800.00

Diamond Drilling:

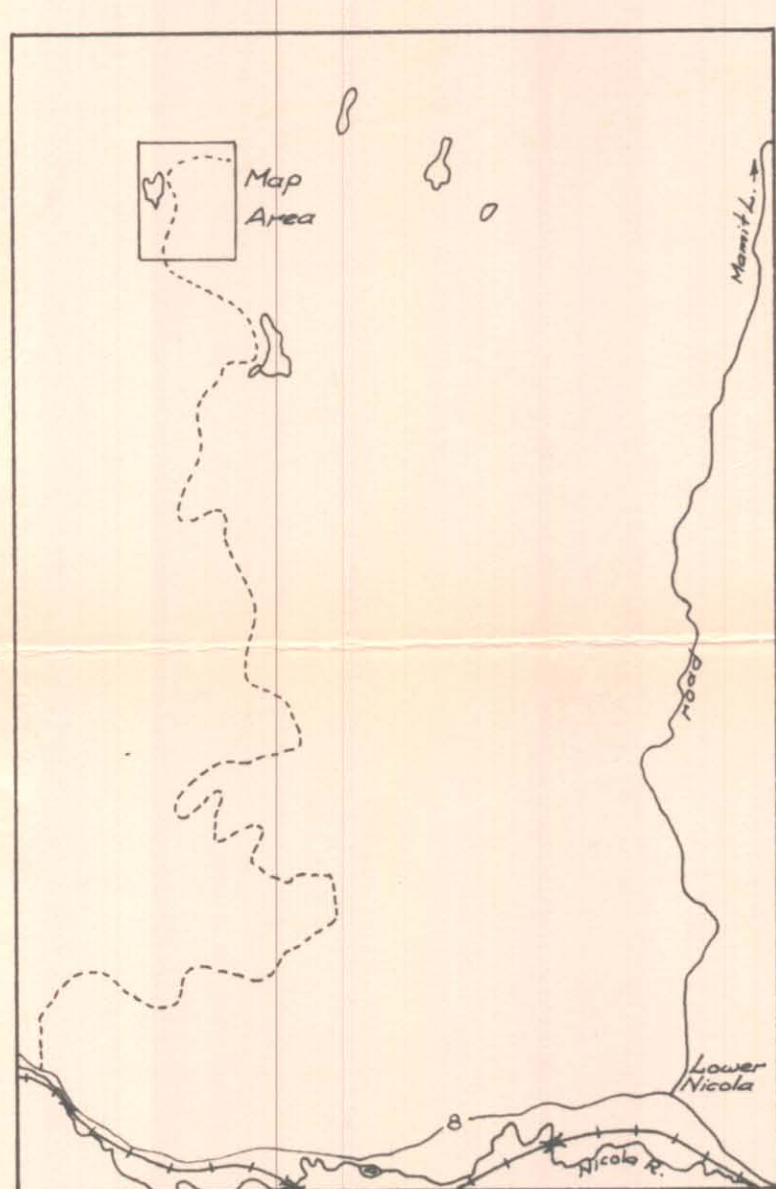
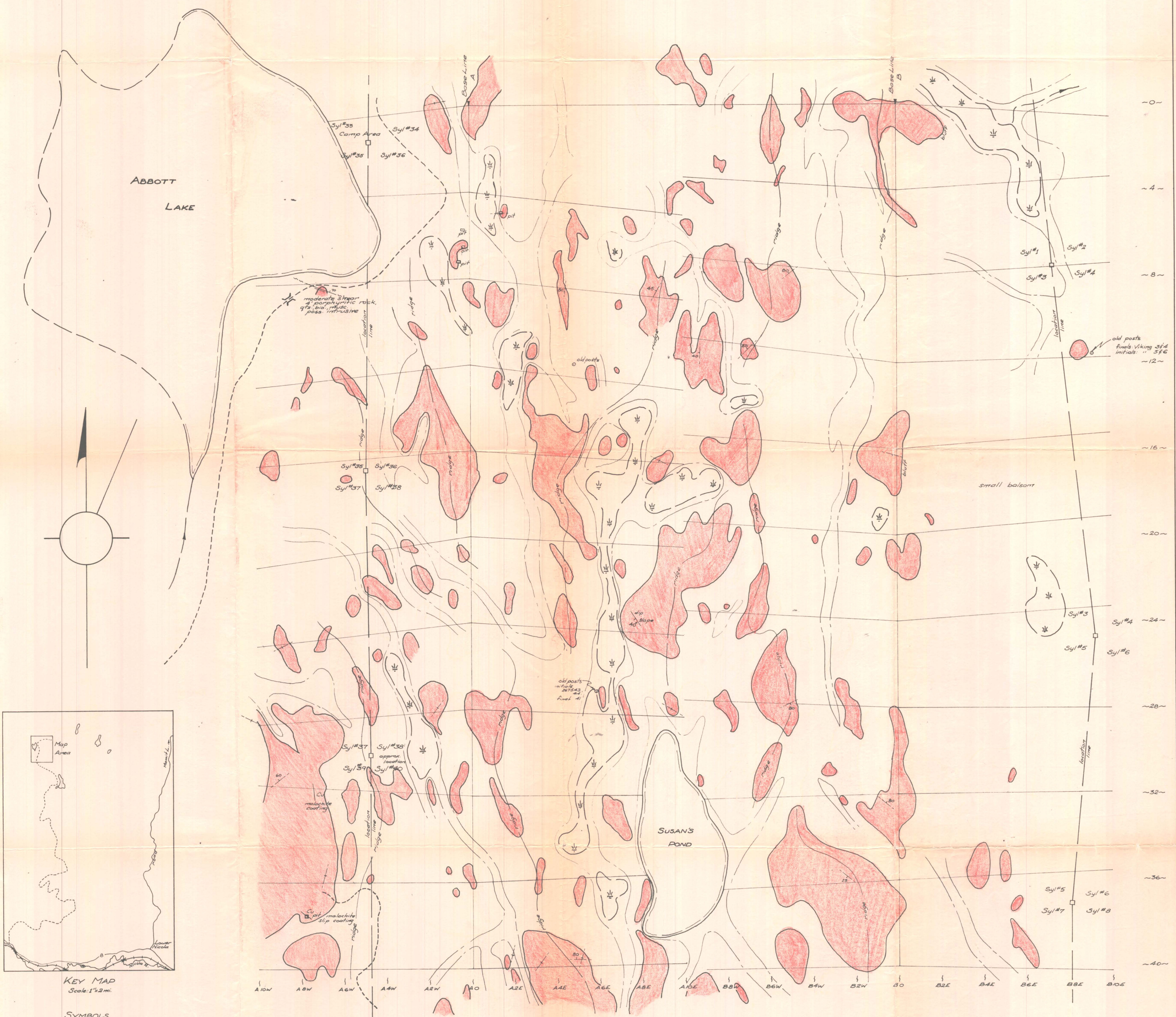
5,000 feet @ \$5.75 per foot	\$28,750.00	
Mobilization and demobilization	1,500.00	
Sampling and assaying	<u>1,100.00</u>	<u>31,350.00</u>
	Total	\$41,150.00
Contingencies @ 10%		<u>4,115.00</u>
	Final Total	<u>\$45,265.00</u>
	Say	<u>\$46,000.00</u>

Respectfully submitted,

Jos. Sullivan, P. Eng.

Vancouver, B.C.
November 12, 1964.

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KEY MAP
Scale: 1:25,000

- SYMBOLS**
- joint
 - shear
 - outcrop
 - swamp
 - lake
 - depression contour
 - jeep road
 - creek
 - claim post

All outcrops are feldspar, quartz, amphibole, biotite - some parts lack amphibole.
The granite is grey to pink, medium grained, weakly and insensibly jointed, and is generally unaltered except for very minor, localized epidote.
Magnetite is a noticeable accessory.

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NO. 624 MAP 1-a

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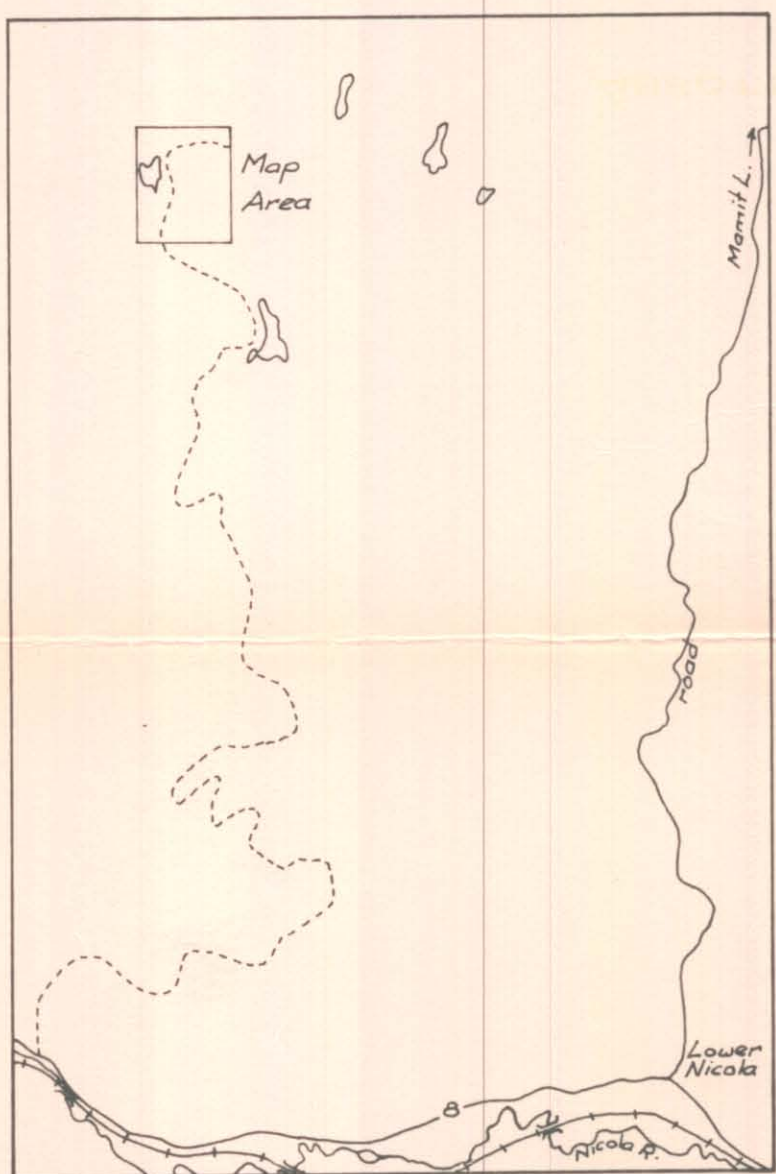
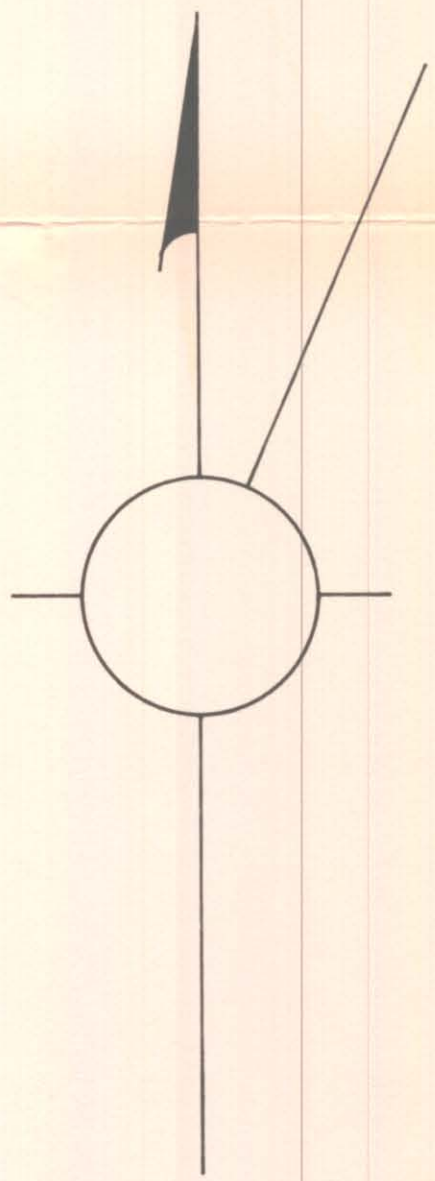
TO ACCOMPANY THE GEOLOGICAL SURVEY REPORT BY J. SULLIVAN ON THE ABBOTT LAKE PROPERTY DATED NOVEMBER 12, 1964
J. Sullivan

Survey by
Granger, Reeve & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD.		
Property - SYL 6A	Location - Merritt, B.C.	Subject - Geological Survey
Scale: 1:200		
Date: Oct. 21/64	Sheet No. 1	

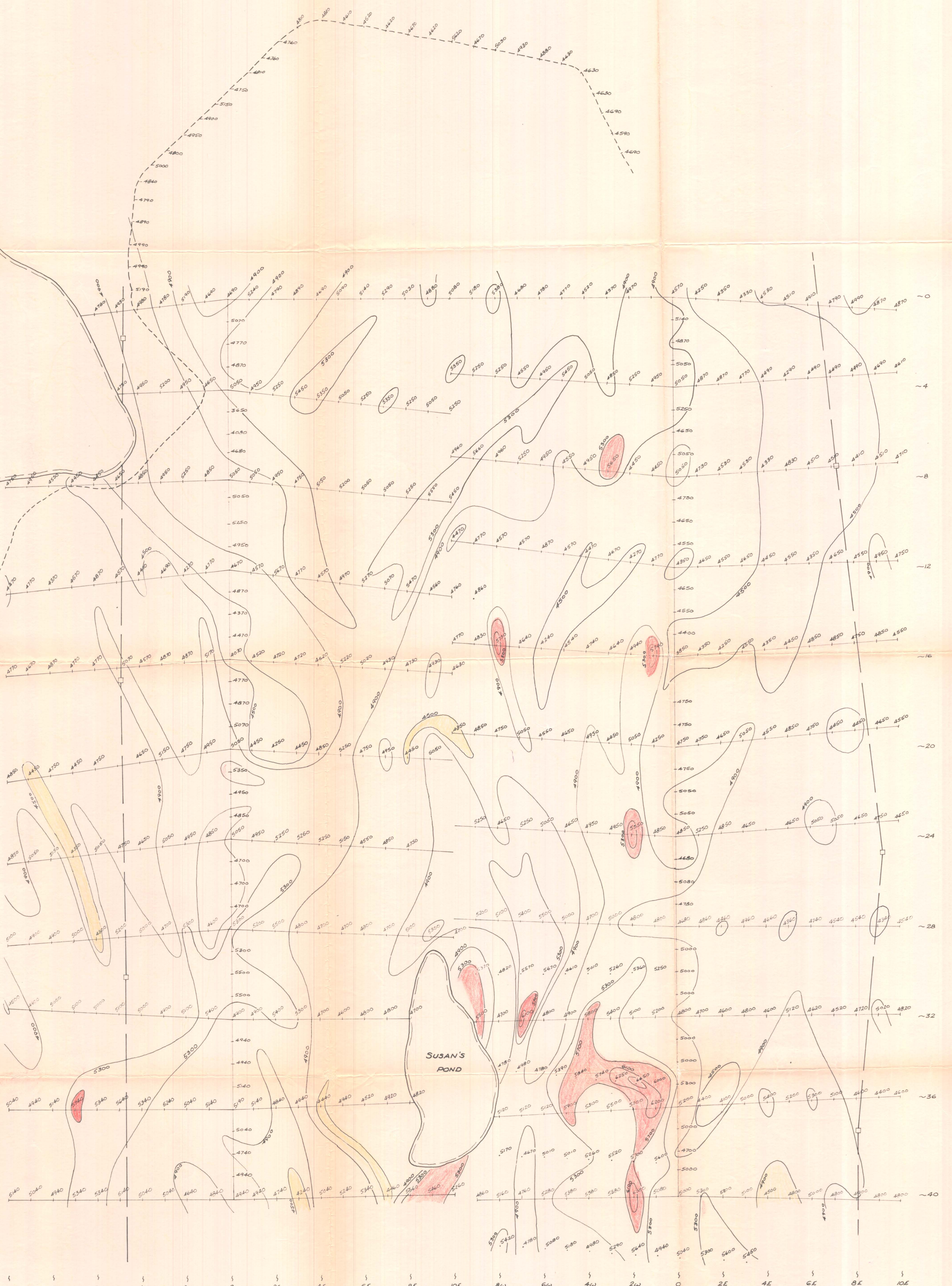
624/1a

ABBOTT
LAKE



KEY MAP
Scale 1" = 2 mi

- SYMBOLS
- lake
 - road
 - claim post
 - magnetic contour



Department of
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NO. 624 MAP 1-b

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TO PRODUCE THIS GEOMAGNETICAL
REPORT BY INSPECTION ON THE SYL
GROUP REPRESENTED AND DATED
NOVEMBER 12, 1964
[Signature]

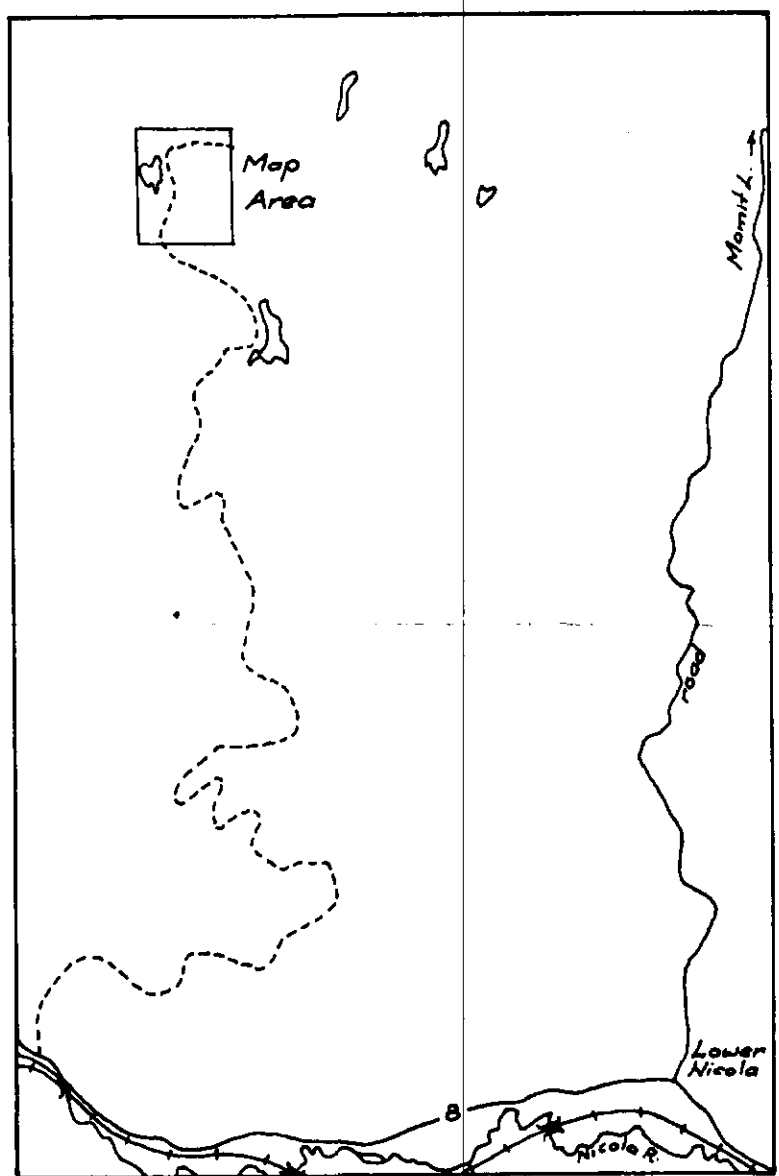
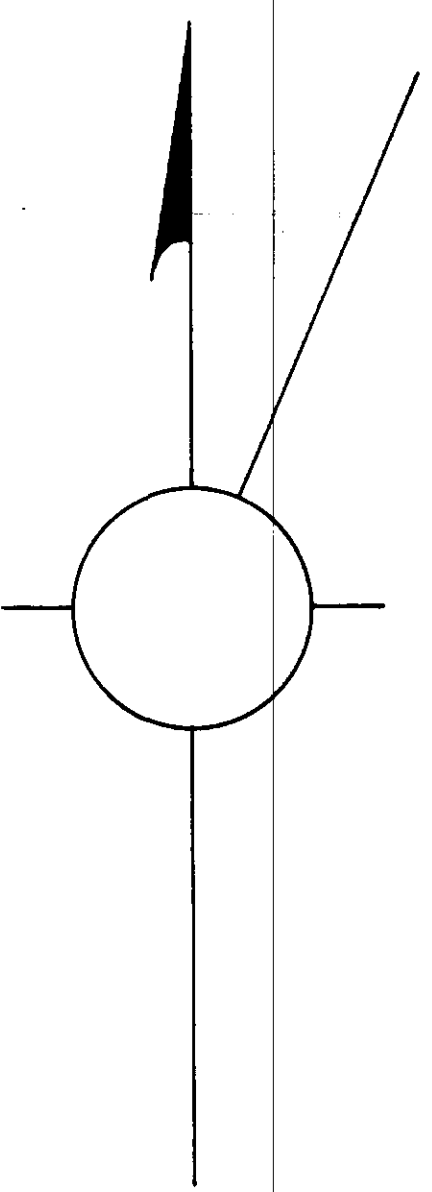
Instrument - Sharpe MF-1

Survey by
Granger, Reeves & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD.
Property - SYL 67 Location - Merritt, B.C. Subject -
(ABBOTT LAKE GROUP) Magnetometer Survey
Scale: 1" = 200' Date: Oct 22/64 Sheet No. 2

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ABBOTT
LAKE



KEY MAP
Scale: 1" = 2mi.

SYMBOLS

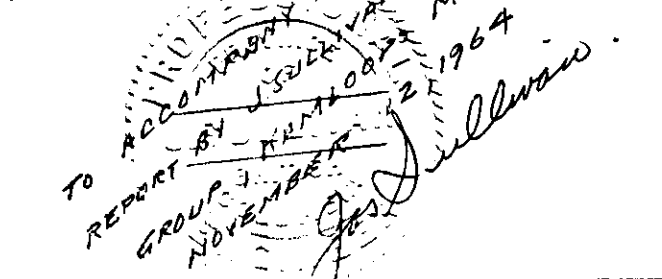
- background
- unsuitable
- weak
- moderate
- strong



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NO. 624 MAP 1-2

Test - Cu, Rubenic Acid.

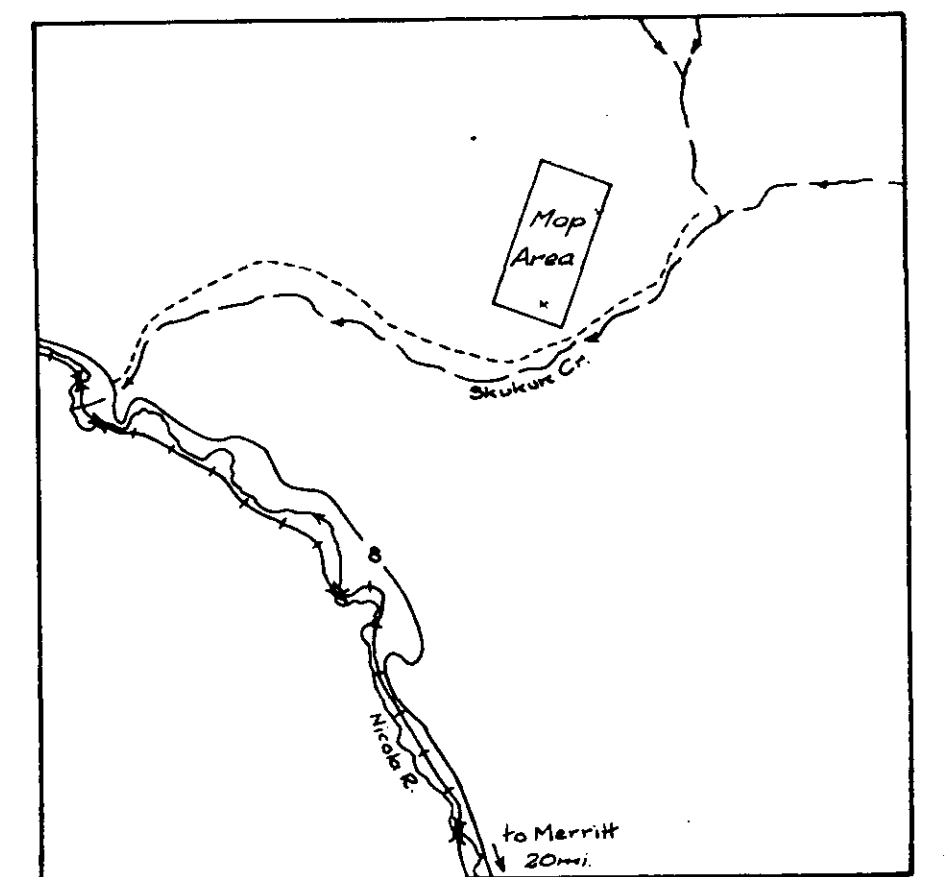
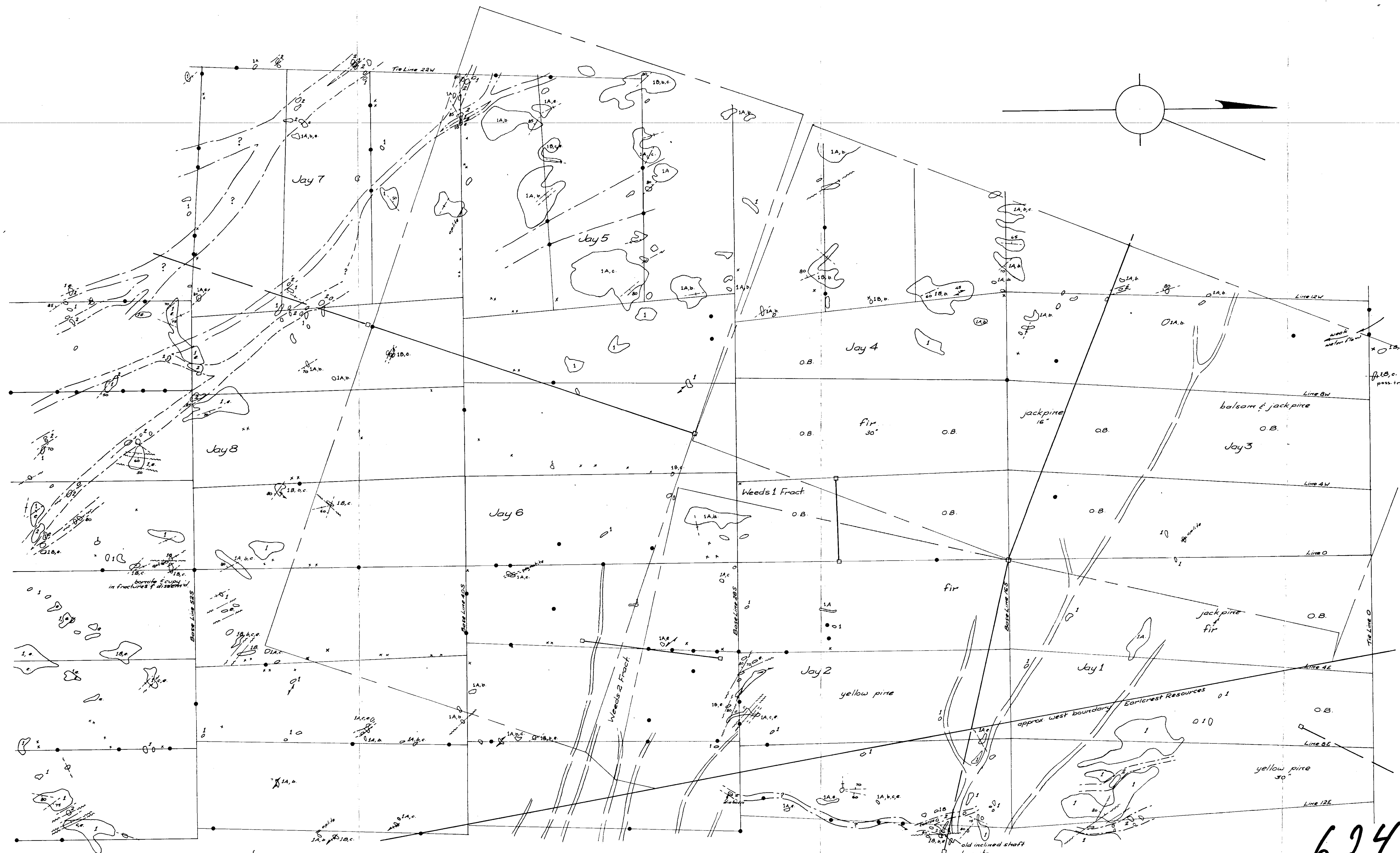
624



Survey by
Granger, Reeve & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD.		
Property - SYL 60 (ABBOTT LAKE GROUP)	Location - Meritt, B.C.	Subject - Cu Soil Survey
Scale: 1" = 200'	Date: Oct 24/64	Sheet No. 3

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KEY MAP
Scale: 1"=2 miles

LEGEND

- 1 granite, weak to moderate gneissosity. A - higher quartz. B - higher feldspar, some plagioclase. b - biotite, c - chlorite, e - epidote
- 2 feldspar porphyry dikes, and coarse grained phases

SYMBOLS

- - - joint
- - - faulting, shearing
- - - gneissosity
- - - contact, probable
- - - contact, possible
- x x floats of dike rock
- anomalous magnetic low
- - - bottom of gully
- o.b. overburden
- claim post

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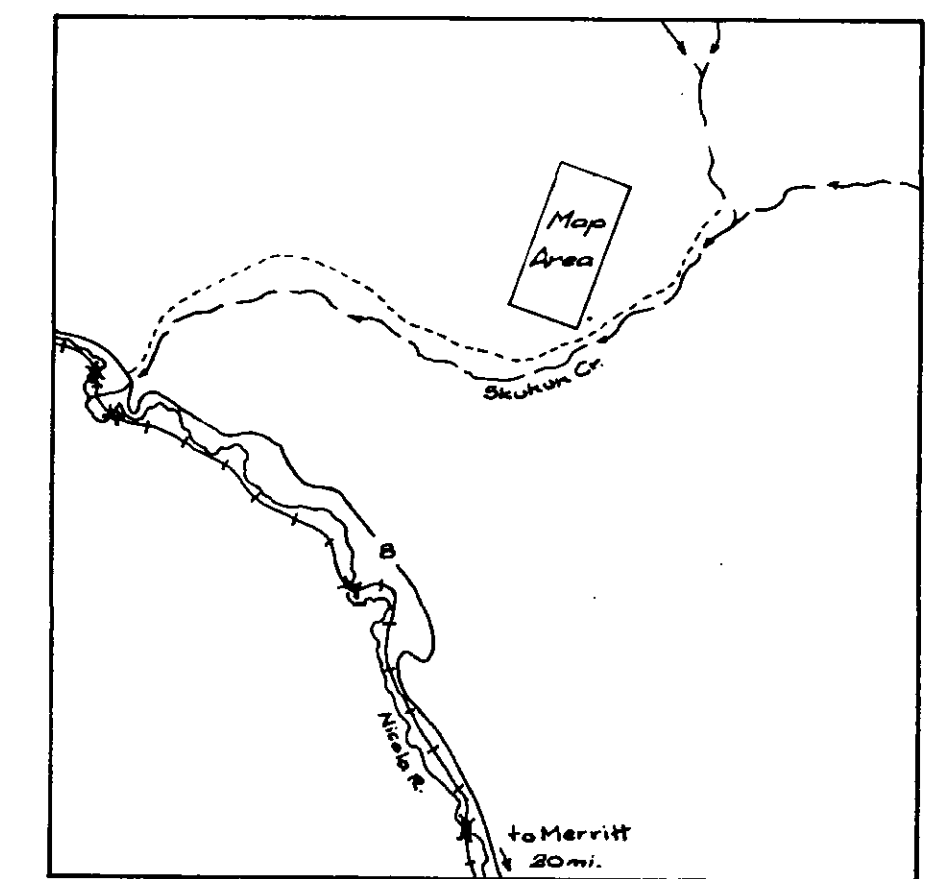
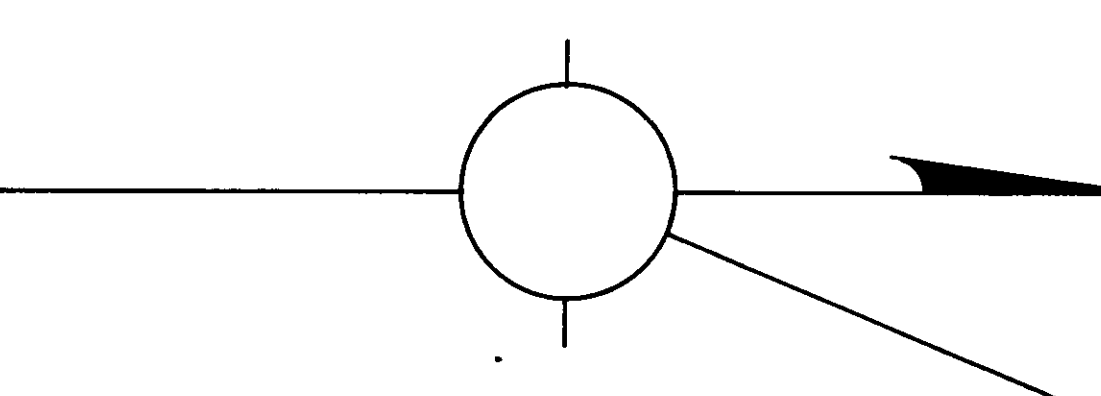
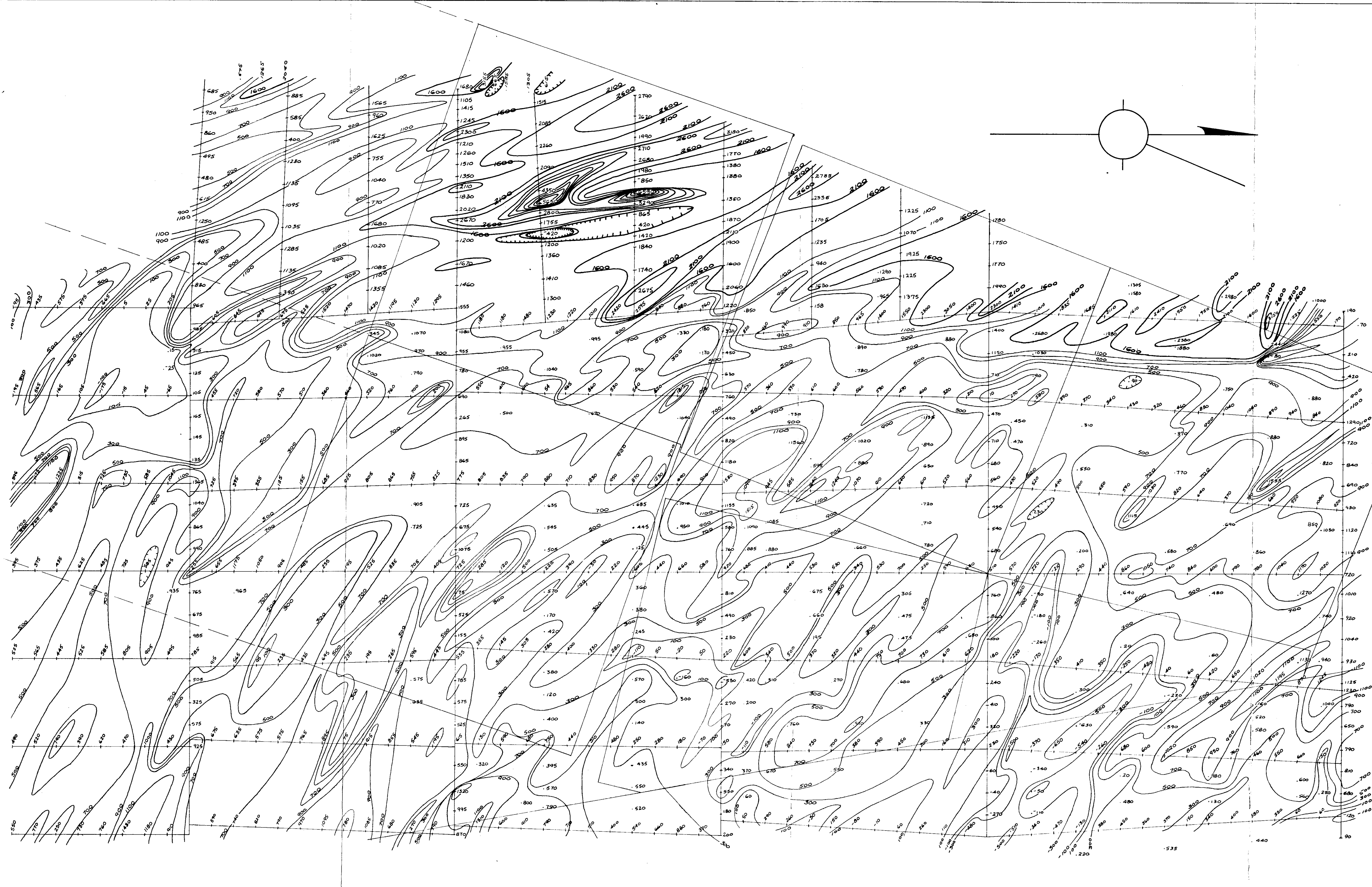
624 R

TO ACCOMPANY THE GEOLOGICAL REPORT
BY J. SULLIVAN ON THE JAY GROUP
KAMLOOPS, B.C. DATED NOVEMBER 12, 1964

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 624 MAP 2-a

Survey by
Granger, Reeve & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD.		
Property - JAY GROUP	Location - Merritt, B.C.	Subject - Geological Survey
Scale: 1"=200'	Date: Oct 15/64	Sheet No. 1



KEY MAP
Scale: 1/2 miles

- SYMBOLS**
- contour, 1600 & over, 500' interval.
 - contour, below 1600', 200' interval.
 - magnetic depression.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 624 MAP 2-B

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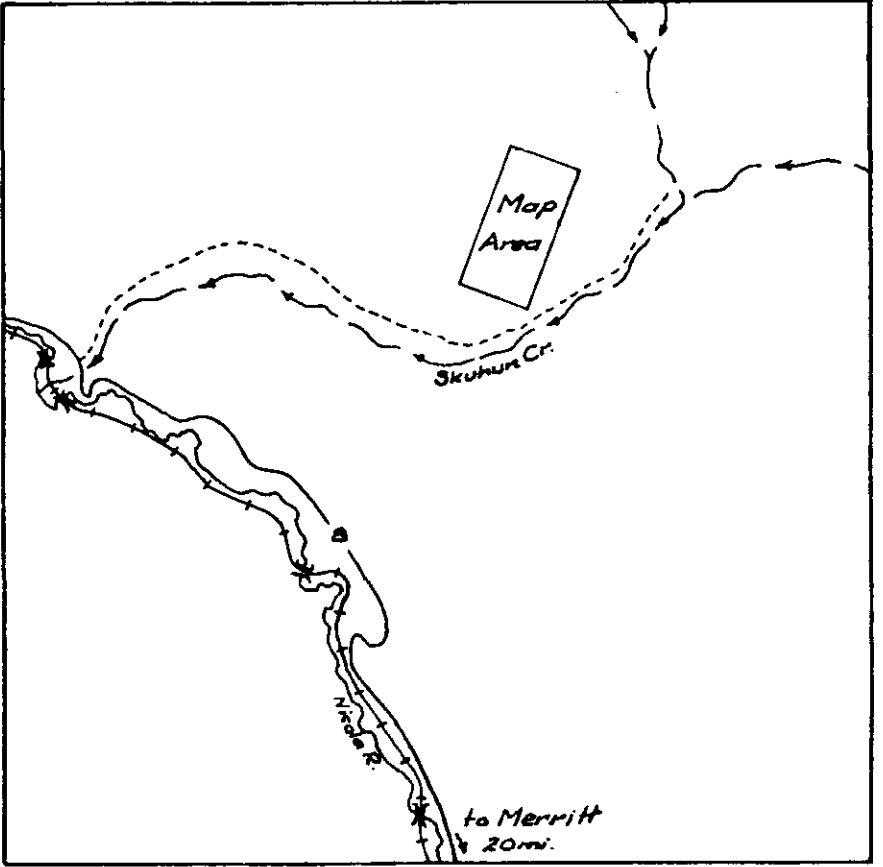
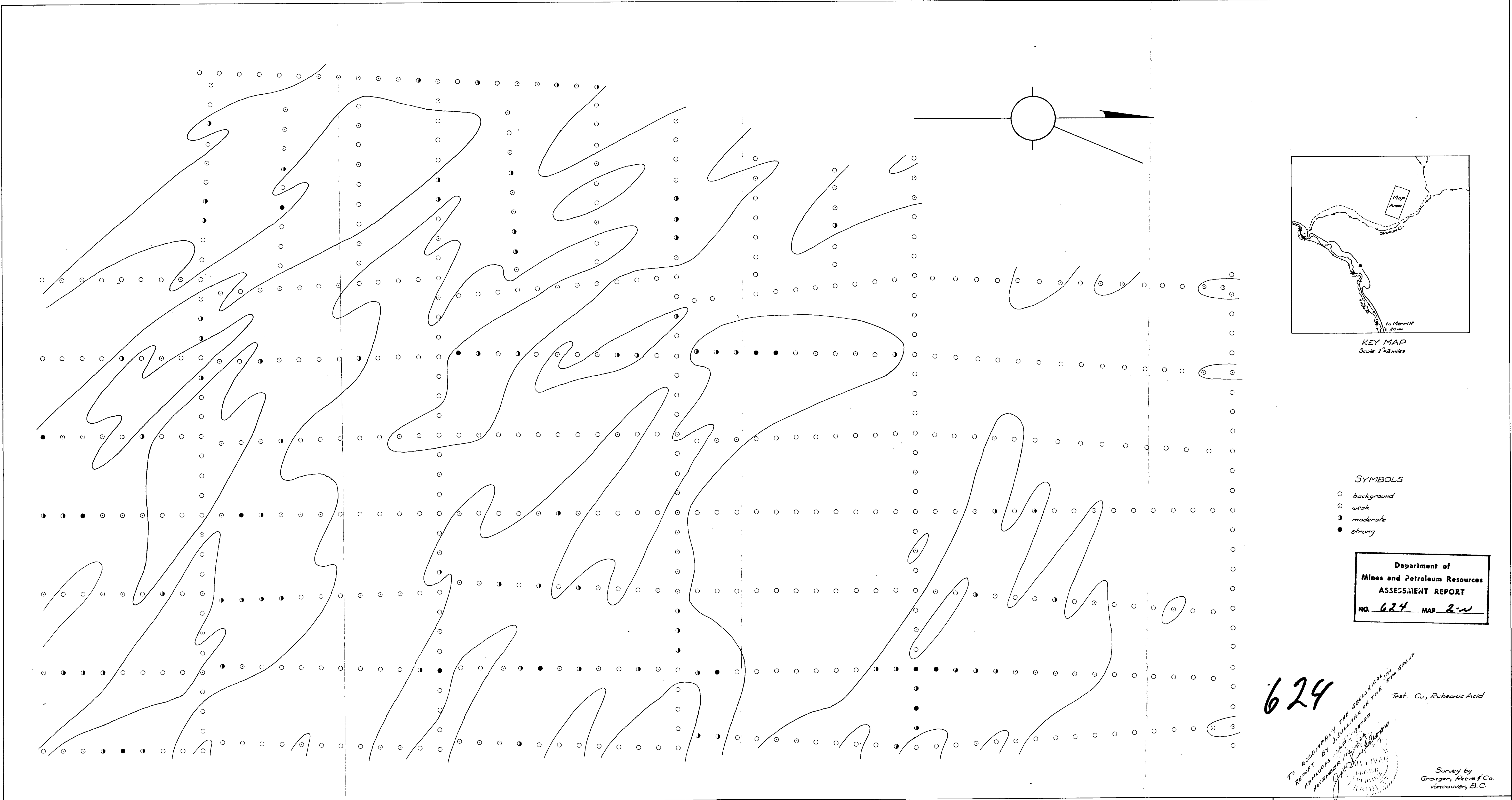
TO ACCOMPANY THE GEOLOGICAL REPORT
ON THE JAY GROUP, HANLOOPS M.D. DISTRICT
NOVEMBER 1964
[Signature]

Instrument: Shoups
MF-1

Survey by
Granger, Reeve & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD.		
Property - JAY GROUP	Location - Merritt, B.C.	Subject - Magnetometer Survey
Scale: 1"=200'	Date: Oct 19/64	Sheet No 2

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KEY MAP
Scale: 1"=2 miles

SYMBOLS

- background
- ◐ weak
- ◑ moderate
- strong

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Mines and Petroleum Resources
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NO. 624 MAP 2-N

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TO ACCOMPANY THE GEOLOGICAL
REPORT BY J. SULLIVAN ON THE
PROPERTY OF THE JAY GROUP
MERRITT, B.C.
NOVEMBER 1964

Test: Cu, Rubearic Acid

Survey by
Granger, Reeve & Co.
Vancouver, B.C.

KAMLOOPS COPPER CONSOLIDATED 1964 LTD		
Property - JAY GROUP	Location - Merritt, B.C.	Subject - Cu Soil Survey
Scale: 1"=200'	Date: Oct 26/64	Sheet No. 3

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