

Box 11

GEOPHYSICAL SURVEY

GP-6438

BANKS ISLAND GOLD PROSPECT
BRITISH COLUMBIA

103-G-8

*Missing Banks Lake
Lilly Pad (X)*

January 11th, 1965.

D.J. Salt

2008

SUMMARY:

The self-potential survey has been successful in finding gold bearing sulphides under shallow cover on the island. In some cases, unfortunately, the sulphides were not gold bearing. This is a useful prospecting tool, but more work needs to be done to evaluate the showings and determine the proper geological relationships.

INTRODUCTION:

A self-potential survey was conducted on Banks Island to locate more of the gold bearing sulphides similar to those first found. Unfortunately, the sulphides will still produce a self-potential anomaly even though they contain no gold.

Several causes for anomalies are expected. The gold bearing sulphides, sulphides containing no gold, and sulphides and graphite associated with sedimentary beds are the common causes.

GEOPHYSICAL INTERPRETATION:

There is little that can be said about the self-potential anomalies except to outline the interpreted sulphides and note any trends.

As the results of this survey have been in the hands of the exploration crew for the summer, many of the self-potential anomalies will have been investigated and many comments made in this report will be redundant.

ENGLISHMAN'S SLOUGH GRID:

There are numerous veins interpreted on this grid, although the self-potential readings are not large. The high values at "A" could be the intersection of two vein structures as shown. The broad area to the north is probably an area underlain with sediments.

QUARTZ LODGE HILL GRID:

There appears to be a trend interpreted on a fault traversing almost east-west. This could be the locus of the gold showings.

There is another zone trending north-south, which ties in with a zone on the India Grid.

Another isolated self-potential anomaly occurs on L-1W to L0 and is worthy of follow-up work.

There is also a self-potential anomaly at the north end of L-6E to L-8E.

LILY PAD GRID:

The west end of this grid shows several weak zones, which could be of interest. One of these is also partly outlined on the India Grid. The rest of the Lily Pad grid is very flat.

WALLER-ARSENO GRID:

The Arseno Grid is intriguing, in that there is a very large anomaly extending for a distance of over 3,000 feet. Unfortunately, this is likely a band of metasediments.

There are many shorter anomalies of lower intensity and it is quite possible that these are gold bearing sulphides. A contact between the long linear anomaly and the other rather irregular ones has been postulated as the metasediment contact.

Further to the southeast in an area marked as "B", there are anomalies which are irregular, suggesting the possibility of gold bearing sulphides rather than metasediments, although the self-potential values are high.

The possibility of cross faults is indicated in the maps.

KIM ZONE GRID:

There appears to be a major southeast trending zone with individual sulphide lenses within this zone. Possibly this zone should be cross-sectioned. Extending from line 250-S to 550-S, there appears to be an extension of this zone.

Possibly the gold values are not associated directly with the sulphides and the sulphides should only be considered as a marker of the structural feature, which controls the gold deposition. With this in mind, probably the best approach is a closely spaced drill program to test the zones indicated.

WALLER BAY GRID:

The map is almost self-explanatory. The maximum values on areas "A" and "B" probably indicate graphite, suggesting that they are metasedimentary bands. The other weaker anomalies may be of greater economic importance.

CROSS GRID:

There is one small self-potential anomaly of importance, which could be an extension of the discovery or Hepjer Lake Zone. A broader weaker zone, adjacent to this, could also be important.

INDIA GRID:

There are two major zones of interest which intersect at the east centre of the grid. There is also an isolated self-potential anomaly in limestone at the north end of the grid.

CROSS-BREAK GRID:

There is an excellent self-potential anomaly striking south-east. This self-potential high is most likely caused by a stockwork of fractures containing sulphides.

MICKEL GRID:

There are a few rather erratic indications of sulphide bearing veins shown on the map. These should be investigated with the hope that the gold values persist beyond the sulphide concentrations.

PENNINSULA GRID:

Although not of high magnitude, there are two zones which show up very well. For this reason have been assigned a priority of 1.

ISLAND GRID:

There is one small zone of second priority.

HEPLER GLADYS GRID:

One rather good self-potential indication has been given as Priority 1. There are several other indications. On rather nebulous evidence a fault has been interpreted.

DISCOVERY GRID:

There are several zones indicated which are worth following up.

CONCLUSIONS:

There are many indicated self-potential anomalies which could be caused by gold bearing sulphides. Unfortunately, it is almost impossible to determine which anomalies are caused by gold bearing sulphides, and which are barren sulphides or graphite. There are some indications of the presence of zinc, lead and copper, in the area and some of these anomalies could be caused by sulphides associated with these base metals.

There could also be gold present in quartz veins without sulphides, and hence would produce no self-potential anomaly.

It must be concluded that the most important anomalies should be drilled. These are marked with a 1 on all the grids. The second priority anomalies should be tested by some other means.

Geochemical work has been tried checking the soil for arsenic. It is proposed that this work continue. Other base metal tests might be applied to check for Cu, Pb, or Zn.

The most satisfactory follow-up work will undoubtedly consist of stripping and trenching self-potential anomalies in areas of shallow overburden.

Deeper overburdened areas might be tested by panning of deep soil samples, and checking these for gold content.

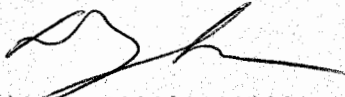
RECOMMENDATIONS:

It is recommended that all priority one anomalies be drilled, or trenched, whichever is the most feasible, unless already tested.

It is recommended that all other anomalies be tested by trenching, soil sampling and soil panning.

Self-potential data should be used only as a prospecting tool to find the gold bearing veins. Once a showing has been uncovered some discretion must be applied in the application of the self-potential data to tracing the vein, as the gold values could follow some other feature rather than the sulphides.

Respectfully submitted,



.....
D. J. Salt

DJS/jj
January 11th, 1965.

REFERENCE MEMORANDUM

DATE _____ 19__

THE ATTACHED PAPERS ARE REFERRED

TO _____

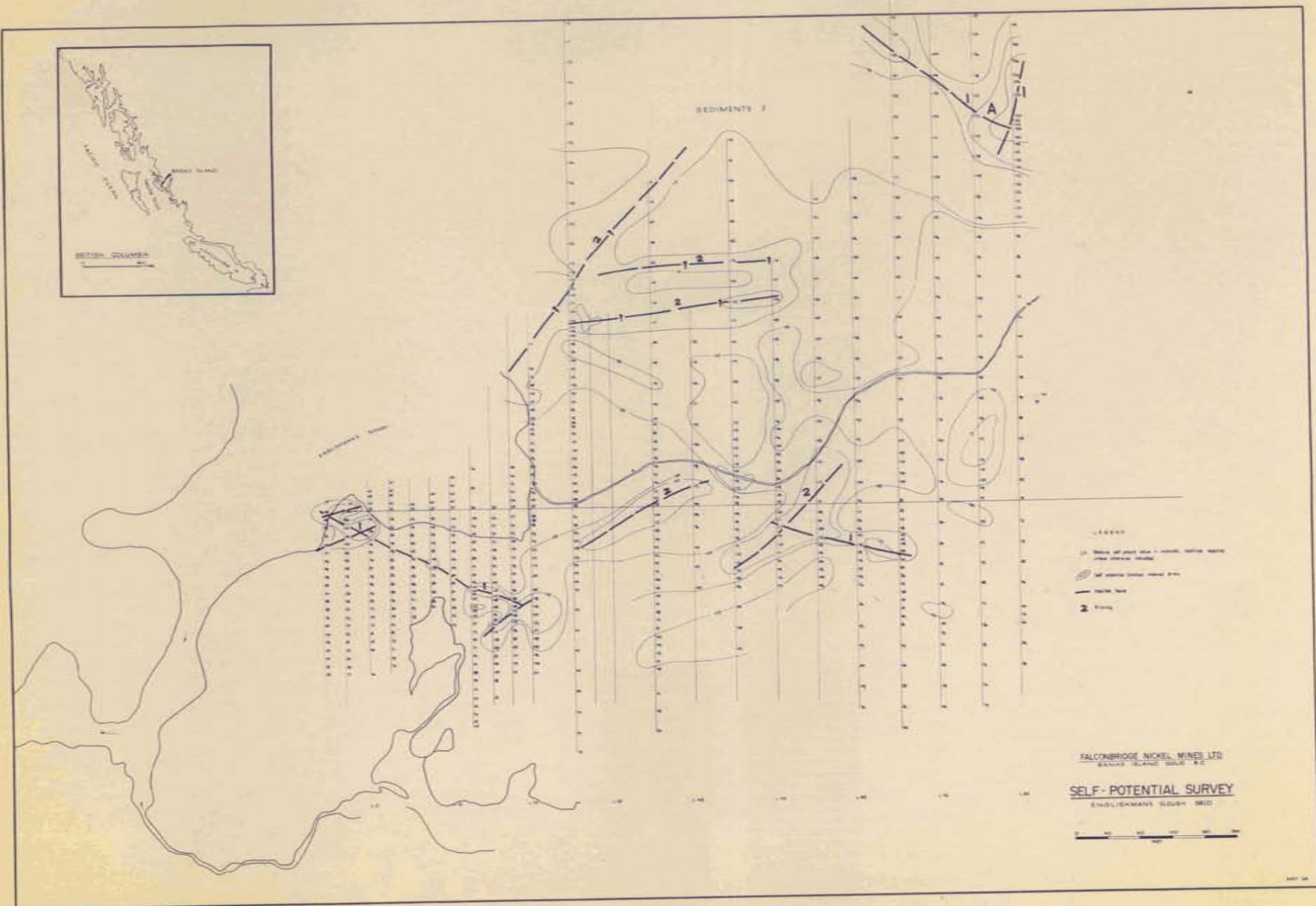
BY _____

PLEASE REPLY DIRECT	<input type="checkbox"/>	PLEASE HANDLE	<input type="checkbox"/>
PLEASE SEE ME RE THIS	<input type="checkbox"/>	YOUR COMMENTS	<input type="checkbox"/>
FOR YOUR INFORMATION	<input type="checkbox"/>	FOR APPROVAL	<input type="checkbox"/>
PLEASE RETAIN	<input type="checkbox"/>	PLEASE RETURN	<input type="checkbox"/>

Distribution:

Banks Island Gold Prospect, B.C.

Vancouver Office	3 ✓
G.P. Mitchell	1
A.S. Dadson	1
S.N. Charteris	1



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WALLER ARSINO GRID

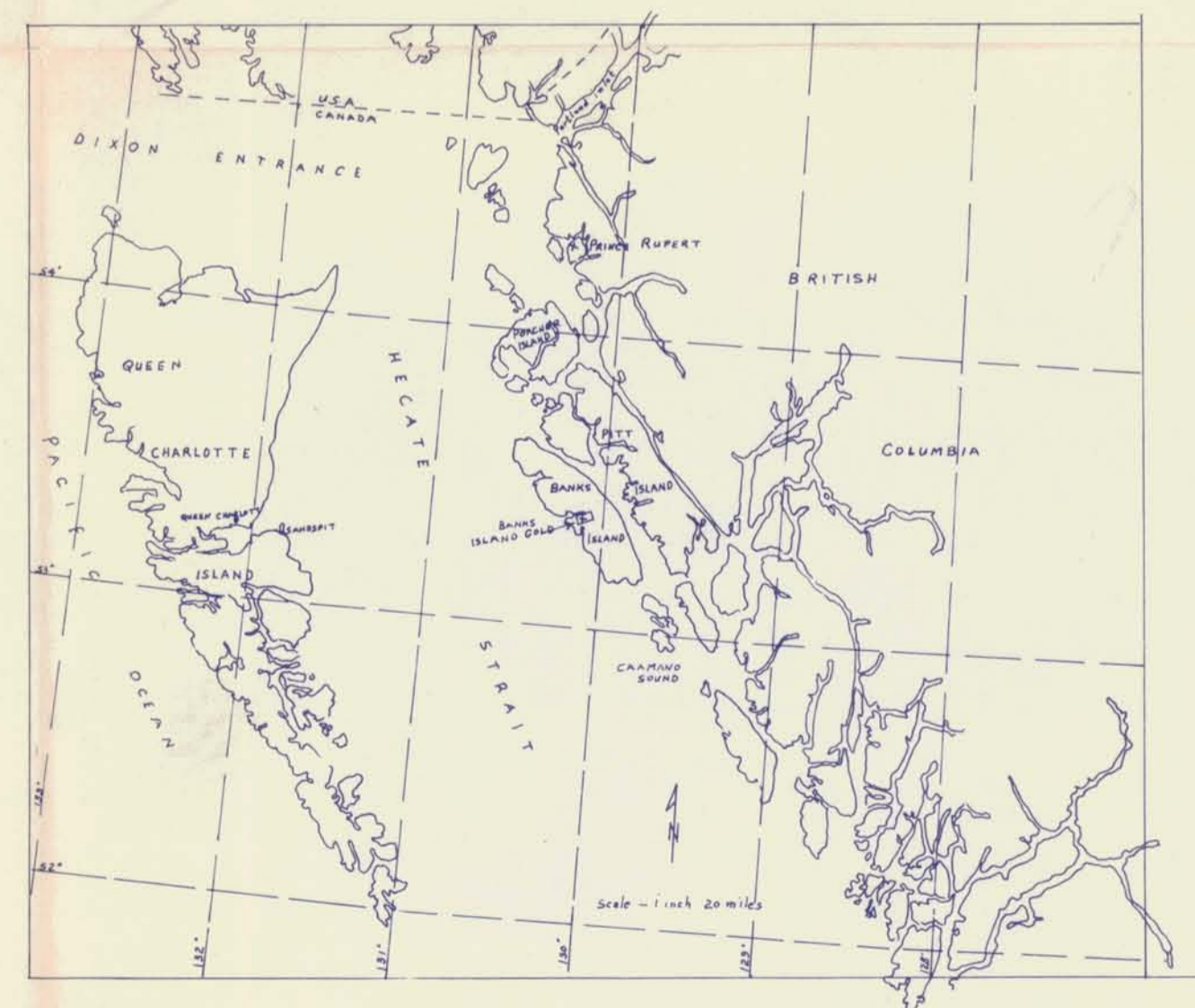
L48E L44E L40E L36E L32E L28E L24E L20E L16E L12E L08E L04E L00E L04W L08W L12W L16W L20W L24W L28W L32W L36W L40W L44W L48W

META-SEDIMENTS

WALLER ARSINO GRID

ARSINO LAKE

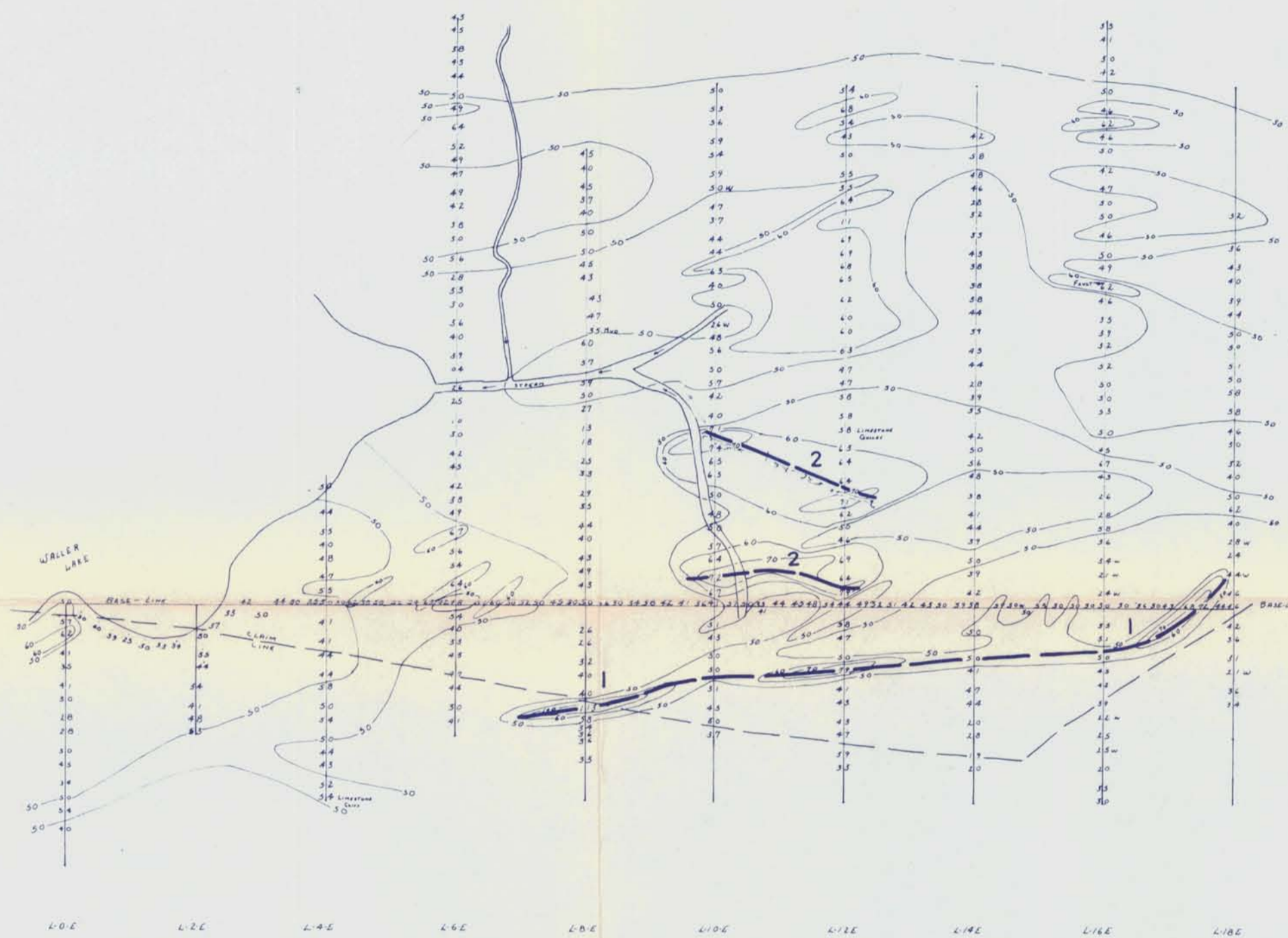
WALLER LAKE



- LEGEND
- Radio and potential values in microvolts, maximum negative values otherwise indicated
 - Self potential contours
 - Fracture lines
 - I Priority
 - Interpreted fault
 - Interpreted geological contact

FALCONBRIDGE NICKEL MINES LTD
 BANKS ISLAND GOLD PROSPECT
 B-C
SELF-POTENTIAL SURVEY





LEGEND

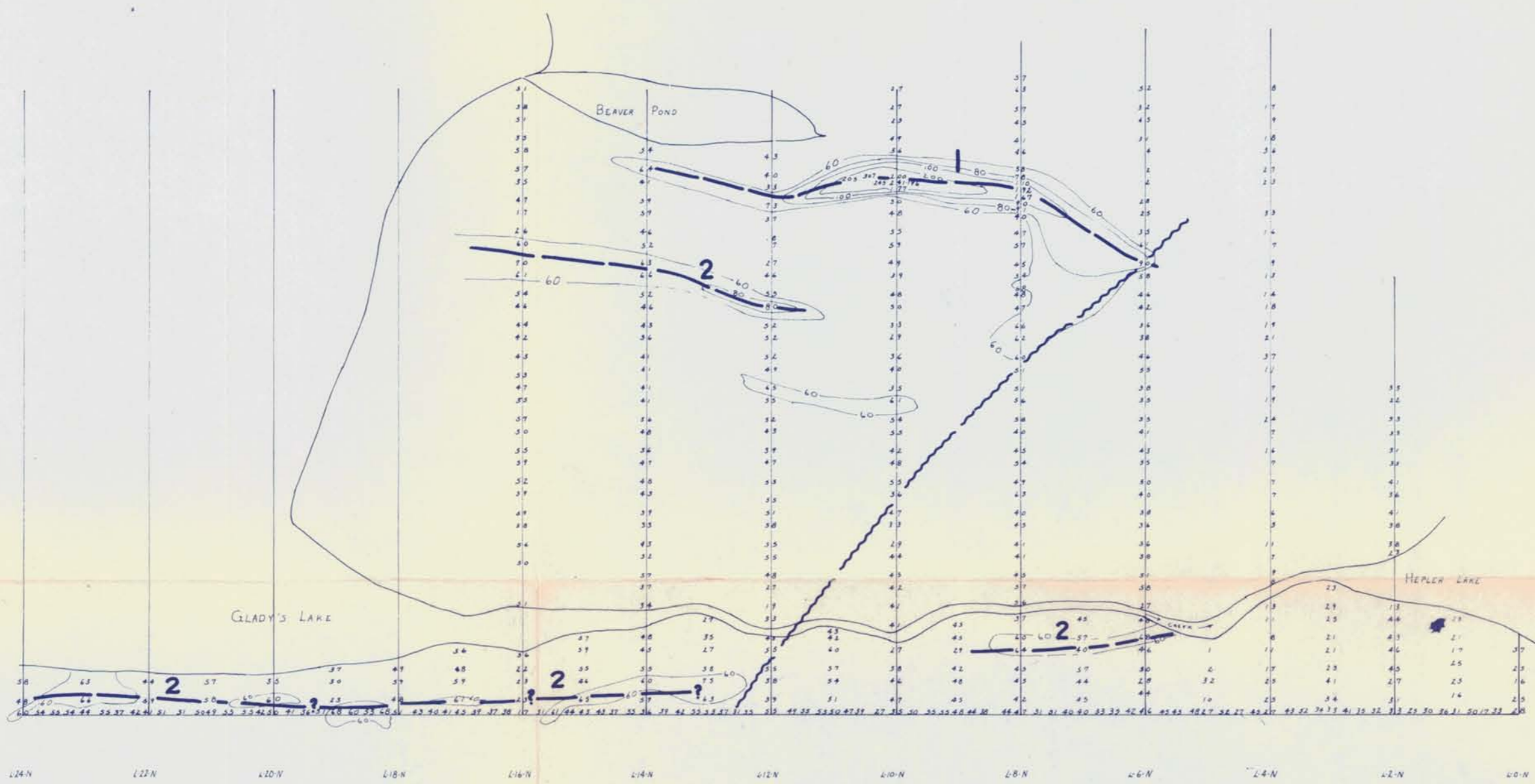
- 3/5 Relative self potential value in millivolts, readings negative unless otherwise indicated
- Self potential contour interval 20 m.v.
- Prospective veins
- 1 Priority



COMPANY . . . FALCONBRIDGE NICKEL MINES LTD.
 PROPERTY . . . BANKS IS GOLD
 LOCATION . . . BANKS IS

WORKING PLACE . . . EAST WALLER LAKE
 TYPE OF MAP . . . BSP
 BASED ON . . .

DATE . . . Dec 1964
 DRAWN BY . . . VB
 DATE OF WORK . . . Dec 1964



- LEGEND**
- Relative self-potential value in millivolts, readings negative unless otherwise indicated
 - Self-potential contour interval 20 m.v.
 - Possible vein
 - Priority
 - Interpreted fault

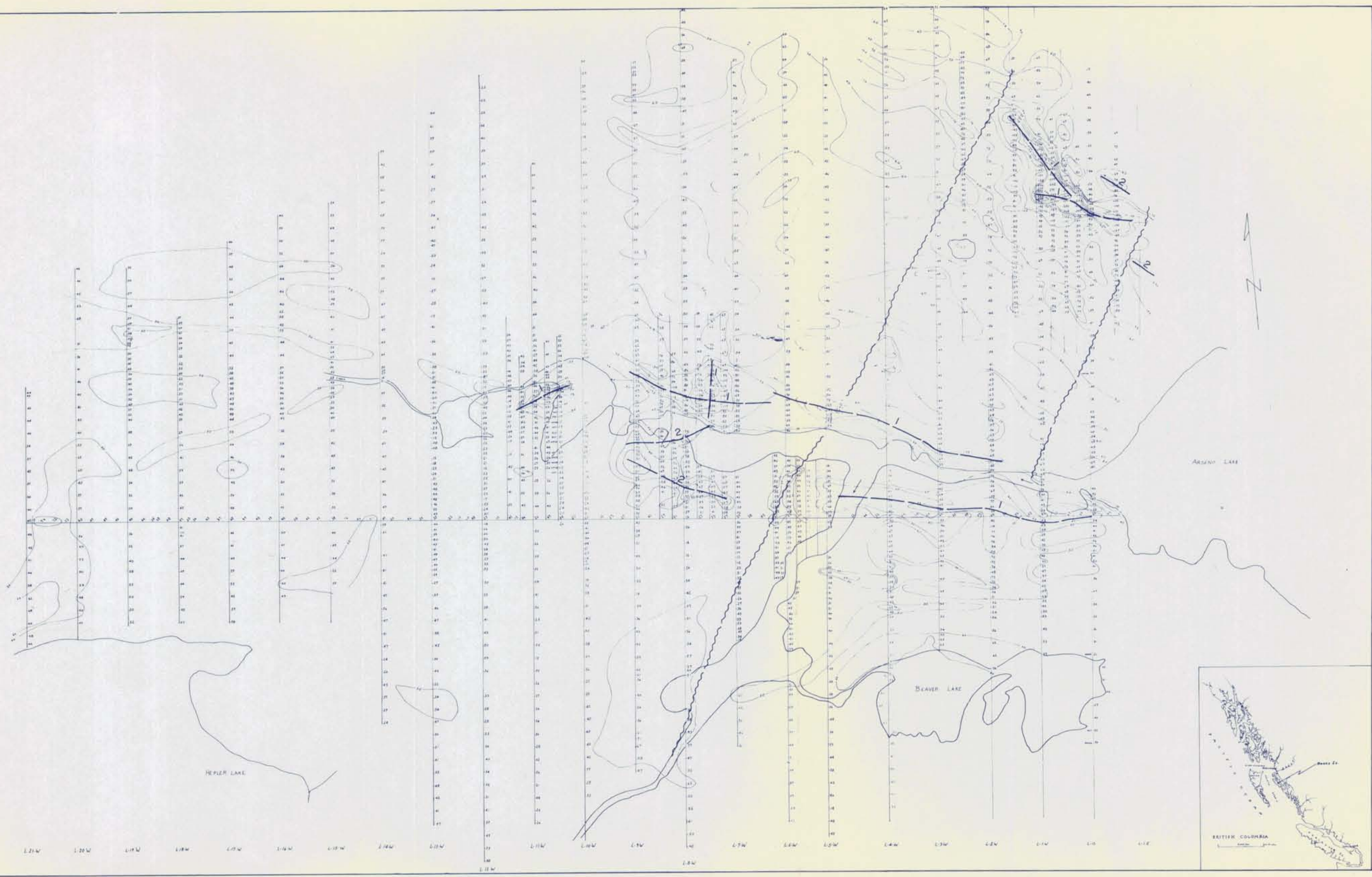


COMPANY . . . FALCONBRIDGE NICKEL MINES LTD.
 PROPERTY . . . BANKS IS. GOLD
 LOCATION . . . BANKS IS.

WORKING PLACE . . . HEPLER-GLADYS GRID
 TYPE OF MAP . . . B.S.P.
 BASED ON . . .

DATE . . . Dec 1964
 DRAWN BY . . . V.B.
 DATE OF WORK . . . SEPT 1964

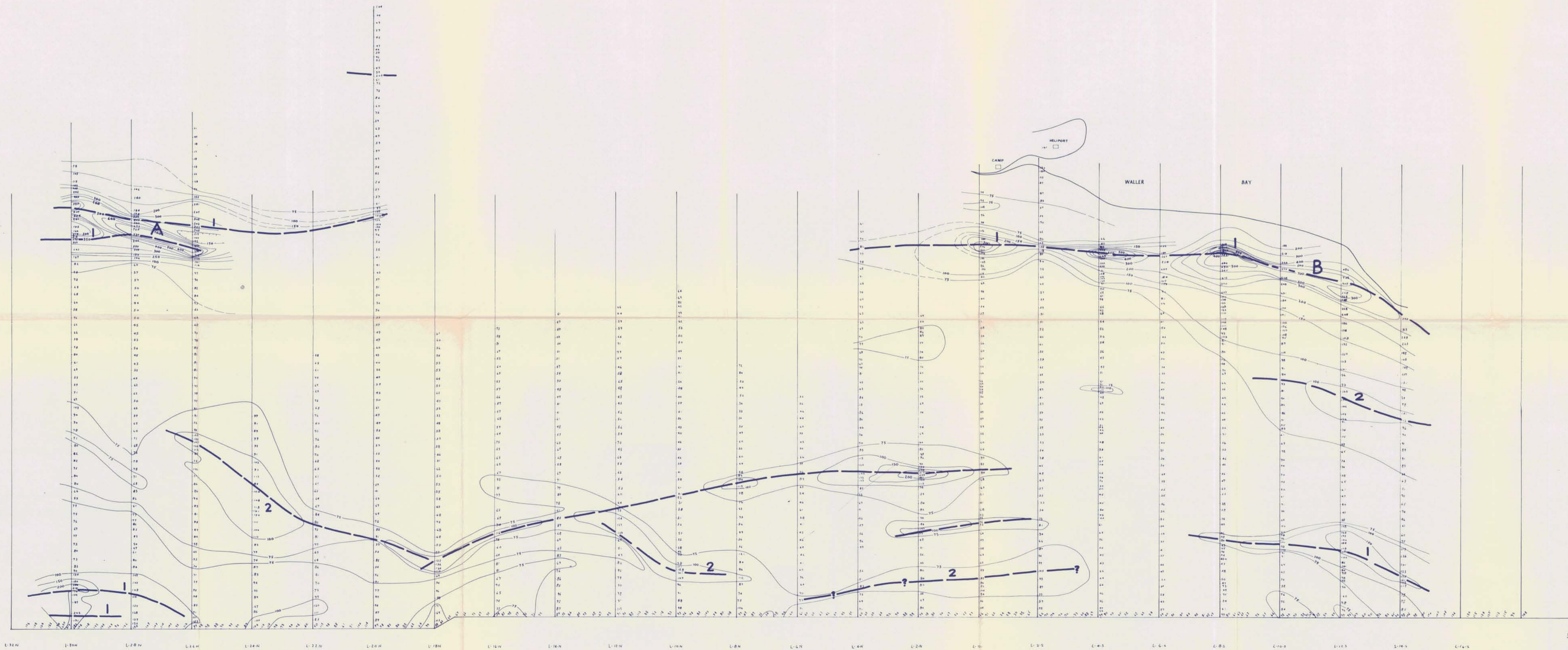
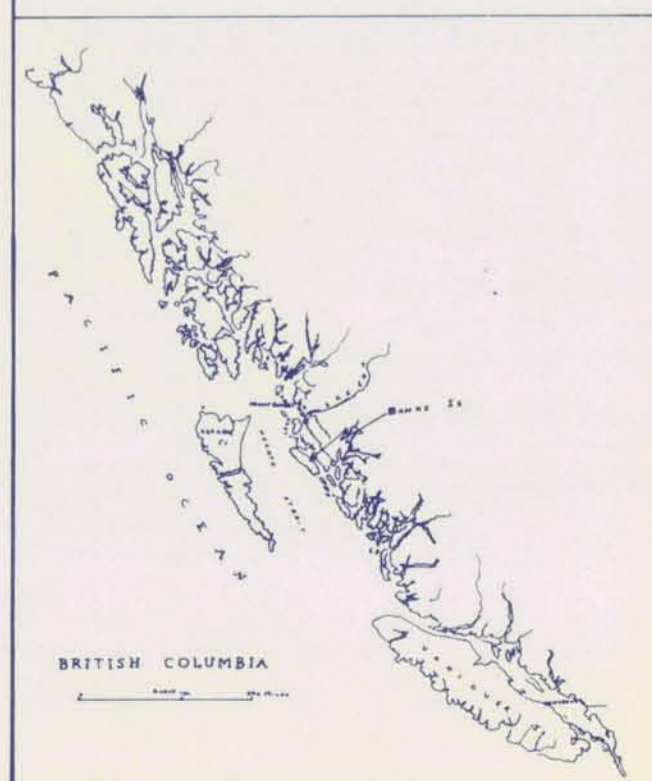
①



- ⊕ Station not plotted when a self-potential anomaly appears, also shown location
- Not plotted station
- Profile line
- 2 Profile
- Boundary line

FALCONBRIDGE NICKEL MINES LTD
 SELF-POTENTIAL SURVEY
 KIM ZONE





FALCONBRIDGE NICKEL MINES LTD.
 BANKS ISLAND GOLD - B.C.
 WALLER BAY GRID
 Self Potential Survey in M.V.
 Scale - 1 inch to 200 feet
 v.9
 S.P.

②



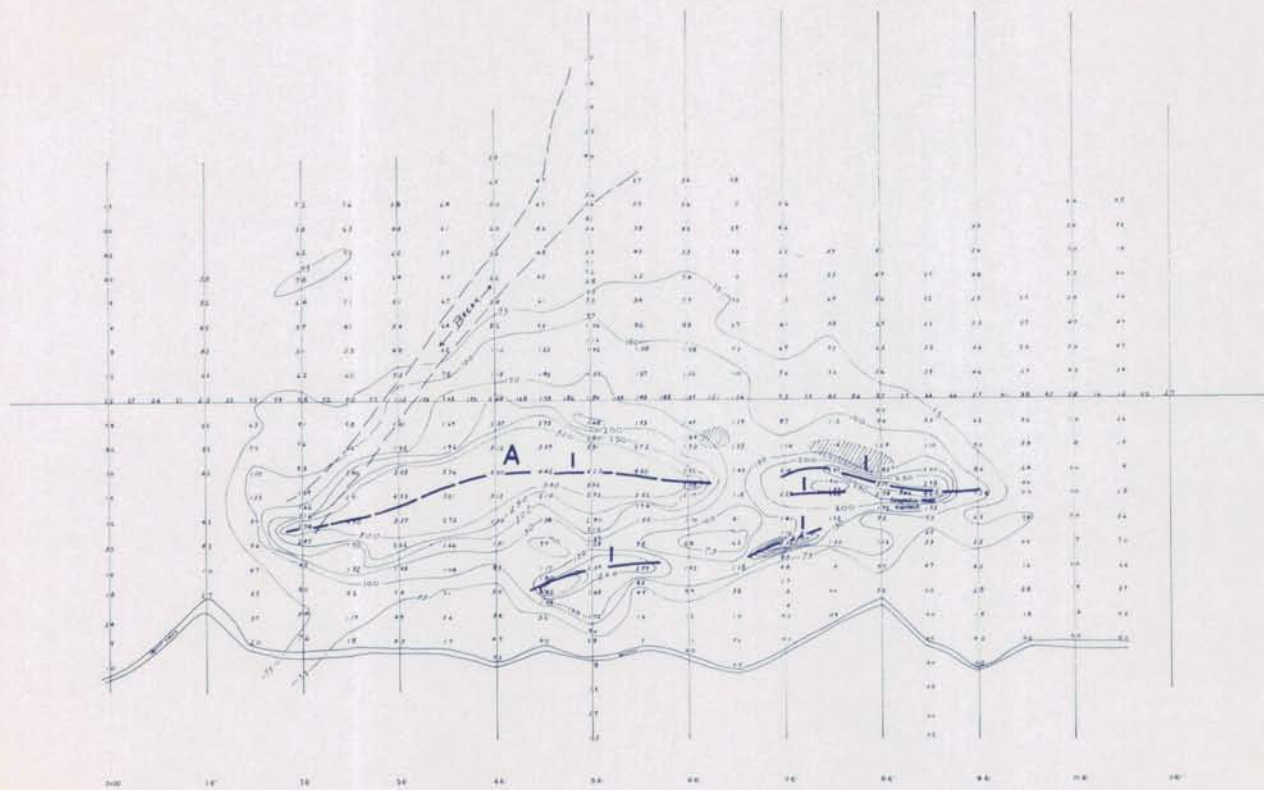
LEGEND
 Relative self potential values in millivolts, readings negative unless otherwise indicated
 Self potential contours
 Possible veins
 2 Priority

1/2
 1/1
 2300

MAP REF. NO.

Cross-Break Grid Legend

- Contour lines
- 100m - 200m
- 200m - 300m
- 300m - 400m
- 400m - 500m



A B C D E

North arrow symbol

Contour lines

100m - 200m

200m - 300m

300m - 400m

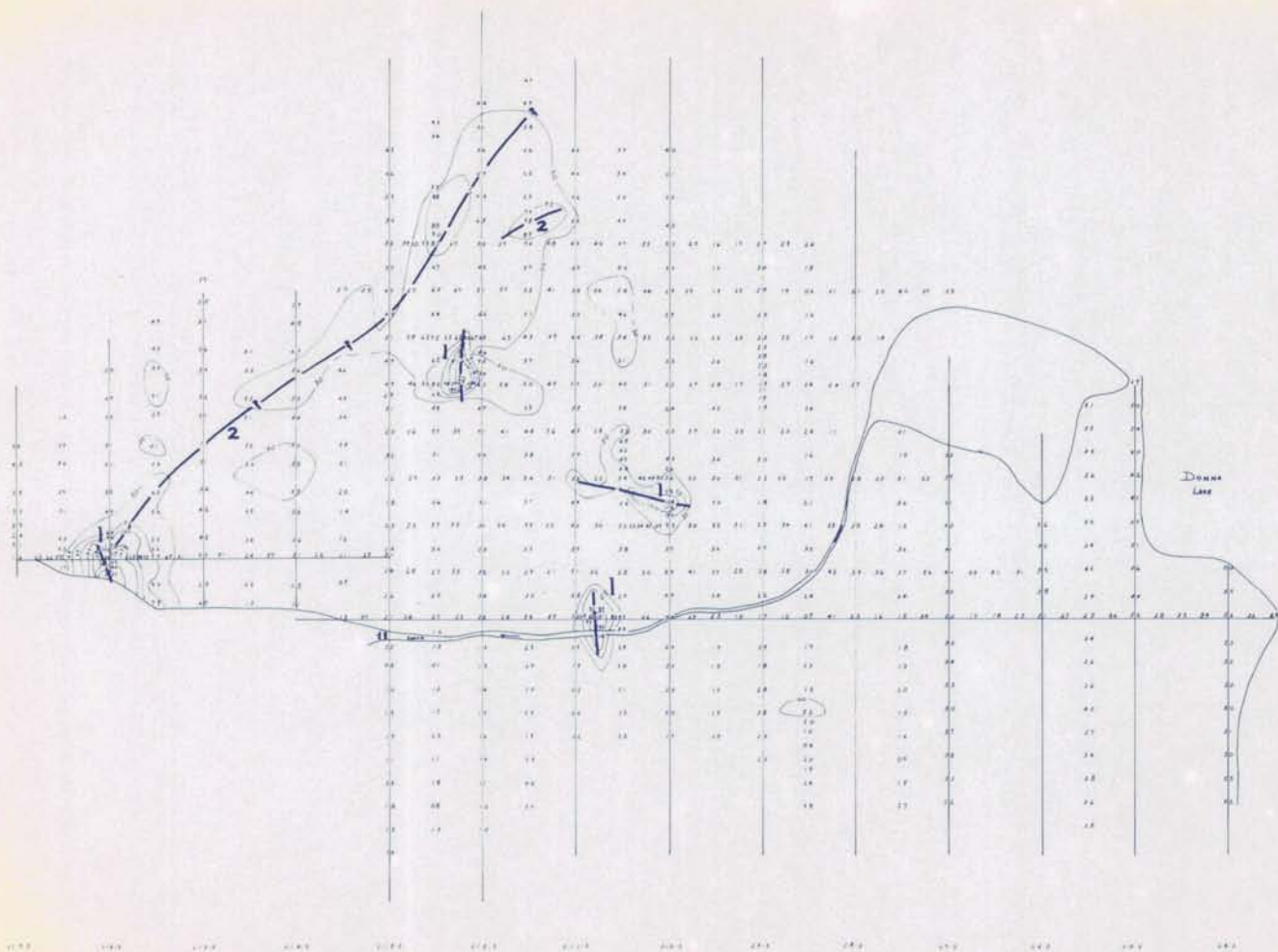
400m - 500m



COMPANY . FALCONBRIDGE NICKEL MINES LTD.
PROPERTY . BARRICK GOLD
LOCATION . BARRICK

WORKING PLANT . Cross-Break
TYPE OF MAP . BSP
BASED ON .

DATE . Nov 1964
DRAWN BY . V.B.
DATE OF WORK . Oct 1964



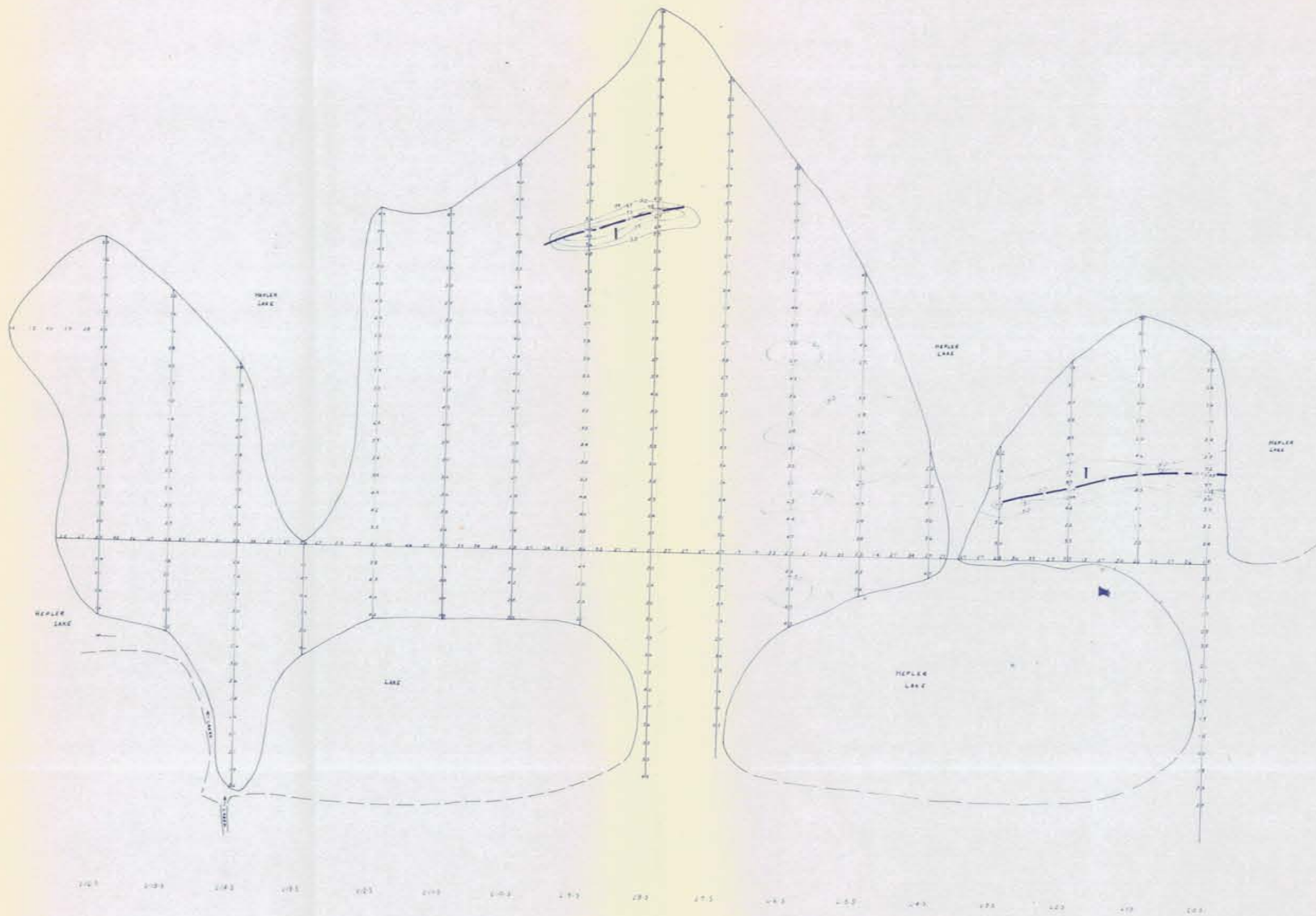
- 1. 0 1 2 3 4 5
- 2. Name of person who is actually holding register unless otherwise indicated
- 3. See general notes attached sheet
- 4. Contour lines
- 5. 2. Marking



COMPANY . . . FALCONBRIDGE NICKEL MINES LTD.
 PROPERTY . . . Bannock Group
 LOCATION . . . Bannock

WORKING PLACE . . . Miller's Gully
 TYPE OF MAP . . . B.S.P.
 BASED ON . . .

DATE . . . Nov 1944
 DRAWN BY . . . V.B.
 DATE OF WORK . . . Nov 1944



1. Contour lines
 2. Spot heights
 3. Lake boundaries
 4. North arrow
 5. Scale bar

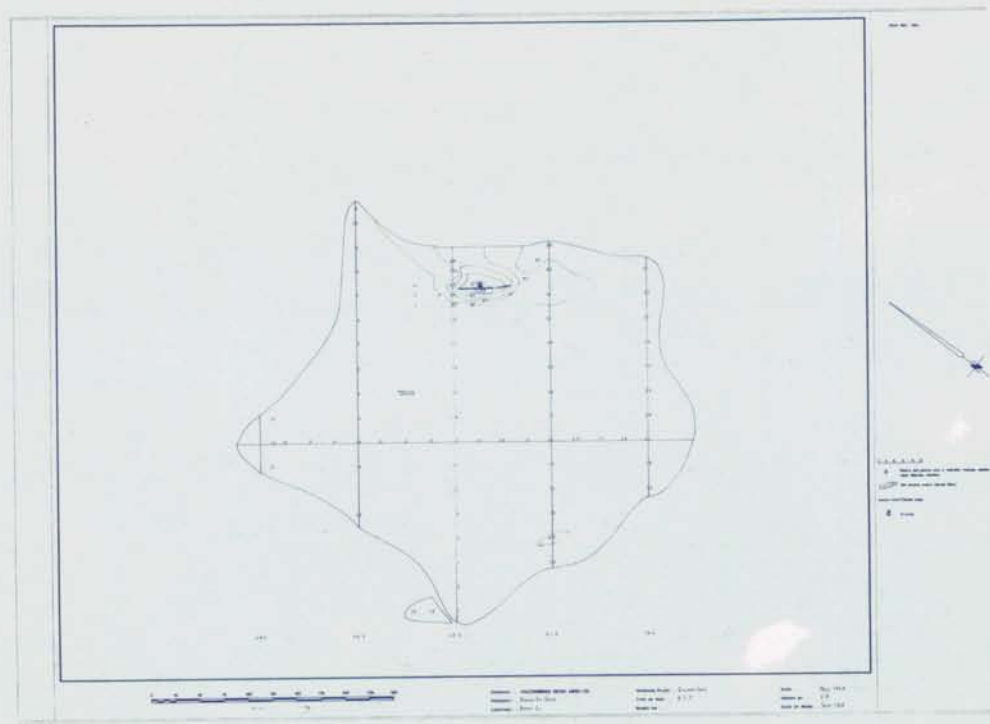


COMPANY: TALLCROFT BOWL MANUFACTURING CO.
 PROPERTY: Deer & Sons
 LOCATION: Deer Is.

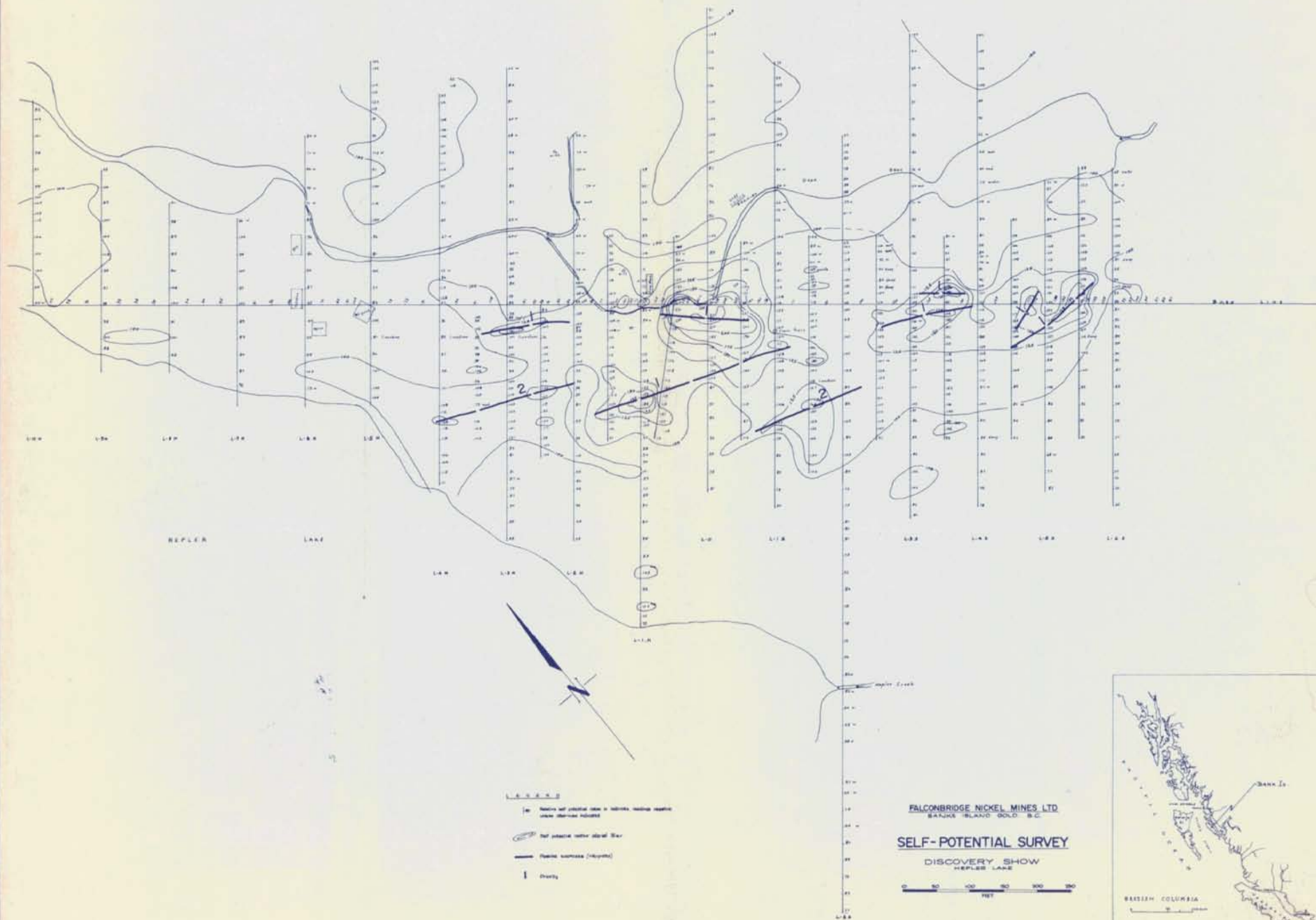
WORKING PLAN: 1000000
 TIME OF MAP: 1957
 DRAWN BY: J.S.P.

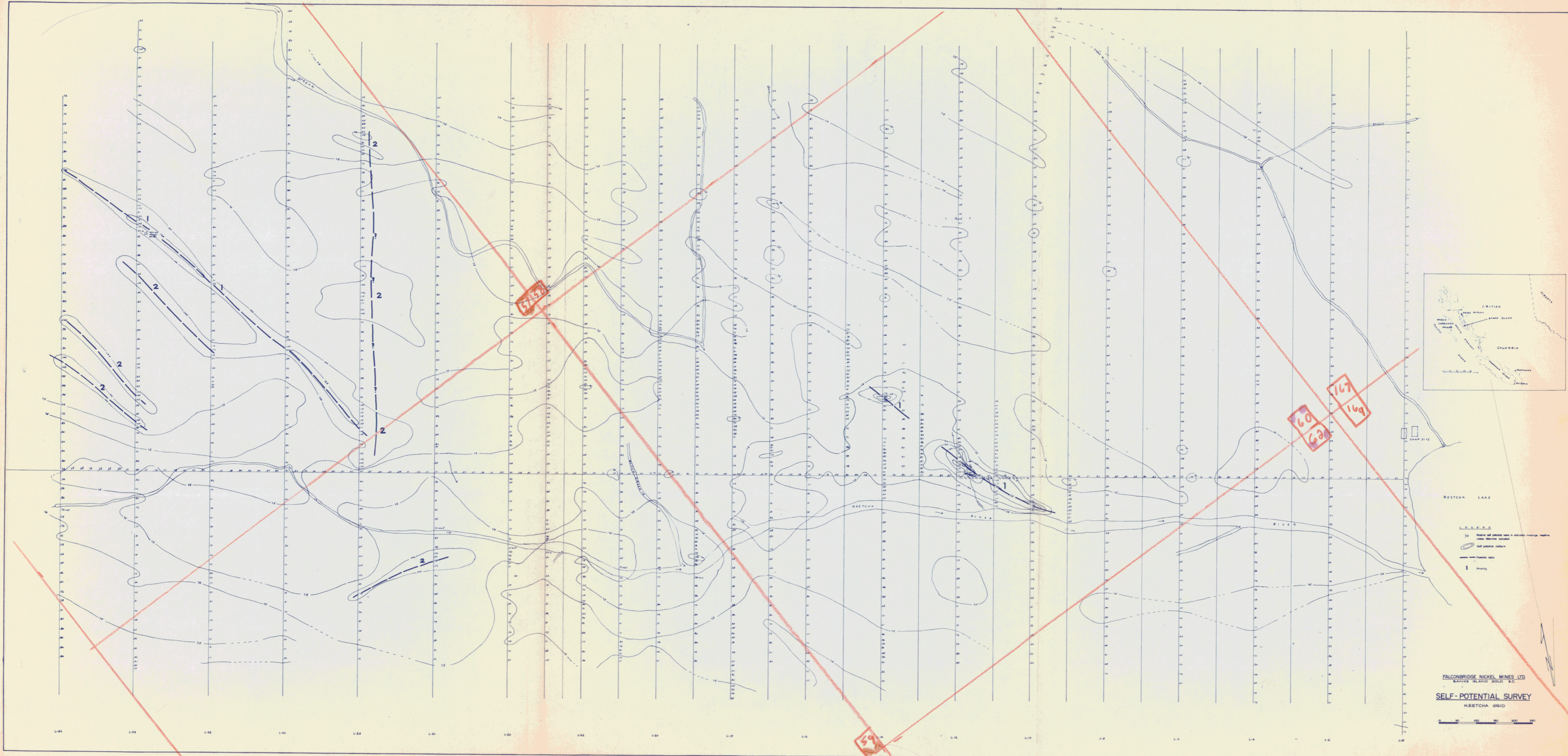
DATE: Nov. 1954
 DRAWN BY: J.S.P.
 DATE OF WORK: Sept. 1954

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KETCHIKAN LAKE

- LEGEND
- (-) Rocks and potential values in millivolts (negative minus relative to standard)
 - Self potential contours
 - Water table contours
 - 1 Priority

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BANNEVILLE ISLAND GOLD S.C.

SELF-POTENTIAL SURVEY
KETCHIKAN GRID

