

2070

SICINTINE MINES LTD.
Geochemical Soil Survey
The Ice Claims
90 Miles North of Smithers, B.C.

ALRAE ENGINEERING LTD.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2070 MAP

October 7, 1969

GOVERNMENT AGENT
RECEIVED
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SMITHERS, B. C.

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ALRAE ENGINEERING LTD.
VANCOUVER, B.C.
ENGINEERS & GEOLOGISTS

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INTRODUCTION

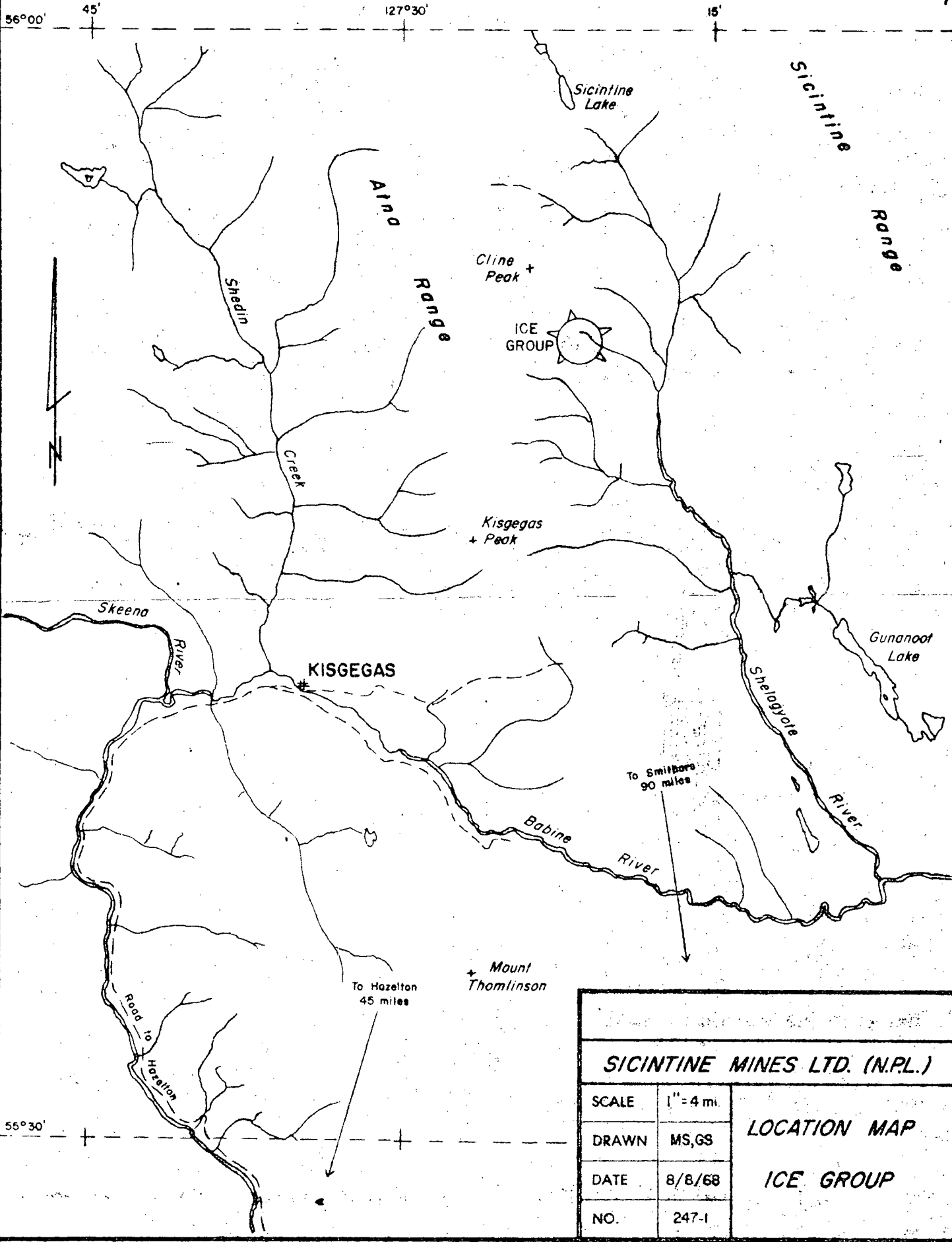
During the period July 5th to July 20th, geochemical soil sampling was carried out over the southern portion of the Ice group of mineral claims owned by Sicintine Mines Ltd. This survey was undertaken to explore the extent of chalcopyrite-molybdenite mineralization in a quartz diorite intrusive mass. Exposed mineralization was examined by the writer on July 20th, during an examination trip to the property and at this time the techniques of soil sampling and record keeping of soil samples was reviewed by the writer. Mr. Mike Callahan was the field man collecting soil samples on this project.

LOCATION AND ACCESS

The Ice claims are located approximately 96 miles north of Smithers, B.C. on a southeasterly flowing tributary of the Shelagyote river. The claims are at latitude 55°50'N and longitude 127°20'W. Elevation within the claims varies from 3,500 feet to 5,500 feet above sea level. Access to the claims is most readily accomplished by helicopter from Smithers, B.C. A road system does, however, extend north from Hazelton to the abandoned Indian village of Kisgegas near the junction of the Skeena and Babine rivers.

CLIMATE AND TOPOGRAPHY

The Ice claims are in central British Columbia immediately east of the Coast Range mountains. This area is subjected to heavy annual precipitation and is at a relatively high elevation. Relief within the claim area is approximately 2,000 feet, varying from 3,500 feet to 5,500 feet. Small snow fields were encountered within the grid area and glaciers support the mountain streams immediately to the north of the grid area. The area sampled is decidedly alpine in nature and contains steep mountain slopes, talus slide areas and cliffs.



SICINTINE MINES LTD. (N.P.L.)		
SCALE	1" = 4 mi.	LOCATION MAP ICE GROUP
DRAWN	MS,GS	
DATE	8/8/68	
NO.	247-1	

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NO. **2070** MAP **4**

Vegetation consists chiefly of heather above timber-line, scrub hemlock at the timber-line zone and hemlock and balsam on the lower slopes and valley bottoms. There is limited undergrowth in the timbered area although zones of alder were encountered.

SOIL SAMPLING PROCEDURE

A grid system of sampling stations spaced approximately 400 feet by 200 feet was established over the claims surveyed from base lines located along the claim location lines. The northern half of the grid is covered by lines running northerly and on the southern half of the grid lines were run east and west. This pattern was chosen to take maximum advantage of the general slope and drainage directions within the claims. More detailed sample spacing was used in the vicinity of favourable geological contacts and known mineralized zones.

Samples were taken at each sampling station by digging holes from eight to 12 inches in depth and collecting the fine to medium grained light brown soil. Samples were missed in areas of outcrop, talus slides and snowfields. A base map was prepared during the survey work and slope direction in the vicinity of the sample stations is indicated on the accompanying maps as are the respective molybdenum, copper and silver content of the individual samples.

Samples were placed in numbered paper bags and forwarded to Vancouver for analysis by Crest Laboratories Ltd. A total of 411 samples were analyzed at the laboratory by the following methods: The samples were dried, sieved to -80 mesh, digested by hot HNO_3 and HClO_4 acid. Copper and silver contents were determined by atomic absorption and molybdenum by colorimetric methods. All determinations are reported in parts per million of the metal. Analysis standards were made from stock solutions containing 100 micrograms per millilitre of metal.

GEOLOGICAL SETTING

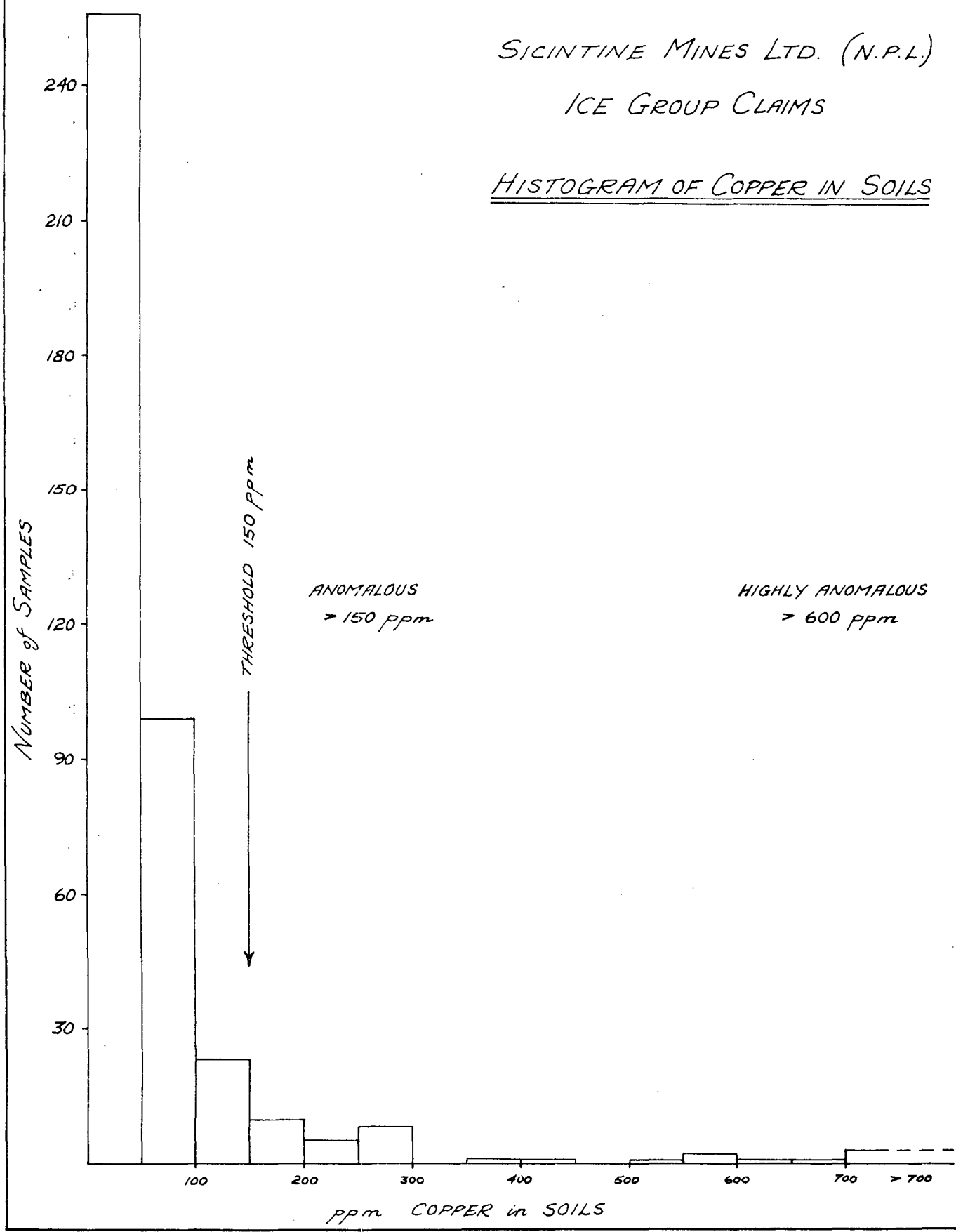
The area sampled is underlain by argillite, hornfels, pebble conglomerate and quartz diorite intrusives. Mineralization is noted to occur in the form of pyrrhotite, molybdenite, chalcopryite within the quartz diorite. Pyrrhotite is disseminated through much of the intrusive and is occasionally accompanied by zones enriched in chalcopryite. Chalcopryite and molybdenite are often found along hair-line fractures in the quartz diorite and are generally associated with sericitization along the walls of the fractures. The molybdenite occurs as fine disseminations within the sericitic zone along some fractures. Best surface exposure of mineralization occurs on claims #38 and #39 and at the southeastern corner of #38 several 1/8 inch to four inch quartz veins along shear zones were noted to contain small amounts of lead and silver. Loose boulders of similar material containing a greater proportion of galena were encountered farther up-slope on the claim Ice #38. These were rich in silver.

INTERPRETATION

As may be seen on the accompanying map sheets on which molybdenum and copper content of soils have been plotted, there is one broad anomaly on claims #36, #37, #38 and #39. Several smaller and isolated anomalies occur within the surveyed area and are also indicated on the map sheets. The accompanying histograms for each of copper, molybdenum and silver indicate the relative anomalous threshold for each metal. Distinct and coincident anomalies are indicated by the copper and molybdenum content of the soils, however, the extremely erratic nature of the silver content precludes selection of a zone anomalous in silver. This would indicate the local distribution of silver and would require much more detailed sampling to delineate anomalous zones.

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ICE GROUP CLAIMS

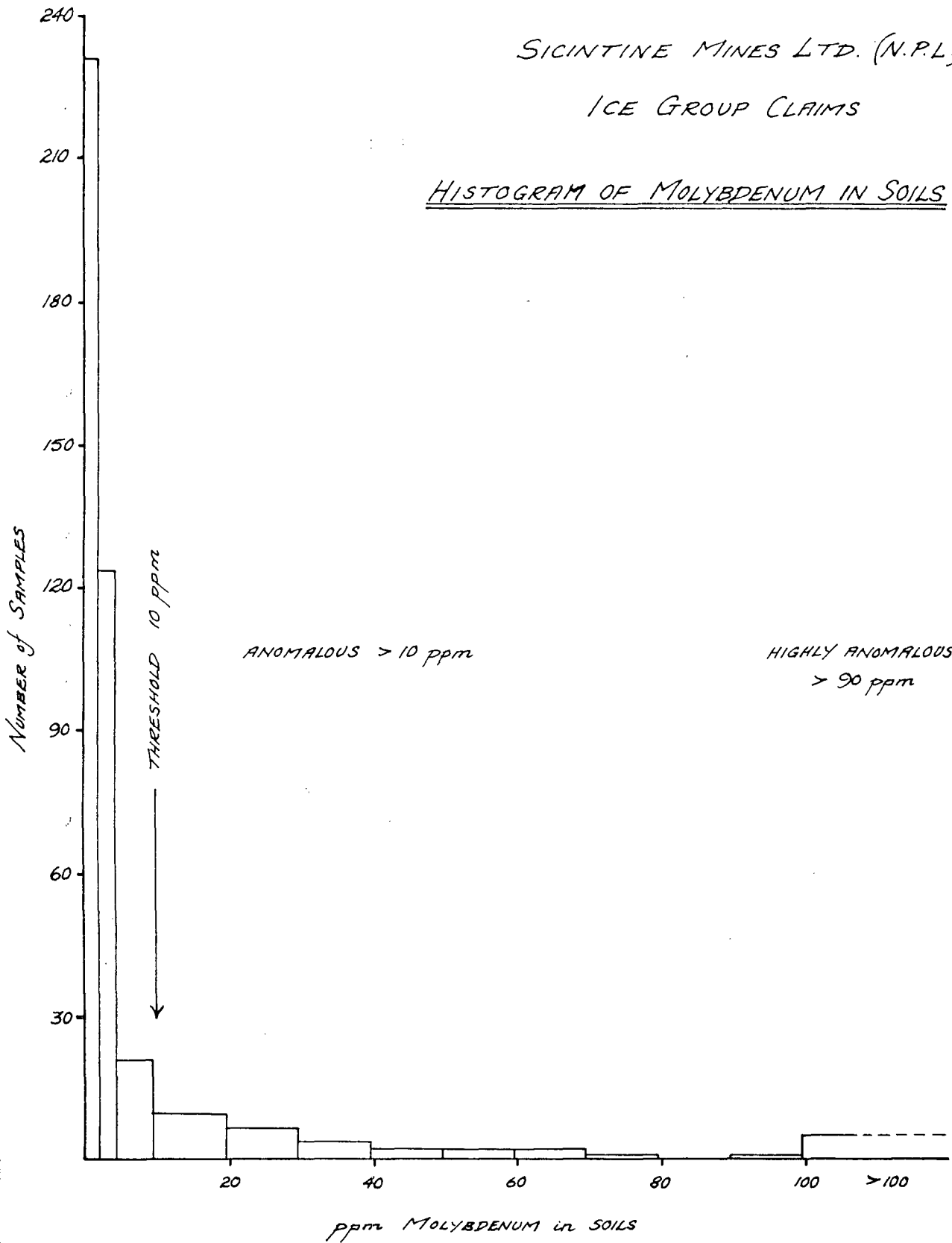
HISTOGRAM OF COPPER IN SOILS



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ICE GROUP CLAIMS

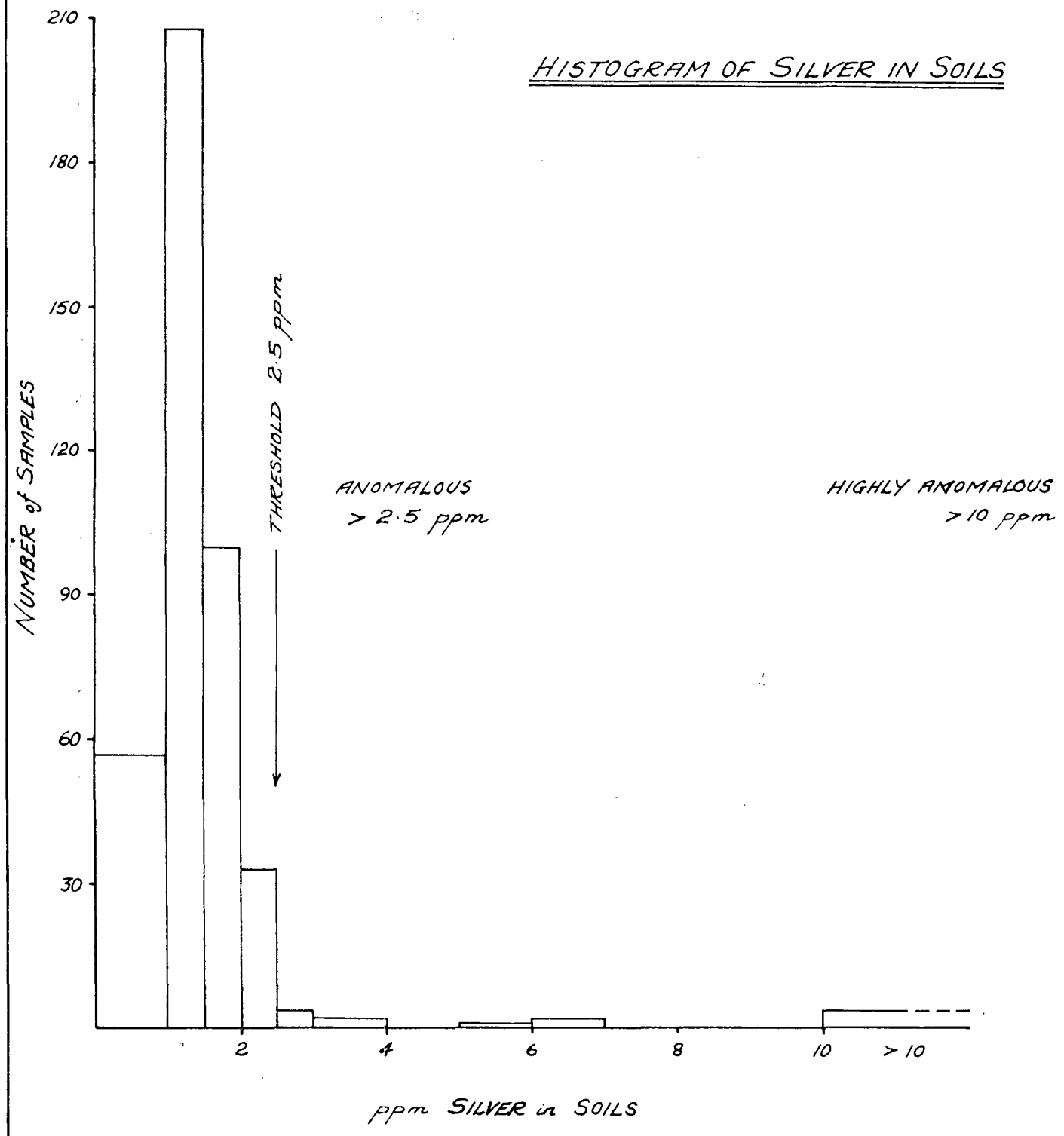
HISTOGRAM OF MOLYBDENUM IN SOILS



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ICE GROUP CLAIMS

HISTOGRAM OF SILVER IN SOILS



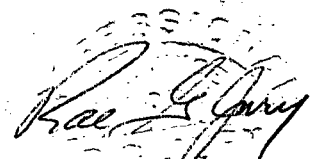
As may be seen on the map sheets the coincident copper and molybdenum, anomalies cover an area approximately 800 feet by 1,200 feet. It is within this zone that the known exposures of mineralization occur. Samples taken from rock pits blasted across outcrops within the zone indicate the copper and molybdenum content each to be 0.02%. Only two samples of visually representative material were taken from these trenches, however, and the above assays cannot be taken as representative of the whole zone. It is estimated that approximately 50% of the area of the anomaly would be covered by talus material and overburden.

CONCLUSIONS AND RECOMMENDATIONS

Reconnaissance soil sampling of the southern portion of the Ice Group of claims indicates one zone of anomalous molybdenum and copper values within the soils which is coincident with known mineralized quartz diorite intrusive. The anomaly occurs on a steep hillside and is elongate downslope of the known mineralized zone. Extensive downward migration of soils is to be expected, however, the indicated zone of interest is approximately 1,200 feet by 800 feet and is worthy of more detailed investigation.

Evaluation of this anomaly should take the form of detailed geological mapping, rock trenching and sampling, and shallow diamond drilling if required.

Respectfully submitted:



Rae G. Jury, P. Eng.

AFFIDAVIT OF COSTS
Geochemical Soil Survey
Ice Claims

R. Jury	Supervision and Report Preparation	\$ 400.00
Merle Cloutier	Field Supervisor - July 5-20, 1969	840.00
M. Callaghan	Sampler - July 5-20, 1969	680.00
G. McKnight	Assistant - July 5-20, 1969	680.00
Helicopter Services		838.33
Assaying of Samples		<u>972.90</u>
		\$ <u>4,411.23</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 *15th*
day of *November 1969* A.D.

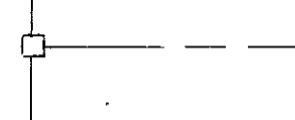




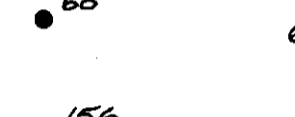



Rae & Jury

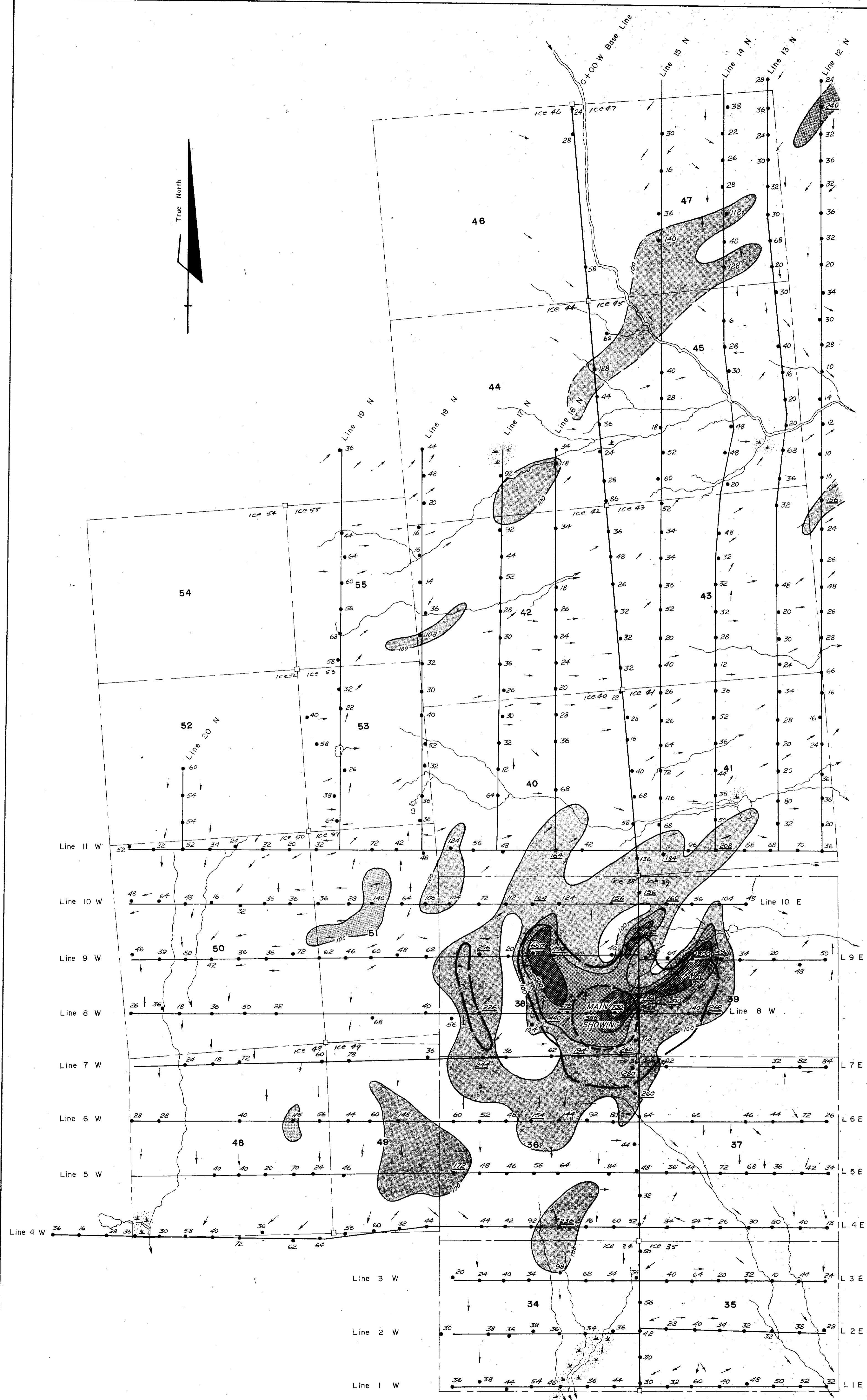
[Signature]

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

Department of
 Mineral Resources
 ALB
 NO. **2070** 1

LEGEND

-  Claim post, claim lines
-  Creek
-  General slope direction
-  Swampy ground
-  Cut line, sample point
-  68 ppm copper
-  Anomalous copper value (>150 ppm)
-  Copper values contoured in ppm
-  Anomalous zone



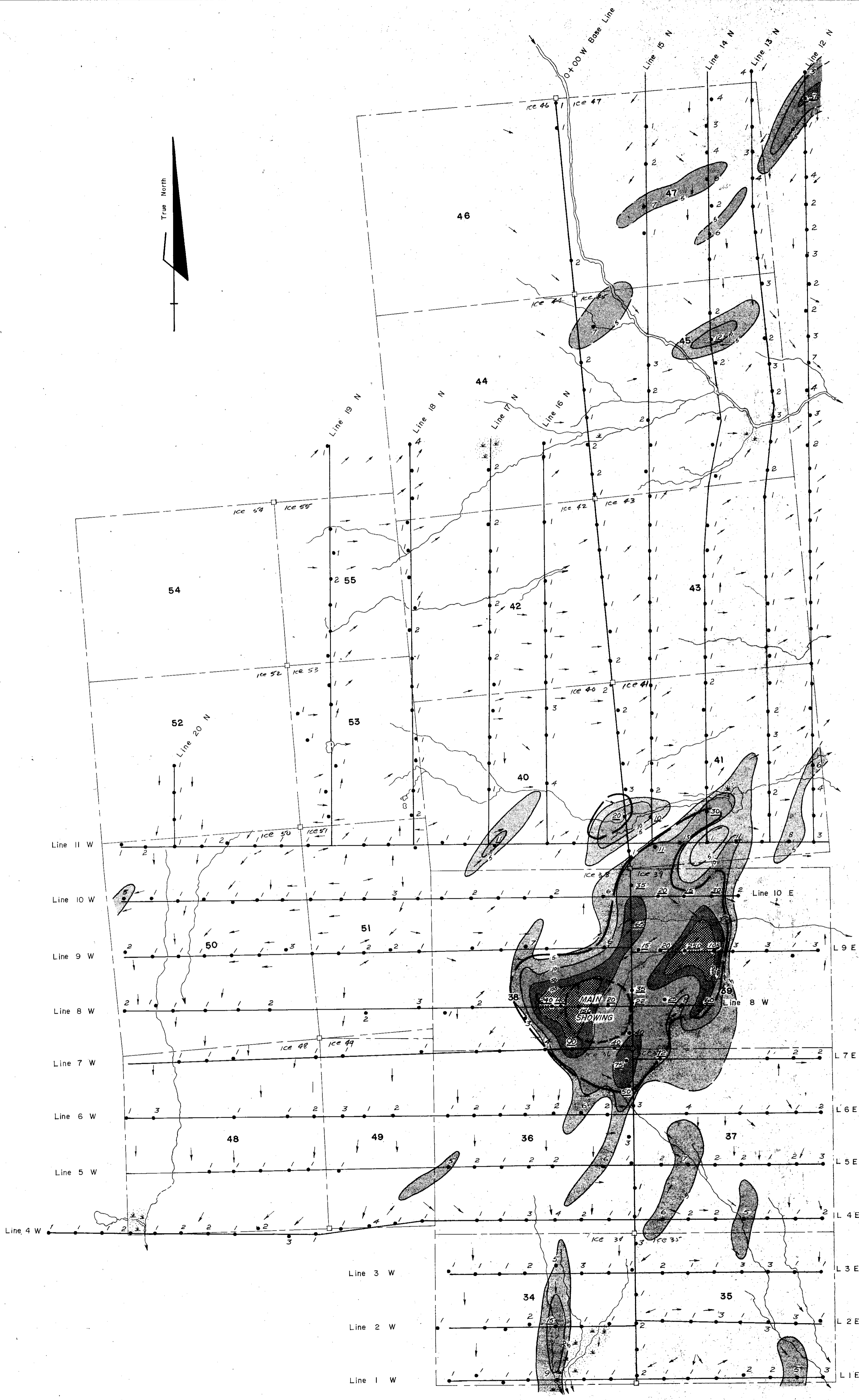
DISTRIBUTION of COPPER in SOILS

2070 *Nov 3 July*

To accompany geochemical report by R.G. Jury, P.Eng. on ICE claims, Atna Range, Omineca M.D., dated Oct 7, 1969

SICINTINE MINES LTD. (N.P.L.)	
ICE GROUP SOUTH	
ALRAE ENGINEERING LTD. GEOLOGISTS AND ENGINEERS VANCOUVER, B.C.	
DESIGNED: <i>F.G.</i>	SCALE: HOR. 1" = 400'
DRAWN: <i>F.G.</i>	VERT. _____
CHECKED: <i>R.G.J.</i>	DWG. No. _____
DATE: <i>NOVEMBER, 1969</i>	

2070 2



LEGEND

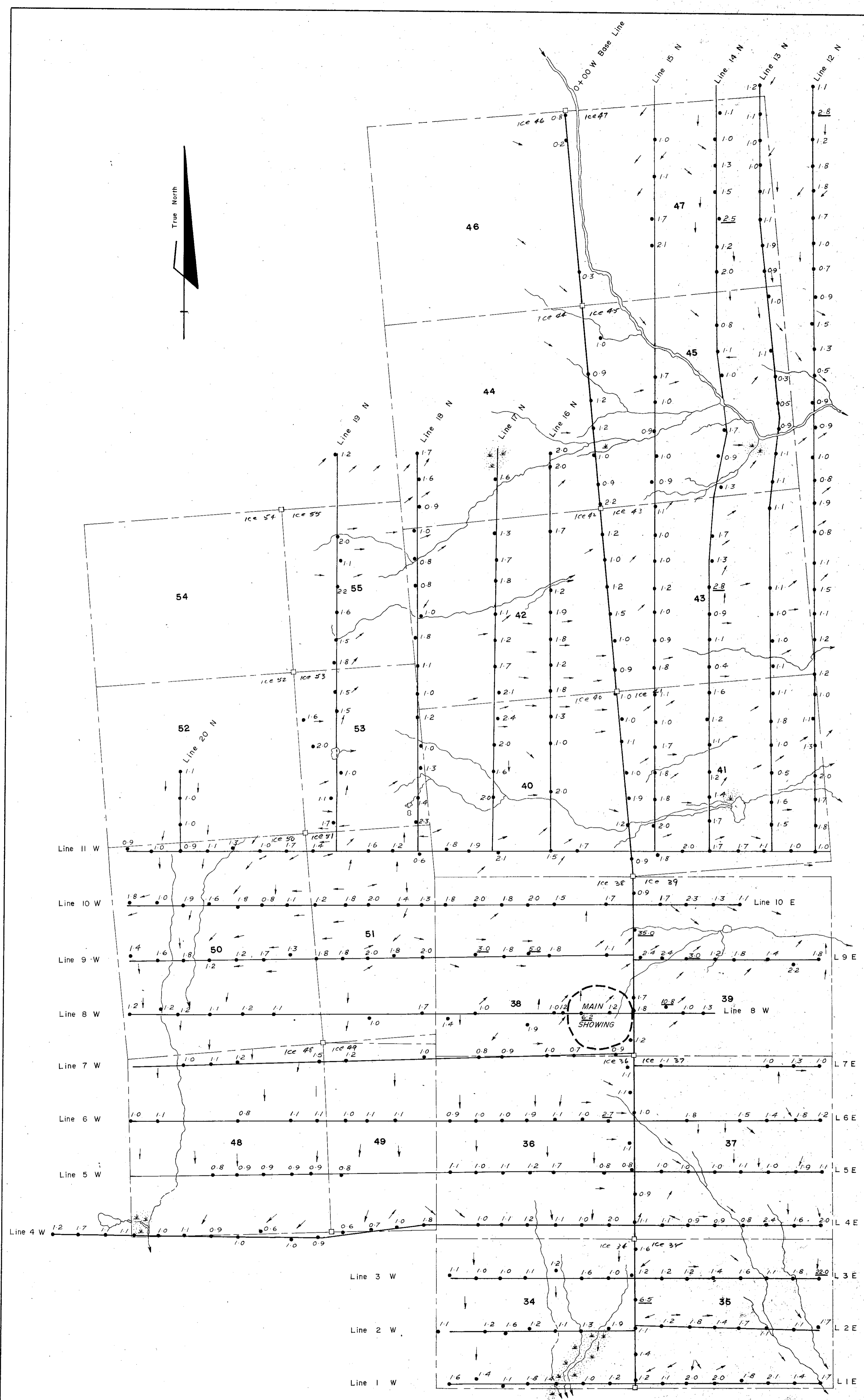
- Claim post, claim lines
- Creek
- General slope direction
- Swampy ground
- Cut line, sample point
- 6 ppm molybdenum
- Anomalous molybdenum value (>10 ppm)
- Molybdenum values contoured in ppm
- Anomalous zone

DISTRIBUTION of MOLYBDENUM in SOILS

2070

To accompany geochemical report by R.G. Jury, P.Eng on ICE claims, Almo Range, Omineca M.D., dated Oct. 7, 1969

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ICE GROUP SOUTH	
ALRAE ENGINEERING LTD. GEOLOGISTS AND ENGINEERS VANCOUVER, B. C.	
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DRAWN..... R.G.	VERT. —
CHECKED..... R.G.	DWG. No.
DATE..... NOVEMBER, 1969	



LEGEND

- Claim post, claim lines
- Creek
- General slope direction
- Swampy ground
- Cut line, sample point
- 1.4 ppm silver
- Anomalous silver value (>2.5 ppm)

DISTRIBUTION of SILVER in SOILS

2070 *Rae G. Jury*

To accompany geochemical report by R. G. Jury, P. Eng. on ICE claims, Alna Range, Omicron M.P., dated Oct 7, 1969

SICINTINE MINES LTD. (N.P.L.)	
ICE GROUP SOUTH	
ALRAE ENGINEERING LTD. GEOLOGISTS AND ENGINEERS VANCOUVER, B. C.	
DESIGNED: <i>E.G.</i>	SCALE: HOR. 1" = 400'
DRAWN: <i>E.G.</i>	VERT. —
CHECKED: <i>R.G.J.</i>	DWG. No.
DATE: <i>November, 1969</i>	

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Mines and Petroleum Resources
ACCESSORY SHEET
NO. **2070** MAP **3**