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REPORT ON
A GROUND ELECTROMAGNETIC SURVEY
NEAR ASPEN GROVE, BRITISH COLUMBIA

for

SKEENA SILVER MINES LIMITED

by

HUNTING SURVEY CORPORATION LIMITED

Toronto, Canada

November, 1961

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 403 MAP

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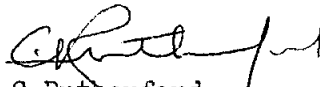
Electromagnetic Survey Performed by Huntin Surveys Corp on
Behalf of Skeena Silver Mines Ltd.

FOREWORD

As noted in main body of Hunting Report some 26.3 miles of picket lines were cut and chained for the purpose of this Survey. Pickets were placed every 100' along these lines and chainage and picket line number scribed on every picket. Elevations and geology were noted at each picket also.

The Area is quite well timbered. There are in places a great number of deadfalls and in other sections a great number of closely spaced small trees difficult to penetrate. This made the cutting of lines a lot more expensive than ordinarily is the case.

The writer was in charge of this work and also decided the type of survey to do. It was felt that if there was any substantial orebody in the area surveyed that it would be shown up with an electromagnetic Survey. In this we were not successful.


C. Rutherford
P. Engr. (Mining)

INTRODUCTION

A ground electromagnetic survey was conducted over a group of mineral claims held by Skeena Silver Mines Limited, located near Aspen Grove, British Columbia.

The survey was conducted by Hunting Survey Corporation Limited during the period September 18th. to October 15th., 1961 inclusive. The field work was carried out by our operator, Mr. F. H. Faulkner, and was supervised by Mr. E. L. Gregotski, geophysicist. Results of the survey are shown on the maps accompanying this report.

SUMMARY AND RECOMMENDATIONS

The results of the E. M. survey conducted over this property did not indicate any conductors of significance. Most of the variations were due to irregularities in the overburden. No further work is therefore recommended for the present. However, the Ronka horizontal loop type E. M. is not always suitable for detecting disseminated sulphides or deep-seated bodies. Therefore, if non-conducting mineralization is found in the general area, then another survey using a different technique should be used.

PROPERTY, LOCATION AND ACCESS

The property of Skeena Silver Mines Limited consists of a group of 32 mineral claims. The names of the claims covered by the survey are listed on the cover of this report.

This property, located in the Nicola Mining Division of British Columbia, is situated approximately eight miles east of Aspen Grove, and is accessible by a bush road from Aspen Grove.

GENERAL GEOLOGY

The principle rocks in the survey area belong to the Nicola Group. The property is situated within the area known as the Aspen Grove Copper Camp. Throughout this area are numerous small mineral deposits located in shear zones in the volcanic rocks of the Nicola Group. The minerals consist of chalcopyrite, bornite, chalcocite. None of the known shear zones are large and the better mineral deposits are restricted to small shoots. On the property in question four small adits and three trenches were located on the base line between Lines 2 and 8.

SURVEY PROCEDURE AND INSTRUMENT DATA

A base line was established through the centre of the property and traverse lines were turned off, every 400 feet, along the base line.

The survey was carried out with a Mark IV Ronka Geophysical horizontal-loop electromagnetic equipment, using an operating frequency of 876 cycles per second. Readings were taken at intervals of 100 feet on the traverse lines. By measuring the percentage change in the compensation voltage required to achieve a null, the operator obtained a measure of the in-phase and out-of-phase components of the secondary field. The receiver and transmitter coils were separated by 200 feet and in the presentation of the data the readings are related to the mid-point between them.

SURVEY DATA

A total of 26.3 miles of line were cut and chained. Electro-magnetic in-phase and out-of-phase readings were taken at 100-foot intervals along the traverse lines. A total of 25 miles of line was surveyed using the Ronka Mark IV E.M. , this required 1300 stations.

MAPS

Presented with this report is a map showing the plotted field readings on a scale of 1 inch to 200 feet. Also accompanying the report is an index map (scale 1 inch to 800 feet) showing the claim group and line location.

INTERPRETATION

The results of the electromagnetic survey conducted over the group of claims held by Skeena Silver Mines Limited are depicted on the map accompanying this report. Most of the minor irregularities, shown on the E.M. profiles, are due to background noise and to the influence of the overburden.

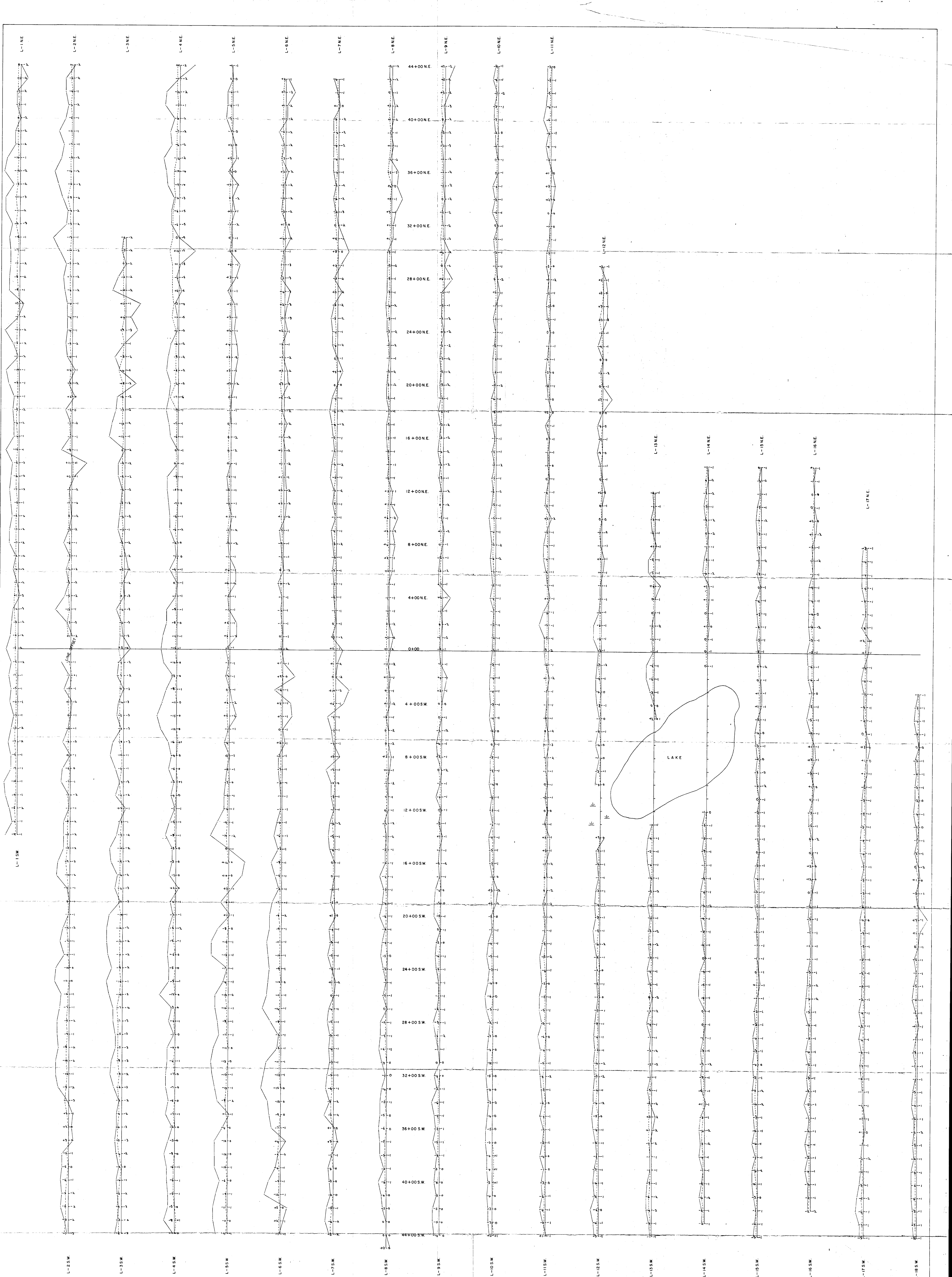
Apart from these general fluctuations, Lines 1-6 show a series of larger variations on the in-phase component. These variations of the in-phase are not accompanied by any change of the out-of-phase component. The known adits and trenchings are located in this same area, along the base line, however no anomalous conditions are found associated with these workings. It is therefore thought that the in-phase variations in this area are also due to topography and overburden.

Since the survey did not reveal any conducting zones of significance, no further work is recommended on this property at this time.

HUNTING SURVEY CORPORATION LIMITED



E. B. Nicholls,
Geophysicist.



——— In-phase
 - - - - - Out-of-phase

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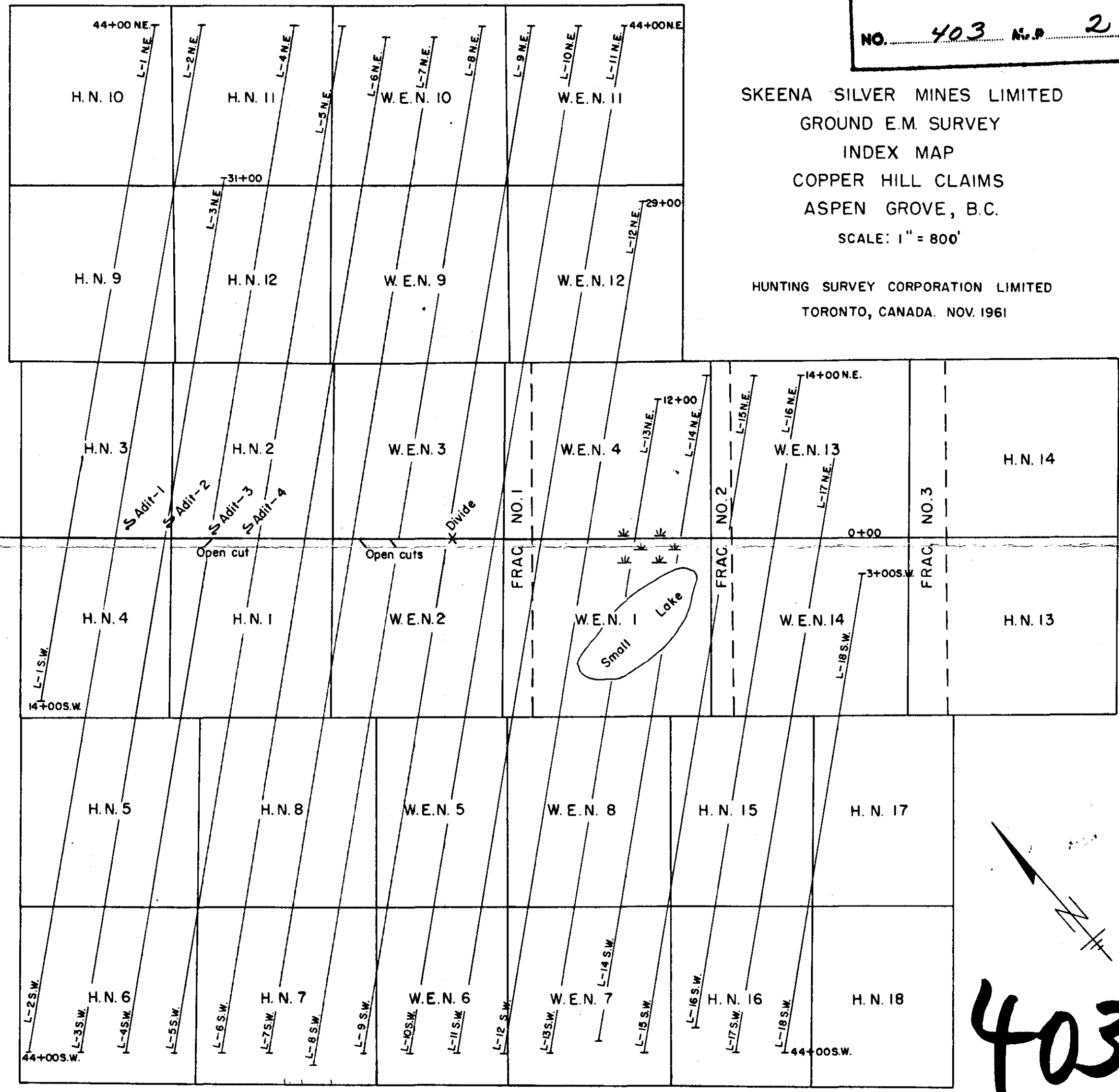
SKEENA SILVER MINES LIMITED
 GROUND E.M. SURVEY
 RONKA MK. IV
 COPPER HILL CLAIMS
 ASPEN GROVE, B.C.

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SCALES: 1" = 200'
 1" = 20%
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 TORONTO, CANADA NOV 1961

SKEENA SILVER MINES LIMITED
 GROUND E.M. SURVEY
 INDEX MAP
 COPPER HILL CLAIMS
 ASPEN GROVE, B.C.
 SCALE: 1" = 800'

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North arrow pointing up and slightly right.

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M2

Ed. Nicholls
 Geophysicist