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**RESULTS OF
MAGNETIC AND RADIATION SURVEYS
on the property of
ASCOT METAL MINES LTD.
HAWK LAKE AREA
ONTARIO**

INTRODUCTION

A magnetic and radiation survey was carried out over a group of claims belonging to Ascot Metals Corporation during May, June and July of this year. The claim group is located in the Hawk Lake area of the Kenora Mining Division of Ontario.

A grid of North-south picket lines was cut over the property at 400 foot intervals and readings were taken along the lines at 100 foot intervals. The results have been plotted on the accompanying maps.

MAGNETIC SURVEY

Magnetic surveys are based on the measurements of the attraction experienced by a magnetic needle at the earth's surface. The earth itself is a magnet and magnetizes the crustal rocks to varying extents depending on their susceptibilities. Magnetic measurements are taken along the picket lines at regular intervals. These magnetic measurements, which are expressed in gammas, are all correlated to an arbitrary base station which tends to reduce all measurements to the values they would have had if measured simultaneously. The readings are then plotted on the map; Magnetite has the

strongest magnetic properties of all minerals and pyrrhotite is next. The occurrence of these minerals in varying amounts cause most of the magnetic anomalies.

RADIATION SURVEY

Two different Scintillators, Model III and Model E A 135 S, were used on the property. The readings on the accompanying map labelled "north sheet" were taken with Model III. Most of the readings on the "south sheet" were taken with Model E A 135 S with the exception of the readings north of the heavy dotted line shown on the "South sheet". Model III has a background value of 5, while Model E A 135 S has a background value of 26. In swampy areas or areas of heavier overburden the background values are lower.

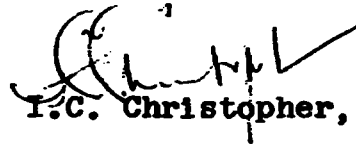
RESULTS OF SURVEY

A series of east-westerly trending magnetic highs occur on the north-eastern part of the property. The magnetic values have been contoured to show the trends.

The radiation anomalies are shown by cross-hatching. Many small radioactive zones were out-

lined. The largest and most consistent zone of radioactivity occurs just to the south of Earngy Lake.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'I.C. Christopher', with a large, sweeping flourish extending to the right.

I.C. Christopher, B.Sc., P.Eng.

Bathurst, N.B.

August 18, 1955.

ASCOT METALS CORPORATION LIMITED

(NO PERSONAL LIABILITY)

Head Office and Mine
P.O. Box 307
Sherbrooke, Quebec
Telephone LO. 2-1579



Executive Office
Suite 605-6
137 Wellington St. West
Toronto, Ontario
Telephone EMpire 6-5684

**Mr. Andrew Robertson, Pres.,
Ascot Metals Corp., Ltd.,
Toronto, Ontario.**



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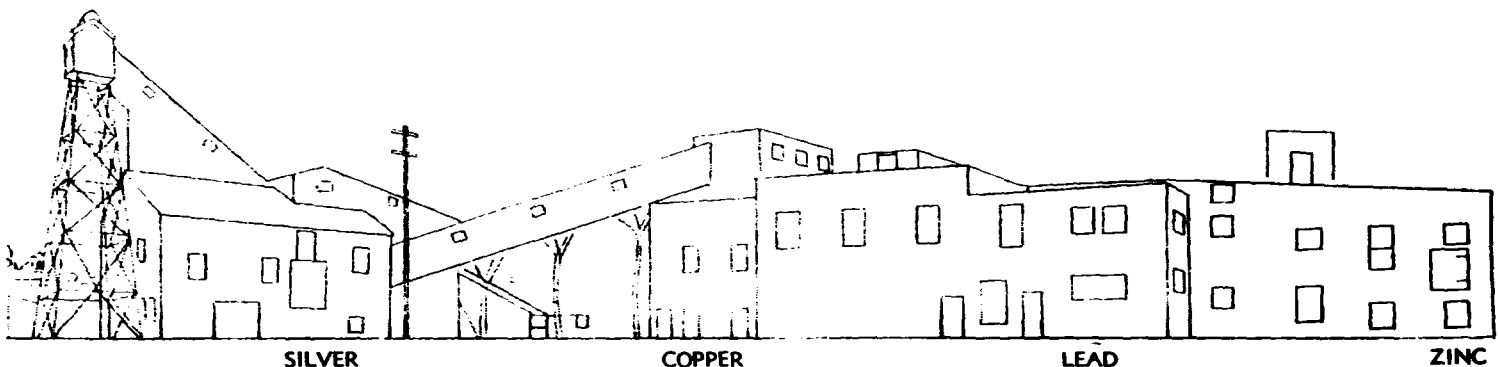
**Report on the Geology
of the
East Hawk Lake Group of
Mining Claims.**

**Kenora Mining Division
Ontario**

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**12 August 1955
Kenora, Ontario**

**R.C. Coutts, Res. Eng.,
Ascot Metals Corp., Ltd.
Sherbrooke, Que.**



Location

The East Hawk Lake group of Asset Metals Corporation Ltd., consists of 35 contiguous mining claims, no.'s K18363-71, K17689-93 and K17694-17714. The group lies across the North centre boundary between MacNichol and Tustin townships in the Kenora Mining Division and are approximately 35 miles East of the town of Kenora.

Access and Utilities

Highway no.17 cuts through the centre of the group in an East-West direction giving easy access to the property by road. The Main C.P.R. line is within a quarter mile of the South boundary and East Hawk Lake Station is 7 miles to the West and connected by dirt road to Highway 17. Willard Lake Post Office is 5 miles to the West, also on Highway 17.

At date of writing the H.E.P.C. of Ontario is constructing a transmission line between Kenora and Dryden and this line passes over the Southern claims of the group.

Geography

The ground is, in general, hilly and well wooded with spruce, jackpine and some poplar and birch. The terrain consists of rocky ridges rising to a height of about 200 feet, alternated with low and swampy ground and small lakes. There are six of these small lakes on and touching the group which assures an abundance of water for mining purposes.

Geology

The general geology of the group shows a belt of Keewatin paragneiss complex. This belt is approximately a mile in width and crosses the group centrally with a general strike of N 80° E and an average dip of N 70°. It is bounded on the South by an Algonian batholith of red, biotite granite, at places on the contact altered to a granite gneiss. The contact zone between the two lies immediately South of, and sometimes underneath, no. 17 highway. To the North, the paragneiss is cut off by a mile wide band of granite intrusive, also of Algonian age.

The belt of paragneiss complex contains many pegmatite intrusives, mostly of dyke form and following the bedding of the paragneiss. It is in these intrusives that all the radio-active minerals of the district have been found.

Structure is controlled by a major, regional East-West fault, with accompanying folding and alteration, which follows the South contact of the paragneiss with the granite. A strong subsidiary fault runs in a general North-East direction through the South-West corner of the group, through Barney Lake and into Peacher Lake. A structural throw of about 300 feet, noticed in outcroppings in the North-East part of the group would tend to show that the fault extends on through. All radio-activity and basic intrusives are closely associated with this faulting and much minor drag folding is found in the paragneisses near them.

The radio-active minerals have been found in light coloured, acid pegmatites usually medium to fine grained and containing biotite and small amounts of hornblende.

Geology(cont'd).

Radio-activity seems to increase in the dyke areas which assume a dark red to brown colouring and fine fracturing. Visual recognition is also helped by the presence, on the surface and to a depth of 3 to 4 feet, of a bright yellow stain in the rock fractures. This stain has been locally identified as the secondary uranium mineral, "Uranophane". In fresh and unweathered rock the radio-active mineral has been identified as Uraninite.

Radio-activity has been found in numerous places on the group, all close by the main and subsidiary faults. Much stripping and trenching has been done on the three most interesting zones, called "A", "B" and "C", as will be seen on the accompanying map.

"A" Zone. This dyke lies in the East centre part of Claim no. 17696 and has been explored by eight rock trenches and much stripping. It has been traced for a length of over 400 feet and varies in width from 4 to 18 feet. Channel sampling was done at a depth of 4 to 5 feet to ensure fresh rock. In the darker sections of the dyke commercial assays of U308 were obtained. Heavy overburden and swamp prevent lengthening the dyke by trenching.

"B" Zone. This occurrence is a mass of white, fine grained pegmatite in the South-East corner of claim no. 17697. Width varies from four to fifteen feet and it has been traced for over 100 feet in length. Most of the rock has been stripped but no rock trenching has been done. Radio-activity is spotty and mostly lower than A and C zones.

Geology (cont'd).

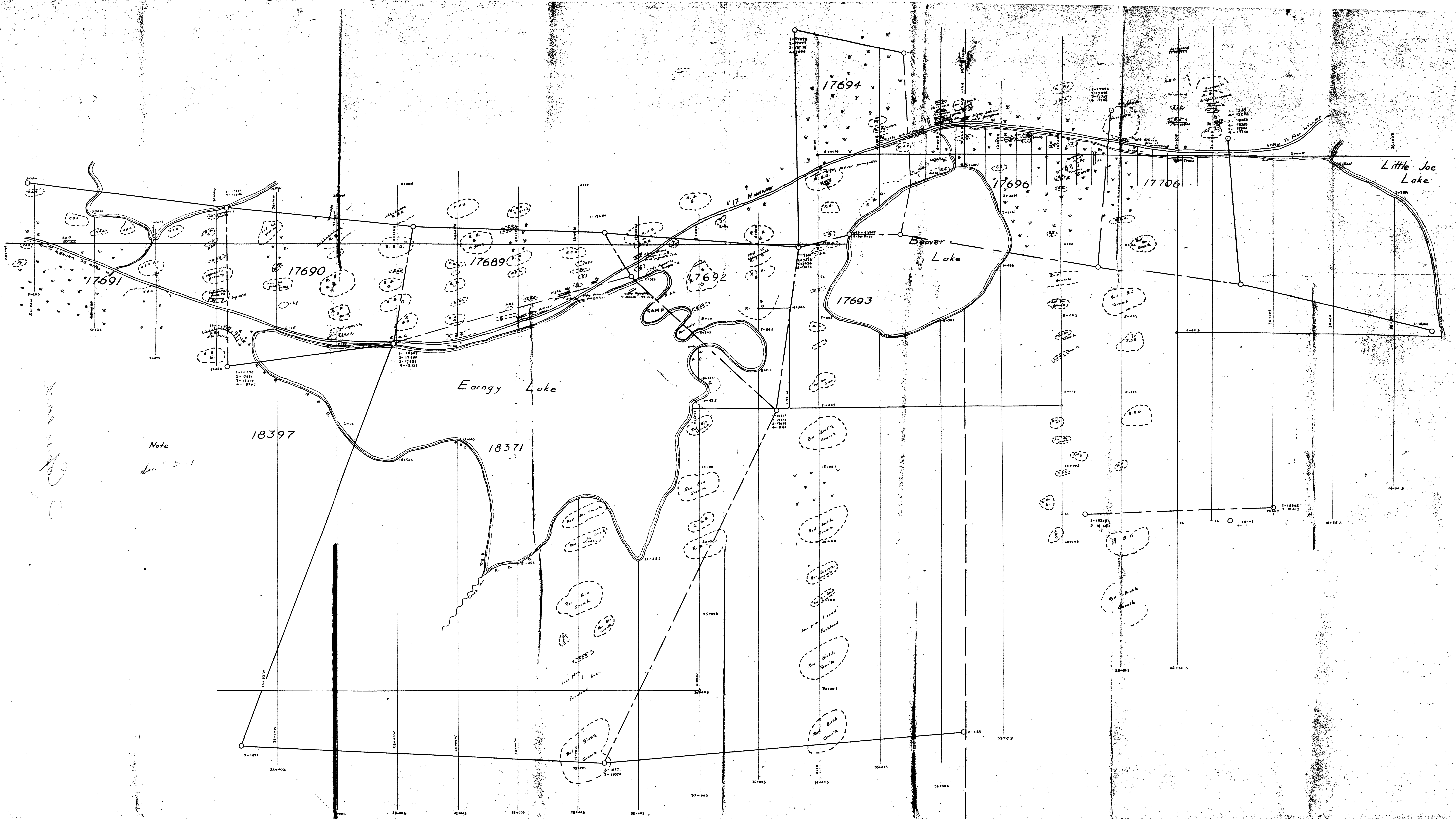
"G" Zone. This occurrence is the original discovery on the group. It consists of a reef in the North-East corner of Earny Lake in claim no. 17692. Above water the dyke is up to 10 feet in width and 25 feet in length. It is part of a white, biotite pegmatite body of unknown dimensions. Several bulk samples of 25 to 35 lbs. weight were taken and gave commercial assays of U308c. Beyond blasting for sampling no other work has been done on this zone.

The favourable zone crosses the property for a distance of nearly 8 thousand feet and numerous radio-active spots have been found in the rock cuts on the highway along the entire distance. The Western end of the zone (4500 feet) lies almost entirely under Earny Lake and a swamp.

Conclusions.

The group contains favourable rock and structure for the deposition of uranium minerals. The favourable zone is contained within the property for a strike length of nearly eight thousand feet, giving an abundance of promising ground to explore. Commercial amounts of U308 have been found in work done to date but owing to the low and swampy nature of the mineral bearing zone further trenching would prove costly for the information obtained. Several drill holes in the "CE" zone and at least two in the "A" zone would prove invaluable in establishing structure and radio-active continuity and are fully warranted by results already obtained.

R C Carter
12 August, 1955
Kenora, Ontario.

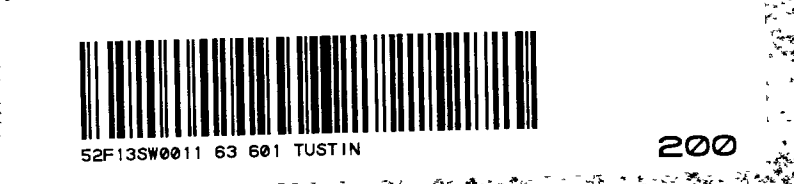


Note
See 17691

- Legend
- Pegmatite
 - ▨ Paragneiss
 - ▩ Red Biotite Granite

ASCOT METALS CORP. LTD.
**HAWK LAKE CLAIMS IN
 KENORA MINING DIVISION**

Scale 1"=500'



1-19264
2-19265
3-19267
4-19268

1-17498
2-19567
3-19569
4-17499

Bruin
Lake

Linklater
Lake

Lake

17711

17701

Poacher
Lake
(GAS L.)

17702

17577

17579

17697

17708

ASCOT METALS CORP. LTD.
HAWK LAKE CLAIMS IN
KENORA MINING DIVISION

Legend
P Pegmatite
B Paragneiss

scale 1"=200'

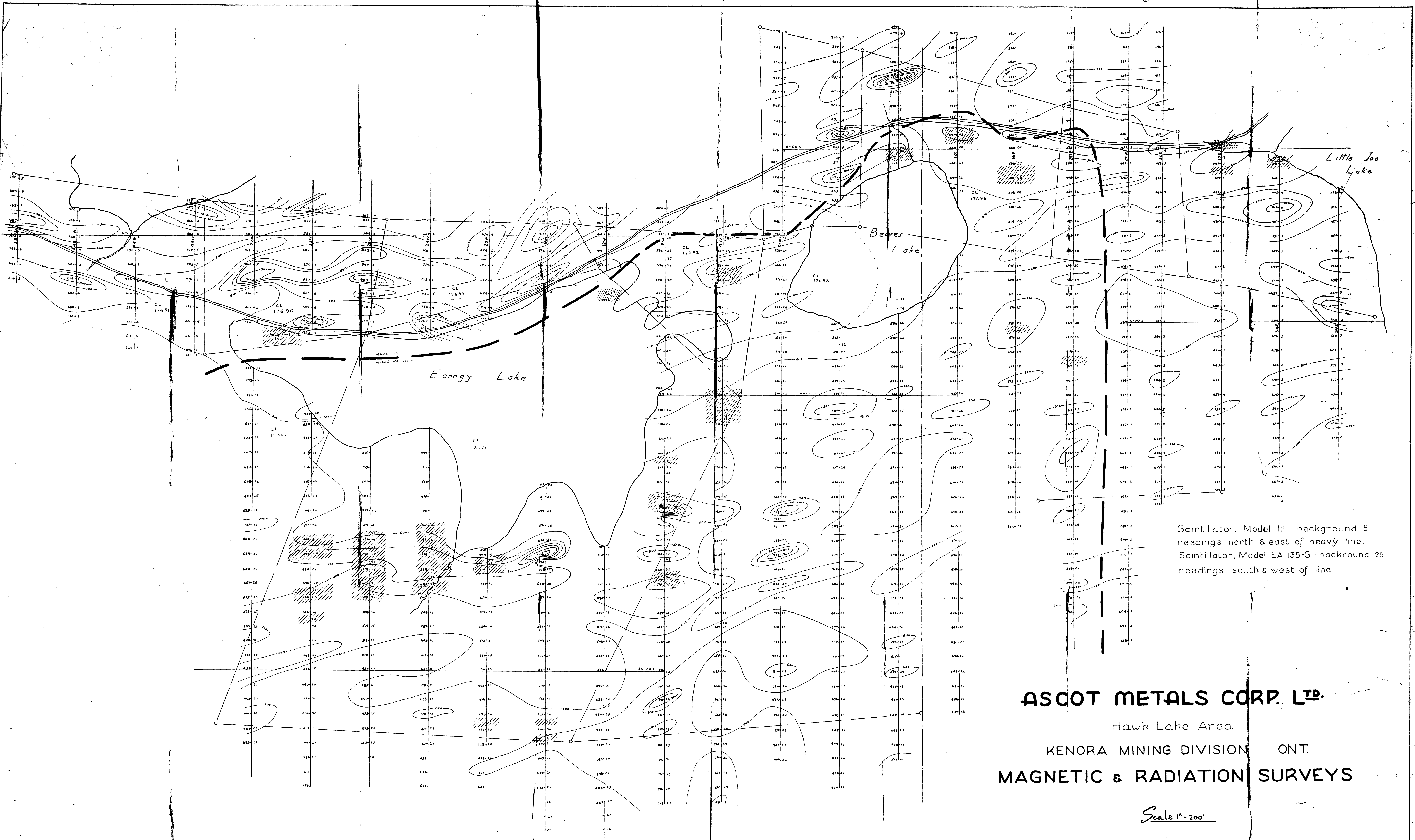
July, 1955

17694

1-17696
2-17697
3-17699
4-17716

1-17706
2-17707
3-17709
4-17718



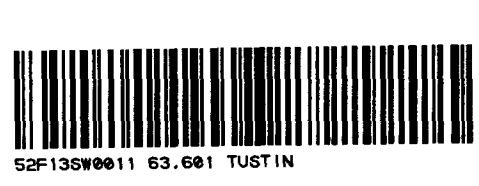


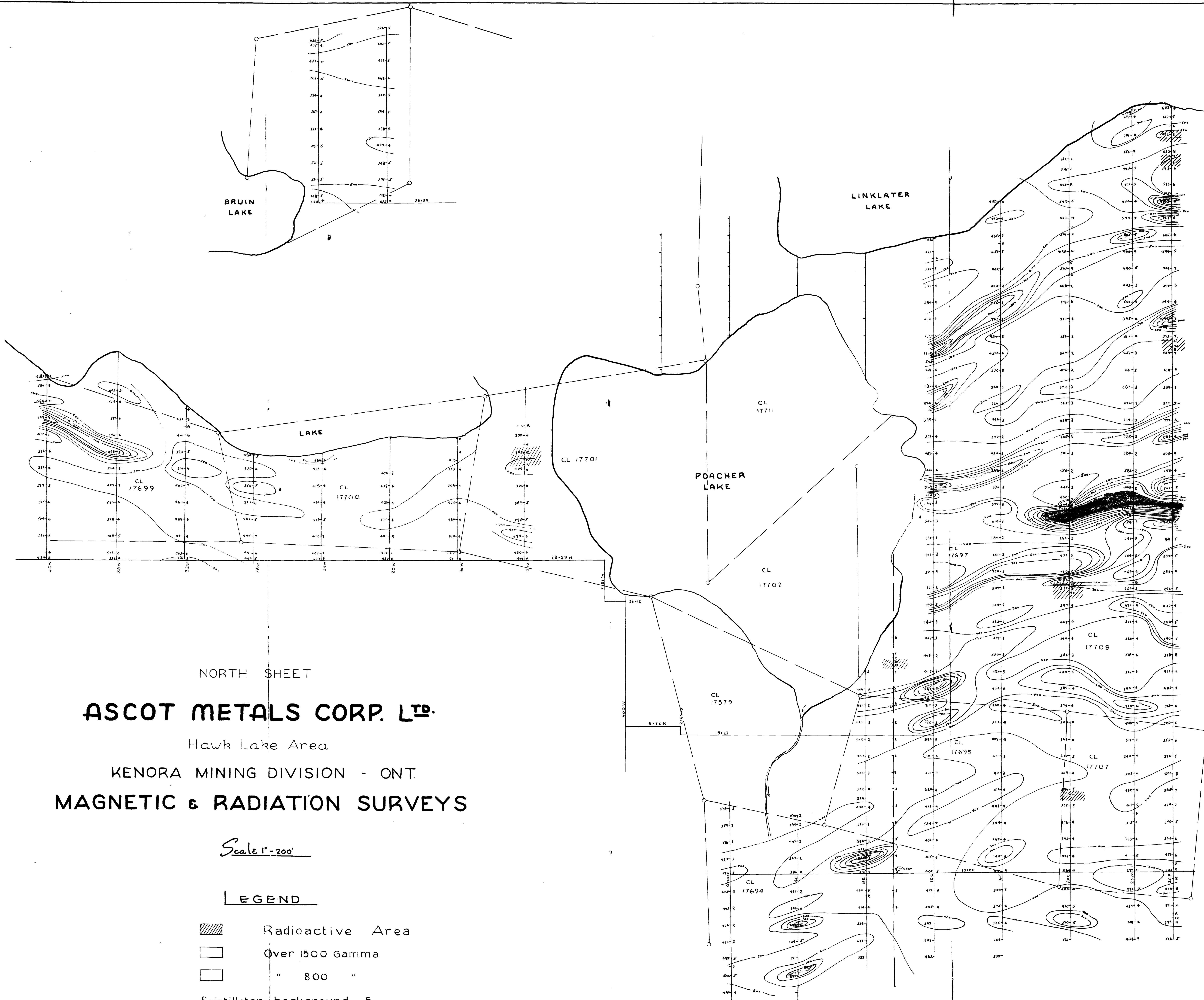
Scintillator, Model III - background 5 readings north & east of heavy line.
 Scintillator, Model EA-135-S - background 25 readings south & west of line.

ASCOT METALS CORP. LTD.
 Hawk Lake Area
 KENORA MINING DIVISION ONT.
MAGNETIC & RADIATION SURVEYS

Scale 1" = 200'

John J. ... Aug 1960





NORTH SHEET

ASCOT METALS CORP. LTD.

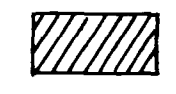
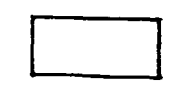
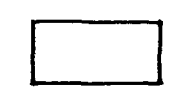
Hawk Lake Area

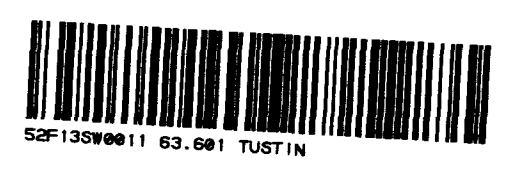
KENORA MINING DIVISION - ONT.

MAGNETIC & RADIATION SURVEYS

Scale 1" = 200'

LEGEND

-  Radioactive Area
-  Over 1500 Gamma
-  " 800 "
- Scintillator background - 5



J. K. ... Aug 1961