



52G14NE0066 52G14NE0051 PENASSI LAKE

010

R E P O R T
O N

MOUNTAIN ISLAND BAY CLAIMS
PATRICIA MINING DIVISION
ONTARIO

June 12, 1970

W. G. Wahl Limited

GENERAL

The Mountain Island Bay area of Sturgeon Lake is located approximately 45 miles north of Ignace on Highway 599. The survey was run over the following mineral claims:

218537[✓] 218546[✓] 218551[✓] 218554[✓]
 218541[✓] 218549[✓] 218552[✓] 218555[✓]
 218545[✓] 218550[✓] 218553[✓]

which are held under option by Chimo Gold Mines Limited with Mr. J. McNeil.

The geology of this area is shown as Geological Map No. 2169 "Sioux-Lookout - Armstrong Sheet" by the Ontario Department of Mines. Airborne magnetometer data covering this area is published in Geophysical Paper 1127-G "Witcomb" by the Geological Survey of Canada. This area is coded under the National Topograph Series 52-G-14.

A grid system comprising of 54,000 feet including tie lines was carried out under the supervision of Mr. K. Kuhner of Thunder Bay, Ontario, during the first week of May, 1970. The baseline trends east-west with picket lines trending north-south at 400 foot intervals. One hundred foot stations were established on all lines.

MAGNETOMETER SURVEY

The ground magnetometer survey was completed under the direct supervision of D. G. Wahl, P.Eng., during the period of May 18 to May 20, 1970. A Barringer GM 102 Magnetometer with a sensitivity of 10 gammas recorded the total field magnetic intensities at fifty foot intervals on all lines. In excess of 900 stations were occupied.

The magnetic data was reduced to a local datum and adjusted for magnetic diurnal. The data is presented on the enclosed maps as corrected station values and as a contoured interpretation of these data.

The andesite flows have a low magnetic susceptibility but are characterized by linear, trending anomalies marking individual flows.

The pyroclastic rocks have a moderate magnetic susceptibility in the range from 400 gammas to 800 gammas.

Associated with the pyroclastic rocks are strong elongate units having a magnetic susceptibility range from 1000 to 1500 gammas. These elongate units are thought to be tuffs.

The syenite intrusive is characterized by very low uniform magnetic susceptibility.

EM SURVEY

The electromagnetic survey was conducted by D. G. Wahl, P.Eng., during the period from May 18 to May 20, 1970, employing a Crone Radam VLF EM Survey Unit. This unit measured the inclination or dip and the total field intensity with a sensitivity of 1° of dip and 1% field intensity. The VLF station used is located at Seattle, Washington, having a frequency of 18.6 KHz. All observations were taken facing west. Stations were occupied at 50 foot intervals on the established grid.

Two conductive zones were mapped lying within the andesitic flows. These anomalous areas will be discussed in detail in a following section of this report.

GEOLOGY

The geology as published by the Ontario Department of Mines was extended and defined by the geophysical surveys and a compilation of the data is appended.

The property occupies a portion of the north limb of an easterly plunging syncline of intercalated flows and pyroclastic rocks. The rocks dip gently into the syncline but the symmetry of the syncline is interrupted by an anticlinal roll trending approximately east-west. This anticlinal roll

it is felt might be the surface expression of the syenite intrusive in the Mountain Island Bay area. A portion of syenite intrusive outcrops on the shore of Mountain Island Bay. This intrusive is also defined by the magnetometer survey.

The attached map shows the rocks and rock structures as inferred from the field surveys.

ANOMALY 1

This anomaly is located approximately 1000 feet south of the baseline roughly paralleling the contact between the andesite flow and pyroclastic rocks. It is characterized by an increasing field strength accompanied with a strong dip reversal. Anomaly 1 exhibits a very low magnetic susceptibility. Attached is a section showing the inferred geology. This anomalous zone is thought to be caused by an in-fold of conductive sediments.

ANOMALY 2

In general an increase in field strength is directly related to an increase in the conductivity of the underlying surficial debris and bedrock and is inversely related to the resistivity of the causative body. It is felt that the clay filled valley of Ethlouse Lake causes the increasing field strength in the area of Anomaly 2. The possibility also exists

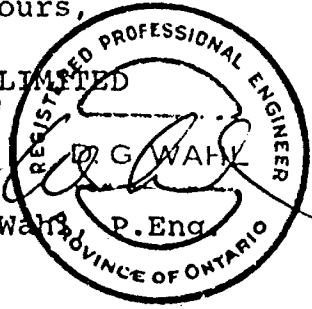
that this anomalous zone could be similar in structure to that of Anomaly 1, representing the southern infold of the conductive sediments flanking the anticline.

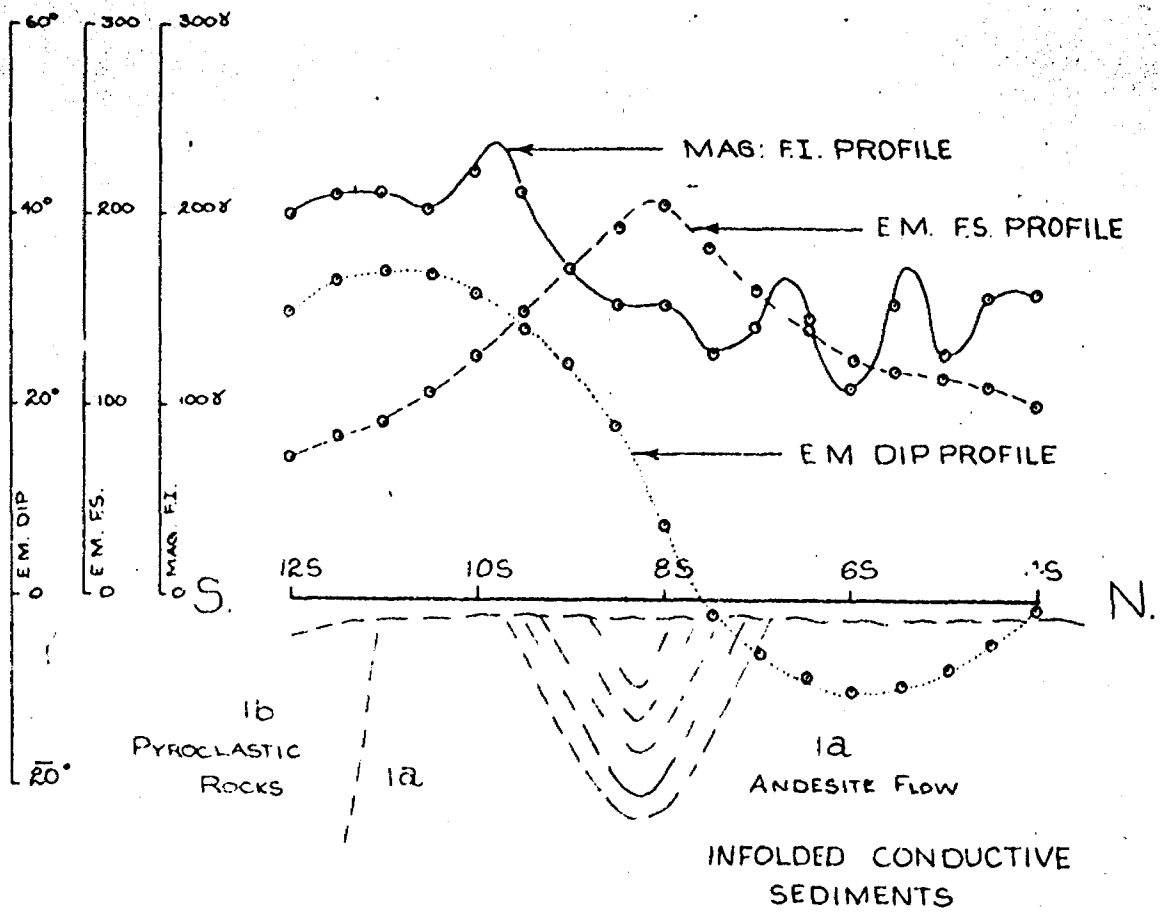
All of which is respectfully submitted.

Sincerely yours,

W. G. WAHL LIMITED

D. G. Wahl
D. G. Wahl P. Eng.





CHIMO GOLD MINES LIMITED

GEOLOGICAL SECTION

LINE 16.00E: 4S-12S SCALE: 1" To 200'

W.GWAHL Ltd.



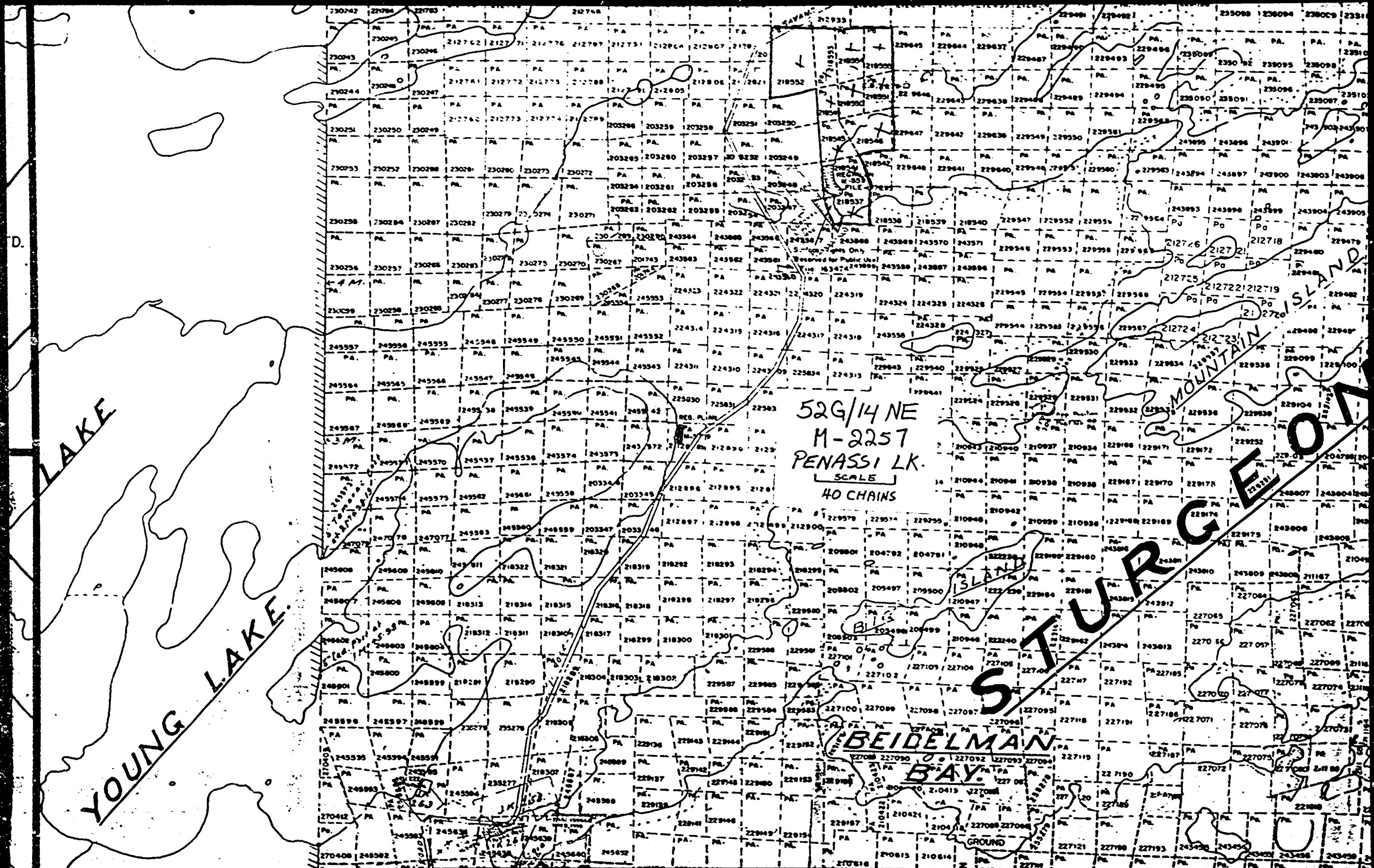
JUNE 15, 1970

D.

LAKE
YOUNG LAKE

52G/14 NE
M-2257
PENASSI LK.
SCALE
40 CHAINS

STURGEON
MOUNTAIN ISLAND
BEIDELMAN BAY





SPECIAL PRO

900

ASSESSMENT WORK DETAILS

Type of Survey GROPHYSICAL - MAGNETOMETER
A separate form is required for each type of survey

Chief Line Cutter or Contractor Mr. K. Kuhner Thunder Bay
Name Address

Party Chief D. G. Wahl, P. Eng. Toronto Ontario
Name Address

Consultant W. G. Wahl, P. Eng. Toronto Ontario
Name Address

COVERING DATES Line Cutting May 8 to May 14, 1970

Field Geology or Geophysics May 18 to May 20, 1970

Office June 4 to June 6, 1970

INSTRUMENT DATA Make, Model and Type G. M. 102-A

Scale Constant or Sensitivity 10 gammas

Or provide copy of instrument data from Manufacturer's brochure.

Total Number of Stations Within Claim Group 850 Number of Miles of Line cut Within Claim Group 8.16

ASSESSMENT WORK CREDITS REQUESTED Geological Survey _____ Days per Claim

Geophysical Survey 40 Days per Claim

MINING CLAIMS TRAVERSED

218537 218546 218551 218554

218541 218549 218552 218555

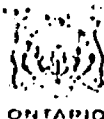
218545 218550 218553

_____ TOTAL 11

DATE June 23, 1970. SIGNED [Signature]

Special provision credits do not apply to Radiometric Surveys.

AREA CODE — 416
TELEPHONE — 365-6918



DEPARTMENT OF MINES AND NORTHERN AFFAIRS
MINING LANDS BRANCH

February 5th, 1971.

Mr. W.A. Buchan,
Mining Recorder,
Court House,
Sioux Lookout, Ontario.

Re: Mining Claim No. PA. 218545 et al,
South-West Part of Sturgeon Lake Area

Dear Sir:

The Geophysical (Magnetometer and Electromagnetic) assessment work credits as listed with my Notice of Intent dated January 20th, 1971, have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Matthews,
Supervisor,
Projects Section.

- c.c. Chimo Gold Mines Ltd.,
1000 - 11 King St., W.,
Toronto, Ontario.
- c.c. W.G. Wahl Ltd.,
Suite 1101,
302 Bay Street,
Toronto, Ontario.
- c.c. Mr. H.L. King,
Resident Geologist,
808 Robertson Street,
Kenora, Ontario. ✓

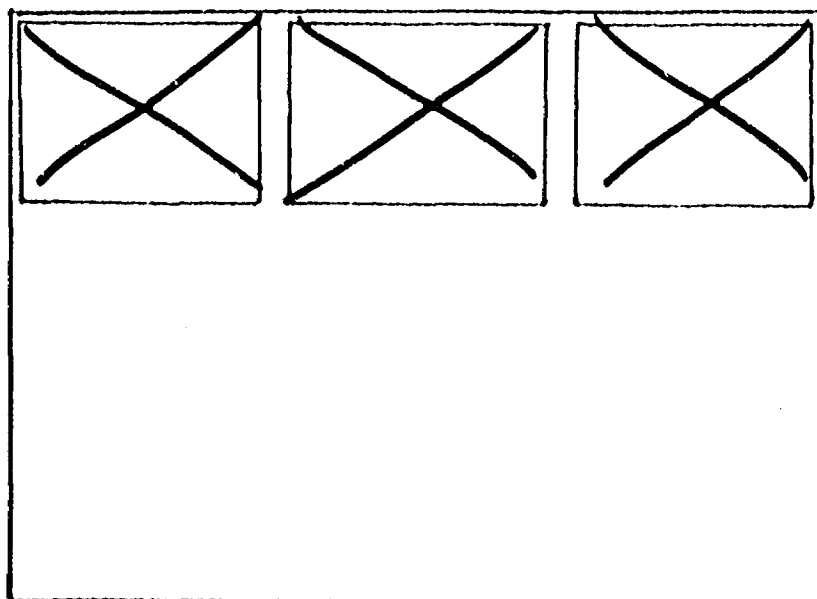
FWM/mr

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

52G/14NE-0051 #1-3

LOCATED IN THE MAP
CHANNEL IN THE
FOLLOWING SEQUENCE

(X)

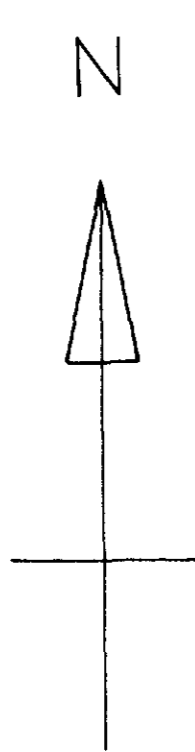
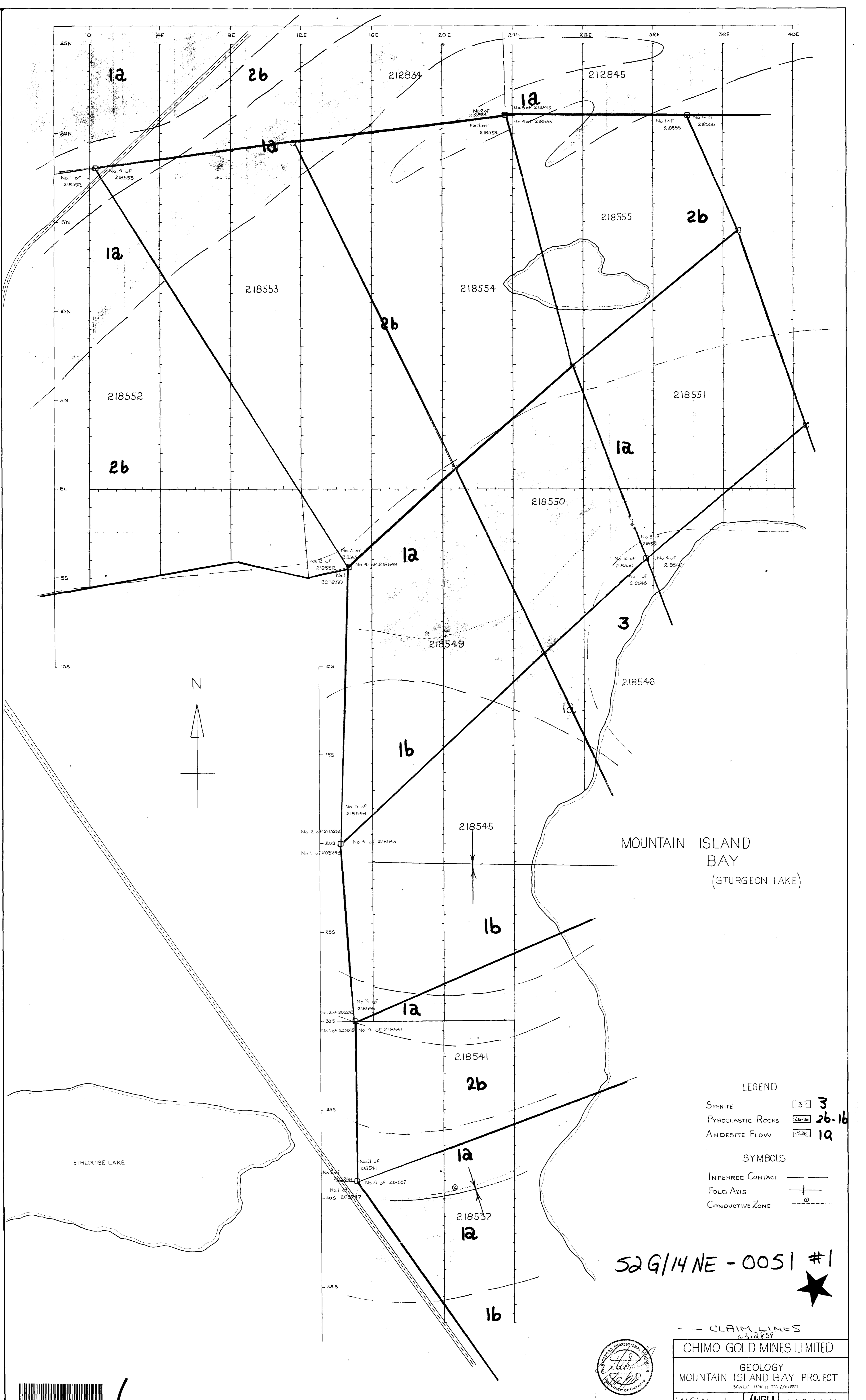


FOR ADDITIONAL

INFORMATION

SEE MAPS:

52G/14NE-0051 # 4



MOUNTAIN ISLAND BAY
(STURGEON LAKE)

LEGEND

- SYENITE 3 3
- PYROCLASTIC ROCKS 2a-1b 2b-1b
- ANDESITE FLOW 1a 1a

SYMBOLS

- INFERRED CONTACT
- FOLD AXIS +
- CONDUCTIVE ZONE o

52G/14NE-0051 #1



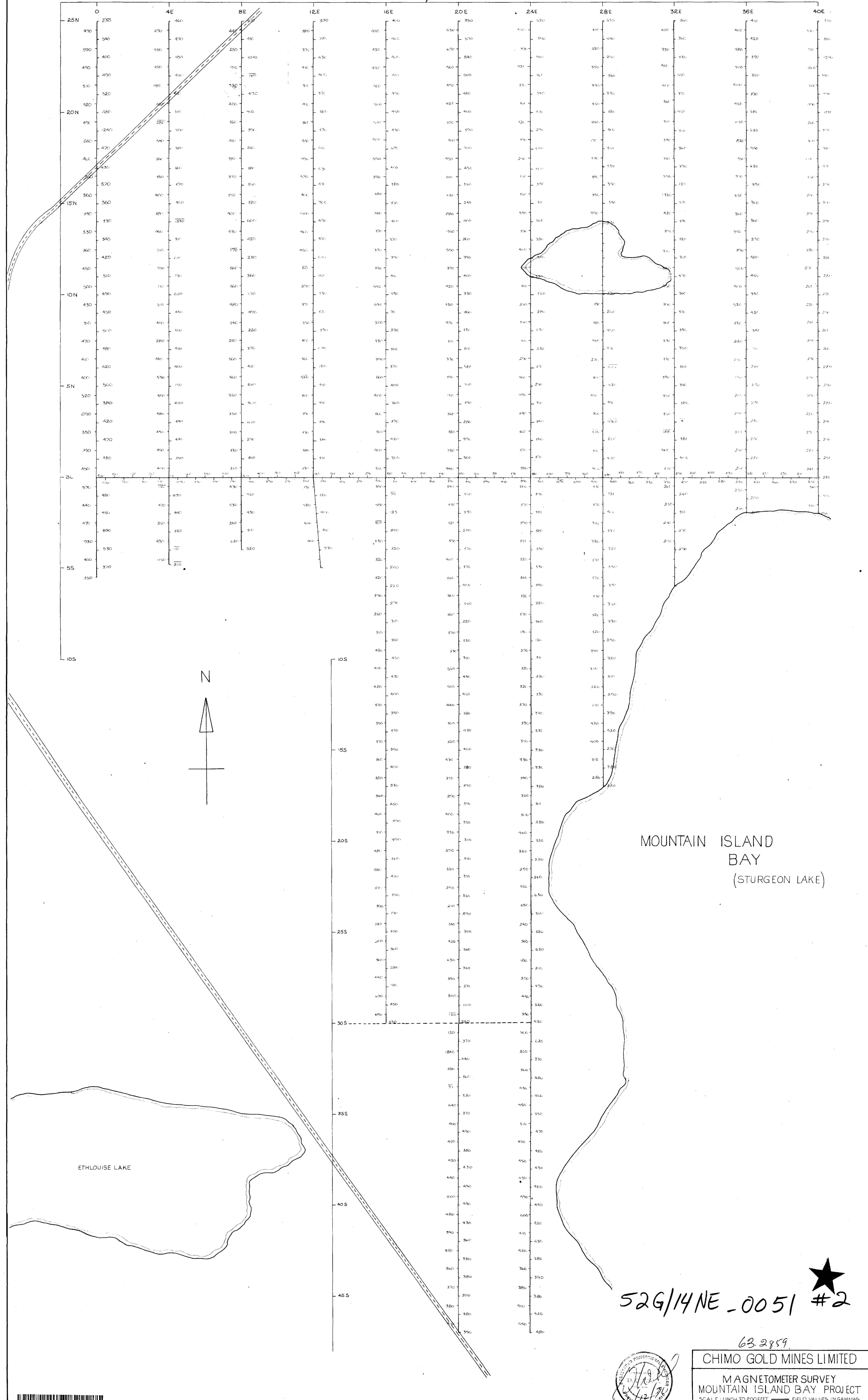
--- CLAIM LINES
(2, 3, 2, 8, 5, 9)

CHIMO GOLD MINES LIMITED

GEOLOGY
MOUNTAIN ISLAND BAY PROJECT
SCALE 1 INCH TO 200 FEET

W.G. WAHL LTD. JUNE 4, 1970





MOUNTAIN ISLAND BAY (STURGEON LAKE)

ETHLOUISE LAKE

52G/14NE - 0051 #2

63.2859



CHIMO GOLD MINES LIMITED
 MAGNETOMETER SURVEY
 MOUNTAIN ISLAND BAY PROJECT
 SCALE: 1 INCH TO 200 FEET — FIELD VALUES IN GAMMAS
 W.G. WAHL LTD. JUNE 4, 1970





MOUNTAIN ISLAND BAY
(STURGEON LAKE)

52 G/14NE-0051 #3

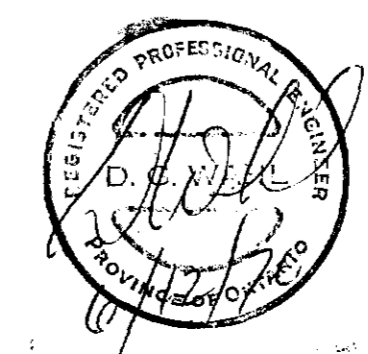


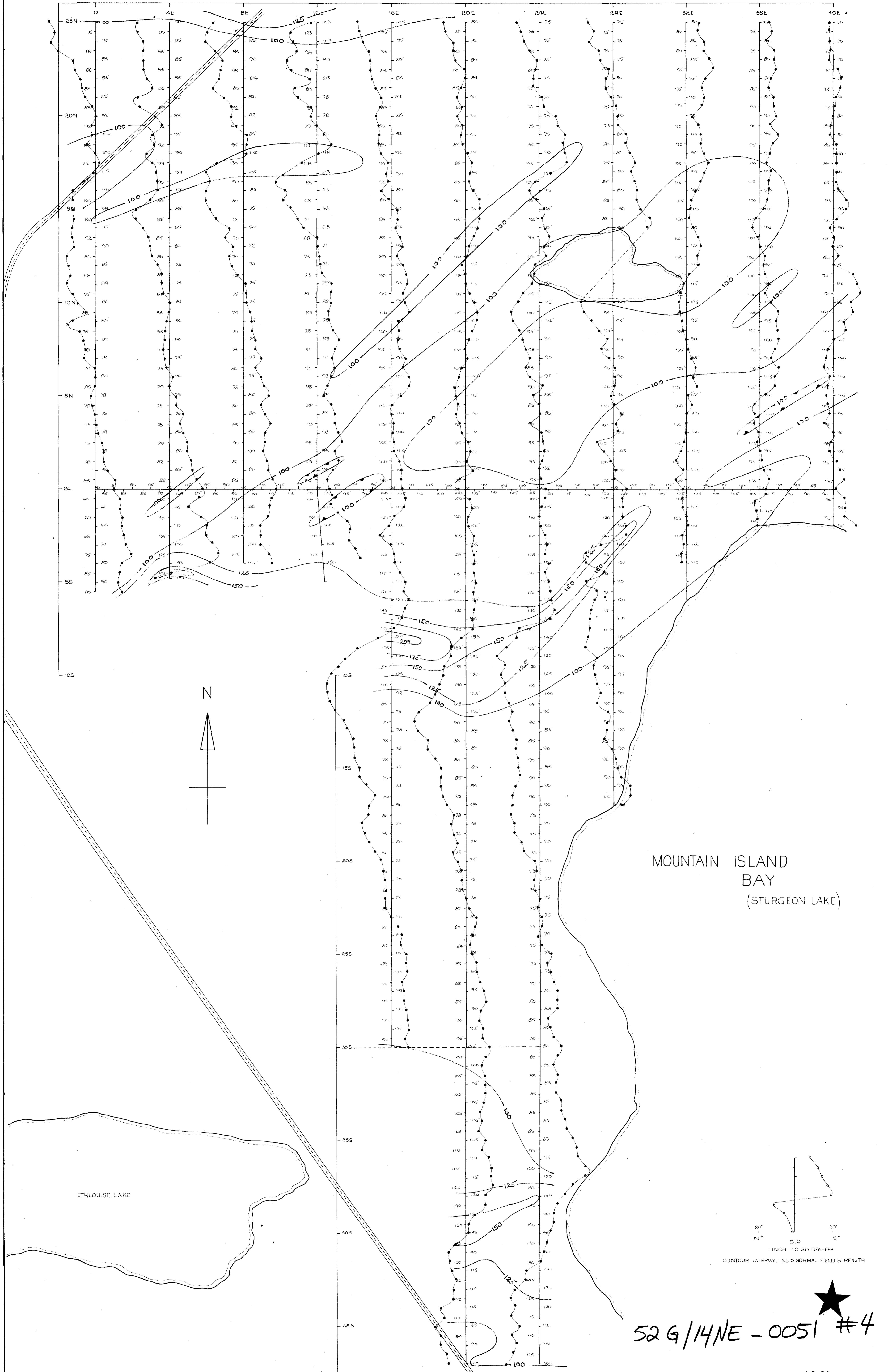
63.2859

CHIMO GOLD MINES LIMITED

MAGNETOMETER SURVEY
MOUNTAIN ISLAND BAY PROJECT
SCALE: 1 INCH TO 200 FEET — CONTOUR INTERVAL 100 Y

W.G. WAHL LTD. JUNE 4, 1970





MOUNTAIN ISLAND BAY
(STURGEON LAKE)

ETHLOUISE LAKE

20° 5' N
DIP
1 INCH TO 20 DEGREES
CONTOUR INTERVAL: 25% NORMAL FIELD STRENGTH

★
52 G/14NE - 0051 #4

63.285f.

CHIMO GOLD MINES LIMITED	
E M (VLP) SURVEY MOUNTAIN ISLAND BAY PROJECT SCALE: 1 INCH TO 20 FEET	
W.G. WAHL LTD	DATE: 4.1970

