

52P/04NE-0013-A1

LOAD: COMBO

63.1108



52P04NE0030 52P04NE0013A1 ACHAPI LAKE

900

MONPRE MINING COMPANY LIMITED

63.1108

GEOPHYSICAL SURVEY

HUMMINGBIRD LAKE CLAIMS - PICKLE LAKE DISTRICT

PATRICIA MINING DIVISION - N.W. ONTARIO

INTRODUCTION

During June, 1960 an aeromagnetic survey was conducted by Monpre Mining Company Limited over iron formation north of the Miskow River 35 miles southeast of Pickle Lake with the purpose of locating the most magnetic parts of the formation for staking as gold prospects.

Ground electromagnetic and dip needle surveys located conducting zones on the iron formation, several of which were investigated by stripping and trenching. Barren pyrrhotite with minor pyrite in altered sediments was found to be the cause of several conductors.

PROPERTY AND TITLE

The property comprises eight (8) claims in the Patricia Mining Division, Northwestern Ontario, numbered PA 27316 to 27321 inclusive, and PA 27644 and 27645. Title of the property is held by Monpre Mining Company Limited, Suite 705, 62 Richmond Street West, Toronto.

LOCATION AND ACCESS

The claims are located 32 miles southeast of Pickle Lake, 1½ miles north of Woodilee Lake, Longitude 89°45'W, Latitude 51°07'N.

Float-equipped aircraft can be landed on a small lake 2000 feet long at the eastern end of the claims. Heavy loads cannot be flown off the lake without danger unless the wind is blowing directly down the lake. The small lake is referred to locally as Hummingbird Lake.

TOPOGRAPHY

A metamorphosed volcanic-sedimentary assemblage striking in an east-west direction outcrops as a succession of ridges up to 75 feet in height across claims 27316, 27317, 27318 and 27645. Intervening areas are filled with moraine, muskeg and swamp. Claims 27319, 27320, 27321 and 27644 are covered for the most part by muskeg and low moraine-covered hills.

HISTORY

The property is situated in the Pashkokogan-Misehkw area which was geologically surveyed in 1932 by W. S. Dyer (ODM Report Vol. 42, Part 6, 1933). Dyer's map (ODM 42e) shows iron formation north of Woodilee Lake and farther eastward on the Misehkw River. Dyer recommended the area for gold prospecting.

According to information from E. Johnson, Manager of Superior Airways at Pickle Lake, the area was aeromagnetically surveyed by W. S. Moore Ltd. several years ago. Iron formation north of Woodilee Lake was staked and prospected for iron. The claims were allowed to lapse.

During the first week in June, the iron formation was aeromagnetically surveyed by Monpre Mining Company Limited. The strongest and most extensive magnetic anomalies on the iron formation were staked as gold prospects in June, following the survey.

GENERAL GEOLOGY

A volcanic-sedimentary assemblage strikes east-west across the property, and dips steeply south. The volcanics comprise andesite, rhyolite and rhyolite tuffs. They are interbedded

with altered sedimentary rocks comprising greywacke, iron formation, arkose, gneisses and schists.

A sill of pyroxenite and gabbro outcrops as a long 50 foot high ridge along the south boundary of claims 27316 and 27317.

MINERALIZATION

Three occurrences of pyrite disseminated in arkose, were found on the middle and south conducting zones. The occurrence on the central zone, exposed on the side of a low cliff, is in a foot-wide rusty zone which extends for 50 feet east and west. Assays from this occurrence showed traces of gold, silver and copper. Those on the south zone consist of two small rusty zones containing pyrite and no gold.

GEOPHYSICAL SURVEYS

(a) Aeromagnetic

Aeromagnetic surveys were flown in a Cessna 180 in which was installed an aeromagnetic pickup unit amplifier and recorder, designed and built by B. Bjarnasson, P. Eng., formerly chief designer of geophysical equipment for Lundberg Explorations Ltd.

Two areas northwest of the Mishekow River were surveyed. One, 15 miles long, 2 miles wide including the Hummingbird claims, was for the purpose of locating high magnetic zones on known iron formation. Spacing of lines was 1/4 mile. The other area 10 miles by 4 miles was flown to cover unmapped ground where iron formation might occur.

The most highly magnetic parts of the iron formation were found west of Hummingbird Lake and these were staked. A total of two miles of flight line covers the Hummingbird property.

(b) Ground Electromagnetic

- Reason for EM survey - to locate conducting zones in iron formation which could be caused by gold-bearing sulphides.
- Name of firm - the survey was done by an employee of Monpre Mining Company Limited, Mr. Walter Macnamara, using E.M. equipment designed and built by B. Bjarnasson, P.Eng. Macnamara was trained in the field by Bjarnasson and was supervised while on the job by J. Grady, M.Sc. geologist. Mr. Bjarnasson served as consultant later in the office.
- Type of instrument - long wire E.M. unit using a 1/2 mile wire energized by an AC generator at 180 volts, 1 amp; 1000 c.p.s. and a hand loop pick-up with amplifier and recording meter. This equipment has greater penetration than most other types of E.M. instruments. Once the gear has been set up the survey can be done rapidly and the conductors found can be more readily assessed in terms of relative strengths than is the case with other types of E.M. equipment.
- Total number of stations established was 285.
- Number of line miles surveyed = 5.4.
- Results of survey - conducting zones associated with iron formation were found as shown on the accompanying map.

(c) Dip Needle

- Reason for survey - to locate magnetic iron formation.
- Results - successful, see map.
- Type of Instrument - Sharpe dip needle.
- Firm - the survey was done by W. Macnamara and supervised by J. Grady.

- Number of stations - 285.
- Number of line miles = 5.4.

CONCLUSIONS

1. Several conducting zones in iron formation were found by E.M. and dip needle survey.
2. Disseminated and massive pyrite and pyrrhotite which were barren of gold and copper or other economic minerals were found by stripping several of the zones.

RECOMMENDATIONS

1. The conductive parts of the iron formation were caused by barren pyrite and pyrrhotite and no further work on these claims is recommended.

Respectfully submitted,

John C. Grady

John C. Grady, M.Sc.
Geologist.

May/1961
JCG:jc

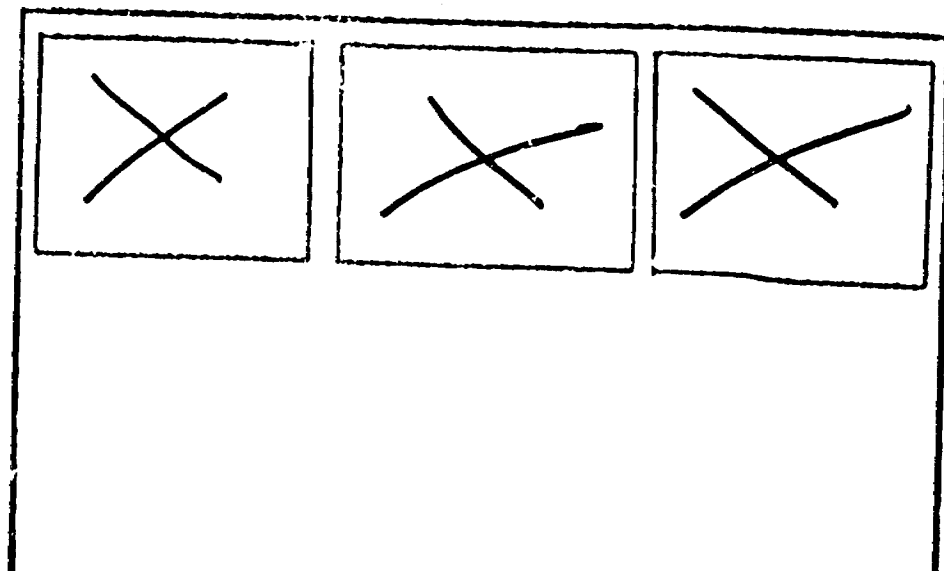
SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

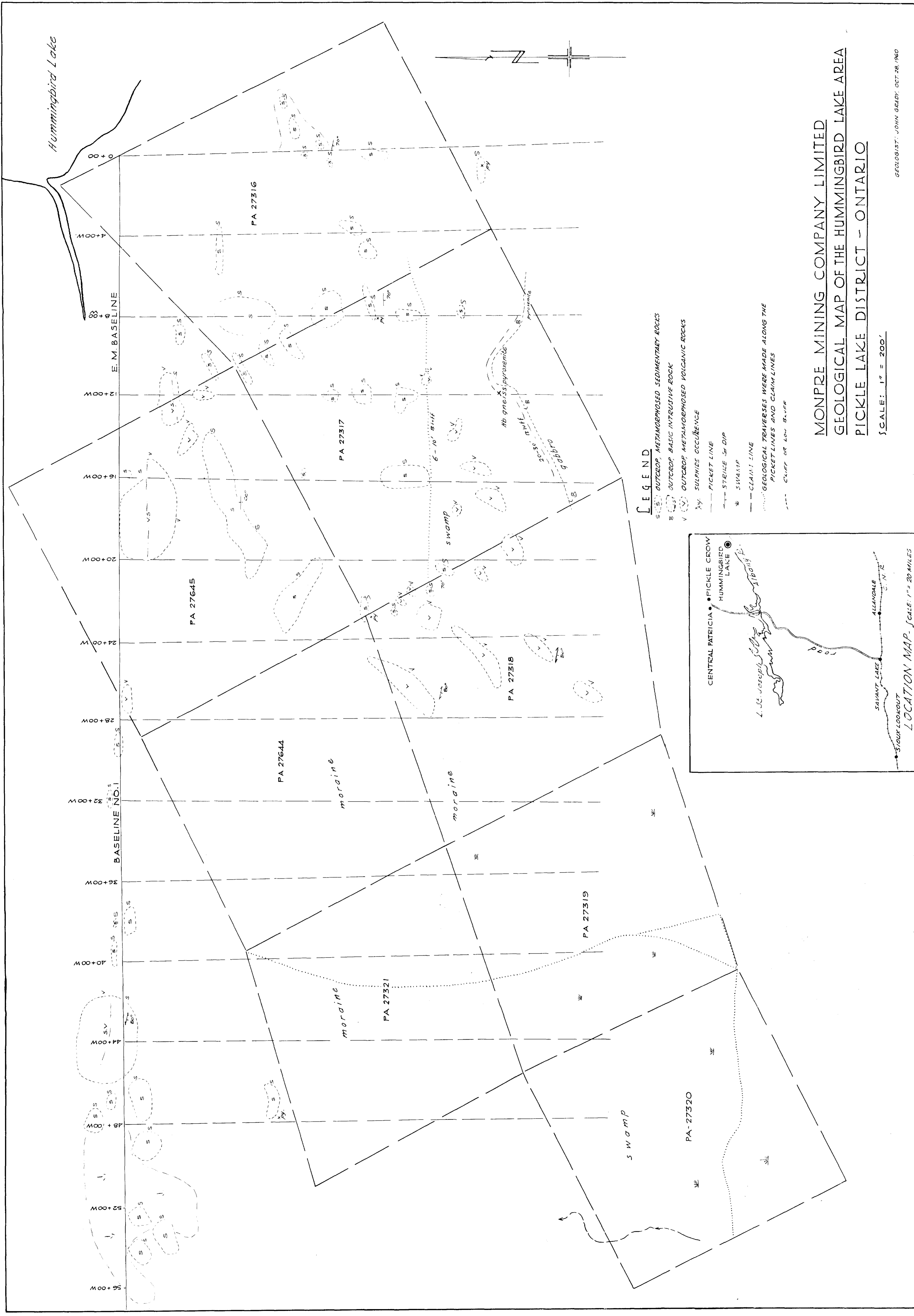
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----- #2

----- #3

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)

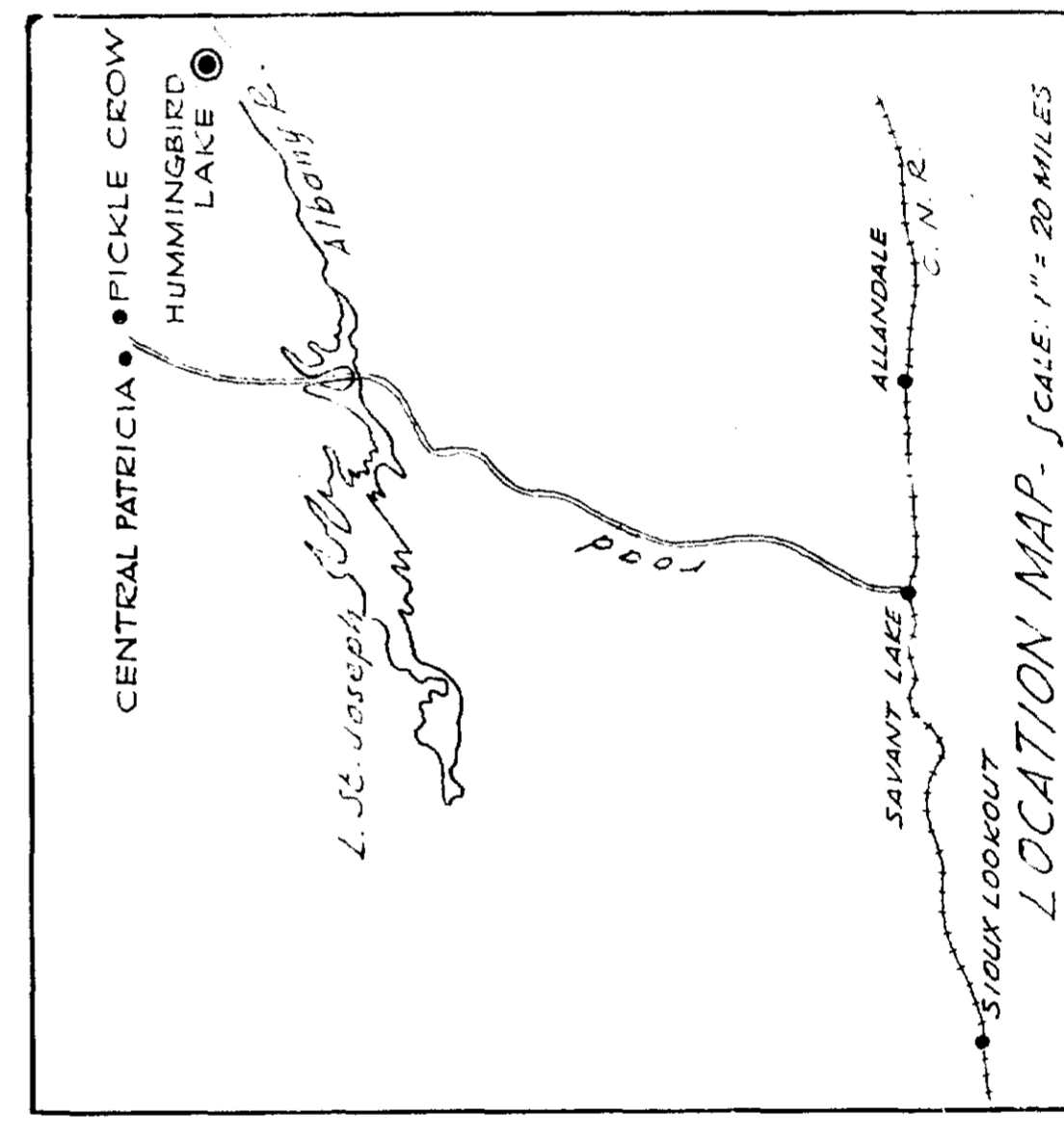




MONPRE MINING COMPANY LIMITED
 GEOLOGICAL MAP OF THE HUMMINGBIRD LAKE AREA
 PICKLE LAKE DISTRICT - ONTARIO

SCALE: 1" = 200'
 GEOLOGIST: JOHN GARDY, OCT. 28, 1960

- LEGEND**
- S (S) OUTCROP, METAMORPHOSED SEDIMENTARY ROCKS
 - B (B) OUTCROP, BASIC INTRUSIVE ROCK
 - V (V) OUTCROP, METAMORPHOSED VOLCANIC ROCKS
 - Xy (Xy) SULPHIDE OCCURRENCE
 - PICKET LINE
 - STRIKE & DIP
 - W SWAMP
 - CLAIM LINE
 - GEOLOGICAL TRAVERSES WERE MADE ALONG THE PICKET LINES AND CLAIM LINES
 - CLIFF OR LOW BLUFF



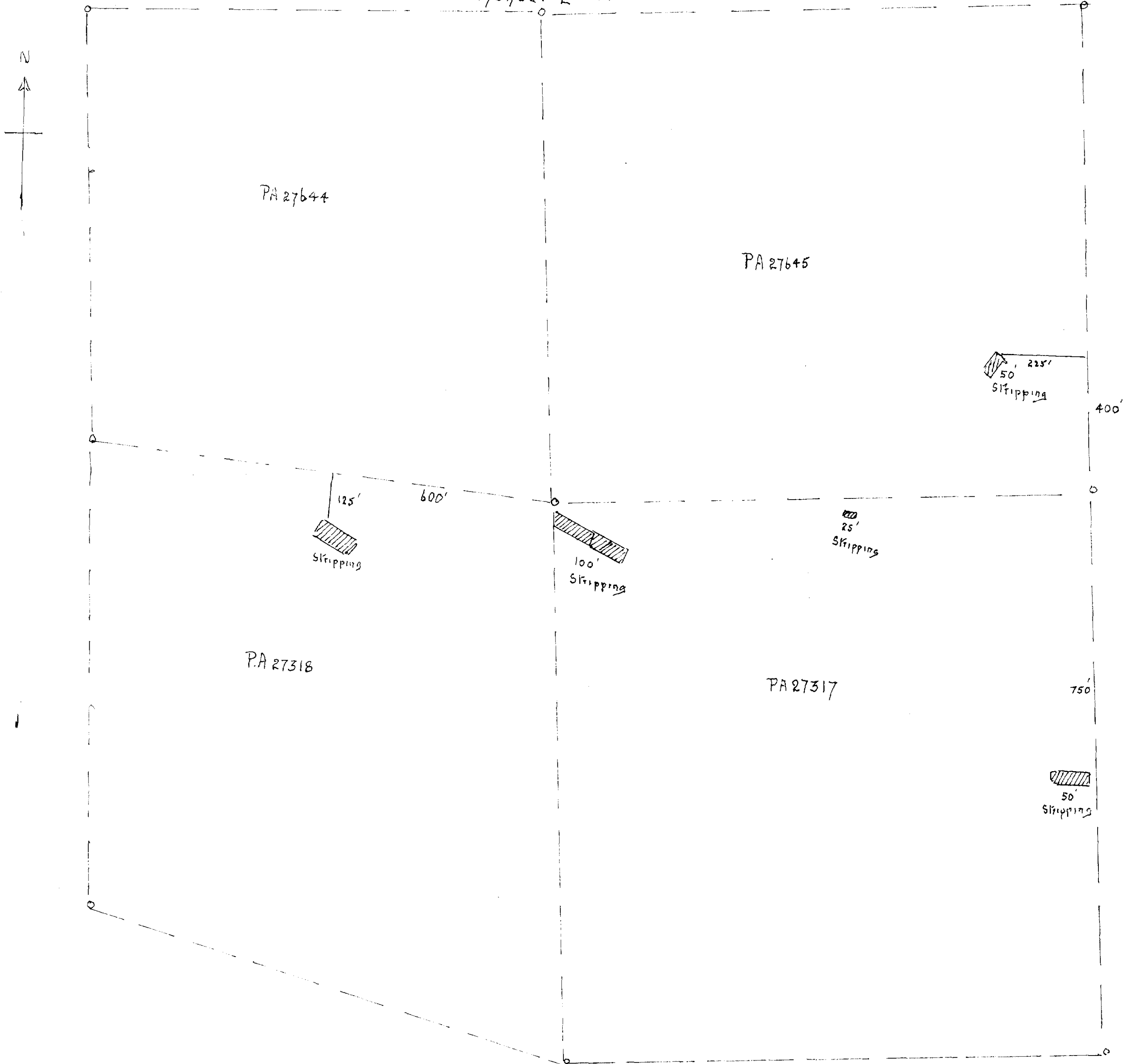
52 P/04 NE -0013-A1 #1
 John C. Gardy, M.Sc.
 May 15, 1961

HUMMINGBIRD LAKE CLAIMS

Location of Skipping

Monte Mining Co Ltd.

Manual Labour.

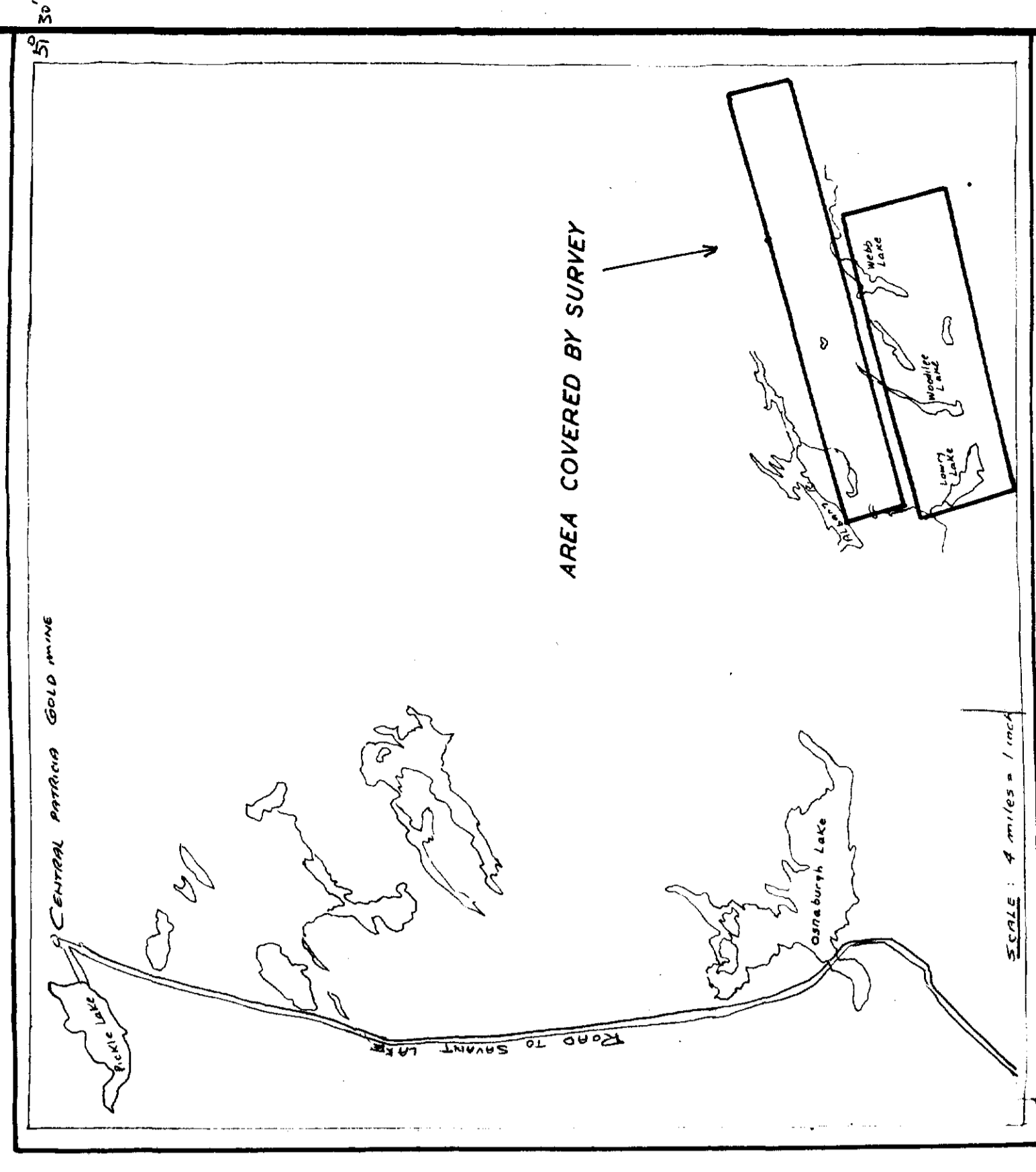
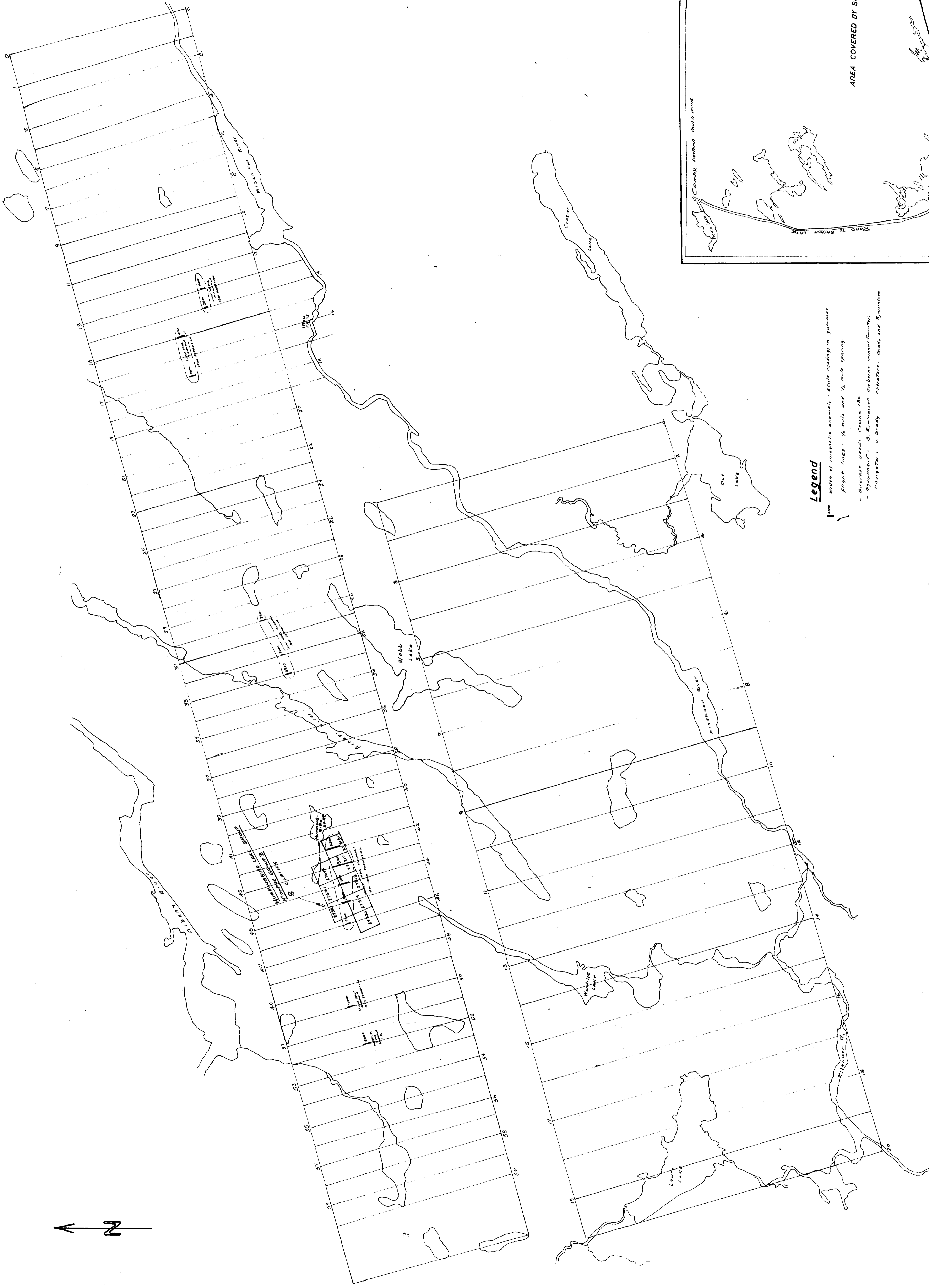


W. MacNAMARA
OCT. 1960

SCALE: 1 inch = 200 ft.

S2 P/04 NE -00B-A1 #2





Legend

- Width of magnetic anomaly - scale reading in gamma
- Flight lines: 1/4 mile and 1/2 mile spacing
- Gravel road: Centre 180
- Equipment: S. Gammeter airborne magnetometer
- Navigator: J. Grady operators: Grady and Spurgeon

AEROMAGNETIC SURVEY—SOUTH OF PICKLE LAKE, NORTHWESTERN ONTARIO

MONPRE MINING COMPANY LIMITED

scale: one inch = half mile

