



52N04SE0086 2.3199 BALMER TWP

010

REPORT ON THE

V.L.F. SURVEY

ON THE

GULLROCK LAKE NORTH CLAIM GROUP

KENORA - RED LAKE MINING DISTRICT

BETH-CANADA MINING COMPANY

A. INTRODUCTION:

The following is a report on the V.L.F. survey completed by Beth-Canada Mining Company in August, 1979 on its Gullrock Lake North claim group.

PROPERTY: DESCRIPTION AND LOCATION

The property consists of 6 contiguous mining claims (Figure 2): Nos. KRL 509078-509083 inclusive. All the claims are registered in the name of:

Beth-Canada Mining Company
40 University Ave.
Suite 702
Toronto, Ontario M5J 1T1
Mining Licence No. T511

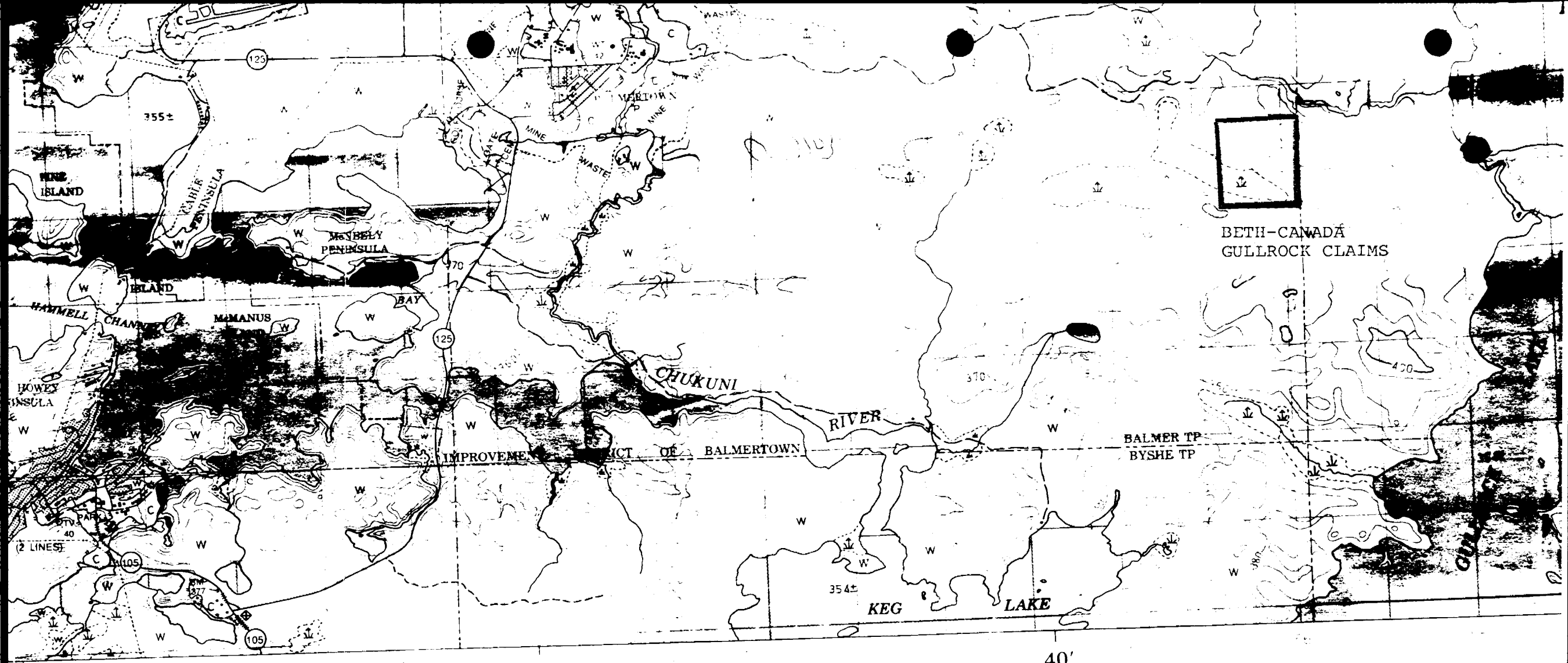
The claim group is located approximately 14 km. (9 miles) northeast of Red Lake, Ontario, in Balmer Township. It is situated on the west side of the Balmer-Ranger Township line, approximately 2.4 km. (1.5 miles) southwest of Ranger Lake (Figure 1). The claims are accessible by winter lumber roads from Balmertown or by float plane or by boat (or snowmobile) from Red Lake.

GEOLOGY:

As shown on Preliminary Map P 1976A (O.D.M., 1978), a large swamp covers much of the property, and the geology (O.D.M. Map No. 1951-3, Balmer Twp.) has been interpreted from a number of diamond drill logs. Mafic volcanic rocks are thought to strike southeasterly across the claims and to contact a narrow band of iron formation on the southern margin of the property. Bands of amphibolite intercalated with mafic volcanic rocks occur south of the iron formation.

HISTORY:

The claims were staked by Beth-Canada to cover a number of electromagnetic anomalies which had been located by a Questor airborne survey released by the Ontario Geological Survey in September, 1978 (Preliminary Map 1581).



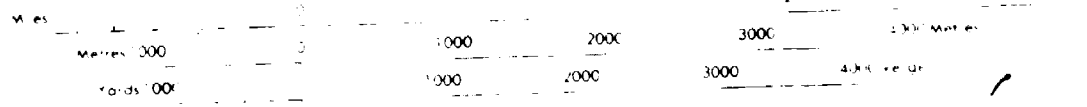
BETH-CANADÁ
GULLROCK CLAIMS

45'
RED LAKE
DISTRICT OF KENORA
ONTARIO

Location Map
Figure 1

ÉLEVATIONS EN MÈTRES AU-DESSUS DU NIVEAU MOYEN DE LA MER
ÉQUIDISTANCE DES COURBES 10 MÈTRES
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 192
PROJECTION TRANSVERSE DE MERCATOR

Scale 1:50,000 Échelle



50'
EAR FALLS
42M 68 Km

40'

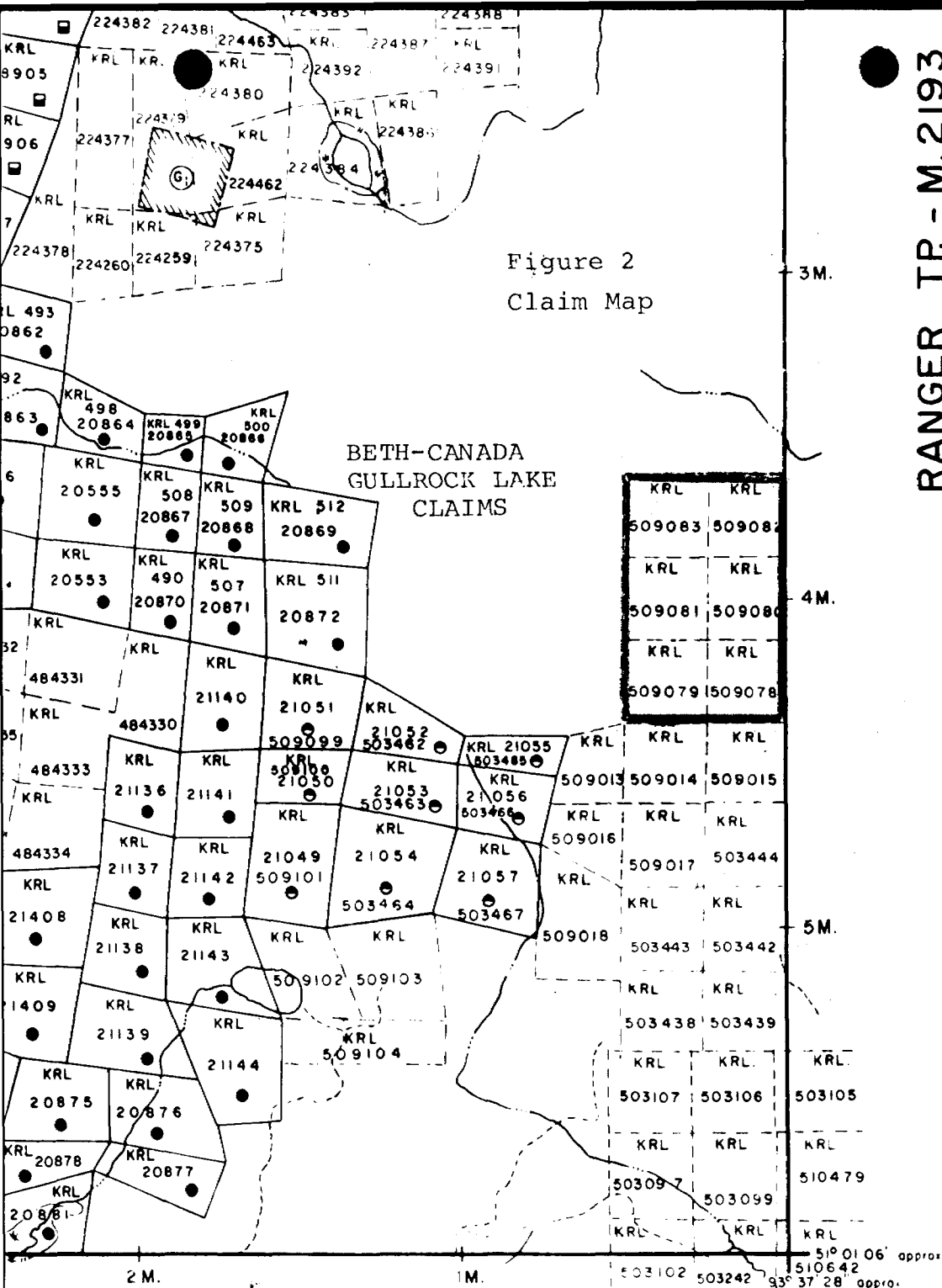


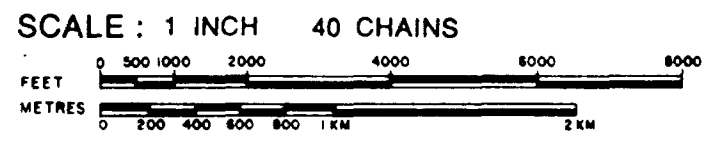
Figure 2
Claim Map

BETH-CANADA
GULLROCK LAKE
CLAIMS

RANGER TP - M.2193

- LEASE SURFACE RIGHTS ONLY
- SURFACE RIGHTS ONLY
- MINING RIGHTS ONLY
- LICENCE OF OCCUPATION
- CROWN LAND SALE
- ORDER-IN-COUNCIL
- RESERVATION
- CANCELLED
- SAND & GRAVEL

- 4 -



ACRES	HECTARES
40	16

TOWNSHIP

BALMER

DISTRICT

KENORA
PATRICIA PORTION

MINING DIVISION
RED LAKE

Found Lake Gold Mines carried out a magnetometer survey on the property in 1945 (O.D.M. Assessment Work File 63.29) and a number of diamond drill holes were put down in 1946 (Preliminary Map 1976A).

LINECUTTING:

Linecutting under the direction of Horst Petak and Lou Chastko of

Independent Exploration Services
Room 17-399 Berry St.
Winnipeg, Manitoba

was carried out August 5-8, 1979.

Grid lines were turned off the baseline at 100 meter intervals (see Map 1). A total of 5.5 km. (3.4 miles) of grid lines and 1.2 km. (0.75 miles) of base and tie-lines were cut (Map 1). All lines were picketed at 25 meter intervals. The Balmer-Ranger Township line and airphotos (scale 1" = 1/4 mile) were used for control.

VLF SUPVEY

The survey was carried out by

Sha-Pak Cheung
c/o Beth-Canada Mining Company
40 University Ave.
Suite 702
Toronto, Ontario

on August 12, 1979. In-phase and dip angle readings

of the secondary field were taken with a Phoenix VLF-2 instrument (see part B for specifications) at 25 meter intervals on the picket lines. A base station was established on line 3+00 E at 0+00 and base station readings were taken at least every two hours.

RESULTS, CONCLUSIONS:

Fraser filtered values (Fraser Filter Method, see Part C) of the dip angle readings, and field strength measurements of the secondary field are shown on Map 2. The positive Fraser filtered values have been contoured on Map 2 and the contours outline a VLF anomalous zone trending southeast across the grid. In the vicinity of line 2+00E the main anomalous zone appears to divide into two narrow but strong branches which extend off the grid to the west.

The VLF anomaly is located in a swamp and no doubt part of the response is due to conductive overburden. However, the strong correlation of the northern branch and main part of the VLF zone with a magnetic anomaly (up to 3000 gammas relief; see Beth-Canada's Assessment Work Report on the Magnetometer Survey on the Gullrock Lake North Grid) suggests the presence of a main south-east trending bedrock conductor possibly with a secondary

conductor extending from line 0+00 to line 4+00 E
in the vicinity of 3+00 N. This interpretation should
be confirmed with a horizontal loop EM survey.

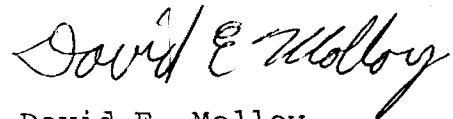
CERTIFICATE

I, David Earl Molloy, of the City of Kitchener,
Province of Ontario, do hereby certify that:

1. I reside at 221 Pandora Cres., Kitchener, Ontario
2. I have worked as a geologist for the last 8 years.
3. I am a graduate of McMaster University with a B.A. Degree (1967) in Philosophy and of the University of Waterloo with a B.Sc. Degree (1972) in Earth Science.
4. I am a member of the Prospectors and Developers Association, of the Canadian Institute of Mining and Metallurgy, and of the Geological Association of Canada.
5. I have carried out the VLF survey, have supervised the preparation of the maps and have written the report.

Dated at Toronto

This 22nd day of January, 1980



David E. Molloy



TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC
MINING LANDS SECTION

JAN 23 1980

Type of Survey(s) V.L.F.
Township or Area Balmer Township
Claim Holder(s) Beth-Canada Mining Company
40 University Ave., Toronto
Survey Company Beth-Canada Mining Company
Author of Report David E. Molloy
Address of Author 221 Pandora Crescent
Covering Dates of Survey Aug. 12, 1979, Jan. 21, 22, 1980
(linecutting to office)
Total Miles of Line Cut 4.2

MINING CLAIMS TRAVERSED
List numerically

KRL 509078
(prefix) (number) *3 not covered*
KRL 509079
KRL 509080
KPL 509081 *3*
KPL 509082 *2/3*
KRL 509083 *3/4*

Area not covered = 2
6 x 20 = 120
÷ (6 + 2) = 15 days

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

Geophysical
--Electromagnetic 20
--Magnetometer _____
--Radiometric _____
--Other _____
Geological _____
Geochemical _____

ENTER 40 days (includes
line cutting) for first
survey.
ENTER 20 days for each
additional survey using
same grid.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: January 22/80 SIGNATURE: David E Molloy
Author of Report or Agent

Res. Geol. _____ Qualifications 2. 3124 J m

Previous Surveys

File No.	Type	Date	Claim Holder
		<u>LD</u>	

TOTAL CLAIMS 6

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

(Specify data for each type of survey)

Number of Stations 229 Number of Readings 229
Station interval 25 meters Line spacing 100 meters
Profile scale (Fraser Filtered Values) 0, 10, 20, 30
Contour interval _____

Instrument _____
Accuracy -- Scale constant _____
Diurnal correction method _____
Base Station check-in interval (hours) _____
Base Station location and value _____

Instrument Phoenix VLF-2
Coil configuration Horizontal
Coil separation None
Accuracy $\pm 3^\circ$ of dip angle measurement
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 14.0-29.9 KHZ increments; Cutler, Maine
(specify V.L.F. station)
Parameters measured Orientation and magnitude of the major and minor axes of the ellipse of polarization

Instrument _____
Scale constant _____
Corrections made _____

Base station value and location _____

Elevation accuracy _____

Instrument _____
Method Time Domain Frequency Domain
Parameters -- On time _____ Frequency _____
-- Off time _____ Range _____
-- Delay time _____
-- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

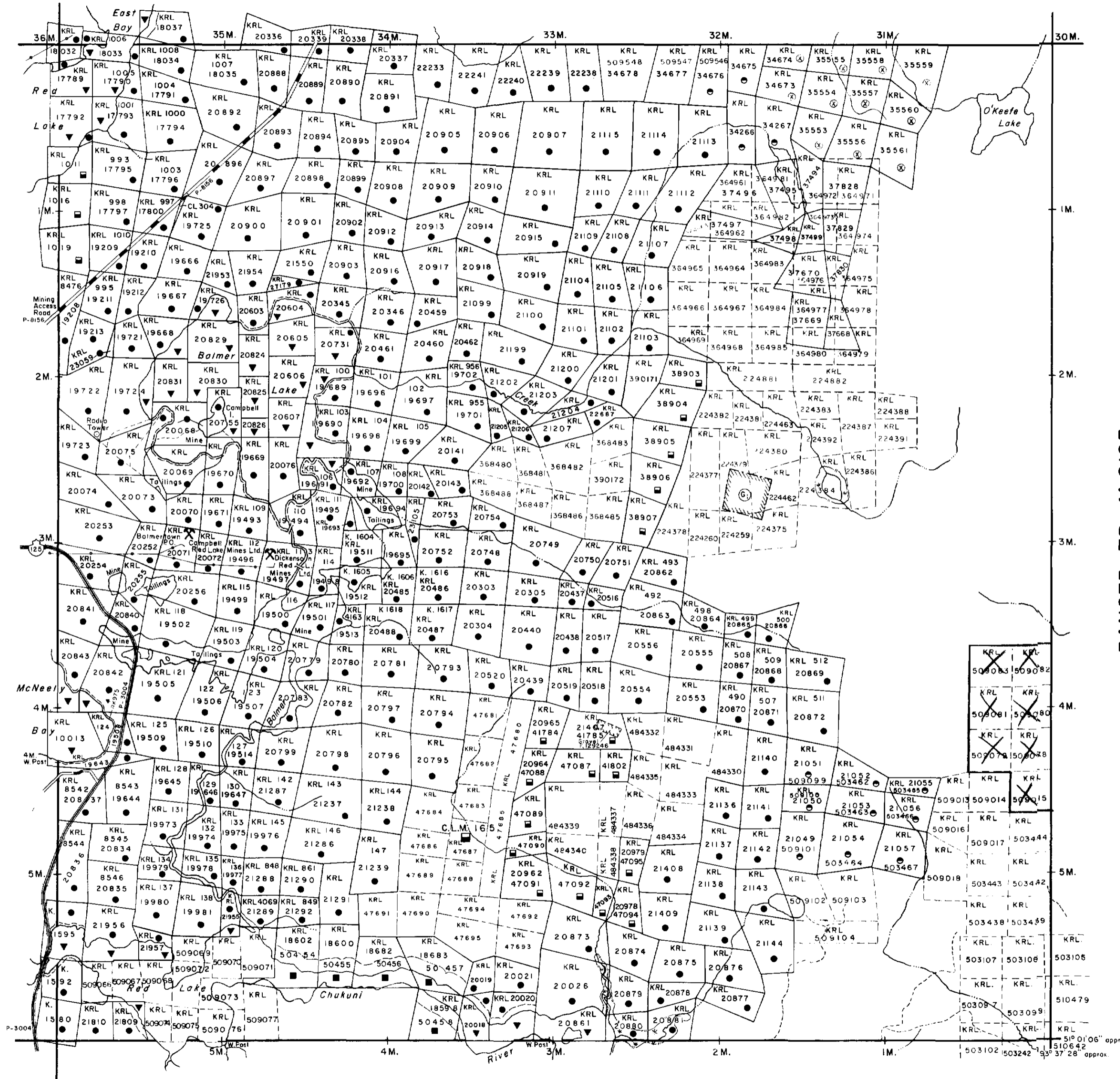
This Township is part of the IMPROVEMENT DISTRICT OF BALMERTOWN.

SAND and GRAVEL

Ⓢ - Gravel File 129504

DATE OF ISSUE
 JAN 24 1980
 SURVEYS AND MAPPING
 BR.

BATEMAN TP. - M.2139



DOME TP. - M. 2156

RANGER TP. - M. 2193

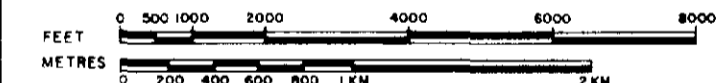
LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◼
" MINING RIGHTS ONLY	◑
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓢ
CANCELLED	Ⓢ
SAND & GRAVEL	Ⓢ

SCALE : 1 INCH = 40 CHAINS



ACRES	HECTARES
40	16

TOWNSHIP 2.3199

BALMER

DISTRICT KENORA
 PATRICIA PORTION
 MINING DIVISION RED LAKE

Ministry of Natural Resources
 Ontario Surveys and Mapping Branch

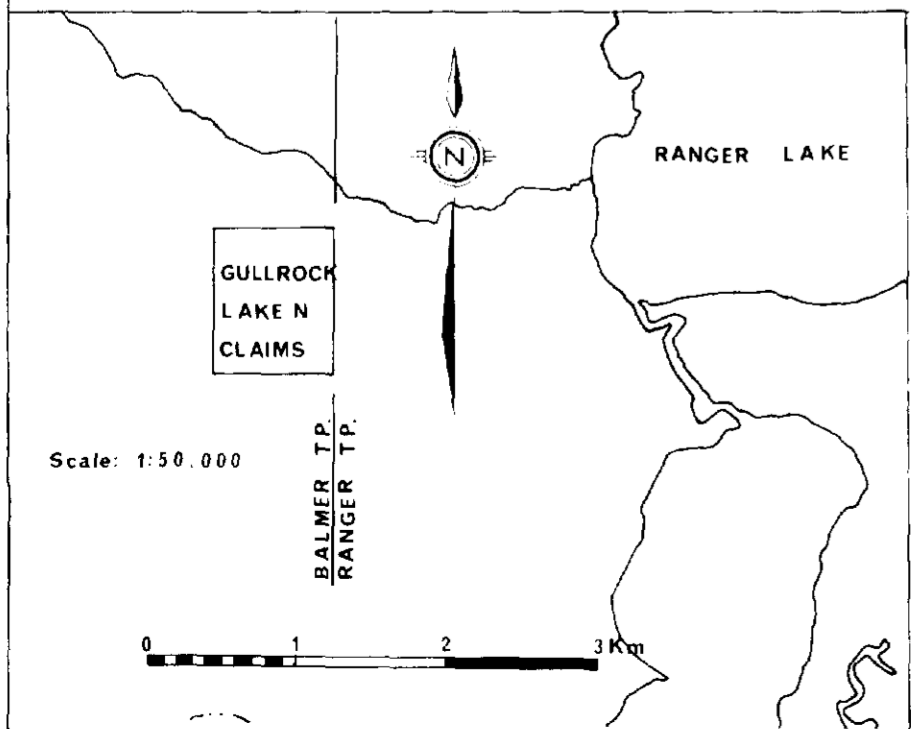
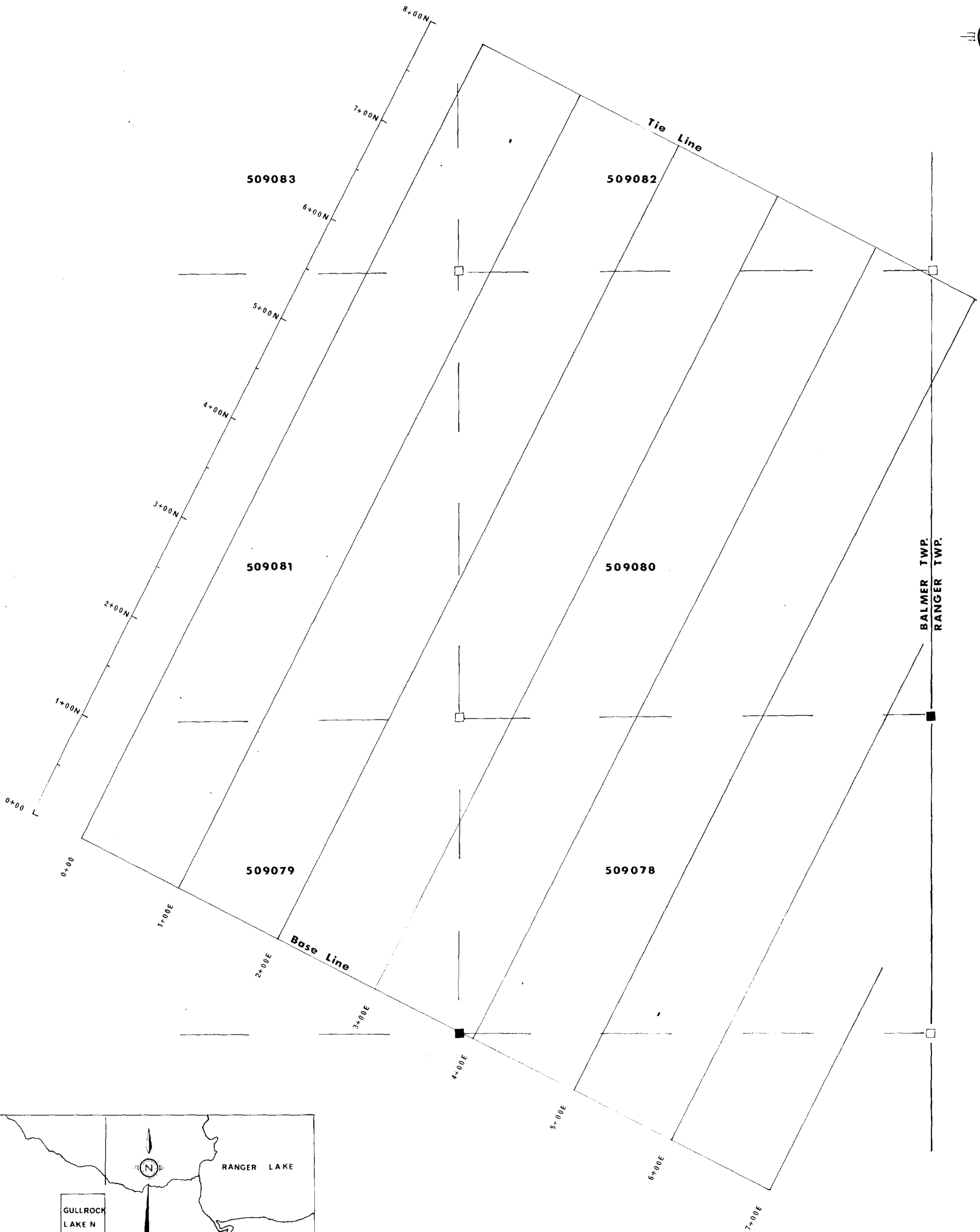
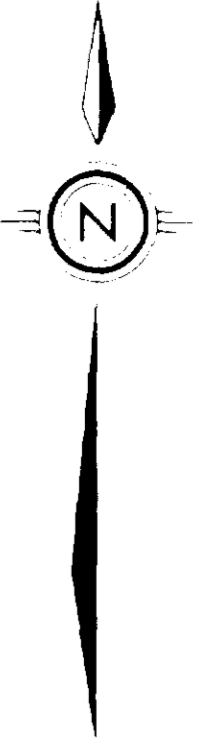
Date March '75 Plan No. M. 2137
 Whitney Block Queen's Park, Toronto

BYSHE TP. - M. 2148



52N045E0886 2.3199 BALMER TWP

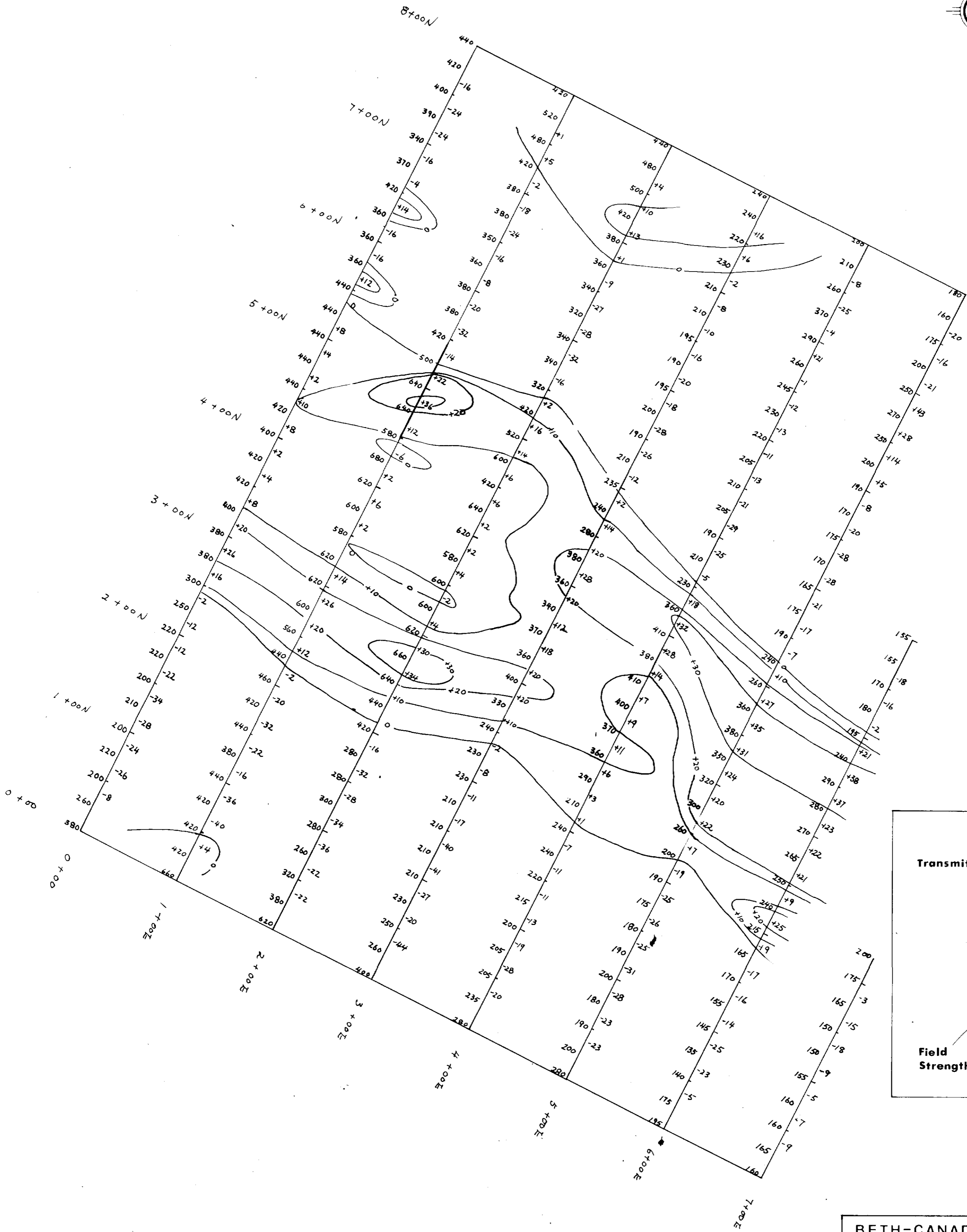
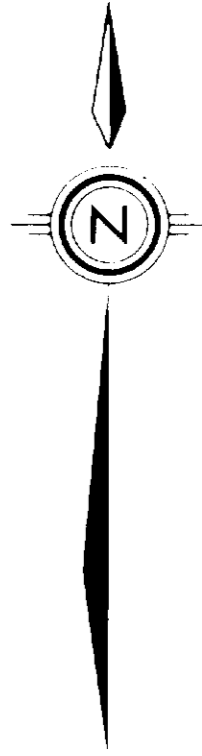
200



BETH-CANADA MINING CO.	
Base Map	
GULLROCK LAKE (NORTH) CLAIMS	
Proj.: 06 On 14	Date: Jan., 1980
NTS: 52N/4	Scale: 2,500
Map: 1	Prep. By: SPC



David E. Molloy



LEGEND

Transmitting Stn.: Cutler, Maine

Field Strength Fraser's Filtered Value

BETH-CANADA MINING CO.	
VLF Field Strength & Fraser's Filtered Value (Contoured)	
Gullock Lake (North) Claim	
Proj.: 06 On 14	Date: Dec., 1979
NTS: 52N/4	Scale: 1:2,500
Map: 2	Prep. By: SPC



Lowell & Molyneux