010

REPORT ON

GEOPHYSICAL SURVEYS

ON THE

HARRISON OPTION

OF

EAGLE LAKE RESOURCES LTD.

MILK LAKE AREA

KENORA MINING DIVISION

ONTARIO

PREPARED BY:

J. M. HARRISON, B. SC.
BOX 117
WABIGOON, ONT.

JUNE 12, 1988

Introduction:

Eagle Lake Resources Ltd. optioned a 17-claim property containing several Cu-Ni showings. Additional claims were staked or optioned to bring the total number of claims to 86. The southern part of the block (54 claims) has been optioned to a major company. The remaining 32 claims constitute the Mile Lake Property.

This report deals with the 17-claim option optioned from J. Harrison.

Location, Access and Physiography:

The Mile Lake Property is located in Northwestern Ontario, 11 km south of Dryden.

The property is most conveniently reached by outboard motor boat from Dryden in the summer and snow machine in winter.

The property has a maximum relief of 55 m (average 20-30 m above lake level. The area is rocky with sparse overburden on the higher ground. Lower ground is covered by a variable thickness of till overlain by a mantle of clay. The entire area is tree-covered.

The Property:

The Harrison Option consists of the following claims:

K 203509 (leased)

K 706070

K 706072 & -073

K 706125 to -134

K 706136 & -137

K 706140

All claims are in good standing.

Previous Work in Area:

The earliest documented exploration was carried out by Falconbridge Nickel Mines Ltd. in the mid 1950's. The work was part of a regional programme for copper and nickel.

During 1970, Steep Rock Iron Mines Ltd. carried out exploration over most of the present 17-claim option. Work consisted of a magnetic survey and rock trenching.

Nichro Mines Ltd. carried out magnetic surveys and extensive diamond drilling from the ice of Mile Lake in the early 1970's. At this time Nichro also drilled several holes on the present Harrison Cu-Ni option.

Beth-Canada Mining Co. carried out exploration on a part of the claims in the early 1980's. The work was terminated prematurely when Beth-Canada was disbanded by the parent corporation.

American Volcano Minerals Corp. and McConnell-Peel Resources Ltd. in a joint venture drilled 4 holes in the area during the mid-1980's. Two of these holes were located on the 17-claim option.

Geology:

The only systematic geological mapping of the area was carried out by Satterly in 1939 and 1940 for the Ont. Dept. Mines.

The oldest rocks exposed on the property are a series of mafic and felsic metavolcanics. These occupy the northeast and east parts of the property. They strike northwesterly and dip vertically to steeply northeast. Shearing is present.

A mafic to ultramafic intrusive underlies the southwest and west parts of the property. The composition ranges from anorthosite to pyroxenite.

A granodiorite to diorite occupies the north central part of the claims.

Three shear directions are present :NW-SE, NNW-SSE and E-W.

One showing is located near the centre of K 203509. The showing consists of disseminated pyrrhotite, chalcopyrite and minor pyrite occur across a width of 3m.

A second is located on claim K 706070 about 400m southeasterly from the first showing. It consists of a sulphide-bearing zone 10-15m wide exposed in outcrop and a trench overlooking the east side of the same beaver pond.

GeoPhysics

Line cutting, ground magnetic and VLF surveys were carried out during the winter of 1987/88.

The line cutting was carried out by a new contractor. The less than Perfect result is apparent on the accompanying maps. The contractor has decided to find other employment and will thus remain nameless. The geoPhysics was done by K. Bernier.

The grid was selected to cross the shear directions known to exist in the area.

Magnetic Survey

The magnetic anomalies are as follows:

(1) strong, linear — Probable dyke

(2) strong, linear — Probable dyke
Possible location of Cu-Ni noted by Steep Rock

(2a) weak, non-linear, area reported to be Pyroxenite

(3) strong, one line, VLF conductor

(4) weak to strong, Probable mafic volcanics included in granodiorite with metamorPhic magnetite

(5) moderate, lacks continuity, near second sulPhide showing

The area east of (4) and south to Mary Lake contain weak linear anomalies. These are typical of volcanics. Felsics predominate in the south and more mafic rocks in the northeast.

VLF Surveys

Anom	Strength 24.	Strength 21.4	Comments
A	m	m	volc. shearing nearby
B	m/s	m	volc.
C	w/s	m/s	volc conductive obd
D	w	vw	volc near gr contact
E	n/s	w/s	gr in N (N of 11NW), volc in S, strong lineament in gr
F	w/m	s	volc cond. obd
G	w	w	volc cond. obd
H	w/m	w/m	volc " "
I	s	s	gr/volc contac ?
J	w/s	w/s	gabbro? cond obd
K	m/s	s	gabbro some cond obd
L	m/s	m/vs	gabbro reverse quad
M	w/vs	w/vs	volc? low cond obd
N	w/s	w/s	volc mod cond obd
O	w/m	w/m	volc Poss extends to 3NW
P	m/s	w/s	volc cond obd
Q	w/s	w/s	volc " "
R	w/s	w/s	" reverse quad
S	s	s	gabbro cond obd first showing
T	m	m	volc? cond obd bdrk?
U	n/w	n/w	gabbro

cond - conductive, m - moderate, n - nil,
s - strong, v - very, w - weak, volc - volcanic

Discussion

The magnetic highs only rarely coincide with the conductors. This is both a function of the data spacing and the styles of mineralization present.

Copper-nickel mineralization will tend to yield a magnetic high. The presence of a conductor will require shearing or sufficient sulphide content to form a conductive zone. Consequently, a standard survey spacing can miss narrow zones with low sulphide content.

Thhe correlation between known Cu-Ni mineralization in a shear and Anomaly S is well established. A narrow magnetic high is also known to overly the mineralization. The spacing of the magnetic readings was too wide to locate this mag high.

Other areas containing disseminated sulphides have been reported from the claims. Precise locations are not known, however the the sulphides do not appear to be identified by discrete anomalies in the present survey. Several of the anomalies may consist of two or more closely spaced parallel conductors.

Alternate interpretations are possible for several of the conductors.

Anomalies R and K may represent a single conductor. A conductor axis does exist to the south of the East Base Line south of 6, 7 and 8E. This area will be covered by geophysics this summer.

Anomalies O, P & Q may represent a single E-W conductor. More detailed work will be required to clarify this possibility.

Intermediate lines and tighter spaced readings will be required to define the details of the conductors.

Conclusions

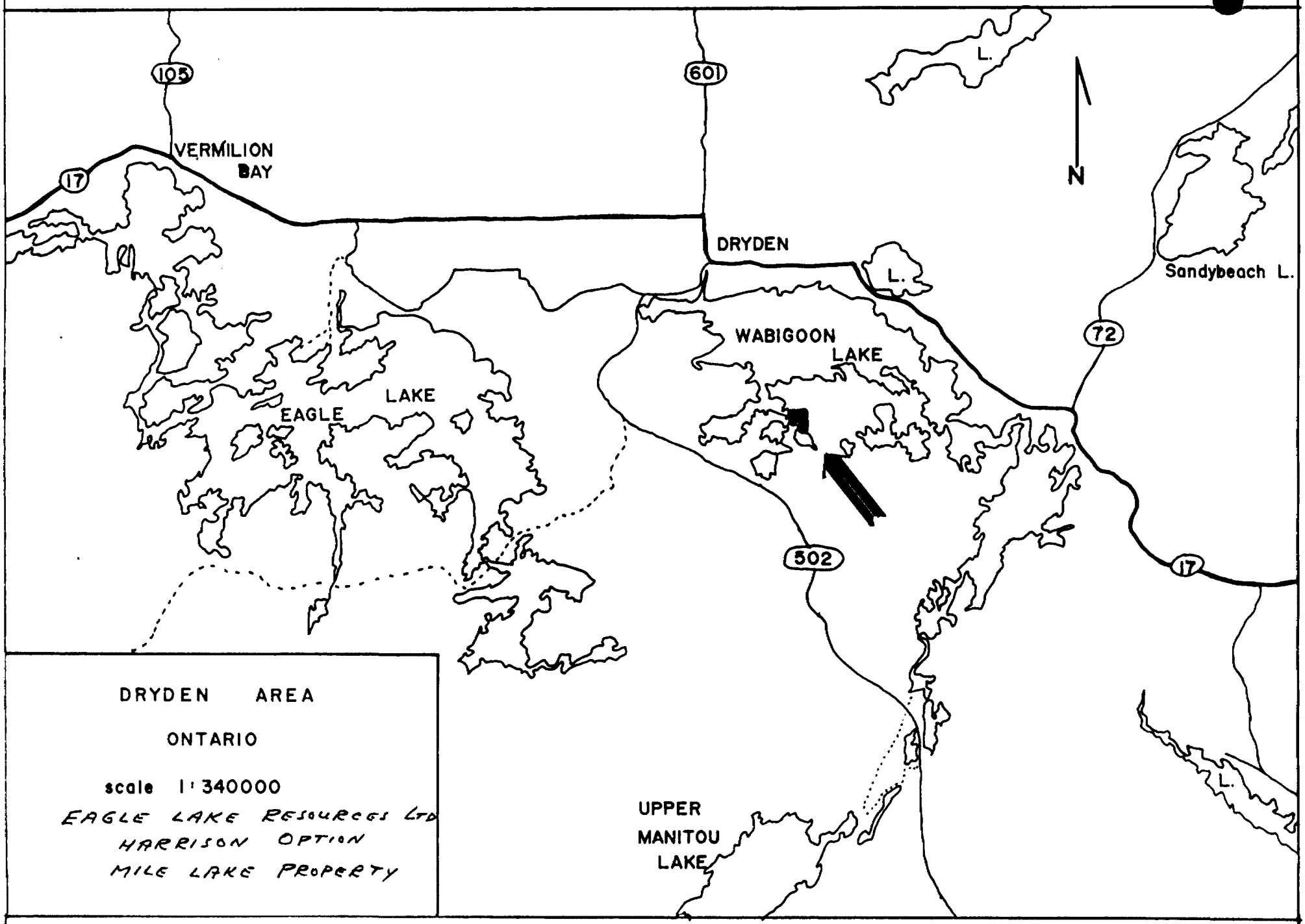
1. Several significant magnetic anomalies occur on the claims
2. Numerous significant VLF conductors occur on the claims
3. Magnetic highs are rarely associated with the conductors
4. Some conductive zones cross from the volcanics into the gabbros
5. Many conductors follow the strike of the volanics
6. Shearing is known to present in the volcanics
7. Most of the VLF conductors represent bedrock sources.
8. More geological data is required to facilitate the interpretation before assigning priorities to the anomalies.

Recommendations

1. A geological survey of the claims is required to compliment the geophysics.
2. Sampling of mineralization in and near the anomalies will assist in the final evaluation.
3. Collection of humus and/or soil samples in the areas lacking outcrop will assist in the determination of the potential of the various conductors.
4. More detailed geophysics is warranted in some areas. Selection of these areas will be carried out following the mapping and sampling.

Mag. - Omni Plus.
VLF - Omni Plus
Geonics 16

Redden Ya Bass
phone call Sept 1/82



DRYDEN AREA

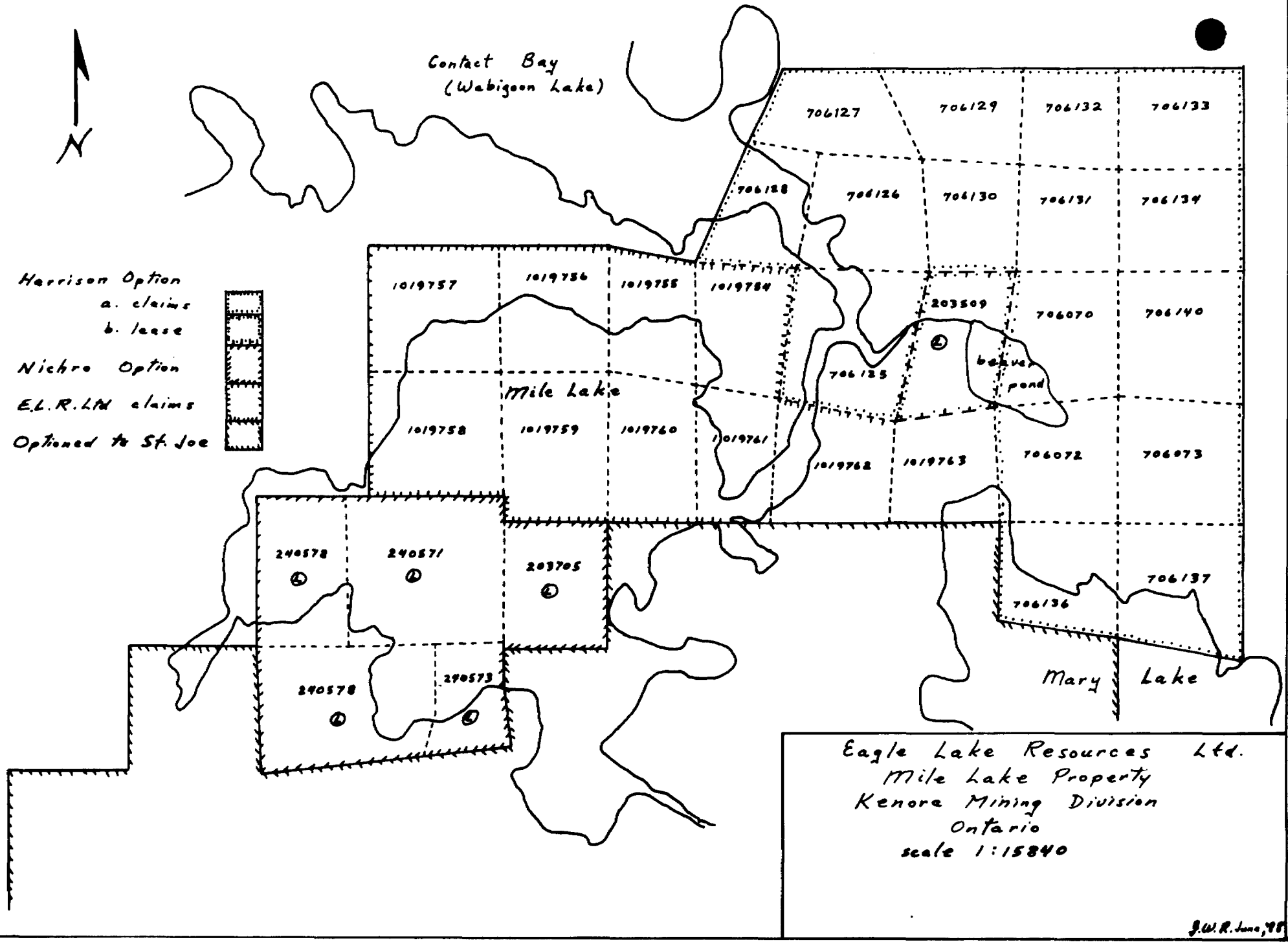
ONTARIO

scale 1:340000

EAGLE LAKE RESOURCES LTD

HARRISON OPTION

MILE LAKE PROPERTY


Contact Bay
(Wabigoon Lake)
N
Harrison Option
a. claims
b. lease
Nichro Option
E.L.R. Ltd claims
Optioned to St. Joe
706127
706129
706132
706133
706128
706126
706130
706131
706134
1019757
1019756
1019755
1019754
203509
706070
706140
beaver pond
706135
Mile Lake
1019758
1019759
1019760
1019761
1019762
1019763
706072
706073
240578
240571
203705
706137
706136
240578
240573
Mary Lake
Eagle Lake Resources Ltd.
Mile Lake Property
Kenora Mining Division
Ontario
scale 1:15840
J.W.R. June, 78

EM16

VLF Electromagnetic Unit

Pioneered and patented exclusively by Geonics Limited, the VLF method of electromagnetic surveying has been proven to be a major advance in exploration geophysical instrumentation.

Since the beginning of 1965 a large number of mining companies have found the EM16 system to meet the need for a simple, light and effective exploration tool for mining geophysics.

The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained.

The EM16 system provides the *in-phase* and *quadrature* components of the secondary field *with the polarities indicated.*

Interpretation technique has been highly developed particularly to differentiate deeper targets from the many surface indications.

Principle of Operation
The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter location.

Fig. 3E (b)

Specifications

Source of primary field	VLF transmitting stations.
Transmitting stations used	Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.
Operating frequency range	About 15-25 kHz.
Parameters measured	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).
Method of reading	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.
Scale range	In-phase ± 150%; quadrature ± 40%.
Readability	± 1%.
Reading time	10-40 seconds depending on signal strength.
Operating temperature range	—40 to 50° C.
Operating controls	ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial ± 40%, *inclinometer dial* ± 150%.
Power Supply	6 size AA (penlight) alkaline cells. Life about 200 hours.
Dimensions	42 x 14 x 9 cm (16 x 5.5 x 3.5 in.)
Weight	1.6 kg (3.5 lbs.)
Instrument supplied with	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
Shipping weight	4.5 kg (10 lbs.)

GEONICS LIMITED Designers & manufacturers of geophysical instruments

~~subsidiary of Beering Milliken Inc.~~

2 Thorncliffe Park Drive
Toronto/Ontario/Canada
M4H 1H2
Tel: (416) 425-1821
Cables: Geonic's

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditure)

DOCUMENT W8801.56

52F10NW8310 2.11356 BUTLER LAKE

900

Mining Act

Do not use shaded areas below.

56-88

Type of Survey(s): GEOPHYSICAL : MAGNETIC , 2 VLF STATIONS

Township or Area: CONTACT BAY AREA + BUTLER LK

Claim Holder(s): EAGLE LAKE RESOURCES LTD. 2.11356 T.5049

Prospector's Licence No.

Address: STE 301, 634 - 6 AVENUE S.W. CALGARY ALTA. T2P0S4

Survey Company: J. W. Redden

Date of Survey (from & to): 17 01 88 (Day / Mo / Yr) — 08 03 88 (Day / Mo / Yr)

Total Miles of line Cut: 18

Name and Address of Author (of Geo-Technical report): J.W. Redden, Box 117, Wabigoon, Ont. P0V2W0

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	Geophysical - Magnetometer	40 20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	20
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
K	706070				
	706072				
	706073				
	706125				
	706126				
	706127				
	706128				
	706129				
	706130				
	706131				
	706132				
	706133				
	706134				
	706136				
	706137				
	706140				

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
AUG 25 1988
RECEIVED

KENORA MINING DIV.
RECEIVED
MAR 15 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 16

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded: 1280

Date Recorded: Mar 15/88

Date Approved as Recorded: Aug 19/88

Mining Recorder: Scott Rivett

Branch Director: J. Hurst for Manager

Date: MARCH 13/88

Recorded Holder or Agent (Signature):

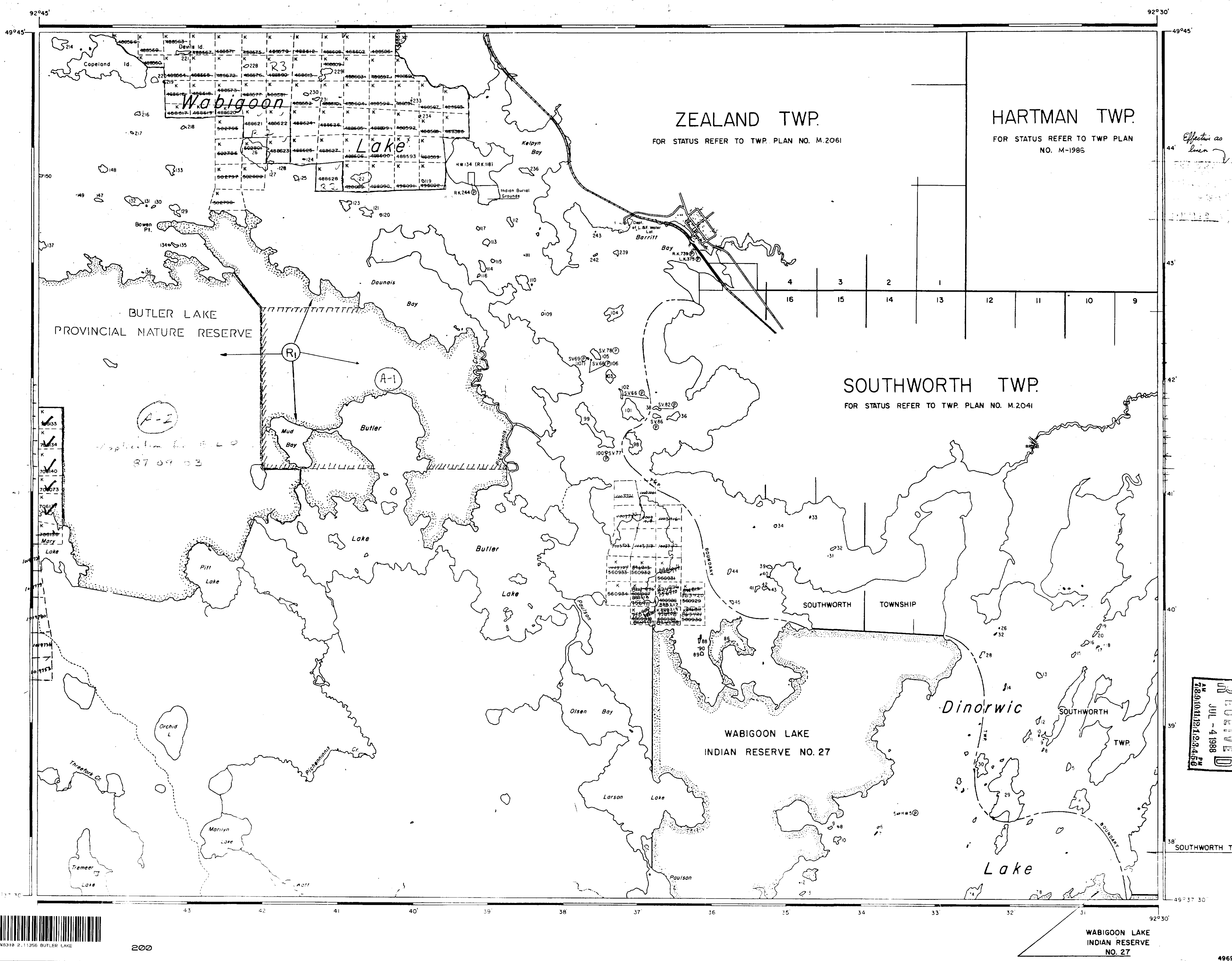
Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: J.W. REDDEN, Box 117, Wabigoon Ont P0V2W0

Date Certified: MAR 13/88

Certified by (Signature):



52F10NE0310 2.11356 BUTLER LAKE

200

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 OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

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	
ORDER-IN-COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(R) PARK RESERVE	W 38/83	8/23/83	M & S	18913

(A) PENDING APPLICATION
ALL ISLANDS IN WABIGOON LAKE WITHDRAWN FROM STAKING

FLOODING

RESERVED THE RIGHT TO HOLD THE WATERS OF WABIGOON LAKE TO ELEVATION NOT EXCEEDING 1209.92 FEET. THE SAID ELEVATION OF 1209.92 FEET IS RELATED TO A READING OF 7.25 FEET ON THE FORMER GAUGE AS ESTABLISHED BY THE DEPARTMENT OF PUBLIC WORKS, ONTARIO, IN THE YEAR 1917, ON THE DOMINION GOVERNMENT DOCK AT DRYDEN, AND IS REFERRED TO A BENCH MARK BEING A BRASS PIN AT ELEVATION 1213.44 FEET ON TOP OF THE EAST END OF THE DAM AT DRYDEN

WATER POWER LEASE AGREEMENT NO. 1.
20 YEARS, FROM 15th AUG.,1947 TO 14th AUG.,1967
FILES 11916 53499

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

RECEIVED
JUL - 4 1988
KENORA MINING DIV.
AM 7,8,9,10,11,12,1,2,3,4,5,6 PM

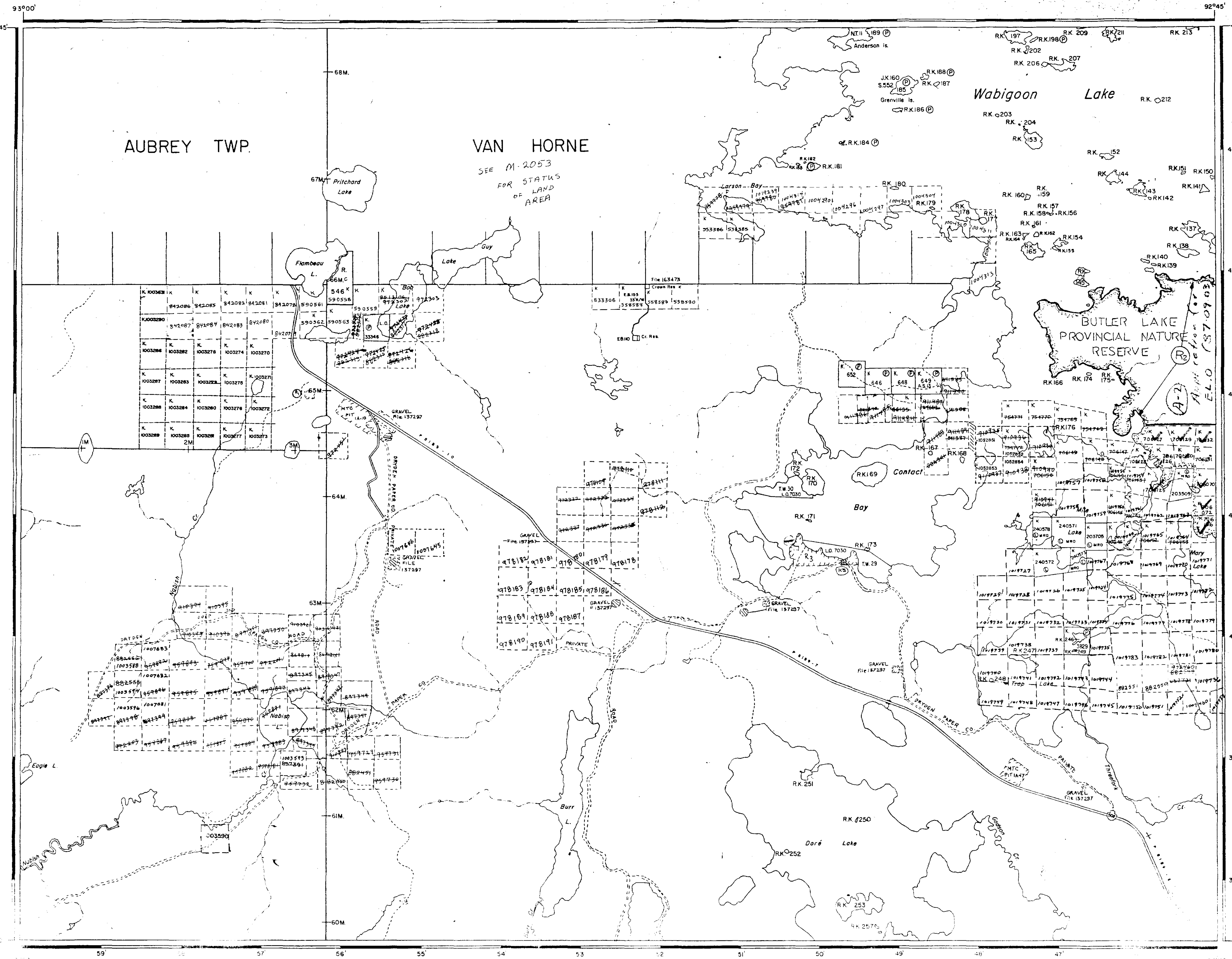
AREA
BUTLER LAKE

M.N.R. ADMINISTRATIVE DISTRICT
DRYDEN
MINING DIVISION
KENORA
LAND TITLES / REGISTRY DIVISION
KENORA

Ministry of Natural Resources
Ontario

Date JANUARY, 1984
Number G-2576
M-2723

496923



Buchan Bay G-2573

Butler Lake G-2576

Ukik Lake G-2596

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 OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

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	▼
ORDER-IN-COUNCIL	OC
RESERVATION	®
CANCELLED	⊗
SAND & GRAVEL	©

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
①	W 78/77	28/3/77	S.R.O.	161004
②	W 54/83	8/25/83	M&S	185316
③ PROPOSED SURFACE RIGHTS RESERVATION	PARK RESERVE	JAN 19/83		PUB. LANDS ACT
R4 PROPOSED SHORT TERM LUO			FALL 85 CANCELLED	

All Islands in Wabigoon Lake withdrawn from staking under Sec. 39 Sub. C. of Mining Act.

Roads indicated Dryden Paper Co. Private Road may be used by Prospectors only after permission is obtained from Dryden Paper Co. Dryden, Ont.

R5 PROPOSED SHORT TERM LUO SPRING 86.

A-2

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA

CONTACT BAY
WABIGOON LAKE

M.N.R. ADMINISTRATIVE DISTRICT
DRYDEN

MINING DIVISION
KENORA

LAND TITLES / REGISTRY DIVISION
KENORA

KENORA MINING DIV. RECEIVED JUL 29 1988 AM 7,8,9,10,11,12,1,2,3,4,5,6 PM

Ministry of Natural Resources — Land Management Branch — Ontario

Date JANUARY, 1984

Number G-2579

EAGLE LAKE RESOURCES LTD.
MILE LAKE PROPERTY
HARRISON OPTION
MAG SURVEY
scale 1:2500

LEGEND

claim block
leased claim
base line
tie line
picket line

MAG SURVEY

< 500 ɣ	
500 – 600 ɣ	
600 – 700 ɣ	
700 – 800 ɣ	
800 – 900 ɣ	
900 – 1000 ɣ	
> 1000 ɣ	

value + 59000 = total field

N

WABIGOON LAKE

MILE LAKE

MARY LAKE

K 706128
K 706127
K 706129
K 706132
K 706133
K 706126
K 706131
K 706130
K 706134
K 706125
K 706070
K 706140
K 706072
K 706073
K 706136
K 706137
K 203509

beaver pond

abandoned beaver ponds

1
2
3
4
5

11 N
10 N
9 N
8 N
7 N
6 N
5 N
4 N
3 N
2 N
1 N
East B.L.

0E 1E 2E 3E 4E 5E 6E 7E 8E

7+10E
8+60E

18 NW 17 NW 16 NW 15 NW 14 NW 13 NW 12 NW 11 NW 10 NW 9 NW 8 NW 7 NW 6 NW 5 NW 4 NW 3 NW 2 NW 1 NW 0 NW N.W.B.L.

MAG + 59,000 ɣ

220

EAGLE LAKE RESOURCES LTD.
MILE LAKE PROPERTY
HARRISON OPTION
VLF SURVEY
scale 1:2500

LEGEND

claim block
leased claim
base line
tie line
picket line
swamp

VLF SURVEY (NSS 21.4)

in phase
quadrature
Fraser Filter

conductor

only positive Fraser Filter values plotted

contours at 0, 25 and 50

2.11[illegible]

J.W. Kedd[illegible] June/88

EAGLE LAKE RESOURCES LTD.
MILE LAKE PROPERTY
HARRISON OPTION
VLF SURVEY
scale 1:2500

LEGEND

claim block
leased claim
base line — B.L.
tie line — T.L.
picket line
swamp

VLF SURVEY (NAA 24.0)

in phase
quadrature
37 / 12 — (37) — Fraser Filter
27 / 6

conductor
only positive Fraser Filter values plotted
contours at 0, 25 and 50

WABIGOON LAKE

MILE LAKE

MARY LAKE

East B.L.

N