



42C04SE0027 2.12143 CAMP LAKE

010

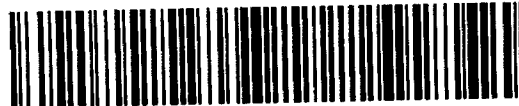
NORANDA EXPLORATION COMPANY, LIMITED  
(no personal liability)

Assessment  
Soil Geochemistry Report  
Pukaskwa - 1109  
42 C/4

January 24, 1989  
Hemlo District

*2.15.09*  
John Londry  
District Geologist

RECEIVED  
FEB 1 1989  
MINING LANDS SECTION



42C04SE0027 2.12143 CAMP LAKE

010C

TABLE OF CONTENTS

	Page No.
1.0 Introduction .....	1
2.0 Location and Access .....	1
3.0 Topography and Vegetation .....	2
4.0 Property .....	3
5.0 Property Geology .....	5
6.0 Geochemical Survey .....	5
7.0 Conclusions and Recommendations .....	6

LIST OF FIGURES

Figure		Page No.
1	Location Map .....	4
2	Claim Map .....	8
3	Soil Geochemistry .....	in pocket

1.0 INTRODUCTION

In the fall of 1988 a soil geochemical survey was performed on the Pukaskwa property. The survey was carried out along cut north-south grid lines at an interval of 500 m, and along flagged lines spaced 100 m apart. East-west tie lines were cut at an interval of 500 m as a control for the flagged lines. A total of 6135 soil samples were taken at stations spaced 25 m apart. Anomalous zones will be followed up by prospecting and rock samples to verify the soil assays.

2.0 LOCATION AND ACCESS

48 degrees 02' North Latitude      ) to approximate centre of claims  
85 degrees 41' West Longitude      )

The Pukaskwa River property is located in the Sault Ste. Marie Mining Division approximately 65 km west of Wawa, Ontario and 14 km west-northwest of Mishibishu Lake (Figure 1).

Direct access to the property is by helicopter from Wawa, 65 km to the east of the claims. An access road to the Magnacon Mine, 50 km south of highway 17, provides relatively easy camp mobilization and servicing by helicopter, reducing the flying time and support costs.

3.0 TOPOGRAPHY AND VEGETATION

Terrain is characterized by numerous low, rounded hills and ridges separated by shallow gulleys, valleys and lakes. Numerous low, near vertical cliffs several metres or more high and trending easterly are common throughout the area.

The claims are well forested by birch, maple, poplar and pine usually accompanied by thick underbrush. Low, flat areas are often swampy with thick tag alder and moose maple.

4.0 PROPERTY

The property consists of 274 contiguous claims (Figure 2). All are located with the Sault Ste. Marie Mining Division. They are:

Claim Nos.	No. of Claims	Area
SSM 753852-753856	5	David Lake
SSM 753857-753858	2	"
SSM 753859-753862	4	"
SSM 753863-753866	4	"
SSM 753867-753868	2	"
SSM 753868-753884	16	"
SSM 753885-753888	4	"
SSM 753906-753918	13	"
SSM 753919-753932	14	"
SSM 753933-753935	3	"
SSM 753958-753959	2	"
SSM 753967-753968	2	"
SSM 753972	1	"
SSM 779109-779121	13	"
SSM 779122-779128	7	"
SSM 779129-779140	12	"
SSM 779141-779148	8	"
SSM 779151	1	"
SSM 779152	1	"
SSM 779155-779156	2	"
SSM 779266	1	"
SSM 800922-800924	3	"
SSM 801306-801309	4	"
SSM 801310-801312	3	"
SSM 801313-801328	16	"
SSM 801336-801347	12	"
SSM 801348-801350	3	"
SSM 801351-801354	4	"
SSM 801355-801357	3	"
SSM 822055-822056	2	"
SSM 822097-822104	8	"
SSM 822145-822164	20	"
SSM 824323-824325	3	"
SSM 1028327-1028349	23	"
SSM 1028353-1028378	26	"
SSM 1028380-1028405	26	"
SSM 10310561	<u>1</u>	

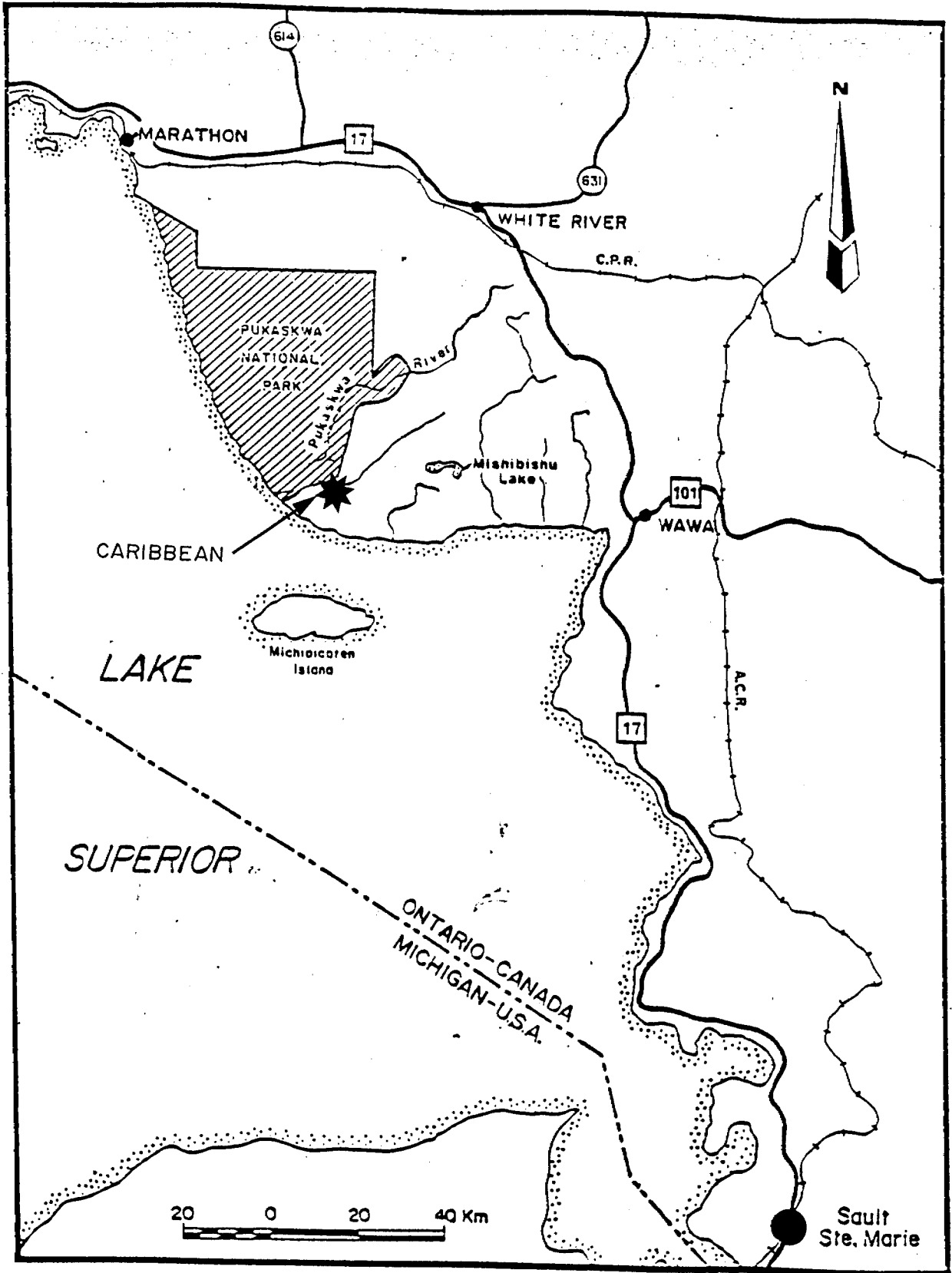


Figure 1: Location map

## 5.0 PROPERTY GEOLOGY

The claims are underlain by rocks of the Mishibishu Lake Belt, which may be divided into three broadly defined N70-75 degrees E, north dipping sequences. These three sequences are recognized on a regional scale at least as far east as the Magnacon gold deposit at Mishibishu Lake. They are: a northern volcanic sequence of mafic to intermediate volcanics; a central sedimentary sequence of conglomerates, greywacke, arkose and argillaceous shales and the southern volcanics are made up of mafic to intermediate volcanics with interflow sediments and iron formation. The contact between the northern volcanics and sediments occur within the Mishibishu Lake Deformation Zone.

## 6.0 GEOCHEMICAL SURVEY

Extensive soil sampling was undertaken over much of the property and each station was sampled for B horizon soils. The stations were spaced 25 m apart on grid lines as well as flagged lines. A total of 6135 samples were collected.

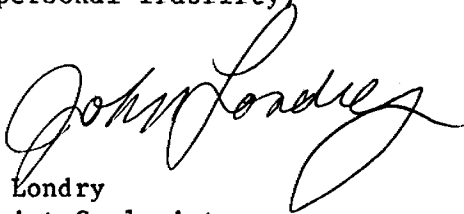
The survey delineated a few areas where clusters of anomalous samples were collected. These clusters may be correlated to form weak east-west trends. An isolated cluster occurs at 12800 E and 8500 N with values ranging from 5 ppb to 285 ppb Au. At 9400E and 7900 N an anomalous east west trending zone with values in the range of 20 ppb to 315 ppb Au occur. The east west trending zones correlate satisfactorily with the strike geology.

7.0 RECOMMENDATIONS

The soil surveys were sufficient to outline a number of anomalous zones. These should be prospected and rock samples should be collected to verify the assays obtained in the soil.

Respectfully submitted,

Noranda Exploration Co., Ltd.  
(no personal liability)

A handwritten signature in cursive script, appearing to read "John Londry".

John Londry  
District Geologist,  
Hemlo District.







Report of Work

Work Performed On Claims

SSM 1028328 - 1028333 ✓ inclusive  
1028335 - 1028349 ✓ inclusive  
1028354 - 1028365 ✓ inclusive  
1028367 - 1028378 ✓ inclusive  
1028380 - 1028403 ✓ inclusive

1028405 ✓

801344 - 801347 ✓ inclusive

801351 - 801354 ✓ inclusive

801306 - 801309 ✓ inclusive

801313 - 801319 ✓ inclusive

753857 - 753858 ✓ inclusive

801320 - 801326 ✓ inclusive

753865 ✓

822055 - 822056 ✓ inclusive

800922 - 800924 ✓ inclusive

779116 ✓

779140 ✓

801327 - 801328 ✓ inclusive

822097 - 822104 ✓ inclusive

822145 - 822148 ✓ inclusive

822151 - 822155 ✓ inclusive

822158 - 822159 ✓ inclusive

**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

DATE OF ISSUE  
JULY 14 1987

SAULT STE MARIE  
MINING RECORDERS OFFICE

**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**

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

RESERVATION

CANCELLED

SAND & GRAVEL

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 1913 VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970 CHAP. 300, SEC. 43 SUBSEC. 1

SCALE 1 INCH = 40 CHAINS

0 1000 2000 4000 8000

0 200 400 800 1600

1:100,000 1:250,000 1:500,000

AREA

**CAMP LAKE**

M.R. ADMINISTRATIVE DISTRICT

**WAWA**

MINING DIVISION

**SAULT STE. MARIE**

LAND TITLES / REGISTRY DIVISION

**THUNDER BAY**

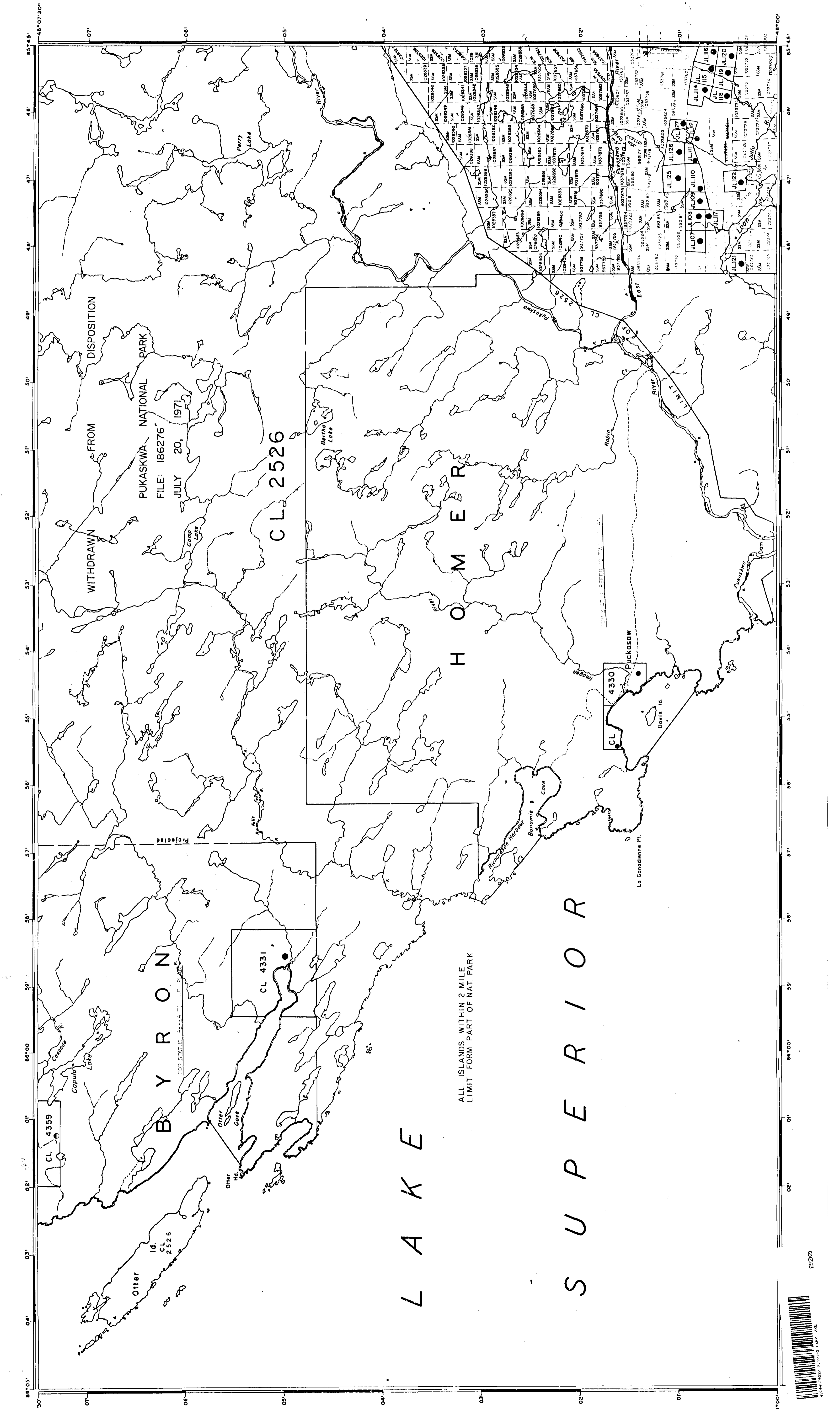
Ministry of Natural Resources and Mines

Ministry of Northern Development and Mines

Ontario

011 FEBRUARY, 1987

REV. G-3764





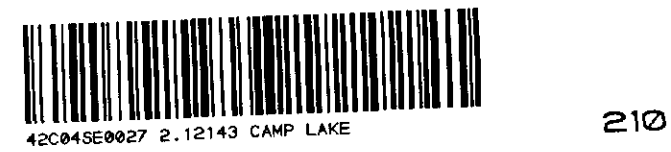
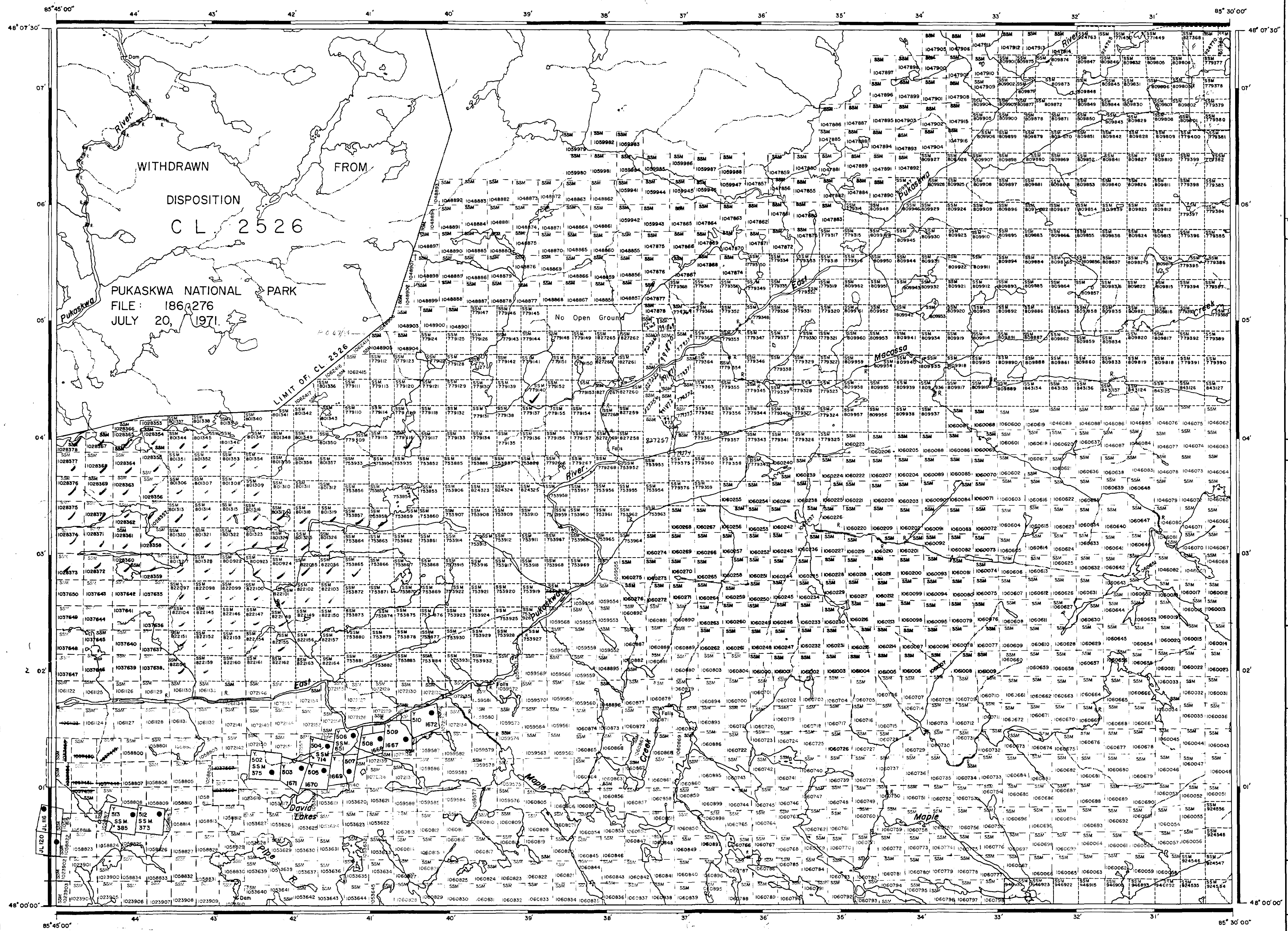
REFERENCES

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

REFERENCES



210

MAR 25

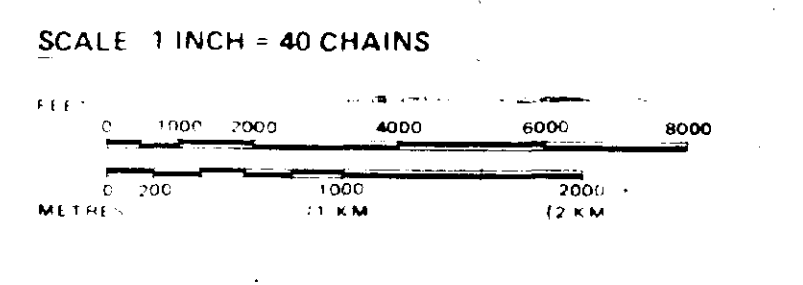
LEGEND

- 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 FLOODING
- FLOODING OR FLOOD RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATION
- ORIGINAL SHORE LINE
- MARSH OR MUSHEG
- 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	○
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

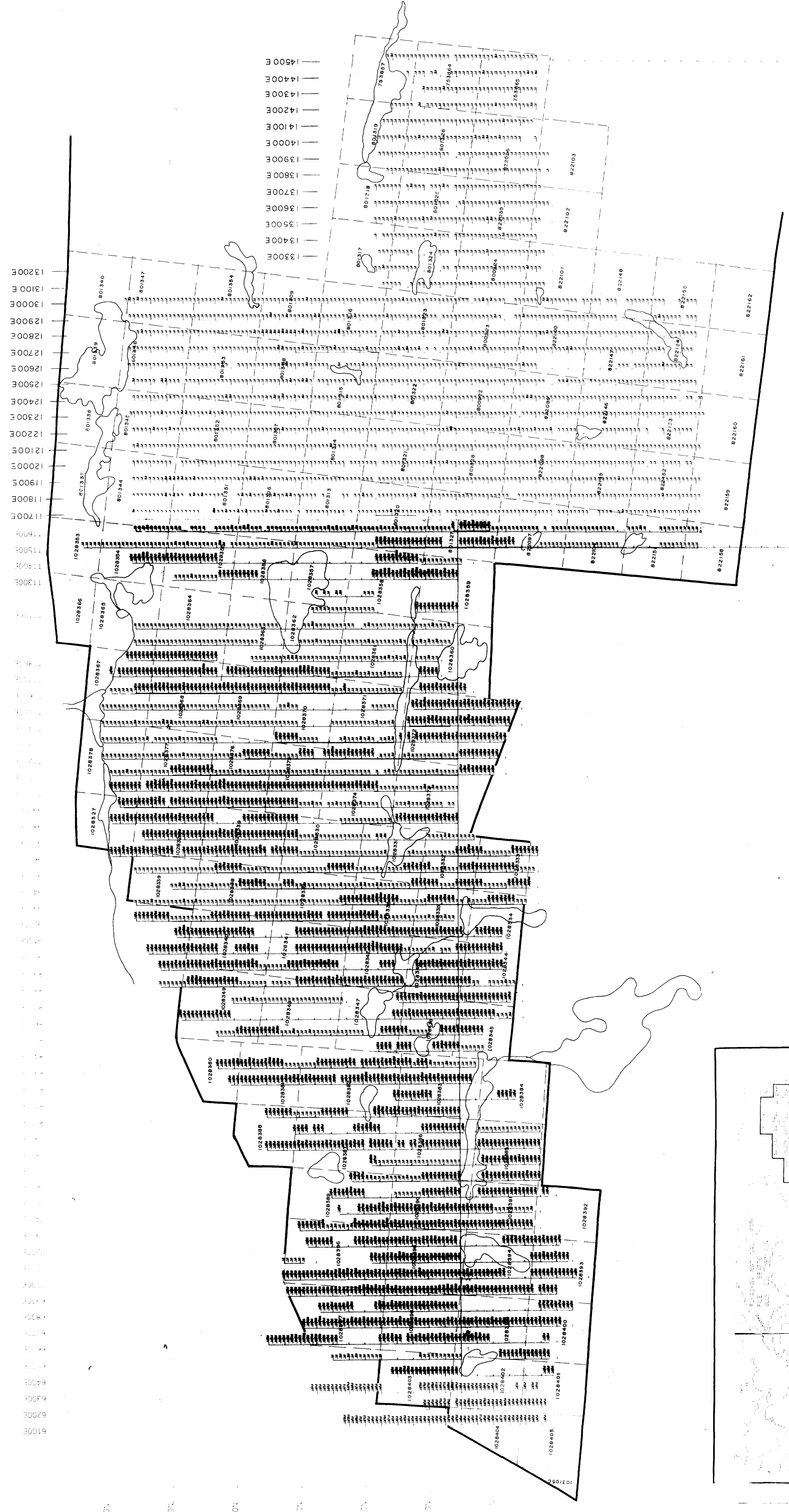
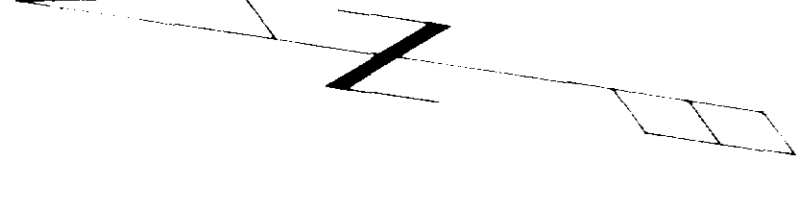
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1910 CHAP. 380, SEC. 63 SUBSEC. 1.



AREA  
**DAVID LAKE**  
M.N.R. ADMINISTRATIVE DISTRICT  
**WAWA**  
MINING DIVISION  
**SAULT STE. MARIE**  
LAND TITLES / REGISTRY DIVISION  
**THUNDER BAY**

Ontario Ministry of Natural Resources  
Ministry of Northern Development and Mines





LEGEND  
 Au-ppb  
 Au-ppb/As-ppm

2.12.13

**GEOCHEMICAL SURVEY**  
 au/ppb as/ppm

PROJECT: PUKASKWA  
 Surveyed by: [Signature] Date: JAN. 1988  
 Drawn by: L.B. Scale: 1:10000  
 NGS  
 10/0/0

**noranda**  
 NORANDA CORPORATION CO. LTD. - MINNESOTA

