



Final Submission - Summary Technical Report

Date: Jan 25, 1991

Name: Peter Harvey

Individuals who applied for assistance for this Project:

- 1 | Ed Ludwig
- 2 | Walter Ludwig
- 3 | Peter Harvey

Location and Access:

Porcupine Mining Division
English Township
Refer to Maps.

Changes to Proposed Project:

Only 6 of the original 14 holes proposed on the property were drilled because applicant Walter Ludwig was not successful in obtaining a grant, which reduced the budget by 33 1/3%.

Geology:

The property is underlain by northeast striking Deloro Group andesitic to basaltic flows and felsic metavolcanic rocks. Numerous mafic to felsic intrusives cut the metavolcanics and related gabbro units.

The gold mineralization is in schistose assemblages associated with shears and intrusive contacts. Sulphide mineralization is associated with quartz and/or carbonate veining within the shear zones and is comprised of pyrite, pyrrhotite and chalcopyrite. Tenor of the gold mineralization is apparently closely related to the amount of sulphide present, giving good visual indication of potentially economic intersections.

Work Done:

4.1 Km of grid lines were cut to facilitate locational control for the drilling and to tie-in drill collar locations from the previous work on the property.

Work Done:

Six diamond drill holes totalling 1865 feet of ADBGM core were drilled on the property.

The drill core was then logged, the core split and assayed, and sections and plan maps plotted.

Results and Recommendations:

The drill holes were successful in intersecting the chlorite schist unit which is host to the gold mineralization. Where intersected, the unit was variably altered, quartz-veined and mineralized.

Based on initial visual results, the work confirmed the orientation, plunge and extension of the gold mineralization on the Muskasenda property. Assays are pending.

Additional work is recommended. The holes initially proposed, but not drilled on this program should be drilled to further test the mineralization, and to establish a small reserve base.

GR 231
T-3186 :T-52

GR 231 pub 1984.

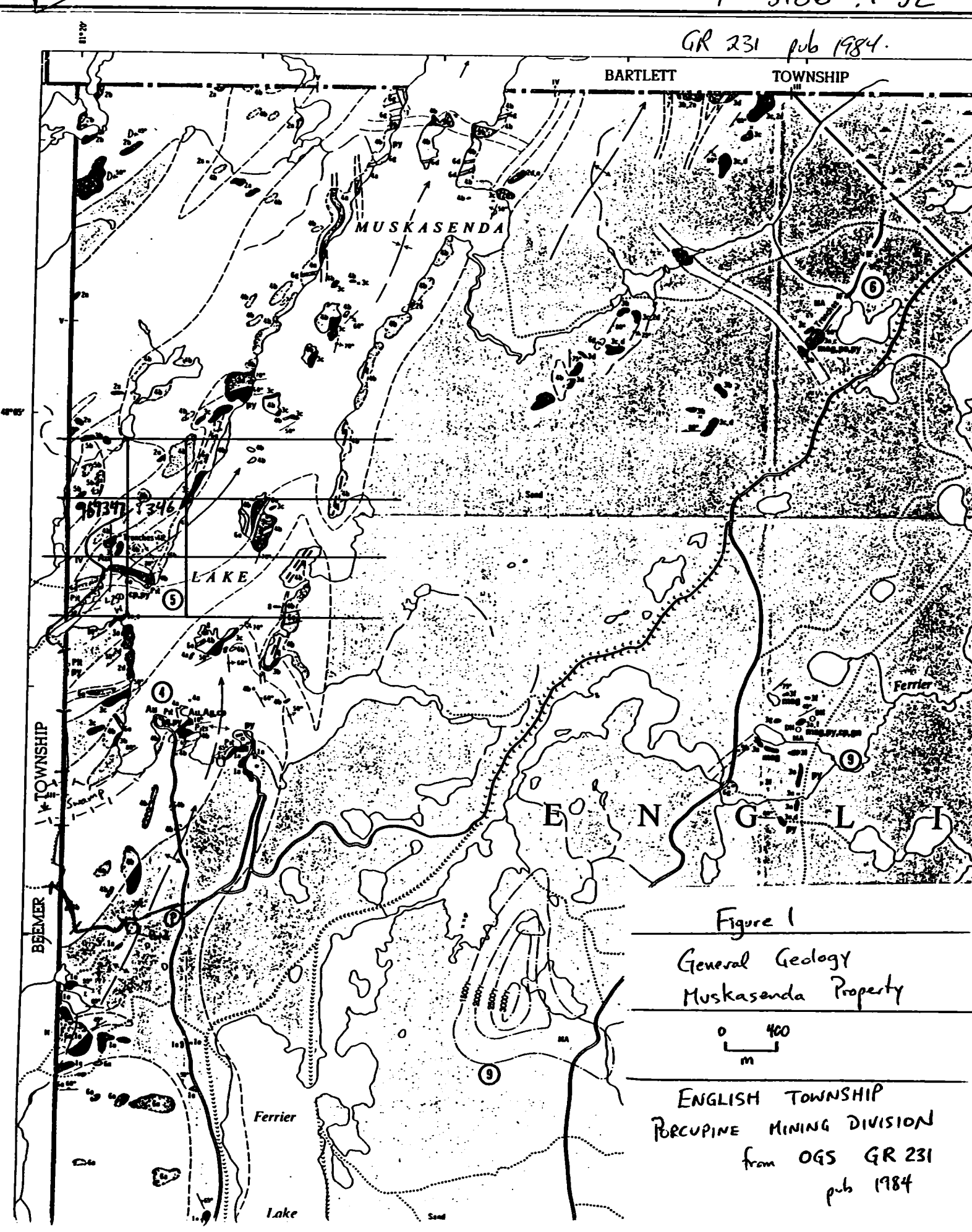
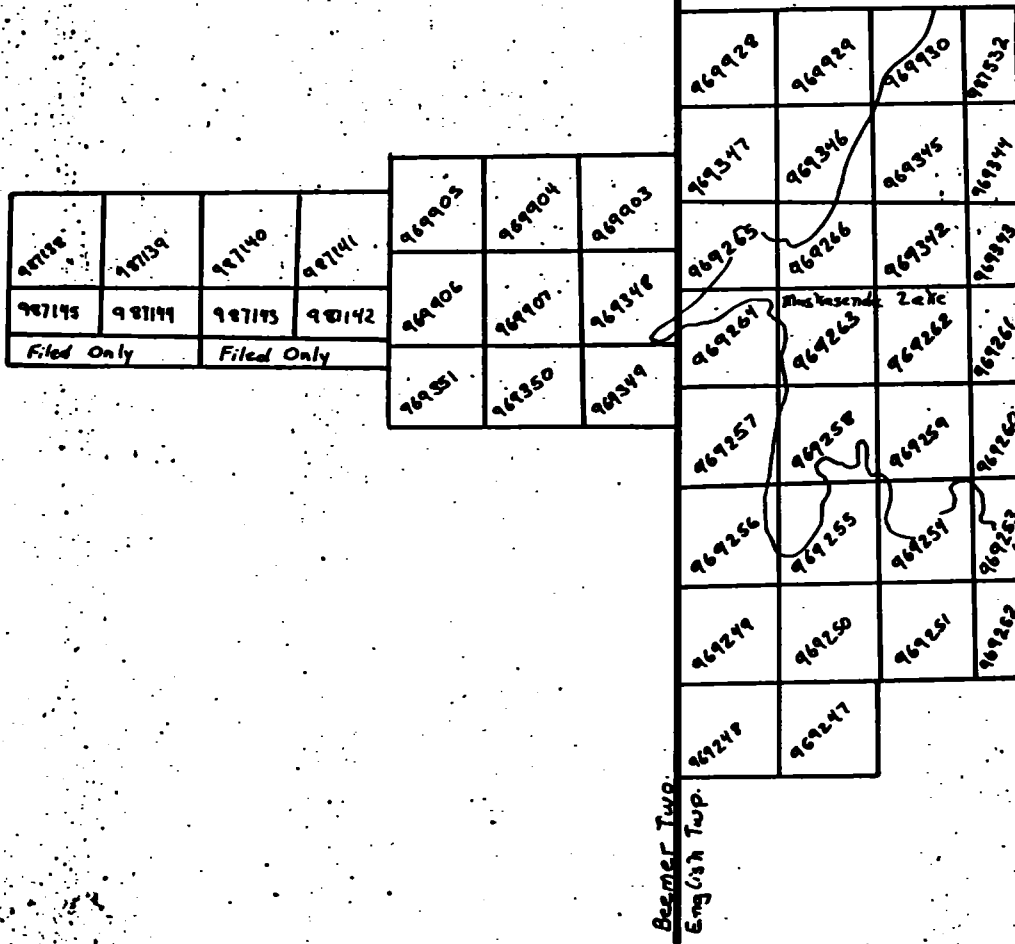


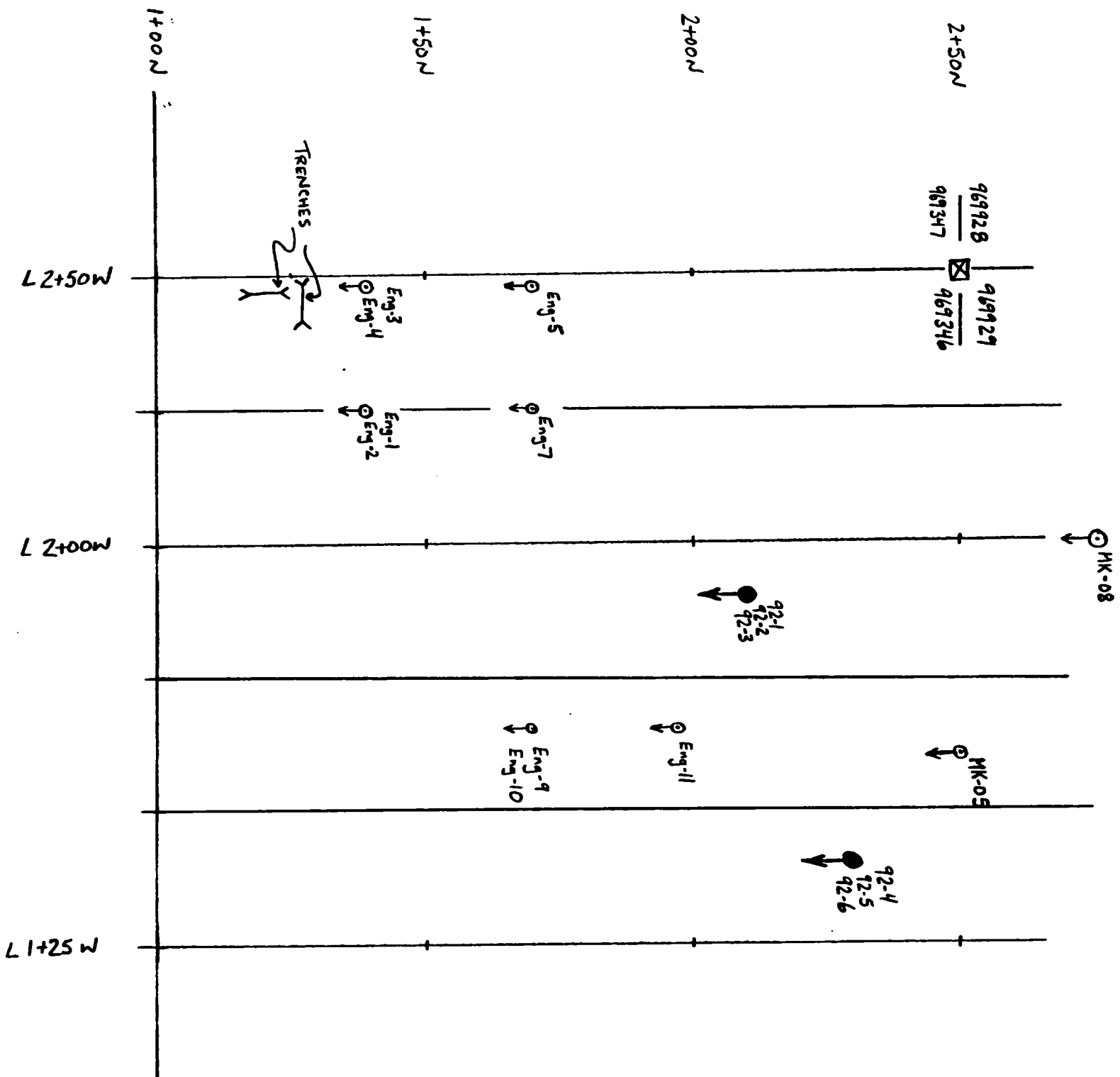
Figure 1
General Geology
Muskasenda Property

0 400
m

ENGLISH TOWNSHIP
PORCUPINE MINING DIVISION
from OGS GR 231
pub 1984



HSK MINERALS LTD.
 CLAIM GROUP MAP
 ENGLISH-BEEMER TOWNSHIPS
 MARCH 1988
 1" = 1/2 MILE
 FIGURE 2



N
↑

0 ————— 50
metres

MUSKASENDA PROPERTY
1992 DRILLING
PLAN MAP
AND
COLLAR LOCATIONS
FROM
PREVIOUS WORK

JAN 92

COLLARS
2+10N

S Surface

N



QUARTZ-FELDSAR
PORPHYRY

QUARTZ-GABBRO

QUARTZ-FELDSAR
PORPHYRY

CHLORITE-CARBONATE
SCHIST

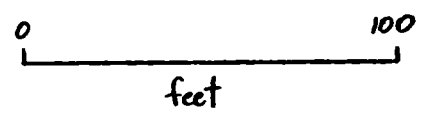
QUARTZ-GABBRO

92-1
-45°
275'

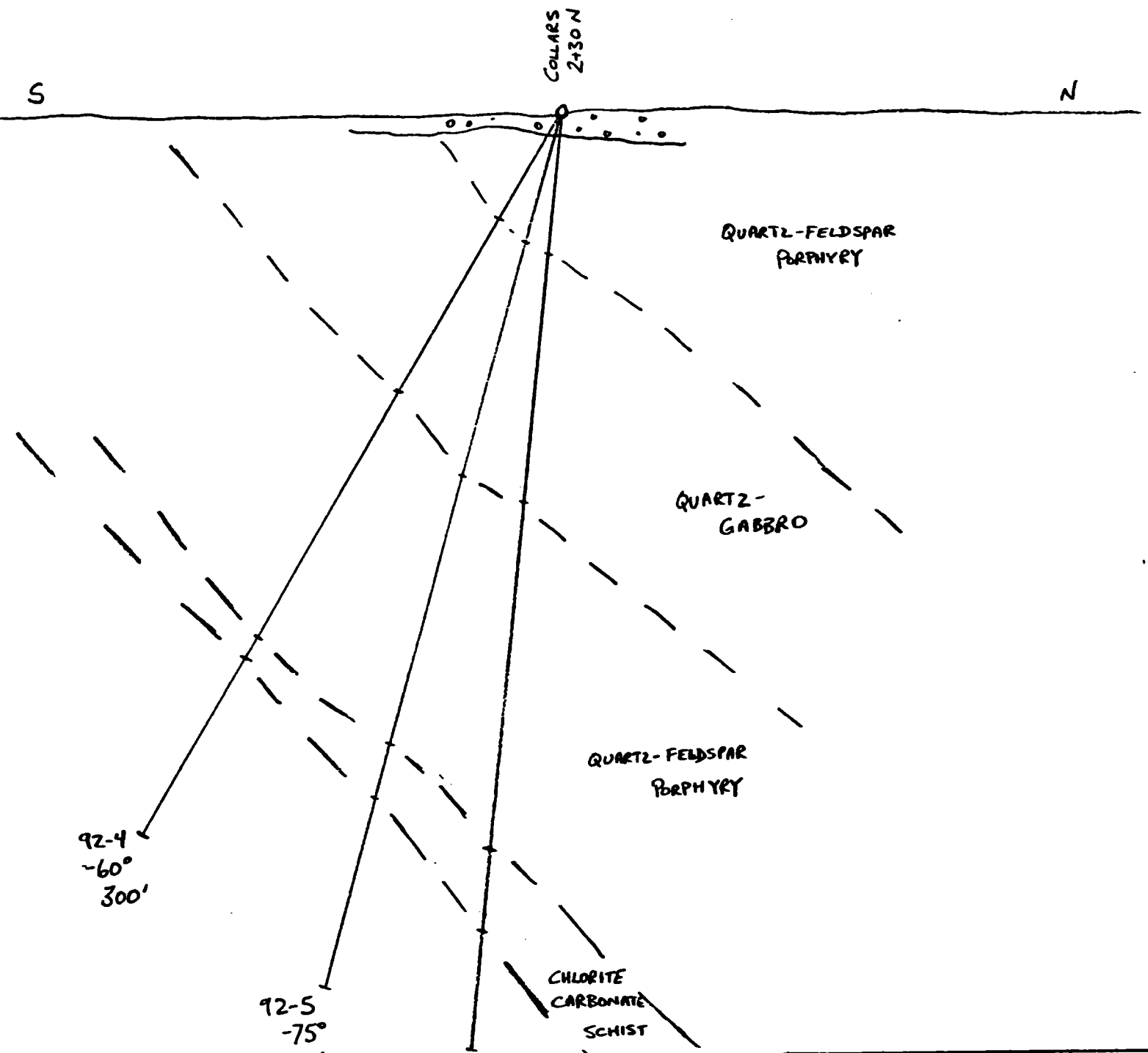
92-2
-60°
300'

92-3
-75°
325'

MUSKASENDA PROPERTY
1992 DRILLING
SECTION 'A'
LINE 1+90W
(LOOKING WEST)



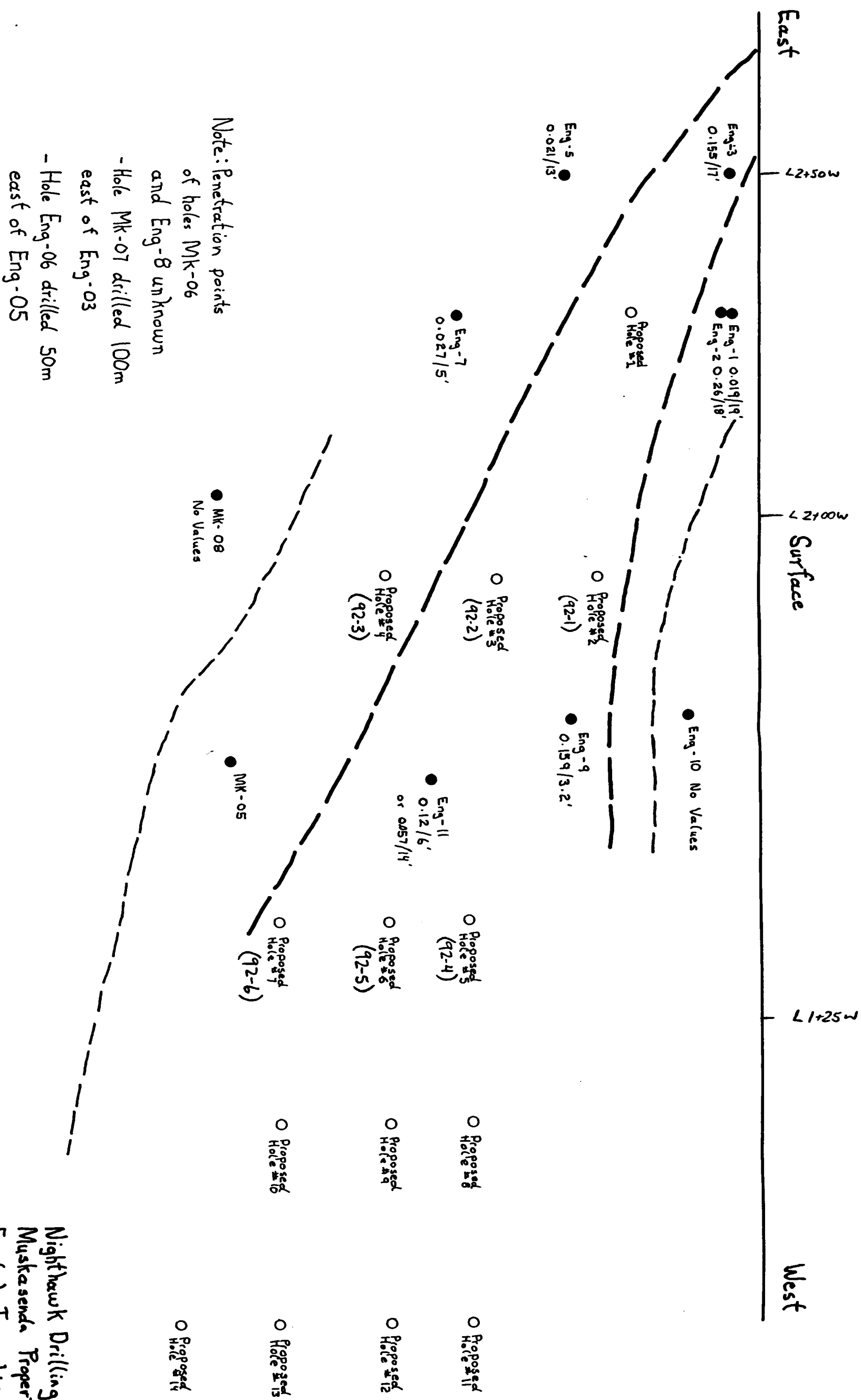
JAN. 1992



MUSKASENDA PROPERTY
 1992 DRILLING
 SECTION B
 LINE 1+40W
 (LOOKING WEST)

0 100
 feet

JAN. 1992



Nighthawk Drilling
 Muskaenda Property
 English Township
 Longitudinal Projection
 Showing '8'
 March 1991
 1" = 50'

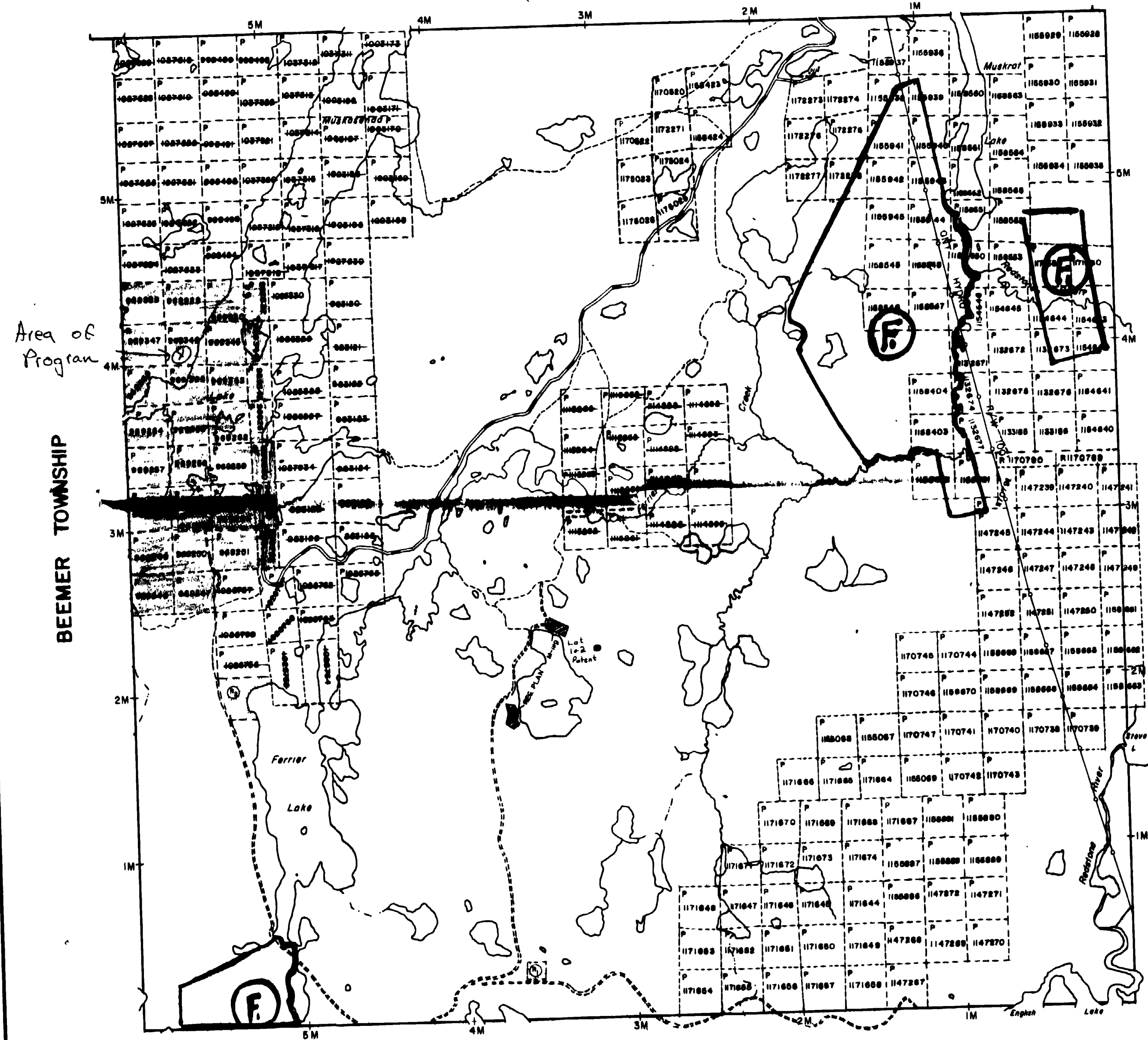
REFERENCES

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
SEC 34/80	W 18/77	28/02/77	S.R.O.	83582
SEC 34/80	W 19/78	10/04/78	S.R.O.	18843
SEC 34/80	W 30/78	08/06/78	S.R.O.	18219

BARTLETT TOWNSHIP



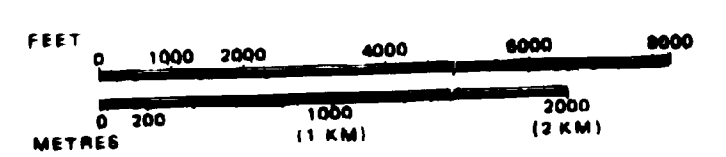
LEGEND

- 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	○
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

SCALE: 1 INCH = 40 CHAINS



THIS TWP IS SUBJECT TO FOREST ACTIVITIES IN 1990
FURTHER INFORMATION AVAILABLE ON FILE

TOWNSHIP

ENGLISH

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY



Date SEPTEMBER 1990

Number
G-3938

ACTIVATED SEPT 20/90
SR

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

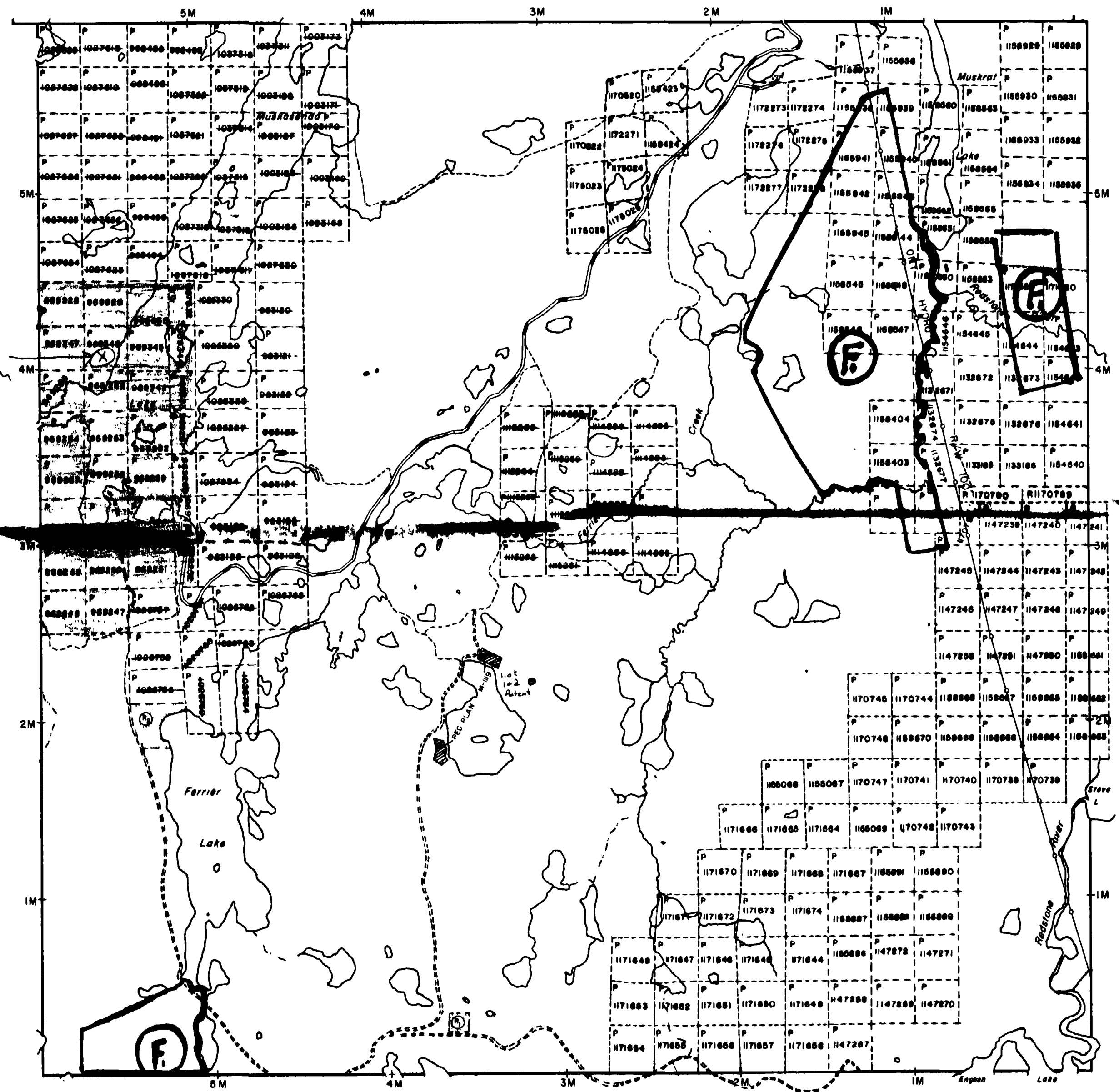


REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

Description	Order No.	Date	Disposition	File
SEC 36/80	W 16 / 77	28/08/77	S.R.O.	83582
SEC 36/80	W 16 / 78	10/04/78	S.R.O.	188543
SEC 36/80	W 30 / 78	08/06/78	S.R.O.	182319

BARTLETT TOWNSHIP

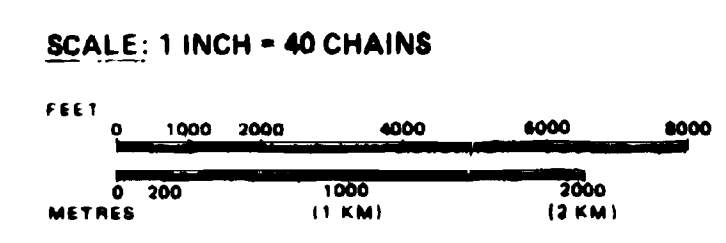


LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
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- LOTS, MINING CLAIMS, PARCELS, ETC.
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DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
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" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	□
" MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▲
ORDER-IN-COUNCIL	OC
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○



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ENGLISH
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
SUDBURY

MAR 5 1991

Ministry of Natural Resources Ontario
Ministry of Northern Development and Mines

Date: SEPTEMBER 1990
ACTIVATED: SEPT 28/90
S.R.
Number: **G-3938**

SEMPLÉ TOWNSHIP

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