

41P12SW0300 2.10191 CHESTER

010

GEOLOGICAL REPORT
ON
BLUE FALCON MINES LTD.
AND
KIDD RESOURCES LTD.
PROPERTY HOLDINGS
IN
EAST CENTRAL YEO
AND
WEST CENTRAL CHESTER TWP.
SAWPETER LAKE PROJECT

by: Neil Novak, B.Sc.
F.G.A.C.

RECEIVED
JUL - 6 1987
MINING LANDS SECTION

INTRODUCTION

A program consisting of linecutting and geological mapping was carried out over this property during the month of May 1987. A baseline was cut on east-west direction across the property from a point on the claim line between the number one post of claims P-805842 located in Chester township and the number one post of P-805841 also located in Chester township. The lines are on 400 foot spacing with station every 100 feet, in the north and south directions.

PROPERTY DESCRIPTION

This property consists of 22 claims in Yeo township and 14 claims in Chester township forming a contiguous block of 36 claims comprising some 1,440 acres.

(See Fig. 1). The claim listing is as follows:

Chester township	805840 to 805853 inclusive
Yeo township	538522
	539531 and 539532
	805854 to 805857 inclusive
	807166 to 807169 inclusive
	831876 and 83187
	957263 to 957269 inclusive

These claims are currently in good standing with the Provincial Mining Recorder.

LOCATION AND ACCESS

The property is located in west-central Chester township and east central Yeo township, located near the Village of Gogama, Ontario.

Access to the property is easily attained by Chester Road and several unnamed lumbering roads branching north from Chester Road.

Personnel involved in the linecutting and surveys travelled to the worksite daily by motor vehicle.

HISTORY OF EXPLORATION

The general area has been prospected since about 1900 (Siragusa, G.M., 1981).

A 30-foot shaft was sunk in 1912 by P. Moore about 1300 metres east of Moore Lake. Another shaft of unknown depth was sunk before 1983 south of Shist Lake on a property then held by Porcupine-Hecla Mining Company Limited.

Gomak Mines Limited was incorporated in 1933 to take over a 17-claim property in Chester Township and later expanded the property to 24 claims. Surface work and 5,000 feet of diamond drilling were carried out and the sinking of a two-compartment shaft inclined at 65 degrees was begun on claim S.20009 in 1935. In 1936, a 35-ton mill was erected and operated intermittently from May to December. When operations ceased in 1937, the workings consisted of an 85-foot shaft with 215 feet of lateral development and 68 feet of raising on the 65-foot level.

Strathmore Gold Mines sank a two-compartment shaft 125 feet on an incline of 65 degrees in 1937 on claim S.21613 and established a level at a depth of 100 feet from which 286 feet of lateral development was carried out. Both claim S.20009 and S.21613 are currently held by Murgold Resources Incorporated. Murgold is presently engaged in active exploration on these and other claims in the area.

Young-Shannon Gold Mines Limited sank a 125-foot vertical shaft. Young-Shannon also sank an inclined, two-compartment shaft to a depth of 200 feet on claim S.01171 in 1936 and completed 172 feet of lateral development at the 100-foot level. A 20-ton mill was installed and 160 feet of drifting completed from the 200-foot level in 1937.

GENERAL GEOLOGY

The area is crossed by two broadly parallel Early Precambrian (Archean) belts of locally pillowed tholeiitic basalt trending west-northwest and dipping subvertically (Siragusa, G.M., 1981). The southern basaltic belt is exposed south of Yeo Lake in Yeo township and in local areas in the eastern part of this township.

Close to the western boundary of Chester Township, this belt merges with rocks of gabbroic to dioritic composition and with agmatitic migmatite. The gabbroic and dioritic rocks generally are texturally homogeneous and are recrystallized metamorphic derivatives of former basalt. Local conditions of incomplete recrystallization are indicated by the presence of basaltic domains of relatively low metamorphic rank within these rocks.

Central Chester Township is underlain by granitic rocks which, in the central part of the township, are relatively free from metavolcanic xenoliths and/or inclusions, and are markedly leucocratic in character. These rocks are dominantly trondhjemitic in composition and form a broadly oval, west-trending body which intrudes the core of the synclinally folded metavolcanics and extends westward into the Ash Lake area of Yeo Township.

This intrusive body is bordered to the south by hornblende diorite, gabbro and migmatite which underlie southern Chester township and extend to the south. To the north, the trondhjemitic body is in contact with pyroclastic metavolcanics.

PROPERTY GEOLOGY

The entire property has been geologically mapped at a scale of 1" to 200' and is presented as Plate 1 (East) and Plate 2 (West). This area covers the assimilation zone (agmatitic migmatites) mentioned by Siragusa in his regional geological mapping of the area.

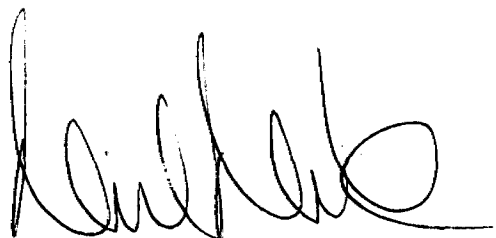
The eastern portion of the map area south of Clam Lake consists of primarily unit 1a being a trondhjemite - coarse grained granodiorite. Numerous north by northwest trending diabase dikes crosscut the trondhjemite mass, while northwest trending Feldspar porphyry (plugs) are scattered throughout. The western portion of Plate 1 (East) is occupied by unit 2a being a hornblende diorite, the contact with unit 1a is gradational. Several small shear zones were found in the vicinity of 10+00 west at 200' south. Chalcopyrite and pyrite are evident in three old trenches (circa 1930) but the sulphide filled shear zones appear quite tight. Sulphides are also evident in association with a porphyritic unit location 20+00W and 2+00N, near the juncture of two old tote roads. A third sulphide occurrence was noted on the Yeo-Chester border, on line 48+00W at 6+00N, this is also attributable to a quartz-feldspar porphyry plug.

The western sheet area (Plate 2 West) is primarily underlain by rock unit 2a (hornblende diorite), interfingering with unit 1a (trondhjemite) and unit 5 (diorite) to the northeast. The extreme southwest limit of the map area is covered by massive tholeiitic volcanics, primarily flows. Numerous small outcroppings of diabase in the western portion of the map area indicate a discontinuous diabase dike, while a very large diabase dike is evident along the western border of the property, having several offshoots of an olivine rich phase. Numerous shears are inferred by topographic depressions trending in a northwesterly direction. Sulphides are present at several locations throughout the property. The most promising being at location 52+00W between 26+00N and 32+00N. Examinations of four trenches indicate the presence of pyrite and chalcopyrite. One other rather interesting sulphide occurrence is located at location 80+00W at 30+00N. This showing consists of numerous quartz veins 3" - 4" wide with abundant sulphides including pyrite and a minor amount of arsenopyrite.

CONCLUSIONS

The map area is one of complex migmatitic geology and consequently has limited room for the development of major sulphide concentrations. Smaller concentrations may occur in this environment but will almost always be associated with shear zones. Hence the numerous shear zones should be investigated and sampled whenever sulphides are present. Gold is quite often intimately associated with the sulphides and should be assayed for whenever zones of any extent are located. The two areas where sulphides have been investigated by trenching should be re-evaluated, as well as the area in the vicinity of line 80+00W and 30+00N. The area around claim 538522 should be investigated more thoroughly as this area is occupied by intermediate volcanics in contact with a diorite mass which as yet remains inadequately mapped, and sampled.

This report is respectfully submitted.

A handwritten signature in black ink, appearing to read 'Neil Novak', written in a cursive style.

Neil Novak, B.Sc., F.G.A.C.

REFERENCE

Siragusa, G.M.

1981: Precambrian Geology of Chester and Yeo Townships,
and parts of Neville and Potier Townships, Sudbury
District; Ontario, Geological Survey Preliminary
Map P.2449, Geological Series, Scale 1:15,840 or
1 inch to 3/4 mile. Geology 1980.

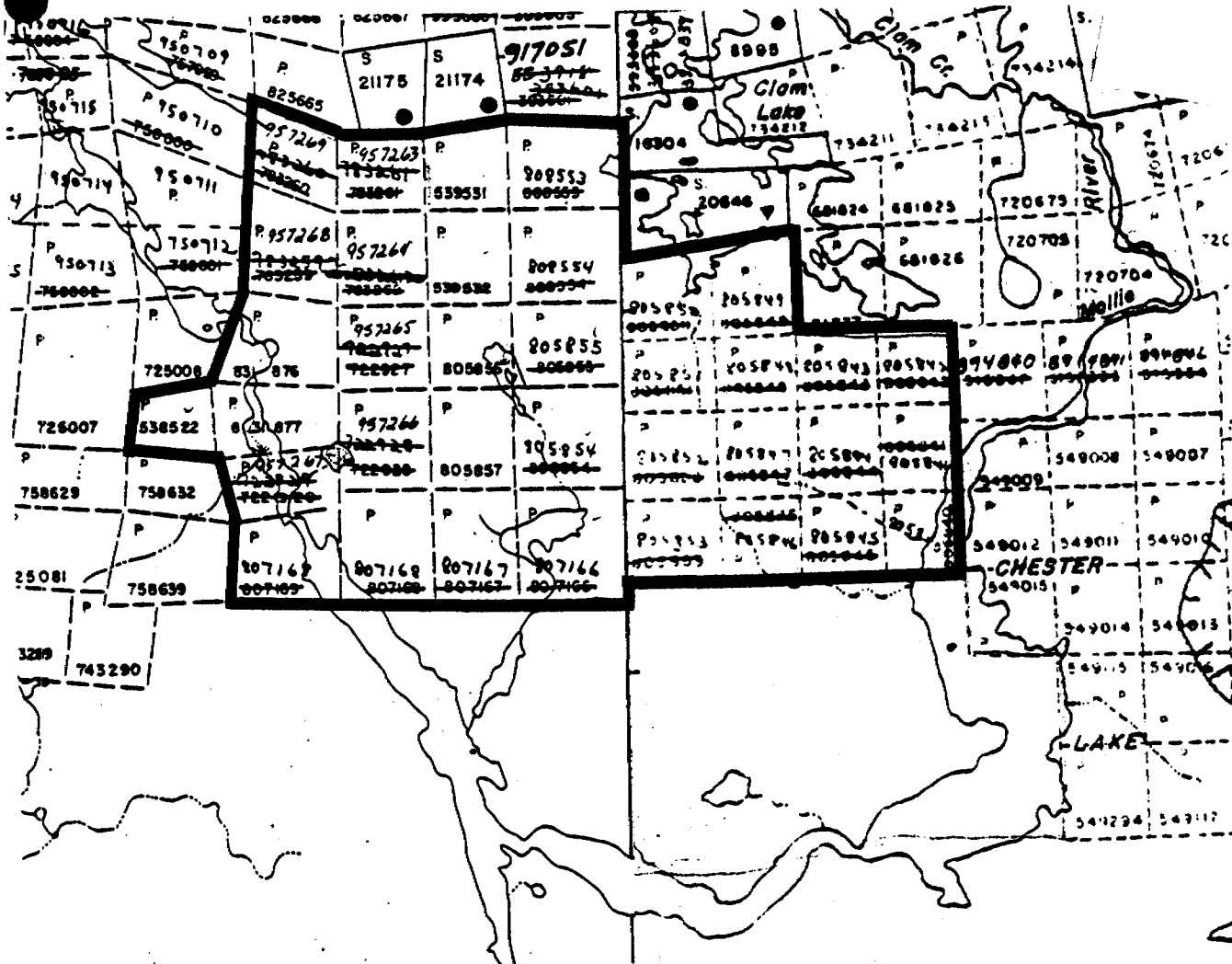
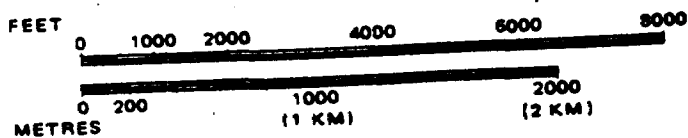
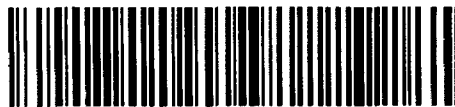


Figure 1
 Property Location Map
 Yeo and Chester twps.

SCALE: 1 INCH = 40 CHAINS





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.

Type of Survey(s) Geological
Township or Area Chester and Yeo
Claim Holder(s) BLUE FALLON MINES AND KIDD RESOURCES INC.
Survey Company NOMINEY LTD
Author of Report NEIL D. NOVAK
Address of Author 1121-6599 GLENERIN DR. MISSISSAUGA
Covering Dates of Survey MAY 1 TO MAY 30 1987
Total Miles of Line Cut 29.2

MINING CLAIMS TRAVERSED
List numerically
Table listing claim numbers: P-805840, P-807167, 805841, 807168, 805842, 807169, 805843, 831876, 805844, 831877, 805845, 957263, 805846, 957264, 805847, 957265, 805848, 957266, 805849, 957267, 805850, 957268, 805851, 957269, 805852, 805853, 538522, 538523, 538524, 805854, 805856, 805857, 807166, TOTAL CLAIMS 31

SPECIAL PROVISIONS CREDITS REQUESTED
Table with columns: SPECIAL PROVISIONS CREDITS REQUESTED, DAYS per claim
Geophysical: -Electromagnetic, -Magnetometer, -Radiometric, -Other
Geological: 40
Geochemical

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: SIGNATURE: 2.4227
Author of Report or Agent

Res. Geol. Qualifications

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____
Station interval _____ Line spacing _____
Profile scale _____
Contour interval _____

MAGNETIC

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

ELECTROMAGNETIC

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)
Parameters measured _____

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

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 _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



Ontario

Ministry of
Northern Development
and Mines

August 14, 1987

Your File: 141
Our File: 2.10191

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated July 29, 1987
Geological Survey on Mining Claims
P 538522, et al, in Chester and Yeo
Townships

The assessment work credits, as listed with the above-mentioned
Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and
so indicate on your records.

Yours sincerely,

R.M. Charnesky (Mrs.)
Acting Manager
Mining Lands Section
Mineral Development and Lands Branch
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

AB
AB/mc
cc: Blue Falcon Mines Ltd
Kidd Resources Ltd
20 Advance Blvd
Brampton, Ontario
L6T 4R7
Attention: Neil D. Novak

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Timmins, Ontario

Encl.



Recorded Holder
BLUE FALCON MINES LTD/KIDD RESOURCES LTD

Township or Area
CHESTER AND YEO TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column <p style="text-align: center;">40</p> Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	P 805841 to 44 inclusive 805847 to 52 inclusive 805854 to 57 inclusive 807166 to 69 inclusive 831876 - 77 957264 to 68 inclusive

Special credits under section 77 (16) for the following mining claims

<u>20 DAYS</u>	<u>10 DAYS</u>
P 538522	P 805845 - 46 957263 957269

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

P 805840
805853

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

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

Disposition	Order No.	Date	Disposition	File

SAND AND GRAVEL

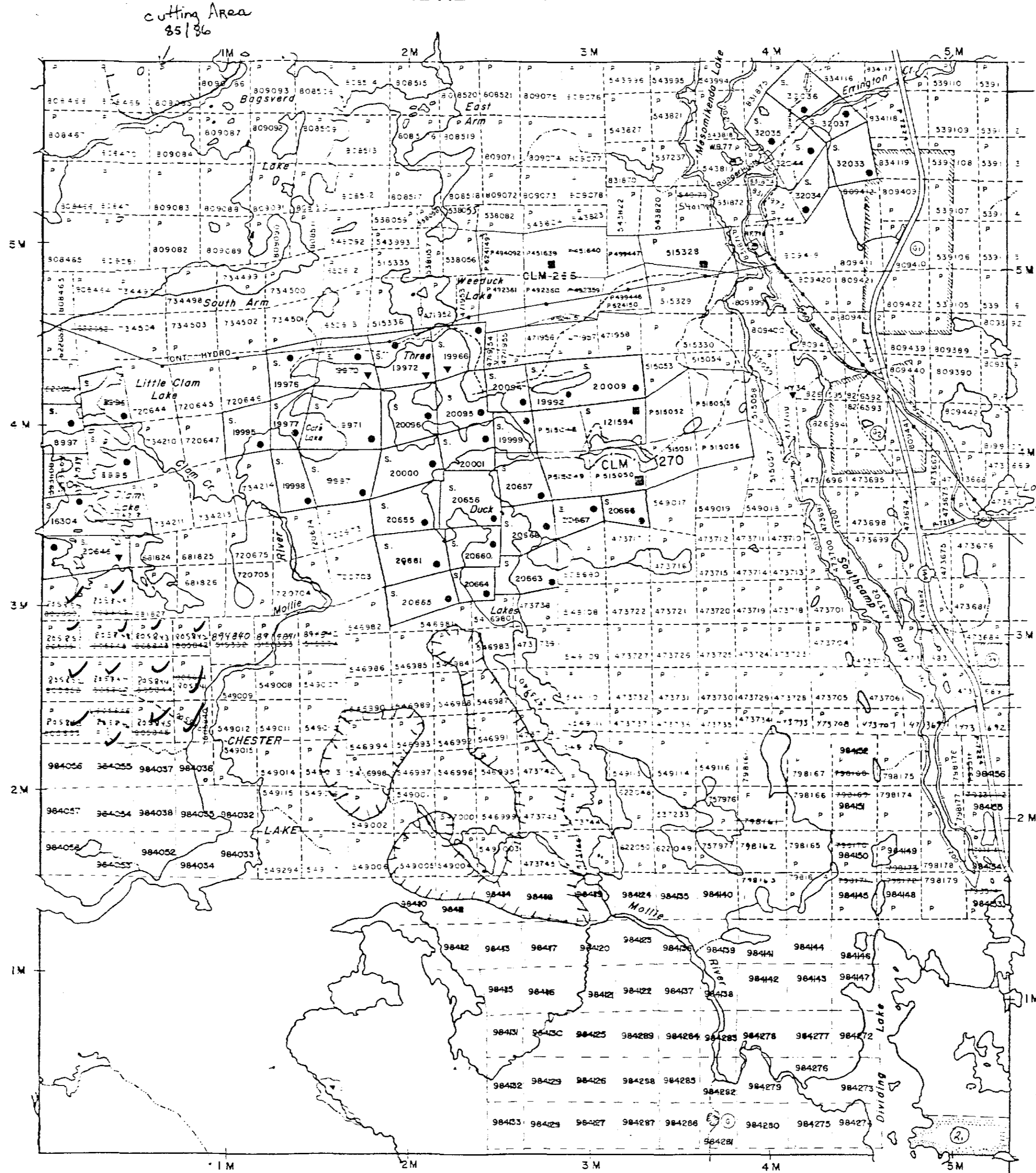
- (1) CLARIFY PERMIT
- (2) W.P. No 1349
- (3) W.P. GRAVEL PIT No 1649
- (4) W.P. GRAVEL PIT No 1385

NOTES

FLOOD HEIGHTS TO CONTOUR 500 RESERVED TO
ONT. HYDRO. LOC. HY 36, L.O. 7542, P.L. 582.

Forestry operations
cutting and site
preparation 85-86

NEVILLE TP.



YEO TP.

BENNEVIS TP.

INVERGARRY TP.

LEGEND

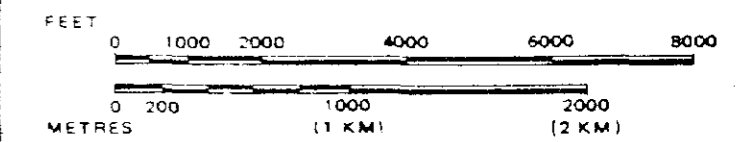
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS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

DISPOSITION OF CROWN LANDS

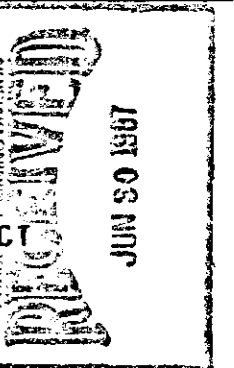
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, RESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP
CHESTER
M.N.R. ADMINISTRATIVE DISTRICT
GOGAMA
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
SUDBURY



Ministry of Land
Natural Resources Management
Ontario Branch

Date MARCH, 1985 Number
Rec'd Am. 4185 checked L.H. **G-3223**



41P125W0300 2.10191 CHESTER

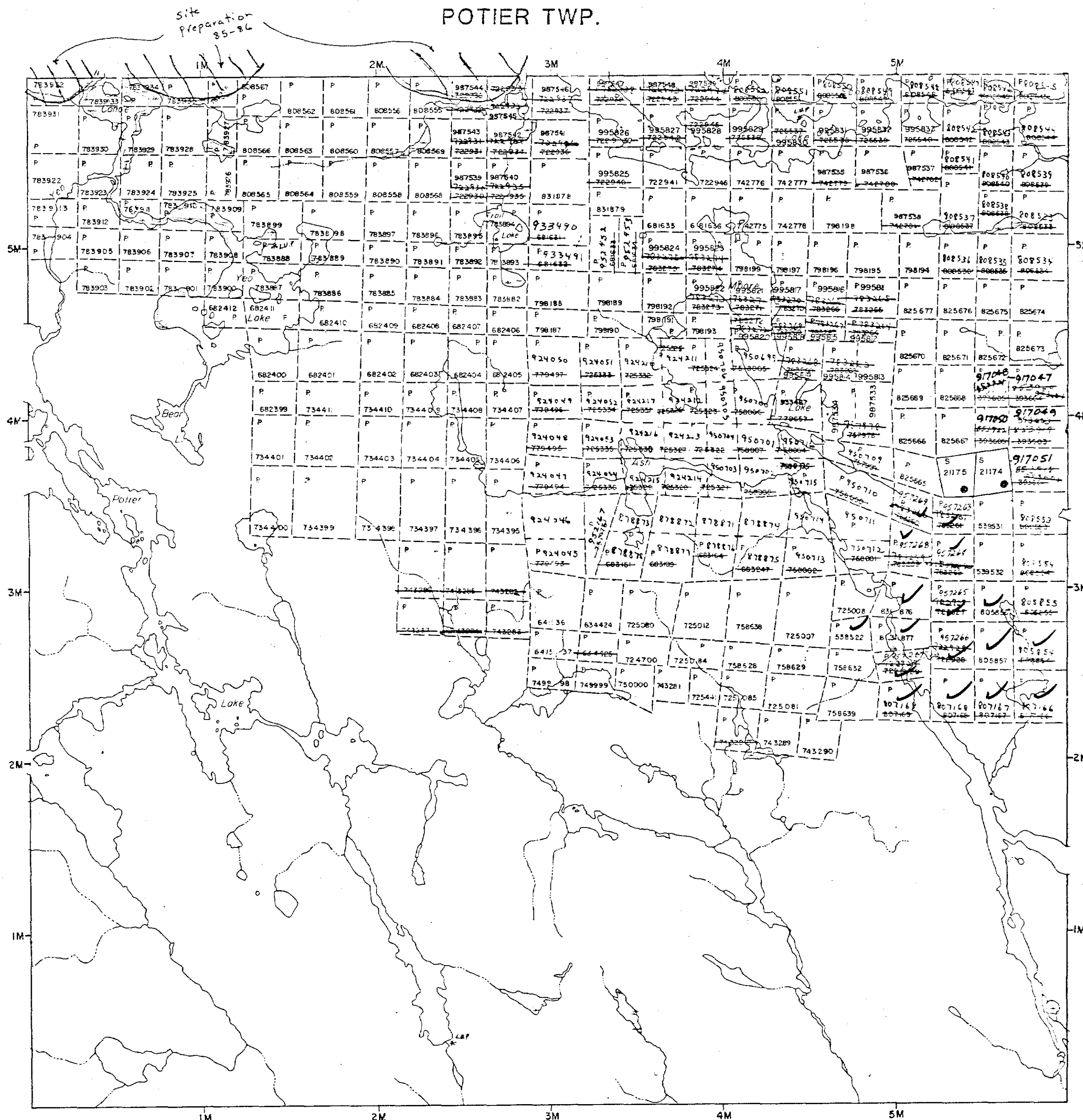
REFERENCES

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

POTIER TWP.



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
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- 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	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CAP. 350, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 2000 (2 KM)

TOWNSHIP

YEO JUN 9 1987

M.N.R. ADMINISTRATIVE DISTRICT

GOGAMA

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY

Ministry of Land Natural Resources Management Branch

Date OCTOBER, 1983 Number **G-2481**



LEGEND

**PRECAMBRIAN
MIDDLE TO LATE PRECAMBRIAN (PROTEROZOIC)
MAFIC INTRUSIVE ROCKS**

- 6 Diabase dike
- 6a Olivine diabase dike

INTRUSIVE CONTACT

- 5 Diorite plugs/sills

INTRUSIVE CONTACT

**EARLY PRECAMBRIAN (ARCHEAN)
FELSIC INTRUSIVE & METAMORPHIC ROCKS
BATHOLITHIC INTRUSIVE ROCKS**

- 1 Unabraded granitic rocks
- 1a Trondhjemite, gneiss/diorite
- 1b Quartz monzonite, granodiorite
- 1c Containing xenoliths of "gabbro"

INTRUSIVE CONTACT

- 2 Migmatitic rocks

INTRUSIVE CONTACT

SUBVOLCANIC FELSIC INTRUSIVE ROCKS

- 4 Unabraded
- 4a Feldspar porphyry

INTRUSIVE CONTACT

**METAVOLCANICS & METASEDIMENTS
MAFIC METAVOLCANICS**

- 3 Unabraded
- 3a Metabasaltic flow
- 3b Felsic basaltic flow
- 3c Cut by granitic veins
- 3d Containing quartz veins/or "pods"

SYMBOLS

- 50° Bedding
- Sheared zone
- Major fault
- Minor fault
- Outcrop area
- Inferred geological boundary
- Swampy area
- Wooded area
- Scarified area
- Township boundary
- Claim post with claim line
- direction and claim number
- Lake or near shore line
- Dir road
- Trench and pit
- Vein with width
- 3.5"
- Unabraded sulphide mineralization
- Chalcopyrite mineralization
- Pyrite mineralization
- Quartz



161012

PLATE 2 (WEST)

KIDD RESOURCES LTD.

SAWPETER LAKE PROJECT, YEO TWP.

PORCUPINE MINING DIVISION

SURFACE GEOLOGY MAP

SCALE - 1" = 200'

Drawn by M. WUNDER. Mapped by M. ALEXANDER, June, 1987

