



42A10NE0068 2.3102 WALKER

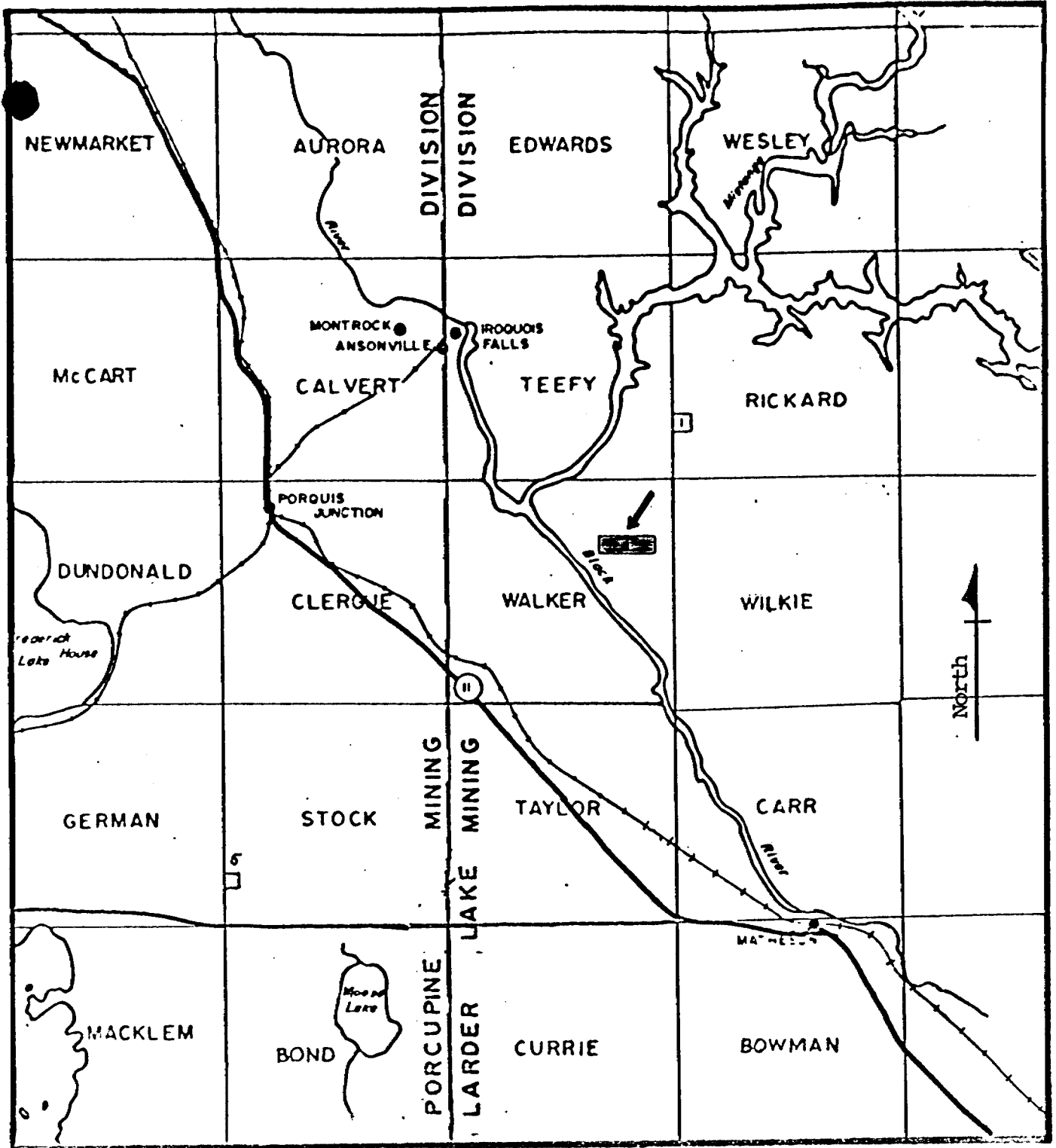
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GEOPHYSICAL REPORT
on
a
MAGNETIC SURVEY
on
WALKER No. 1 GROUP
Walker Township, Ontario

RECEIVED
NOV 16 1979
MINING LANDS SECTION

Timmins, Ontario
November 13, 1979

H. Z. Tittley



INDEX MAP

Scale, 1:253,440

INTRODUCTION

During the winter and summer of 1979, a grid of lines was established and later surveyed with a magnetometer on a group of six (6) claims in Walker Township situated between Matheson and Iroquois Falls in northeastern Ontario.

A magnetic body, extending for half a mile, was completely outlined as well as the likely presence of a diabase dyke.

PROPERTY, LOCATION and ACCESS

The portion of the Walker No. 1 Group, covered by the survey, contains 6 contiguous mining claims, numbered L.517099 to L.517101 and L.522222 to L.522224, all inclusive, that occupy the NE, SE and the NW and SW parts of the south half of lots 4 and 3 in the fifth concession of Walker Township. They were staked for Hollinger Mines Limited during 1978.

This Township lies midway between Matheson and Iroquois Falls in the district of Cochrane and the Larder Lake Mining Division, province of Ontario.

Access to the property is via rural roads and the Black River.

GENERAL GEOLOGY

Pleistocene clays mantle the entire property to depths in excess of 30 metres as encountered in drill holes.

From published maps, the area is shown to be underlain by mafic to felsic volcanic sequences intruded by conformable

mafic to ultramafic units and cross-cutting north trending diabase dykes found in outcrops to the south.

SURVEY METHOD

The survey was conducted along a grid of lines 120 metres apart surveyed from a base line that originated between concessions 5 and 6 along the Walker-Wilkie township boundary one mile to the east. The grid lines, intended to be in a north direction, were cut in a direction 4 degrees west of north. Stations were established 30 metres apart in this direction and along both the base line and the tie line at 810^m N.

The magnetic survey of the total field was performed over the entire 6 claims and beyond into lot 2 with a model G-816 proton magnetometer manufactured by Geometrics of California. Control stations were established along the 00 base line and the tie line by averaging repeat closed loops that included the even 120 metre stations. A curve of the diurnal was obtained from the control points and applied to the readings taken along the grid lines.

RESULTS

Results of the survey are plotted and contoured on the accompanying plan entitled MAGNETIC SURVEY at a scale of 1:2400.

A magnetic feature 3000 gammas above background centering in the northern part of claim L.517101 is caused by an unknown source but does appear to occupy the contact

between material of higher magnetic susceptibility to the south and a lower magnetic background to the north. Sediments encountered elsewhere have been of comparable magnetic values.

Between lines 360 E and 480 E is the magnetic expression of what is confidently believed to be a diabase dyke.

The 400 gamma magnetic anomaly on line 600 E at 650^m N is possibly due to a northeast trending arm of the diabase dyke.

The disappearance to the east of the previously mentioned strong magnetic anomaly suggests faulting in a northeasterly direction. This can be partially substantiated upon close examination of published aeromagnetic data.

CONCLUSION

The magnetic survey successfully outlined important aspects of the subsurface geology which in turn assist considerably in the interpretation of other geophysical surveys and the eventual evaluation of the property.

Respectfully submitted,



H. Z. Tittley, P.Eng





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) Geophysical (Magnetic)
Township or Area Walker Township
Claim Holder(s) Hollinger Mines Limited
Box 320, Timmins, Ont. P4N 7E2
Survey Company Hollinger Mines Limited
Author of Report H. Z. Tittley
Address of Author Box 320, Timmins, Ont.
Covering Dates of Survey February 1 to Nov. 13, 1979
(linecutting to office)
Total Miles of Line Cut 11.9 km (7.41 miles)

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L -	517099 ✓
L -	517100 ✓
L -	517101 ✓
L -	522222 ✓
L -	522223 ✓
L -	522224 ✓

If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	Geophysical	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	-Electromagnetic _____	
ENTER 20 days for each additional survey using same grid.	-Magnetometer _____	<u>40</u>
	-Radiometric _____	
	-Other _____	
	Geological _____	
	Geochemical _____	

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

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

DATE: Nov. 13, 1979 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. L.D. Qualifications 63.2513

<u>Previous Surveys</u>			
File No.	Type	Date	Claim Holder

TOTAL CLAIMS 6

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 417 Number of Readings 417
Station interval 30 metres Line spacing 120 metres
Profile scale N/A
Contour interval 50 and 100 gammas

MAGNETIC

Instrument Geometrics G-816 total field proton magnetometer
Accuracy - Scale constant 1 gamma
Diurnal correction method Closed Loops
Base Station check-in interval (hours) up to 1.5 hours
Base Station location and value 00/00 = 357 + 59,000 = 59,357 gammas

ELECTROMAGNETIC

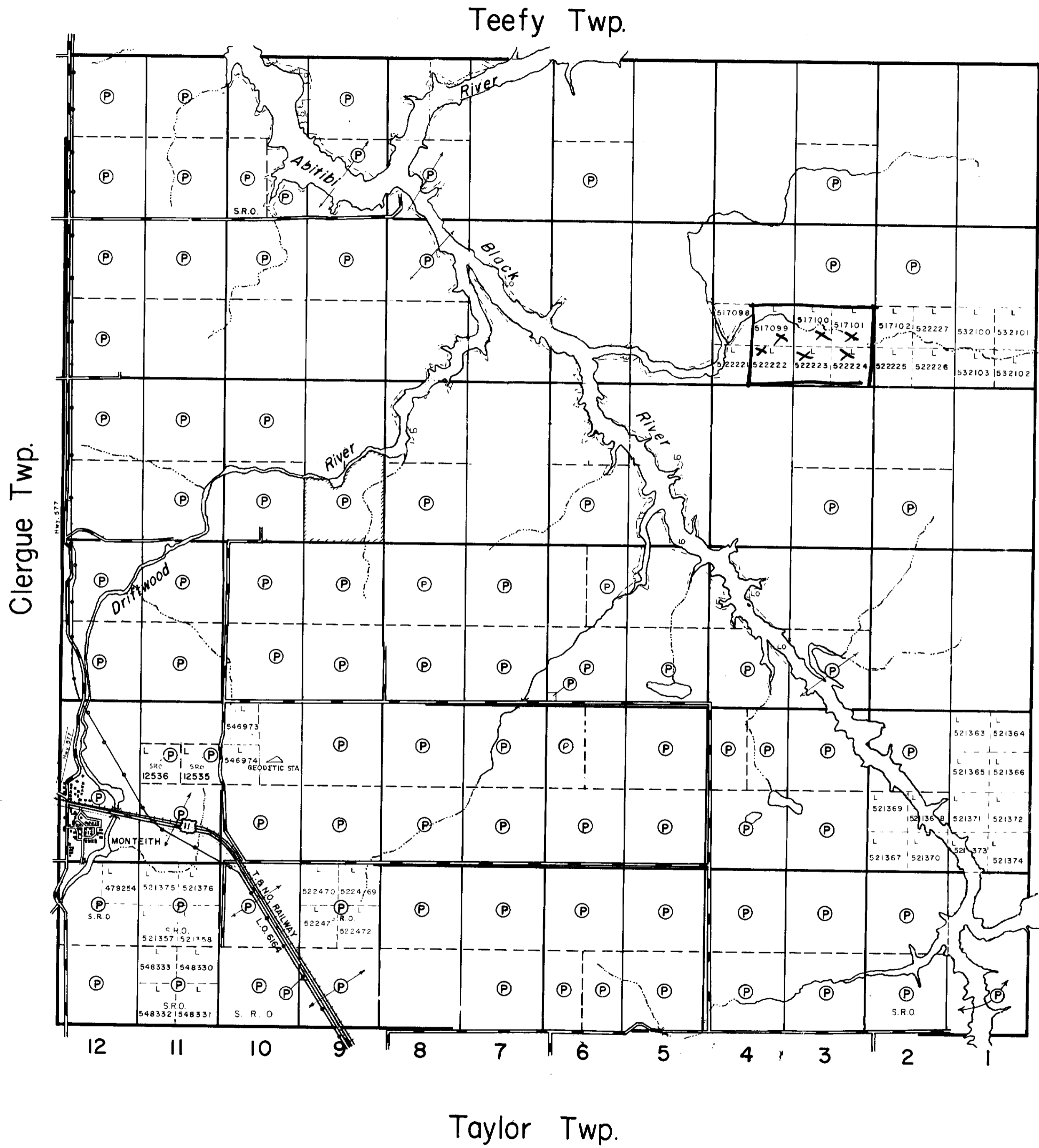
Instrument
Coil configuration
Coil separation
Accuracy
Method: [] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency (specify V.L.F. station)
Parameters measured

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



THE TOWNSHIP
OF 2.3102
WALKER
DISTRICT OF
COCHRANE
LARDER LAKE
MINING DIVISION
SCALE: 1-INCH= 40 CHAINS

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	Ⓢ or Ⓞ
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	X

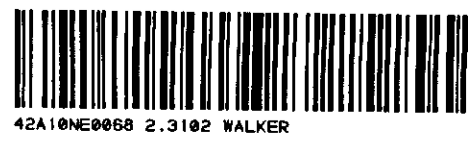
NOTES

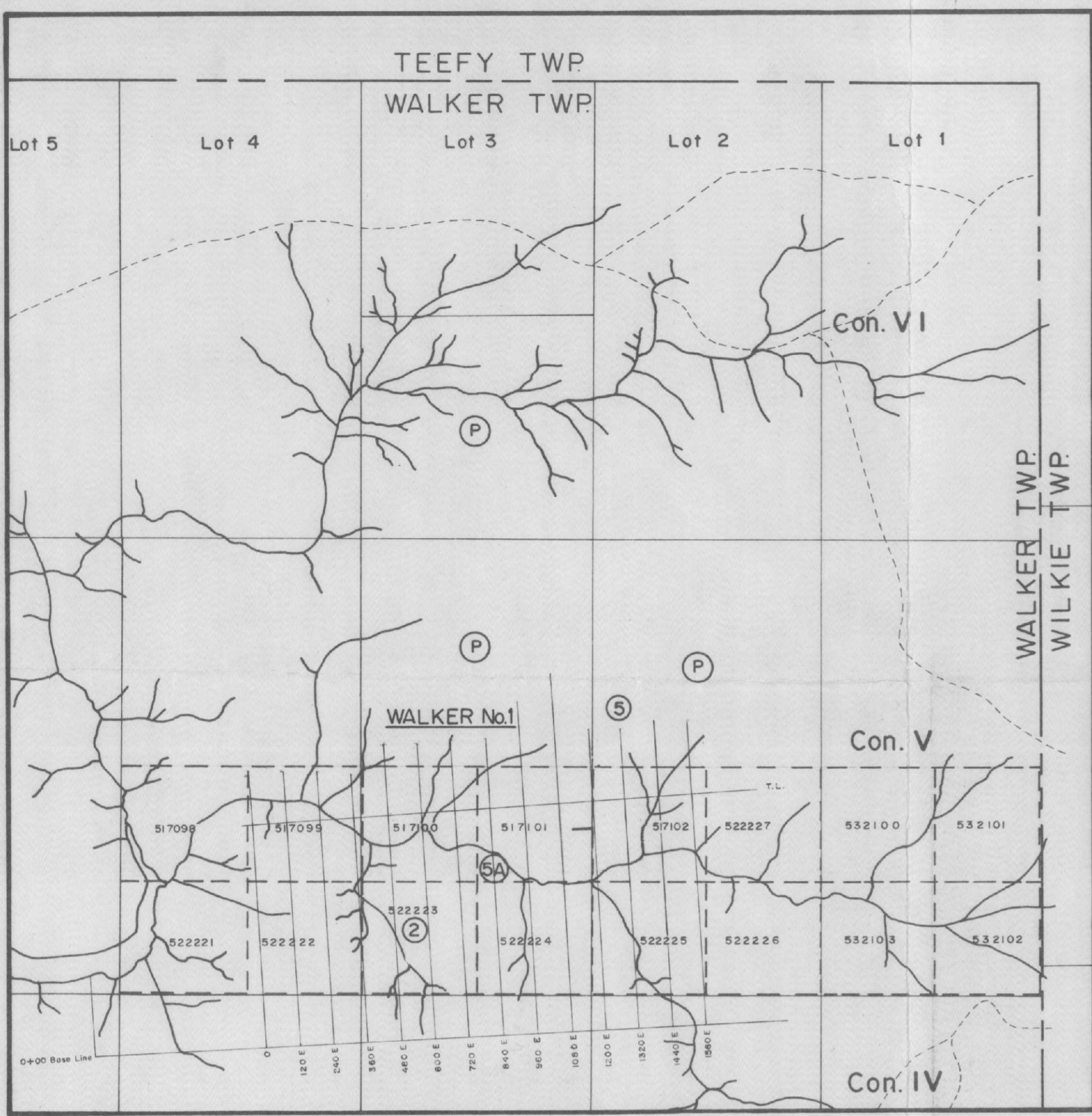
400' Surface rights reservation around all lakes and rivers.

L.O. 8672 issued for flooding rights along the shores of Abitibi, Black and Driftwood Rivers.

DATE OF ISSUE
FEB 18 1980
SURVEYS AND MAPPING
BRANCH

PLAN NO.- M-396
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH





Location Map
Scale = 1:15,840



LOT 5

LOT 4

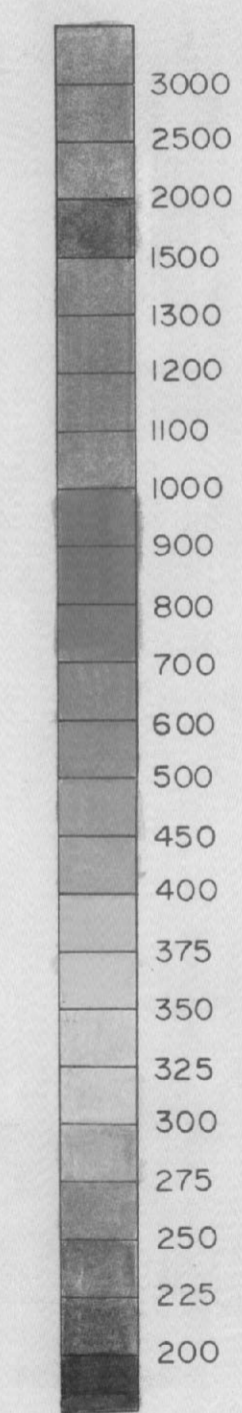


LOT 3

LOT 2



Contour Intervals: (in gammas)



Con. V
Con. IV

HOLLINGER MINES LTD.
WALKER No. 1
MAGNETIC SURVEY

WALKER TWP. ONT.

SCALE: 1:2400

