

REPORT ON A GEOLOGICAL SURVEY

WALKER-1

PROJECT 1131-09

NTS: 42-A-10

RECEIVED

MAY 1 0 1982

MINING LANDS SECTION

AMAX MINERALS EXPLORATION

Timmins, Ontario August, 1981 John Walmsley Geological Engineering Technician



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SUMMARY

A group of eight (8) claims were staked in early September, 1980, to cover two conductors detected by an A.E.M. survey conducted over Walker township.

In June of 1981, a geological mapping-prospecting survey was undertaken to locate geophysical grids, claim posts, lines, outcrop and to search for any evidence of previous activity on the property. An old claim post was discovered at the north end and an old grid line from a claim group to the south crossed part of the southeast claim.

INTRODUCTION

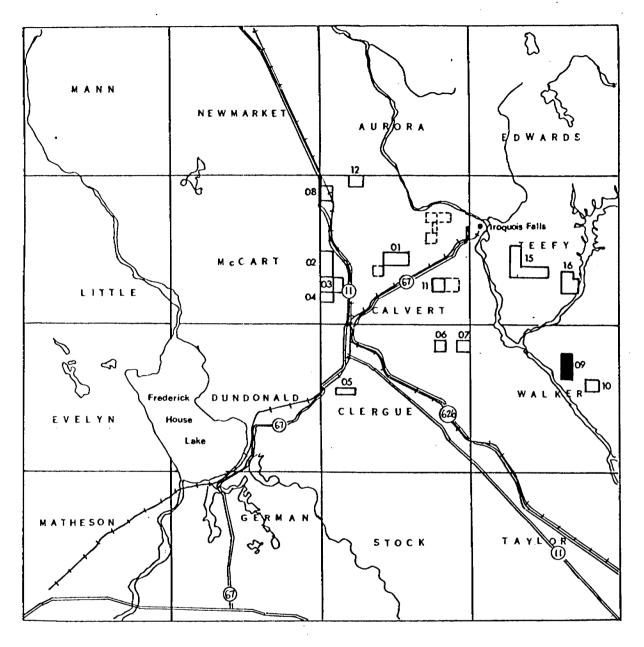
On June 5, 1981, a geological mappingprospecting survey was conducted on a group of eight (8) claims staked on September 6, 1980, in the name of Amax of Canada Limited.

The claims were staked to cover two anomalies detected by an A.E.M. survey flown for Amax by Questor Surveys Limited.

This report describes the method and results of the geological survey.

LOCATION AND ACCESS

The claim group consists of eight (8) claims



SCALE: 1" = 4 miles

LOCATION SKETCH
Project 1131-09, Iroquois Falls

WALKER TOWNSHIP

NTS: 42/A/10

Lot 5		
L583762 L58376	3	
L 583761 L 58376	Con V	
L 583760 L 58376	5	•
L583759 L58376		<u>CLAIM MAP</u> Project 1131-09
		WALKER-1 Walker Township 1"=¼ mile

.

taking up Lot 5, Concession V, Walker township, northeastern Ontario. It is approximately 6.5 kilometres south and 5.5 kilometres east of the town of Iroquois Falls.

Access is by boat taken from a landing approximately 2.5 kilometres east of highway 577, along Black River road, 5 kilometres south of Iroquois Falls. The Black River is followed east for 0.25 kilimetres then southeast, keeping to the east channel, for about 2.5 kilometres to a tributary on the east side. The tributary is then followed for approximately 0.25 kilometres.

TOPOGRAPHY AND RESOURCES

The topography of the area is quite rough along side the river, flattening out into swamps to the north and south. Most of the property is on the rough part, being cut by many small streams. The north claims are on flatter ground and swamps.

Most of the group is covered with poplar and mixed vegetation making for easy walking. Some alder swamps occur through the central portion, and the northern claims are in spruce swamp.

PREVIOUS WORK

One old claim post, #1, L-83984 was found

TABLE OF FORMATIONS

CENOZOIC

	Recent: Pleistocene:	Swamp and stream deposits Glacial drift, gravel, sand and clay
	w 	Unconformity
PRECAMBRIAN		
	Proterozoic:	Diabase dykes - 2 generations
	***************************************	Intrusive Contact
		Lamprophyre dykes
•	\$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10	Intrusive contact
	Archean:	Discordant gabbro bodies
	der des	Intrusive contact
		: Layered gabbro-peridotite sills
	the time gam yan dan time time can bee the	Intrusive contact
	•	: Volcanics - Rhyolite, rhyolite agglomerate and tuff, and associated chert - Andesite, basalt; as pillowed and massive flows, individual flows
		separated by flow breccia - Ultramafic flows - showing spinifex texture
		Faulted contact
		: Sediments - Greywacke, argillite, arkose, conglomerate

on the northeastern claim. A grid line from the claim below Amax's was found extending north to the river. An old road was found traversing east-west along the top boundary. No evidence of what the road was for was found.

SURVEY METHOD

Traverses were made by J. Walmsley, P. Bateman and M. Villeneuve in a north-south direction from the north and south group boundaries at 125 metre intervals.

All claim posts, lines, grid lines and physical features were located and tied in.

A 1:5000 blow-up of an Ontario Government 1:15000 air photo, number 2.71-4828-24, 129, was used for control while mapping.

REGIONAL GEOLOGY

Most of the township is underlain by intermediate and mafic metavolcanics. A band of metasediments strikes east-west across the bottom and a small unit of felsic intrusives occurs in the southeast corner. Through the centre of the township, a fault traverse strikes northwest-southeast. A thin

unit of felsic metavolcanics strikes east through the central part of the region, east of the fault.

PROPERTY GEOLOGY

The claim group is covered by swamp and clay overburden, allowing no bedrock to be exposed. It is therefore assumed that the property is underlain by intermediate and mafic volcanics. The fault mentioned above cuts across the northeast corner of the property.

CONCLUSIONS AND RECOMMENDATIONS

Due to the lack of outcrop, the nature of the conductors was not observed. It is therefore recommended that the northern conductor be drilled to determine its cause and if possible, further geophysical work be done to the east of the southern claims to determine more accurately the value of that conductor.

Respectfully submitted,

John Walnedy

Timmins, Ontario August, 1981 John Walmsley Geological Engineering Technician

LIST OF REFERENCES

References:

Geological Compilation Series Map

Timmins-Kirkland Lake

D.R. Pyke, L.D. Ayres and D.G. Innes

1970,71

APPENDIX A

SCHEDULE OF CLAIMS

PROJECT 1131-09; Walker-1

Claim Group	Township	Number	Claim Numbers	Recording	Date
1131-09	Walker	8	L-583759	September	
Walker-1			L-583760	September	•
			L-583761	September	
			L-583762	September	•
•			L-583763	September	
			L-583764	September	10/80
			L-583765	September	10/80
			L-583766	September	10/80

STATEMENT OF QUALIFICATION

I, John R. Walmsley, residing at 164 Hugill St. Sault Ste. Marie, Ontario, employed as a Geological Engineering Technician by Amax of Canada Limited, to hereby certify that:

I attended Sault College of Applied Arts and Technology in Sault Ste. Marie, Ontario and graduated as a Geological Engineering Technician in 1980.

I have been employed as a Geological Engineering Technician for the 1980 and 1981 field seasons in all phases of mining exploration.

I was personally present on the property and $\mbox{\rm did}$ supervise the survey as reported.

John Walmely

J. R. Walmsley

1360 (81/2)

Ministry of Natural Resources

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)



112-09 R	Me 258375	59)	The Minin	2 42A10NE0057 . پچ y Acc			shaded areas be	900
	ogical Survey	X	ldit		Township	or Area	alker or	
Claim Holder(s)	of Canada Limit	.ed	11	1.47	7/	Prospector	's Licence No.	3/1500
Survey Company	Minerals Explor			Survey Dates (linecutting to		-38495 Total Miles of lin	ie Cut
Name and Address of Author	(of Geo-Technical report)			Day Mo.	Yr. Day	Mo. Yr.	THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS O	
John	Walmsley, 255 A	lgonqui						
Special Provisions Credits Instructions		Days per		laims Traversed (List in num		nce) ning Claim	1
For first survey:	Geophysical	Claim	Prefix	Number	Days Cr.	Prefix	Number	Expend. Days Cr.
Enter 40 days. (This includes line cutting)	- Electromagnetic		L	583759	20	10 1		
, and the same same same same same same same sam	- Magnetometer			583760	20			2
For each additional survey using the same grid:				583761	20		Δ	<u> </u>
Enter 20 days (for each	- Other			583762	20		الما الما	SECTION
	Geological	20		583763	20		> 5	
	Geochemical			583764	20		(C)	ANDS
Man Days Instructions		Days per		583765	20		U ≥	أسبيها
Complete reverse side	Geophysical	Claim		583766	20		四 :	N.
and enter total(s) here	- Electromagnetic						<u> </u>	MINING
	- Magnetometer							
	- Radiometric							
	- Other							
	Geological							
	Geochemical				1			
Airborne Credits		Days per						
Note: Special provisions credits do not apply	,	Claim				1 7 -		
to Airborne Surveys		ļ						
	Magnetometer			-		-		
	Radiometric			ARDE		1		
xpenditures (excludes po Type of Work Performed	wer stripping)			图图版证明) 17 (17 (17)			
Performed on Claim(s)				M41 - 41	482			,
			718	3 19 110 11112 1 1 2	3141516		7750	
Calculation of Expenditure Da	Nua Cradita		93.12		110			
Total Expenditures	Ť	otal Credits						
\$	+ 15 =							
Instructions							per of mining	8
Total Days Credits may be choice. Enter number of da				For Office Use O	nly	claims cove report of w		<u> </u>
in columns at right,			Total Days Recorded	Cr. Date Flercouded	4 1982	Mining Reco	order	
	lecorded Holder or Agent (S		1/0	Date Approved		Bayerin (B)	anot chargion	0
April 27, 1982	Roxmany Vitte	<u></u>	4,9	83.07.	09	Des	June 8	≱ >.
Pertification Verifying Rep		owledge of	the facts set for	orth in the Desert	-			
I hereby certify that I have or witnessed same during as	nd/or after its completion a	nd the anne	exed report is 1	ordin the Heport (true.	of Work annex	ed nereto, ha	ving performed	tne work
Name and Postal Address of Pe R. J. Roussain	erson Certifying							
255 Algonquin Blv	d West Timmine		DAN 2D9	Date Certified		Certified by	(Signature)	,
360 (81/2)	HOOO, 17HHH [[S		1711 210	1 gril :	2/87		(1) m	man'
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Ontario

Ministry of Natural Resources

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.

1131-09		
Type of Survey(s)	Geological Survey	
Township or Area	Walker	MINING CLAIMS TRAVERSED
Claim Holder(s)	Amax of Canada Limited	List numerically
Survey Company	Amax Minerals Exploration	
Author of Report	John Walmsley	(prefix) (number)
Address of Author	255 Algonquin Blvd. West, Timmins,Ont	•••••••••••••••••••••••••••••••••••••••
Covering Dates of Survey	June 5, 1981	583759
Total Miles of Line Cut_	(linecutting to office)	L 583760
The State of Contract of the C	Section 1 and the state of the section of the secti	L 583761
SPECIAL PROVISIONS CREDITS REQUESTED		L 583762
	Electromagnetic	L 583763
ENTER 40 days (includ line cutting) for first	esMagnetometer	L 583764
survey.	Radiometric	
ENTER 20 days for eac	h Other	
additional survey using	Geological20	
same grid.	Geochemical	
AIRBORNE CREDITS (s	pecial provision credits do not apply to airborne surveys)	
MagnetometerEle	ctromagnetic Radiometric (enter days per claim)	
DATE: May 7, 1982	SIGNATURE: Roseman Hitter Author of Report or Afcht	
Res. Geol.	_Qualifications	
Previous Surveys		
File No. Type	Date Claim Holder	••••••
		TOTAL CLAIMS8

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 spacio	ng	
Profile scale				
Contour interval				
Instrument			······································	
Accuracy - Scale	constant			
Diurnal correction	method			
Base Station check	-in interval (hours)			
Base Station locati	on and value			<u> </u>
Instrument				
Coil configuration				
Coil separation		<u>, ,</u>		
Accuracy				
Method:	☐ Fixed transmitter	☐ Shoot back	☐ In line	☐ Parallel line
Frequency		(specify V.L.F. station)		
Parameters measur	ed			
2 4				
Instrument				
Scale constant				
Base station value	and location			
Elevation accuracy				
Instrument				
Method Time	e Domain	☐ Fr	equency Domain	
Parameters - On t	ime	Fre	equency	
- Off t	ime	Ra	nge	· · · · · · · · · · · · · · · · · · ·
Dela	y time			
– Integ	gration time			
Electrode array				
· ·				
Type of electrode				

INDUCED POLARIZATION

SELF POTENTIAL	
Instrument	Range
Survey Method	
Corrections made	
Corrections made	
RADIOMETRIC	
Instrument	
Values measured	
Energy windows (levels)	
Height of instrument	Background Count
Size of detector	
Overburden	
(туре, аер	th - include outcrop map)
OTHERS (SEISMIC, DRILL WELL LOGGING ET	(C.)
Type of survey	,
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding results).	
(
AIRBORNE SURVEYS	
Type of survey(s)	
Instrument(s)(specify for	or each type of survey)
Accuracy(specify for	or each type of survey)
Aircraft used	
Sensor altitude	
Aircraft altitude	Line Spacing
Miles flown over total area	Over claims only

${\bf GEOCHEMICAL~SURVEY-PROCEDURE~RECORD}$

Numbers of claims from which samples taken	
Total Number of Samples	ANALYTICAL METHODS
Type of Sample(Nature of Material)	
Average Sample Weight	p. p. m.
Method of Collection	Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)
Soil Horizon Sampled	Others
Horizon Development	Field Analysis (tests)
Sample Depth	Extraction Method
Terrain	Analytical Method
	Reagents Used
Drainage Development	Field Laboratory Analysis
Estimated Range of Overburden Thickness	
	Extraction Method
	Analytical Method
	Reagents Used
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)	Commercial Laboratory (tests) Name of Laboratory
Mesh size of fraction used for analysis	Extraction Method
	Analytical Method
	Reagents Used
General	General —

2.4771

MINERALS EXPLORATION (A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West Timmins, Ontario P4N 2R8

Telephone: (705) 264-5247

February 2, 1983

Our File:

034-09

Mr. E. F. Anderson, Director, Land Management Branch. Ontario Ministry of Natural Resources, Whitney Block, Room 6450. Queen's Park. Toronto, Ontario. M7A 1W3

RECEIVED

htb - 8 1983

MINING LANDS SECTION

Dear Sir:

Re: Your File 2.4771

Enclosed herewith is the map in duplicate for the Geological Survey report submiteed on Mining Claims L.583759 et al., in the township of Walker in the Larder Lake Mining Division.

The traverse lines have been added onto the maps.

Yours truly. AMAX OF CANADA LIMITED

Rosemany Green

Rosemary Tittley (Mrs.) Land Recorder

Encs. 2

c.c. G. Koleszar, Mining Recorder, Kirkland Lake



Ministry of Natural Resources

Geotechnical Report Approval

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Mining Lands Cor	mments				
,					
To: Geophysics					
Comments					
1					
			Date	Signature	
Approved	Wish to see again			Signature	
To: Geology - Ex		mith corrections No. Kustie		Signature	
<u> </u>				Signature	
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To: Geology - Exp		Mr. Kustre			4
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To: Geology - Exp Comments Approved To: Geochemistry	penditures	Mr. Kustre			a
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To: Geology - Exp Comments Approved To: Geochemistry	penditures	Mr. Kustre			a
To: Geology - Exp Comments Approved To: Geochemistry	penditures	Mr. Kustre			a
To: Geology - Exp Comments Approved To: Geochemistry	penditures	Mr. Kustre			

1983 02 01 2.4771

Amax of Canada Limited 255 Agonquin Blvd West Timmins, Ontario P4N 2R8

Attention: Mr. John Walmsley.

Dear Sirs:

RE: Geological Survey submitted on Mining Claims L 583759 et al in the Township of Walker.

Enclosed is the map in duplicate for the above mentioned survey. Please show all traverse lines and return the maps to this office.

For further information, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson Director Land Management Branch

Whitney Block, Room 6450 Queen's Park Toronto, Ontario M7A 1W3 Phone: 416/965-1380

A. Barr:sc

Encls:

cc: Mining Recorder
Kirkland Lake, Ontario

1982 05 21 2.4771

Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims 1, 583759 et al in the Township of Walker.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson Director Land Management Branch

Whitney Block, Room 6450 Queen's Park Toronto, Ontario M7A 1W3 Phone: 416/965-1316

J. Skura/amc

cc: Amax of Canada Limited
Timmins, Ontario
Attn: Mrs. Rosemary Tittley/
Mr. John Walmsley



MINERALS EXPLORATION (A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West Timmins, Ontario P4N 2R8

Telephone: (705) 264-5247

Our File: 1131-09

Mr. F. W. Matthews, Ontario Ministry of Natural Resources, W1617, Whitney Block, Queen's Park, Toronto, Ontario. M7A 1W3

Dear Sir:

May 7, 1982

Enclosed herewith please find two (2) copies of a report by Mr. John Walmsley who was employed by Amax during the 1981 summer field season, concerning a geological survey which was performed over the below listed contiguous mining claims located in Walker township, along with the survey plans.

> L-583760 L-583761 L-583762 L-583759 L-583763 L-583764 L-583765 L-583766

A "Report of Work" concerning this survey has been filed with Mr. George Koleszar, Mining Recorder for the Larder Lake Mining Division.

Thank you.

Yours truly,

AMAX OF CANADA LIMITED

Rosemary Tittley (Mrs.) Land Recorder

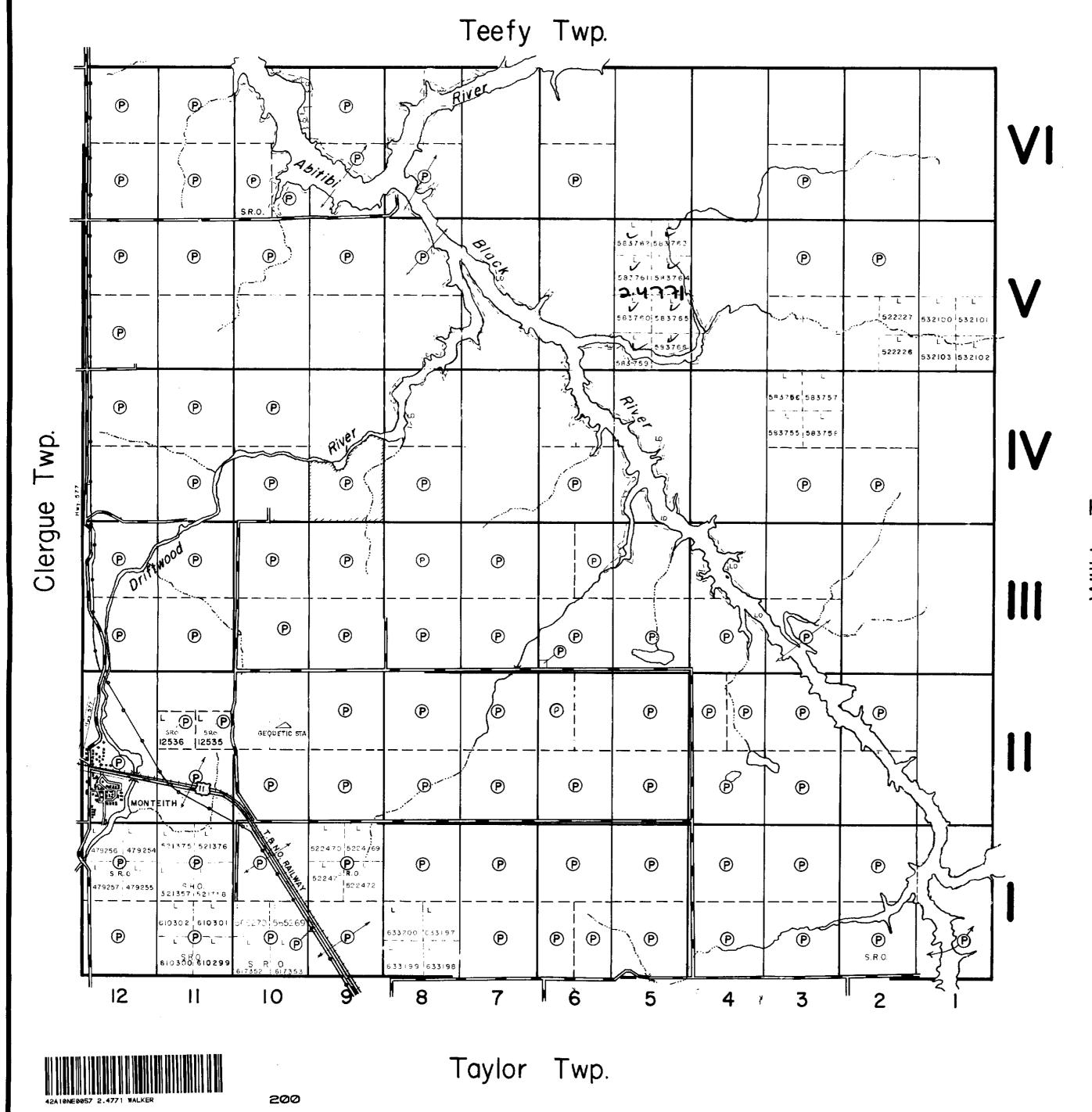
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c.c. K. Clemiss/E. Barclay, Toronto

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11AY 1 0 1982

MINING LANDS SECTION



THE TOWNSHIP OF

WALKER

DISTRICT OF COCHRANE

LARDER LAKE MINING DIVISION

SCALE: I-INCH= 40 CHAINS

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES



NOTES

4.00 Surface rights reservation around all lakes and .vers.

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

DATE OF ISSUE

JAN - 5 1983

Ministry of Natural Resources
TORONTO

PLAN NO.- M-396

ONTABLO

MINISTRY OF MATURAL RESOURCES

1 DURYLY O APHD MARE NO EXAMPLE

