



42A07NW0173 2.9483 THOMAS

010

**MAGNETOMETER REPORT on the BA RESOURCES LTD.,  
JOSEPH PROPERTY**

**in THOMAS TOWNSHIP  
Porcupine Mining Division  
Ontario**

**RECEIVED**

**OCT 20 1986**

**MINING LANDS SECTION**

by

**R. Bruce Durham Bsc. FGAC**

**DURHAM GEOLOGICAL SERVICES INC.**

**Box 734  
1176 Delnite Road  
Timmins, Ontario  
P4N 7G2**

**September 15, 1986**

TABLE



42A07NW0173 2.9483 THOMAS

010C

	Page
PROPERTY . . . . .	1
LOCATION, ACCESS AND FACILITIES . . . . .	1
GENERAL GEOLOGY . . . . .	2
MAGNETIC SURVEY . . . . .	3
CONCLUSIONS AND RECOMMENDATIONS . . . . .	4
SELECTED REFERENCES . . . . .	5
CERTIFICATION . . . . .	6

LIST OF FIGURES

Figure 1	Property Location Map	1 : 7,603,200
Figure 2	Claim Location Map	1 : 20,000
Figure 3	Regional Geology	1" = 4 mi.
Figure 4	Magnetometer Survey Map	1" = 200 ft.

PROPERTY

The BA Resources Ltd., Joseph property located in Thomas Township consists of 25 unpatented mining claims in the Porcupine Mining Division of Ontario.

The numbers of the claims and their respective expiry dates are as follows:

CLAIM #	EXPIRY DATE
P 867076	September 3, 1987
P 867077	September 3, 1987
P 867078	September 3, 1987
P 867079	September 3, 1987
P 867080	September 3, 1987
P 867081	September 3, 1987
P 867082	September 3, 1987
P 867083	September 3, 1987
P 867084	September 3, 1987
P 867085	September 3, 1987
P 867508	September 3, 1987
P 867509	September 3, 1987
P 867510	September 3, 1987
P 867511	September 3, 1987
P 867512	September 3, 1987
P 867513	September 3, 1987
P 867514	September 3, 1987
P 867515	September 3, 1987
P 867521	September 13, 1987
P 867522	September 13, 1987
P 867523	September 13, 1987
P 867524	September 13, 1987
P 867525	September 13, 1987
P 867526	September 13, 1987
P 867527	September 13, 1987

The claims are registered in the name of BA Resources Ltd.

LOCATION, ACCESS AND FACILITIES

The property is located in Thomas Township, 38 km east of Timmins, Ontario and is readily accessible via a gravel road system that extends southward from Hwy. 101 from a point approximately 25 km east of Timmins. This is an all weather gravel road, known as the Gibson Lake road, extends through the extreme northeast corner of Thomas Township,

within 2 km of the eastern portion of the property. Small bush roads extend onto the property from that point.

### GENERAL GEOLOGY

The BA Resources, Thomas Township property lies within the Abitibi greenstone metavolcanic belt, an 800 km long, 240 km wide suite of Archean volcanic rocks that stretches from Chibougamau, Quebec on the east to the west of Timmins, Ontario.

While average rock exposure in the area is less than 10%, outcrop information coupled with geophysical interpretation, and drill hole information, indicate that the majority of the BA Resources Ltd. property and surrounding area are underlain by a suite of komatiitic and tholeiitic basaltic rocks, which, if not of the Tisdale Group of volcanics, are certainly similar to the Tisdale Group.

"Deloro Group" type rocks to the east in the extreme northeast corner of the townships of Thomas, Sheraton and Bond, and to the southwest in Carman Township, indicate that the regional contact between the Deloro and Tisdale Group of rocks may be present on or near the BA Resources Ltd. property.

This regionally extensive contact has been shown to be important from an economic point of view in that many of the Porcupine gold deposits are located near this time stratigraphic boundary.

One of the other key features found near most of the gold deposits of the Porcupine Gold camp, the Destor-Porcupine Fault zone, is a major regional zone of faulting and structural adjustment which passes through Macklem Township in an easterly direction approximately 6 miles north of the property.

The majority of the Porcupine gold deposits lie within approximately 10 km of this major structure which usually consists of a highly sheared zone of talc-chlorite carbonate schist of ultramafic composition.

Basaltic rocks in the vicinity of the BA Resources property are highly carbonatized and schisted in a southeasterly direction. Dips, while near vertical appear

to be generally to the north.

The basaltic rocks are cut by felsite and diabase dikes, and by a variety of quartz, quartz-carbonate and quartz-carbonate tourmaline veins similar in nature to those that host the gold deposits in the Porcupine gold camp.

The diabase dikes are the youngest rocks in the area and crosscut all other units. Faulting in the area, both parallel to the Destor-Porcupine Fault and southeasterly, parallel to the Montreal River Fault appears to be extensive. Some faulting is also postulated parallel to the frequently well developed east-southeast schistosity.

The presence of extensive zones of mariposite, carbonate alteration, scattered veining, felsic intrusions, extensive shearing, and known gold mineralization makes this an excellent area to explore for mineable concentrations of gold mineralization.

#### MAGNETIC SURVEY

The magnetic survey was conducted between August 29th and September 2, 1986. The instruments used were a Geometrics Model 816 portable proton magnetometer and EDA Omni-IV Tieline magnetometer.

Readings were taken at 50 foot intervals along the baseline and all readings were calculated relative to the baseline. Readings were taken at base control stations at periodic intervals to determine day to day and diurnal drifts. Any change noted in the magnetic intensities were then applied as factors, and progressive adjustments were made to each reading taken during that specific period of time.

The results of the magnetic survey are shown on the accompanying map (Figure 4) at a scale of 1" = 200'. Three linear zones of high magnetics were located on the property. The first of these zones cuts across the southeast corner of the property from line 48E to 4W and reflects the presence of a large diabase dyke. The other two zones both trend in a NW-SE direction and cross the property between lines 36 and 32W; and between 16 and 4 W respectively.

These two linear zones of high magnetic relief are

also interpreted to reflect the presence of late, crosscutting diabase dikes.

The magnetic relief on the entire property is quite low, varying only by approximately 300 gammas except where influenced by the presence of diabase dikes. The generally low magnetic values across the property and very low magnetic relief are interpreted to be caused by the destructive effects of intense carbonate alteration upon the original volcanic lithologies. While this renders the survey of very limited use in defining stratigraphy, the presence of intense carbonate alteration is interpreted to be an environment favorable for gold mineralization.

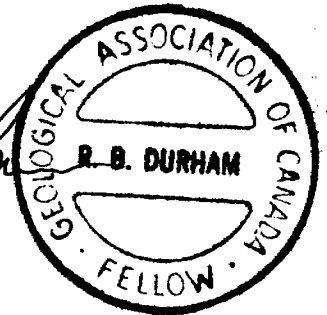
#### CONCLUSIONS AND RECOMMENDATIONS

Based upon a previous report by the author and the subject survey, it is recommended that the next phase of exploration consist of a geological mapping and sampling program.

Respectfully submitted,



R. Bruce Durham Bsc. FGAC  
Consulting Geologist



*Final  
2.4980*

SELECTED REFERENCES

- Burrows, A.N.  
1940  
Geology of the Langmuir Sheraton area;  
Ontario Department of Mines Vol. 49, pt.  
4, 21 p. Accompanied by Map 49h, scale 1  
inch to 1 mile.
- Durham, R.B.  
1986  
Report on the BA Resources Ltd., Joseph  
Property in Thomas Township, Porcupine  
Mining Division, Ontario.
- Fyon, J. Andy and Crocket, J.H.  
1983  
Gold Exploration in the Timmins Area,  
Using Field and Lithogeochemical  
Characteristics of Carbonate Zones;  
Ontario Geological Survey Study 26, 56 p.  
Accompanied by 2 Charts, 2 Maps.
- Leahy, E.J.  
1971  
Geology of the Nighthawk Lake Area  
District of Cochrane, Ontario. Ontario  
Department of Mines and Northern Affairs,  
GR 96, 47 p. Accompanied by Map 2222 scale  
1 inch to 1 mile.
- Pyke, D.R.  
1981  
Relationship of Gold Mineralization to  
Stratigraphy and Structure in Timmins and  
Surrounding Area.
- MNR Assessment  
Files: Timmins, Ontario.

CERTIFICATION

I, R. Bruce Durham, of 1176 Delnite Road, Timmins, Ontario certify as follows concerning my September 15, 1986 report on the BA RESOURCES LTD., JOSEPH PROPERTY, located in Thomas Township in Northeastern Ontario.

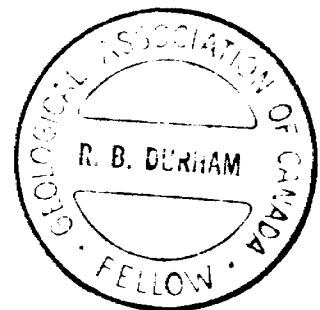
1. I am a graduate of the University of Western Ontario, having obtained a Bachelor of Science Degree in Geology in 1976.
2. I have been practising my profession, primarily in Canada, since 1975.
3. I directly hold 10,000 free trading common shares of BA Resources Ltd.
1. I am a fellow of the Geological Association of Canada.
5. That this report is a product of my knowledge of the area, and a compilation of available previous work.

Dated at Timmins

this 15th, day of September, 1986.



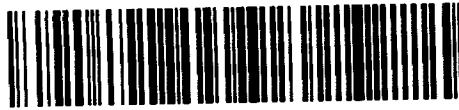
R. Bruce Durham Bsc. FGAC  
Consulting Geologist







Ontario



42A07NW0173 2.9483 THOMAS

900

Ministry of  
Northern Development  
and Mines

August 6, 1987

Your File: 130/87  
Our File: 2.9483

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

Dear Sir:

RE: Notice of Intent dated July 22, 1987  
Geophysical (Magnetometer) Survey on  
Mining Claims P 867508, et al, in Thomas  
Township

---

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

DK/mc

cc: BA Resources Ltd  
Suite 402  
1755 West Broadway  
Vancouver, B.C.  
V6J 4S5

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

Durham Geological Inc  
Box 734  
Timmins, Ontario  
P4N 1G2  
Attention: R. Sproule

Resident Geologist  
Timmins, Ontario

Encl.



Recorded Holder  BA RESOURCES LTD
Township or Area  THOMAS TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column <b>Geological</b> _____ days <b>Geochemical</b> _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input 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.	

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

--

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey <input type="checkbox"/> insufficient technical data filed  <p style="text-align: center;"><b>NO GEOPHYSICAL (MAGNETOMETER) CREDITS APPROVED FOR MINING CLAIM P 867521, AS THE WORK WAS CARRIED OUT ON MINING CLAIMS P 867077, P 867508 and P 867522.</b></p>
---

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.

November 14, 1986

Your File: 286/86

Our File: 2.9483

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

Dear Sir:

RE: Notice of Intent dated October 24, 1986  
Geophysical (Magnetometer) Survey on  
Mining Claims P 867076, et al, in Thomas  
Township

---

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,

J.C. Smith, Supervisor  
Mining Lands Section

Whitney Block, 6th Floor  
Queen's Park  
Toronto, Ontario  
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: BA Resources Ltd  
Suite 402  
1755 West Broadway  
Vancouver, B.C.  
V6J 4S5

Resident Geologist  
Timmins, Ontario

R. Bruce Durham  
Box 734  
Timmins, Ontario  
P4N 7G2

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

Encl.



Recorded Holder  
**BA RESOURCES LTD**

Township or Area  
**THOMAS TOWNSHIP**

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer <u>40</u> days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column <b>Geological</b> _____ days <b>Geochemical</b> _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input 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 867076 to 085 inclusive 867508 to 515 inclusive 867522 to 527 inclusive

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

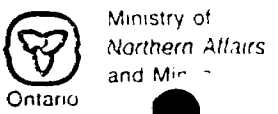
20 DAYS

P 867521

No credits have been allowed for the following mining claims

not sufficiently covered by the survey       insufficient technical data filed

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.



Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

Instructions: -- Please type or print.  
-- If number of mining claims traversed exceeds space on this form, attach a list.  
Note: -- Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
-- Do not use shaded areas below.

Mining Act

# 355/16  
29423

Type of Survey(s): Geophysical-Magnetometer Township or Area: Thomas

Claim Holder(s): RA Resources Ltd Prospector's License No.: T-4682

Address: 402-1755 West Broadway Vancouver BC V6J 4S5

Survey Company: Durham Geological Services Inc Date of Survey (from & to): 27 08 86 to 3 9 86 Total Miles of line Cut: 21.0

Name and Address of Author (of Geo-Technical report): R Bruce Durham. Box 734 Timmins Ont P4N 7G2.

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Min Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	867076		P	867526	
	867077			867527	
	867078				
	867079				
	867080				
	867081				
	867082				
	867083				
	867084				
	867085				
	867508				
	867509				
	867510				
	867511				
	867512				
	867513				
	867514				
	867515				
	867521				
	867522				
	867523				
	867524				
	867525				

RECEIVED  
SEP 03 1986  
MINING LANDS SECTION

RECORDED  
SEP - 3 1986

Expenditures (excluding magnetic stripping) section

Type of Work Performed: RECEIVED

Performed on Claims: SEP 03 1986

Calculation of Expenditures: Total Expenditures \$ ÷ 15 = Total Days Credits

Total number of mining claims covered by this report of work: 25

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded: 1000 Date Recorded: SEP 3 1986 Mining District: Thomas

Date Approved as Recorded: SEP 3 1986 Branch Director: [Signature]

Date: Sept 3/86 Recorder/Holder or Agent (Signature): [Signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: R Bruce Durham Box 734

MAP SYMBOLOGY

Aerial Cableway	Pipeline (above ground)
Boundary	Railroad
International	Single Track
Interprovincial	Double Track
District, Township	Abandoned
Indian Reserve	Road
Approximate	Highway, County
Let. Concession	Township
Approximate	
Park Boundary	
Bridge	
Road, Railroad	
Building	
Chimney	
Cliff, Pit, Pile	
Contours	
Interpreted	
Approximate	
Depression	
Control Points	
Horizontal	
Vertical	
Culvert	
Folia	
Double line river	
Fence, Hedge, Wall	
Feature Outline (Construction features, etc.)	
Flooded Land	
Lock	
Marsh or Swamp	
Mast	
Mine Head Frame	
Outcrop	
	Reservoir
	River, Stream, Canal
	Approximate (seasonal) location of flow
	Rock
	Spot Elevation (rock elevations) 300.0
	Tower
	Transmission Line
	Police Station
	Tunnel
	Utility Poles
	Wharf, Dock, Pier
	Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

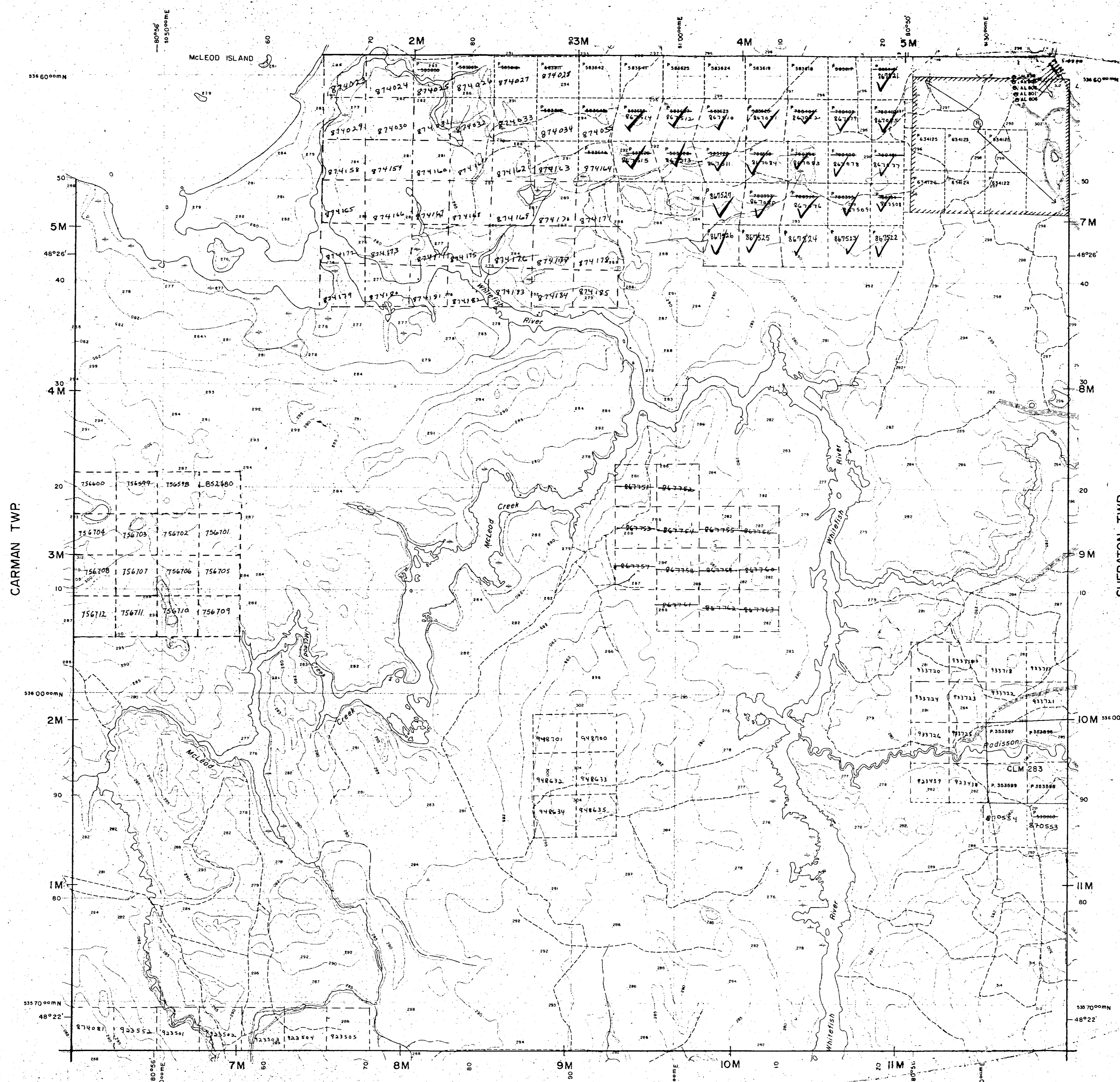
- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description Order No. Date Disposition File

NRW 16/83	S.R. & M.R.
-----------	-------------

S.R. & M.R. WITHDRAWN FROM STAKING SEC. 36 ORDER NO. 16/83 (GEOLOGICAL/GEOPHYSICAL TESTING RANGE 1).

MACLEOD TWP.



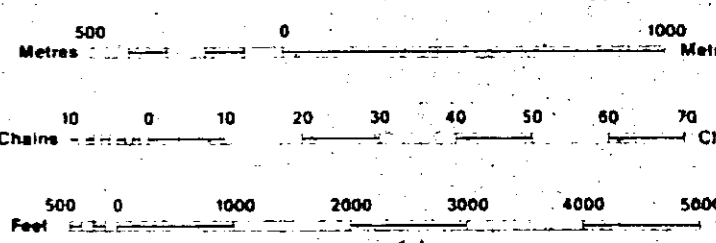
LEGEND

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	
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	○

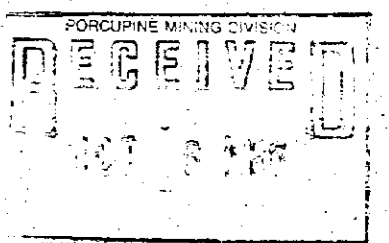
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.



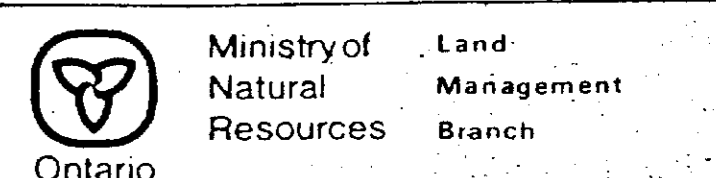
SCALE 1:20 000  
GRID ZONE: 17

RESERVE FLOODING RIGHTS TO H.E.P.C. OF ONTARIO TO ELEVATION 903.5 T. B. N.O. RAILWAY DATUM ON NIGHT HAWK LAKE.

*MR. SA withdrawn from staking under Section 36 - The Mining Act Order No. NAW 16/82*



Read Jan 22/85  
TOWNSHIP  
**THOMAS**  
M.N.R. ADMINISTRATIVE DISTRICT  
**TIMMINS**  
MINING DIVISION  
**PORCUPINE**  
LAND TITLES / REGISTRY DIVISION  
**COCHRANE**



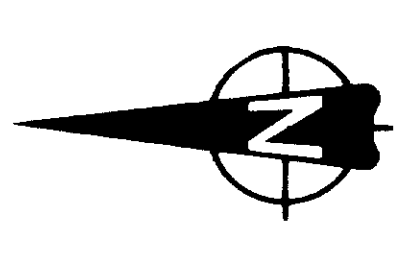
ORIGINAL COMPILATION JULY, 1984  
REVISED:  
Number  
**G-3977**

BLACKSTOCK TWP.





29483



**LEGEND**

OPERATORS: B.J. Adams  
D.J. Merrick

INSTRUMENTS: E.C.A. "Omni" (w/ "Prime"\*)  
Magnetometer (with staff)  
Leveling staff  
Cotton "P" (1000)  
Magnetometer (with staff)

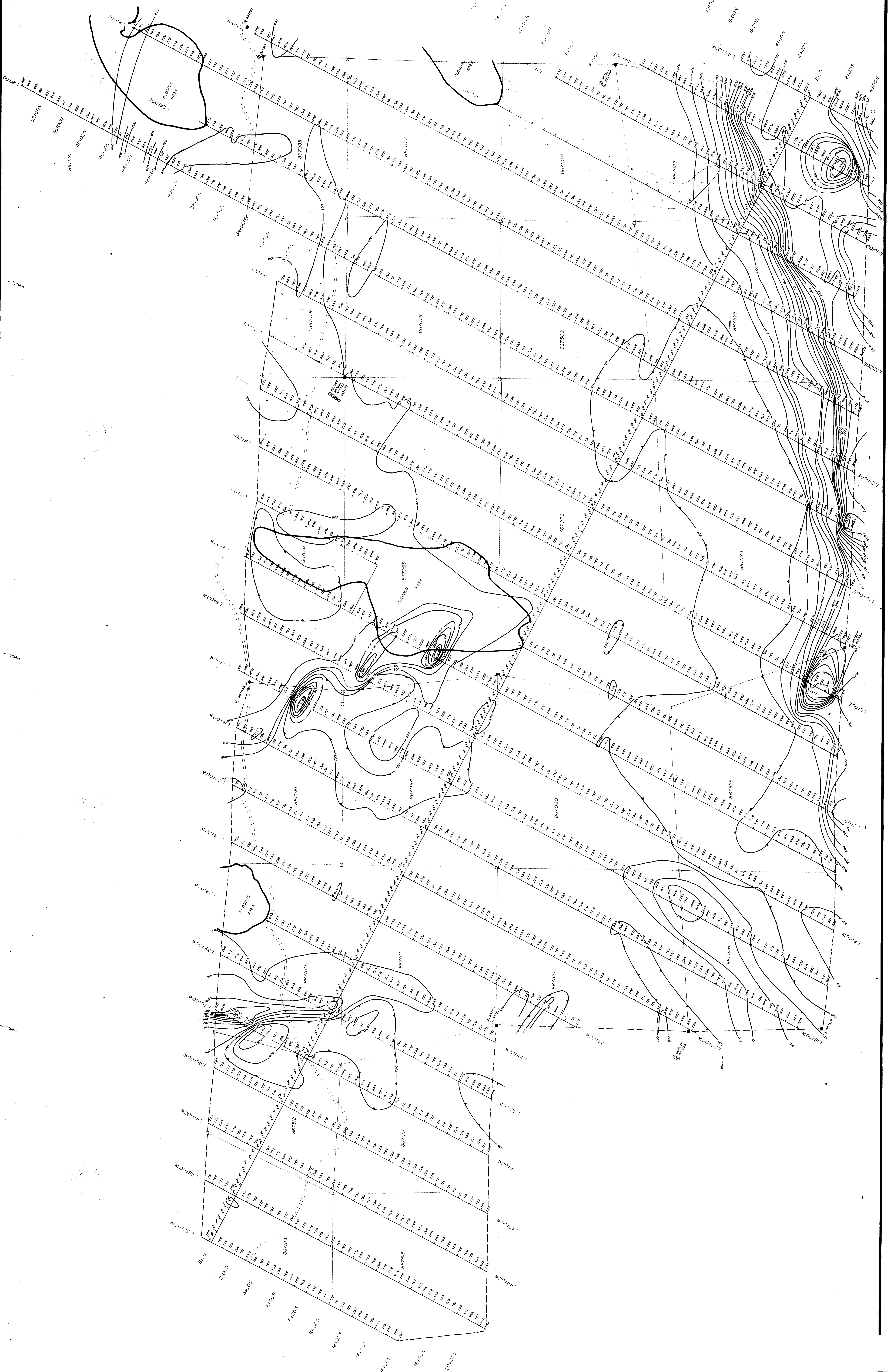
DIRECTION CORRECTION: Assuming the line corrected by time

DATUM LEVEL: 58,000 gamma

READING INTERVAL: 25 m

CONTOUR INTERVAL: 400 gamma

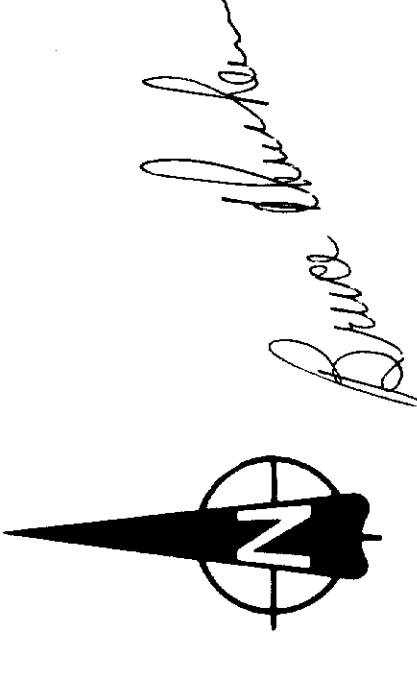
REVISIONS	DURHAM GEOLOGICAL SERVICES INC.
	B. A. RESOURCES LTD.
	MAGNETOMETER SURVEY
	JOSEPH PROPERTY
	THOMAS TOWNSHIP
DATE: 29/05/2008	DRAWN: K.F.
SCALE: 1"=200'	APPROVED: B.E.
FIGURE: 4	





REVISED	DATE	BY	REASON

DURHAM GEOLOGICAL SERVICES INC.  
 B. A. RESOURCES LTD.  
**MAGNETOMETER SURVEY**  
 JOSEPH PROPERTY  
 THOMAS TOWNSHIP  
 DATE: 2007.05.08 DRAWN: AB  
 SCALE: 1:200  
 APPROVED: B.G. FIGURE: 4  
 N.T.S.



**LEGEND**

OPERATORS: D.J. White  
 D.J. White  
 INSTRUMENTS: E.D.A. "Dino IV" (with 2007)  
 Geometrics 0.86  
 Geometrics 0.86  
 Magnetometer (with 2007)

DIURNAL CORRECTION: Baseline Tie-ins corrected by time  
 DATUM LEVEL: 56,000 p.p.m.  
 READING INTERVAL: 25 m  
 CONTOUR INTERVAL: 100 p.p.m.

