

22.16/72 BRISTOL

GEOPHYSICAL REPORT

ON THE

BRISTOL TOWNSHIP PROPERTY

MAGNETOMETER SURVEY

LOCATED IN

BRISTOL TOWNSHIP - PORCUPINE MINING DIVISION

FOR

PELANGIO LARDER MINES LTD.

RECEIVED

SEP 121996

MINING LANDS BRANCH

Submitted by: R.J. Meikle

Rayan Exploration Ltd.
July 1996





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LIST OF MAPS

CONTOURED and POSTED MAGNETOMETER SURVEY1:5000

INTRODUCTION

Rayan Exploration Limited of Timmins, Ontario was hired by Pelangio Larder Mines ltd. to conduct a Total Field Magnetometer Survey on a group of 4 claims (7 units), located in Bristol Township. This report describes the parameters and results of the survey.

The purpose of the survey was to map the magnetic susceptibility to help interpret the geology and areas to do follow up work on. A subsequent Geological Mapping program and I.P. Survey is planned based in part on the Magnetic Survey results.

LOCATION AND ACCESS

The property is located in the south/central part of Bristol Township, approximately 18km southwest of the City of Timmins, Cochrane District, Porcupine Mining Division, Ontario (see figs.1.2,3).

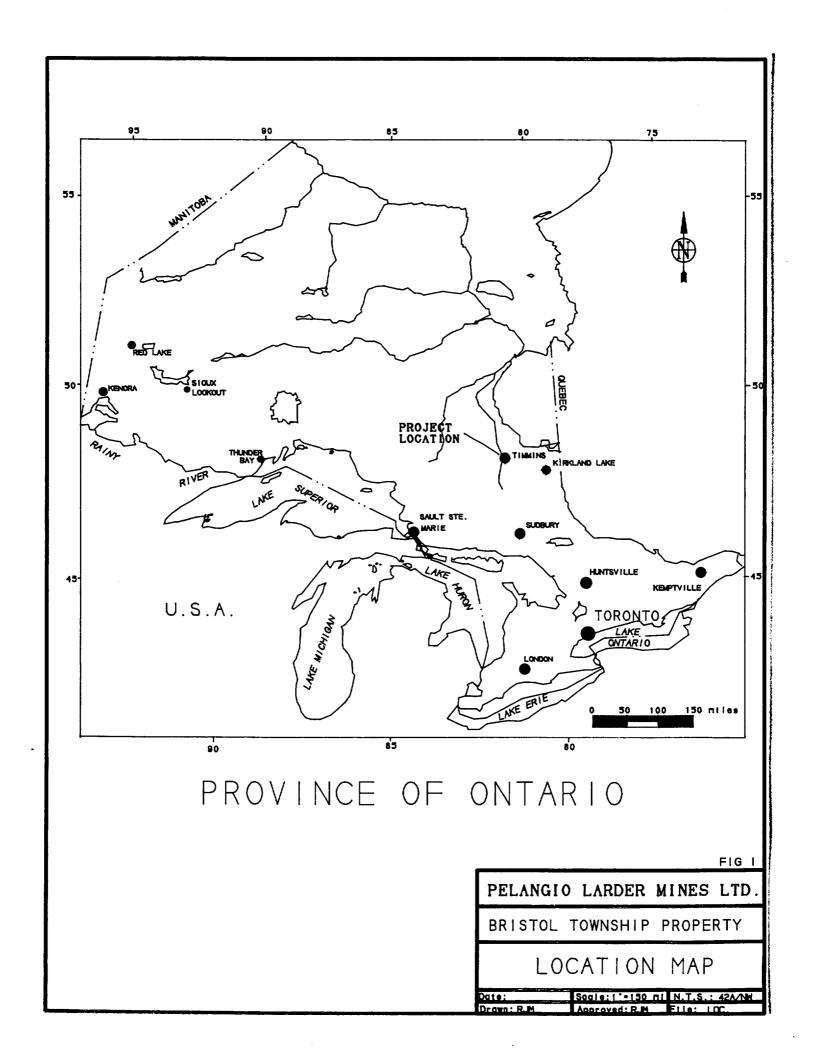
Access to the property was gained via Hwy 101 west for approx. 23km, then south on Hwy 144, 6km to the Tatachikapika River. A logging road goes east then northeast across Thorneloe Twp., parallel and just west of the river through the property in southern Bristol Twp. This road continues north through the property and on to Hwy 101 but is only driveable on the north part.

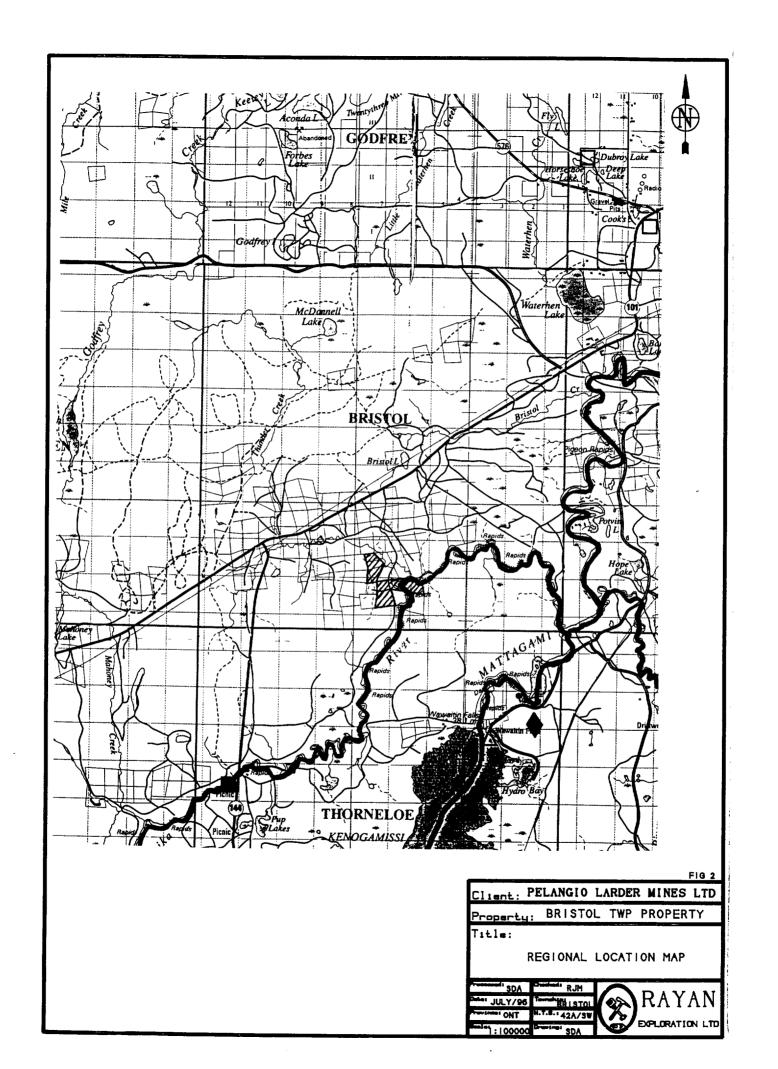
CLAIM STATUS

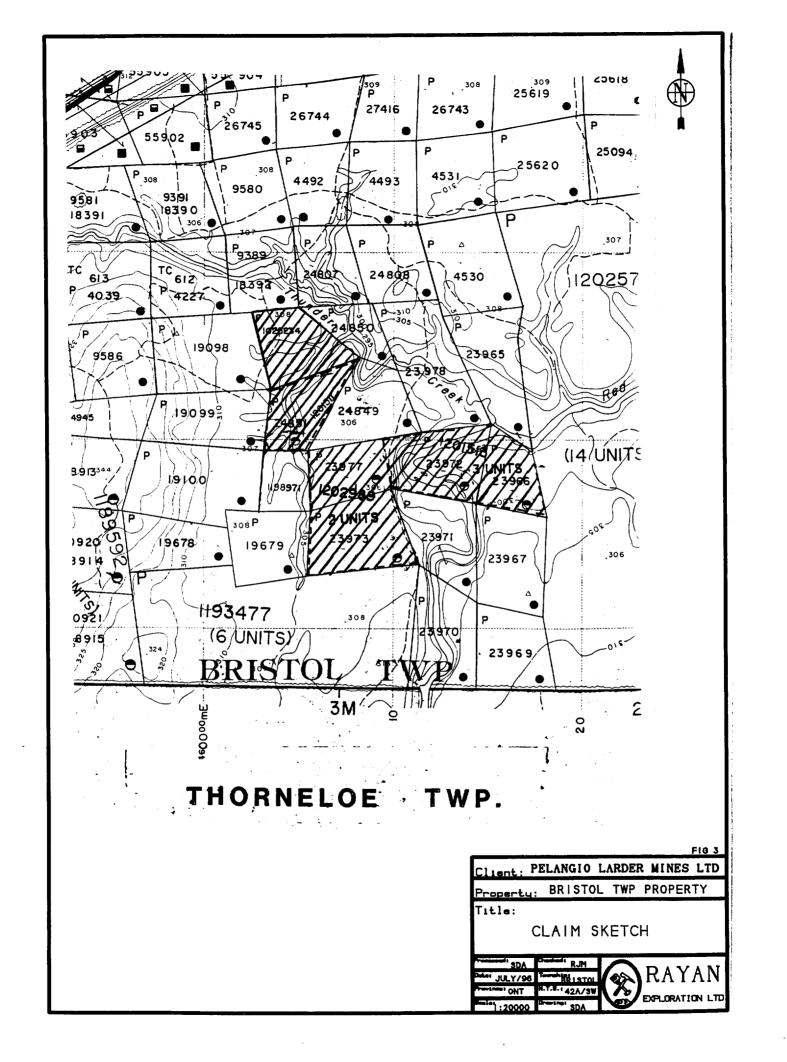
The Property is comprised of 4 contiguous, unpatented mining claims (7 units) in Bristol Twp., Porcupine Mining Division, Ontario.

The claim numbers are as follows:

1202989	(2	units)	Bristol	Township
1201513	(3	units)	Bristol	Township
1201511	,		unit)	Bristol	Township
1025234	(1	unit)	Bristol	Township







PERSONNEL

The people directly involved in this program were all employed by Rayan Exploration Limited, during July, 1996, and are as follows:

All work was supervised by R.J. Meikle, Timmins.

GEOLOGY

The property is shown on the Timmins-Kirkland Lake Map No. 2205, to be situated within the Abitibi Greenstone Belt which covers much of northeastern Ontario and northwestern Quebec.

Generally this belt is underlain by a variety of mafic to felsic volcanics and related sediments as well as felsic to ultramafic intrusive.

Map 2205. Timmins Kirkland Lake Geological Compilation Series show the property to be underlain by Metasediments with northwest striking diabase dikes.

GEOPHYSICAL PROGRAM

A total of 9km of chainsaw cut grid lines were established, covering the claim group. A baseline and tieline were cut at 090 degrees with crosslines every 100 meters and pickets every 25 meters.

All of the crosslines were surveyed with a Proton Magnetometer, recording the Total Magnetic Field at 12.5 meter intervals.

The following is a brief description on the Geophysical Survey Method used:

MAGNETOMETER SURVEY

An EDA Omni Plus Proton Precession magnetometer was used to carry out the magnetometer survey. The instrument is synchronized with an EDA recording base station to help eliminate magnetic diurnal variation. This should ensure an accuracy of less than 10 Nt.

The Proton Precession method involves energizing a wire coil immersed in a hydrocarbon fluid. This causes the protons in the proton rich fluid to spin or precess simulating spinning magnetic dipoles. When the current is removed the protons precess about the direction of the earth's magnetic field, generating a signal in the same coil which is proportional to the total magnetic field intensity. In this way, the horizontal gradient of the earth's magnetic field can be measured and plotted in plan form with values of equal intensity joined to form a contour map.

This presentation is useful in correlating with other data sets to aid in structural interpretation. Individual magnetic responses can be interpreted for dip. depth and width estimates after profiling the data.

The following parameters were employed for the survey:

Instrument - EDA Omni Plus Proton Precession Magnetometer Station Interval - 12.5m
Line Interval - 100m
Diurnal Correction Method - EDA D

Diurnal Correction Method - EDA Recording Base Station Data Presentation - Magnetic Data Posting and Contour Map - 1:5000 scale

Contour Interval - 25 nT

SURVEY RESULTS

The results of the Magnetometer Survey done on the Bristol Township Property show a relatively uniform magnetic susceptibility across the property with the exception of narrow magnetic high striking slightly west of north through the midwestern part of the property. This feature is interpreted to be a diabase dike and is shown on OGS Geological Map No. 2205 as such.

The magnetic results do not appear to suggest any geological change on the property other than the above mentioned dike, and are consistent with the magnetic signature associated with the sediments believed to exist on the property.

RECOMMENDATIONS AND CONCLUSIONS

The results of the current Magnetometer Survey indicate that the property is possibly entirely underlain by sediments with the exception of an intrusive dike.

Because of the close proximity to the recent Band-Ore gold discovery to the south of the property, in Thorneloe Township, an I.P. Survey is recommended on the entire grid as well as possibly filling in the area on the east part not covered by the current survey because of the river. A Pole-Dipole electrode array is recommended to better penetrate the overburden. Care should be taken to avoid the interpreted dike area, especially for any follow up drilling.

<u>CERTIFICATION</u>

I, Raymond Joseph Meikle of Timmins, Ontario hereby certify

1. I hold a three year Technologist Diploma from the Haileybury School of Mines. Haileybury. Ontario, obtained in May 1975.

2. I have been practising my profession since 1973 in Ontario. Quebec. Nova Scotia. New Brunswick, Newfoundland, NWT, Manitoba, Germany and Chile.

3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries. .S. Middleton Exploration Services Ltd.. self employed 1979-1985 (Rayan Exploration Ltd.) and currently with Rayan Exploration Ltd.

4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the field work conducted on the property during 1996.

5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from the property other than professional and contract fees for services rendered.

Dated this 24th day of July, 1996 at Timmins, Ontario.

R.J. Meikle

APPENDIX A

EDA OMNI PLUS MAGNETOMETER

ONN PIUS VIEWNES Notwelensystem





Major Benefits of the OMNI PLUS

- Combined VLF/Magnetometer/Gradiometer System
- No Orientation Required
- Three VLF Magnetic Parameters Recorded
- Automatic Calculation of Fraser Filter
- Calculation of Ellipticity
- Automatic Correction of Primary Field Variations
- Measurement of VLF Electric Field



Specifications*

*Preliminary

Frequency Tuning Range 15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz Transmitting Stations Measured . . Up to 3 stations can be automatically measured at any given grid location within frequency tuning range Recorded VLF Magnetic Parameters Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude) Standard Memory Capacity 800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings display with built-in heater and an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors. RS232C Serial I/O Interface 2400 baud rate, 8 data bits, 2 stop bits, no parity Test Mode A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware) Sensor HeadContains 3 orthogonally mounted coils with automatic tilt compensation Operating Environmental Range -40°C to +55°C; 0 – 100% relative humidity: Weatherproof Power Supply Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only. Weights and Dimensions Instrument Console 2.8 kg, 128 x 150 x 250 mm VLF Electronics Module 1.1 kg, 40 x 150 x 250 mm Lead Acid Battery Cartridge . . . 1.8 kg, 235 x 105 x 90 mm Lead Acid Battery Belt1.8 kg, 540 x 100 x 40 mm Disposable Battery Belt 1.2 kg, 540 x 100 x 40 mm

EDA Instruments Inc., 4 Thorncliffe Park Drive, Toronto, Ontario Canada M4H 1H1 Telex: 06 23222 EDA TOR, Cables: Instruments Toronto (416) 425-7800

In USA, EDA Instruments Inc., 5151 Ward Road, Wheat Ridge, Colorado U.S.A. 80033 (303) 422-9112

Printed in Canada

Northern Development and Mines

rioport or nork contagorda After Recording Claim

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions: Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulr Recorder.
 - A separate copy of this form must
 - Technical reports and maps must
 - A sketch, showing the claims the v



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						PORC	UPINE MINING DIVISION
0241 (03/91)							- IN THE CITY OF THE CONTRACT

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was per



Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction
U9660. 00465

2.16772

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Lol sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collèce de ces renseignements au chef provincial des terrains minières, ministère du Développement du Nord et des Mines, 159, rue Cedar, 46 étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Туре	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's	Type Aire cutting 4		
Fees Droits de l'entrepreneur	Mire cutting + magnetonete Survey		
et de l'expert- conseil	Survey	4108	4108-
Supplies Used Fournitures utilisées	Туре		
•			
Equipment Rental	Туре		
Location de matériel			
	Total Di Total des co	rect Costs its directs	4108

2.	Indirect	Costs/Coûts	indirects
	Note: W/h	on olaimina Daha	hilliantine

Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Туре	Descrip	tion	Amount Montant	Totals Total global
Transportation Transport	Туре			
Food and Lodging Nourriture et hébergement				
Mobilization and Demobilization Mobilisation et démobilisation				
	Sub To Total partiel		rect Costs Indirects	
Amount Allowable Montant admissible				
Total Value of Ass (Total of Direct and indirect costs)		Valeur tota d'évaluatio (Total des co et indirects :	oûts directs	4108-

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

- 1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
- Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

ſ	Total Value of Assessment Credit	Total Assessment Claimed
	× 0.50 =	

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur	r totale du crédit d'évaluation	Évaluation totale demandée
	× 0,50 =	
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Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as _	RESIDEUT (Recorded Holder, Agent, Position in Company)	l am	authorized
-----------	--	------	------------

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :

que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'	à titre de					ie s	uis	autorisé
•	(titulaire en	registré.	représentant.	poste occu	oé dans la			

à faire cette attestation.

Signature A 1	Date		
-H/(-1	July 25/96		
Nota : Dans cette formule, lorrou des personnes,	le masculin est utilisé au ser neutre.		

INVOICE

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Ministry of **Northern Development** and Mines

Ministère du Développement du Nord et des Mines

October 18, 1996

Gary White Mining Recorder 60 Wilson Avenue, 1st Floor Timmins, ON P4N 2S7



Geoscience Assessment Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5

Telephone:

(705)670-5853

Fax:

(705) 670-5863

Dear Sir or Madam:

Submission Number: 2.16772

Subject: Transaction Number(s): W9660.00465

After reviewing the Work Report(s) we have prepared this letter and the attached summary, which lists the results of our review. Requirements of the Assessment Work Regulation may not have been fully met. Please examine the summary to determine the next course of action concerning the identified Work Report(s).

NOTE: The 90 day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, is no longer in effect for this submission.

PLEASE NOTE ANY REQUESTED REVISIONS MUST BE SUBMITTED IN DUPLICATE.

If the anniversary dates for the mining claims affected by this correspondence have not passed, a number of options are available. Please contact the Mining Recorder to discuss these options.

If you have any questions regarding this correspondence, please contact Steve Beneteau at (705)670-5855.

Yours sincerely,

Ruc Galil.

ORIGINAL SIGNED BY Ron C. Gashinski Senior Manager, Mining Lands Section Mines and Minerals Division

Work Report Assessment Results

Submission Number: 2.16772

Date Correspondence Sent: October 18, 1996 Assessor: Steve Beneteau

Transaction Number

First Claim Number

Township(s) / Area(s)

Status

Approval Date

W9660.00465

1025234

BRISTOL

Approval

October 17, 1996

Section:

14 Geophysical MAG

Correspondence to:

Mining Recorder Timmins, ON

Resident Geologist Timmins, ON

Assessment Files Library Sudbury, ON

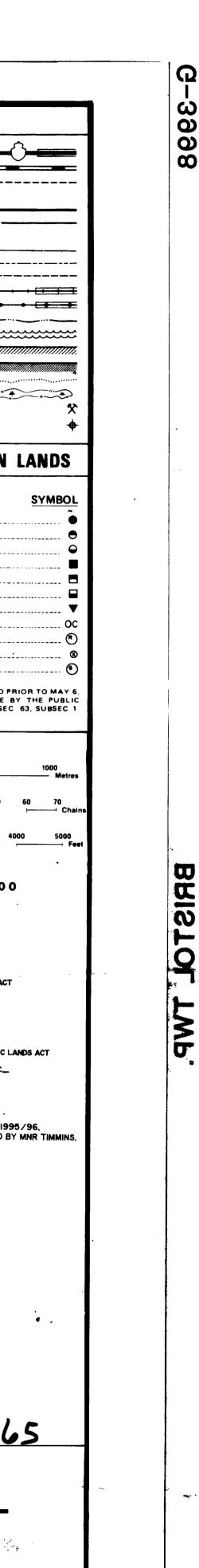
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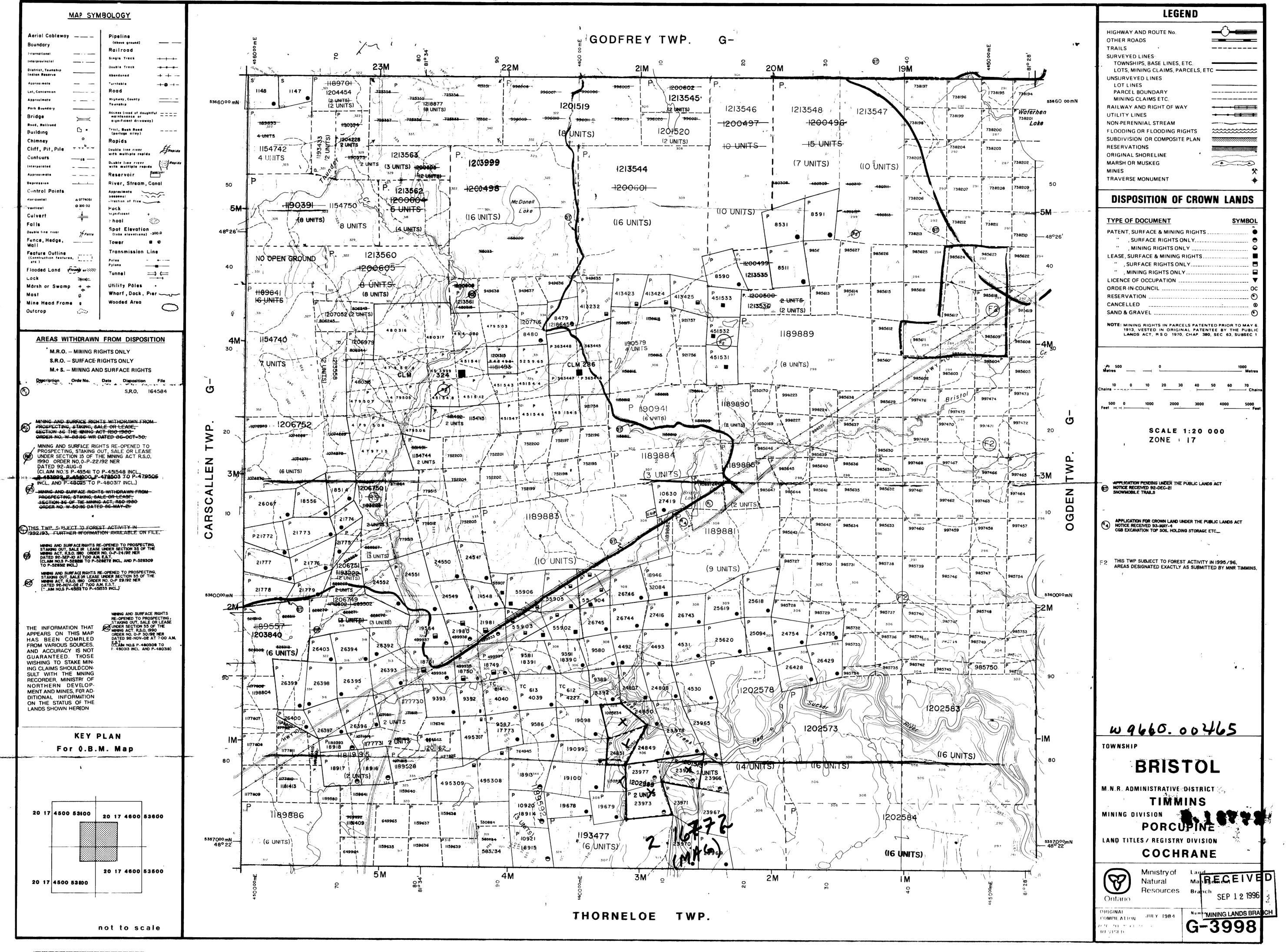
Ingrid Hibbard

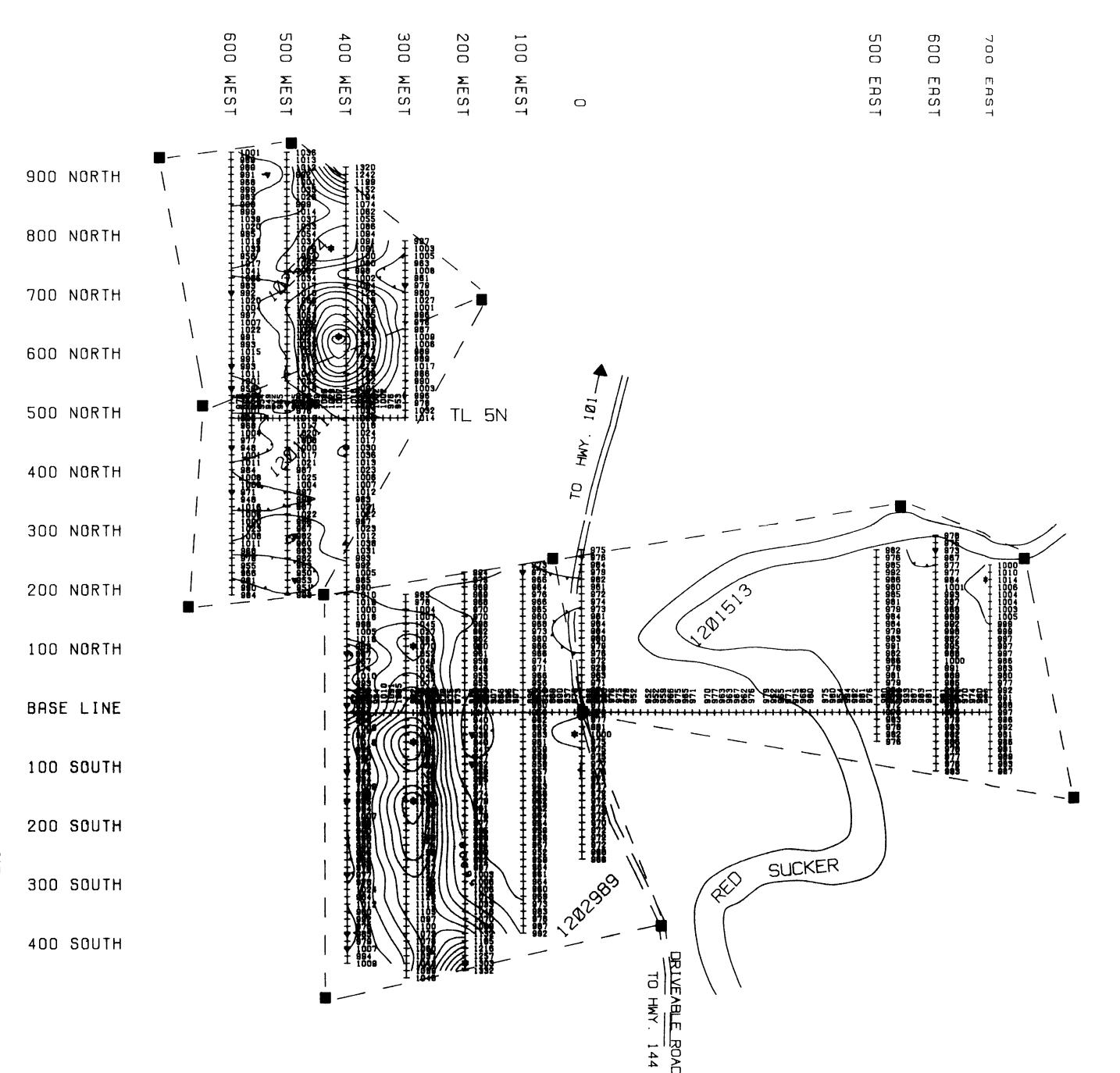
PELANGIO - LARDER MINES, LIMITED

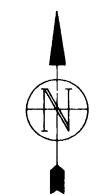
CONNAUGHT, Ontario

JOHN KEVIN FILO TIMMINS, Ontario









LEGEND

INSTRUMENT: EDA OMNI PROTON PRECESSION MAGNETOMETER

PARAMETERS MEASURED: EARTH'S TOTAL MAGNETIC FIELD (NANO-TESLAS)

READING INTERVAL: 12.5 M

CONTOUR INTERVAL: 25 NANO TESLAS

DIURNAL CORRECTION METHOD: RECORDING OMNI BASE STATION

DATUM SUBTRACTED: 57000 nT

TOTAL SURVEY COVERAGE: 10 Km

2.16372



712

Client: PELANGIO LARDER MINES LTD.

BRISTOL TOWNSHIP PROPERTY

Title:

TOTAL FIELD MAGNETOMETER

SURVEY

Proc essed: R.J. MEIKLE	Checked: RJM		
Date: JULY 1986	Township: BRISTOL		
Province: ONT.	N.T.S.: 42A/SV		
Scale: 1 - 5 0/0/0	Drawing: R341MAQ		



