



Suite 22, Hollinger Building - P.O. Box 1670 Timmins, Ontario. P4N 7W8-(705) 264-2977

REPORT ON A

GROUND MAGNETIC

AND

ELECTROMAGNETIC SURVEY

FOR

BAYRIDGE - PELANGIO JOINT VENTURE

BLUEBERRY ISLAND GOLD PROPERTY

HORWOOD TOWNSHIP

ONTARIO

RECEIVED

MAY 1 0 1988

MINING LANDS SECTION

Timmins, Ontario March, 1988

Kenneth Guy Geologist



#### 42801SE0042 2.11166 HORWOOD

### Ø10C

	Page
SUMMARY and RECOMMENDATIONS	1
INTRODUCTION	2
LOCATION and ACCESS	2
PROPERTY	3
PREVIOUS WORK	<b>3</b> =
GEOLOGY	4
LINECUTTING	<b>.5</b>
SURVEY EQUIPMENT and PROCEDURES	5
DISCUSSION OF RESULTS	6
CERTIFICATE	8

# FIGURES

1. REGIONAL LOCATION MAP	after page 2
2. PROPERTY LOCATION MAP	after page 3
3. VLF-EM PLAN MAP	Back pocket
4. CONTOURED MAGNETIC PLAN MAP	Back pocket
5. CONTOURED FRASER FILTER PLAN MAP	Back pocket

#### SUMMARY AND RECOMMENDATIONS

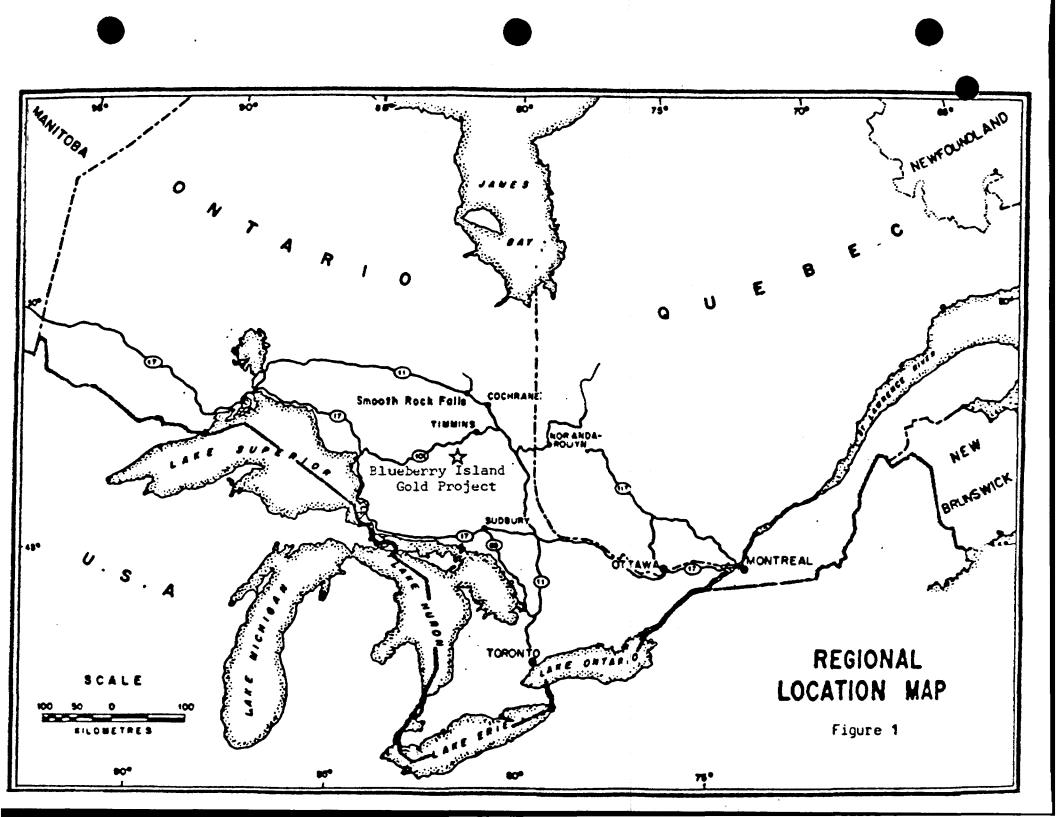
The ground geophysical program has successfully located and defined a number of anomalies. Two VLF-EM anomalies are recommended for additional ground follow up, bringing the total for the project to fifteen.

The magnetic survey outlined an area of probable magnetic mafic volcanics.

The ground geophysical program should greatly aid during geological mapping and assist in stratigraphic correlation of the project area.

The following recommendations are made for the project area:

- 1) A detailed geological survey should be conducted concurrent with intensive prospecting. The geophysics indicates a near surface source for the VLF and magnetic anomalies.
- 2) A reconnaissance geochemical survey be conducted over the gold occurrences and the eastern portion of the property. This may aid in anomaly discrimination.
- 3) A reconnaissance Induced Polarization (IP) survey be conducted over some of the VLF-EM anomalies as well as in the vicinity of the gold occurrences.



### INTRODUCTION

During the period March 1988, a combined Very Low Frequency Electromagnetic (VLF-EM) and magnetic survey was carried out over the Bayridge - Pelangio Joint Venture property in Horwood Township, Ontario.

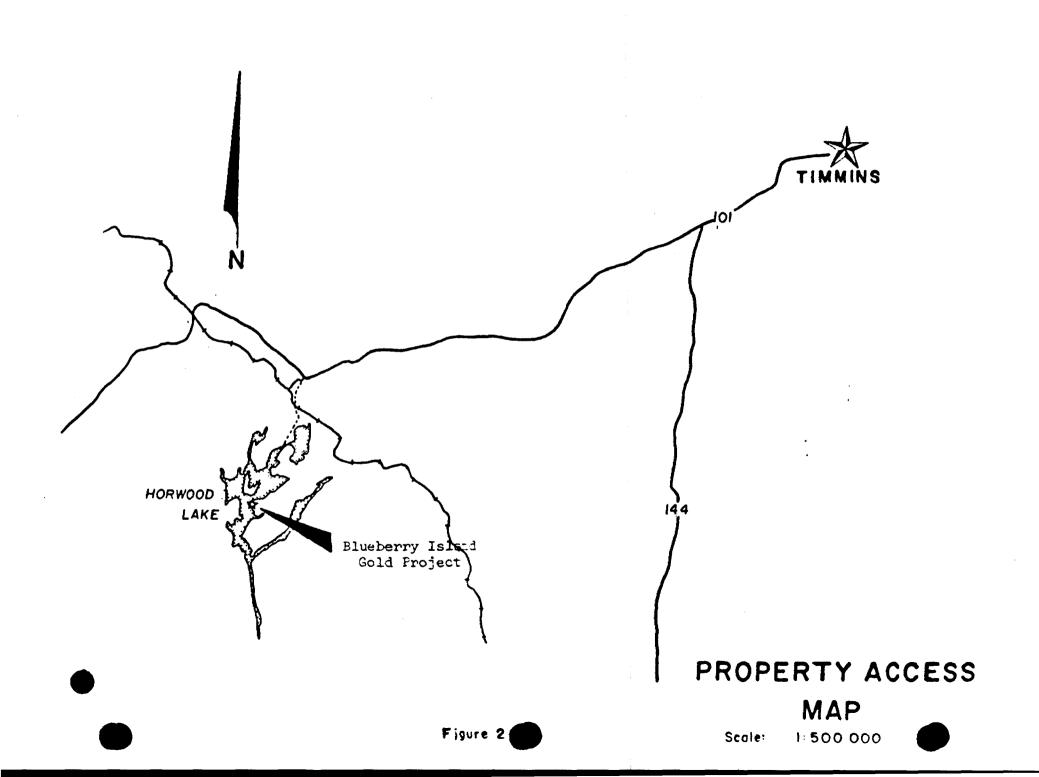
The purpose of the VLF-EM survey was to detect, on the ground, zones of conductivity which may be produced by conductive minerals and/or zones of shearing and faulting. The magnetic survey was performed to determine if any magnetic correlation exists with apparent conductivity and to aid in stratigraphic correlation.

The property encompasses a number of gold occurrences hosted by carbonatized volcanic rocks.

#### LOCATION AND ACCESS

The Blueberry Island Gold Property is located in central Horwood Township, Porcupine Mining Division, Ontario. The property lies approximately 70 miles southwest of Timmins, Ontario (Figure 1).

Access to the property is via Highway 616, south off Highway 101, to the northeast shore of Horwood Lake (Figure 2). Transporation by boat is then necessary to the claim group which straddles the shore of Horwood Lake.



Air transportation, helicopter or fixed wing, is also available in Timmins.

#### PROPERTY .

The Blueberry Island Gold Property consists of 31 contiguous, unpatented mining claims in Horwood township. The survey covered in whole or in part 14 claims; the water covered portion of property. The remainder of the property was covered during an earlier survey.

The following claims were covered in whole or in part by the combined surveys:

995955 - 995958 inclusive

901425, 901426

955556 - 955562

798703

### -14 claims

The remainder of the claim block, land portion, was covered by surveys completed earlier. The entire project now has complete geophysical coverage.

### PREVIOUS WORK

1949 - 1959 J.E. Lefever - 32 DDH's - 0.56 oz Au/ton over 10 feet, sludge sample assayed 7.8 oz Au/ton.

1960 Kerr Addison Mines Ltd. - magnetic survey, 7

DDH's, 3,076 feet, over the main showing - drilling

indicated an auriferous zone 500 feet long by 4 feet

wide with an average assay value of 0.204 oz Au/ton hosted in a sheared diorite - occurrence is a gold and sulphide bearing, quartz - carbonate vein system.

- 3 DDH's on the Stack vein, 0.67 oz Au/ton over 1 inch 1972 - Noranda Exploration Company Limited - magnetic and VEM surveys.

1980 - Ingamar Explorations Limited - magnetic and VLF-EM surveys.

1982 - Raise Contracting - geological survey, stripping and trenching encountered gold values.

1986 - Pelangio - Larder Mines Ltd. - VLF-EM survey.

### GEOLOGY

The Horwood Lake Property lies within the northeast portion of the Swayze greenstone belt. The Swayze greenstone belt is a typical Superior Province, Archean age greenstone belt consisting of predominately mafic volcanics with lesser felsic to intermediate volcanics. Intercalated tuffs and sedmints are also present. The volcanic sequence is intruded by mafic felsic intrusive rocks.

Extensive, intermittent mineral exploration has focused on gold mineralization in quartz vein systems and pyritized shear zones.

### LINECUTTING

During February 1988, a total of 19.8 kilometres of line were cut on the property. The grid established on the land was extended out into the lake on the ice. The base line was extended at az 090 (E-W) with section lines every 100 metres off the base line. Picket stations were established every 25 metres on both section lines and base line.

### SURVEY EQUIPMENT AND PROCEDURES

The Very Low Frequency-Electromagnetic (VLF-EM) survey was carred out using a Geonics EM16, operating at a frequency of 24.0 kHz utilizing the Cutler, Maine (NAA) transmission station. Readings of both In Phase (IP) and Quadrature (OP) were taken every 25 metres, with an accuracy of 1% on both.

A total of 19.0 km of line were surveyed during March 1988.

The data is presented as profiles on the VLF-EM plan map Figure 3.

The Magnetic survey was conducted with a Geometrics G-816 total field magnetometer. Readings were taken every 25 metres along section lines and base line. The intersection of the section lines on the base line served as base stations so that diurnal drift could be

monitored. This method allows readings to be taken and corrected with an accuracy of one gamma.

A total of 19.8 kilometres of line were surveyed during March 1988.

#### DISCUSSION OF RESULTS .

The VLF-EM survey detected 4 anomalies which were not attributed to shoreline effects. Two anomalies were continuations of anomalies outlined on land during the previous survey.

The anomalies break down into the following priorities:

HIGH - 2 - Additional ground follow-up recommended,

good conductivity with corresponding magnetic signature
or structure, possible contact zone or shear zone.

MODERATE - 2 - Additional follow-up is contingent upon results from high priority anomalies.

<u>LOW - 0</u> - no follow-up recommended - likely surficial or overburden response.

The two anomalies continued from the earlier survey are F1 and C1. Both were rated moderate previously and remain so based on the present survey.

The two anomalies detected uniquely by the present survey are designated F2 and D2. Both are rated high priority due their moderate conductivity and possible shear control. Both are in close proximity to known gold occurrences.

MAGNETIC SURVEY - The Magnetic survey delineated a northwest trending area of high magnetics through the property. This is a continuation of the unit outlined in the previous survey. This is probably a dioritic unit or magnetic mafic volcanic unit.

A spot high at L1W/6N appears to be a cultural effect possibly a drill casing.

### CERTIFICATE

I, the undersigned, Kenneth Guy, residing at 180 Nadine Street, South Porcupine, Ontario graduated with a Bachelor of Science degree in Earth Science - Geology from the University of Waterloo, Waterloo, Ontario in 1978.

I have been employed in the field of Geology since graduation in 1978.

I am a Fellow of The Geological Association of Canada

I do not hold, nor do I expect to receive an interest of any kind in these claims held by BAYRIDGE OR PELANGIO RESOURCES LIMITED or in any other mining claims they may have.

Kenneth Guy Geologist

Timmins, Ontario



Ministry of Northern Development and Mines

P1100.0038W

## Report of Work

(Geophysical, Geological, Geochemical and Expenditures



·· ···Mir



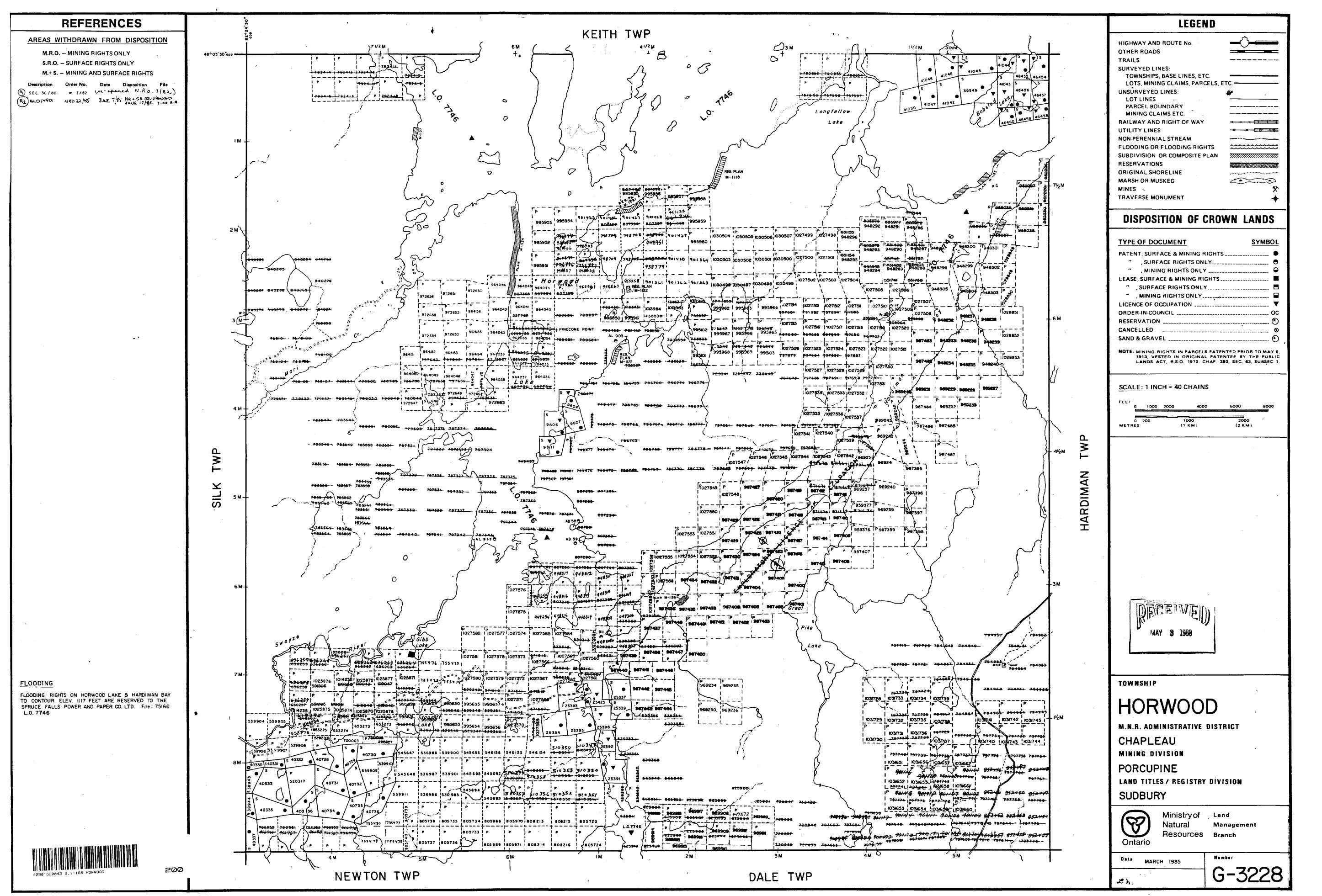
42801SE0042 2.11166 HORWOOD

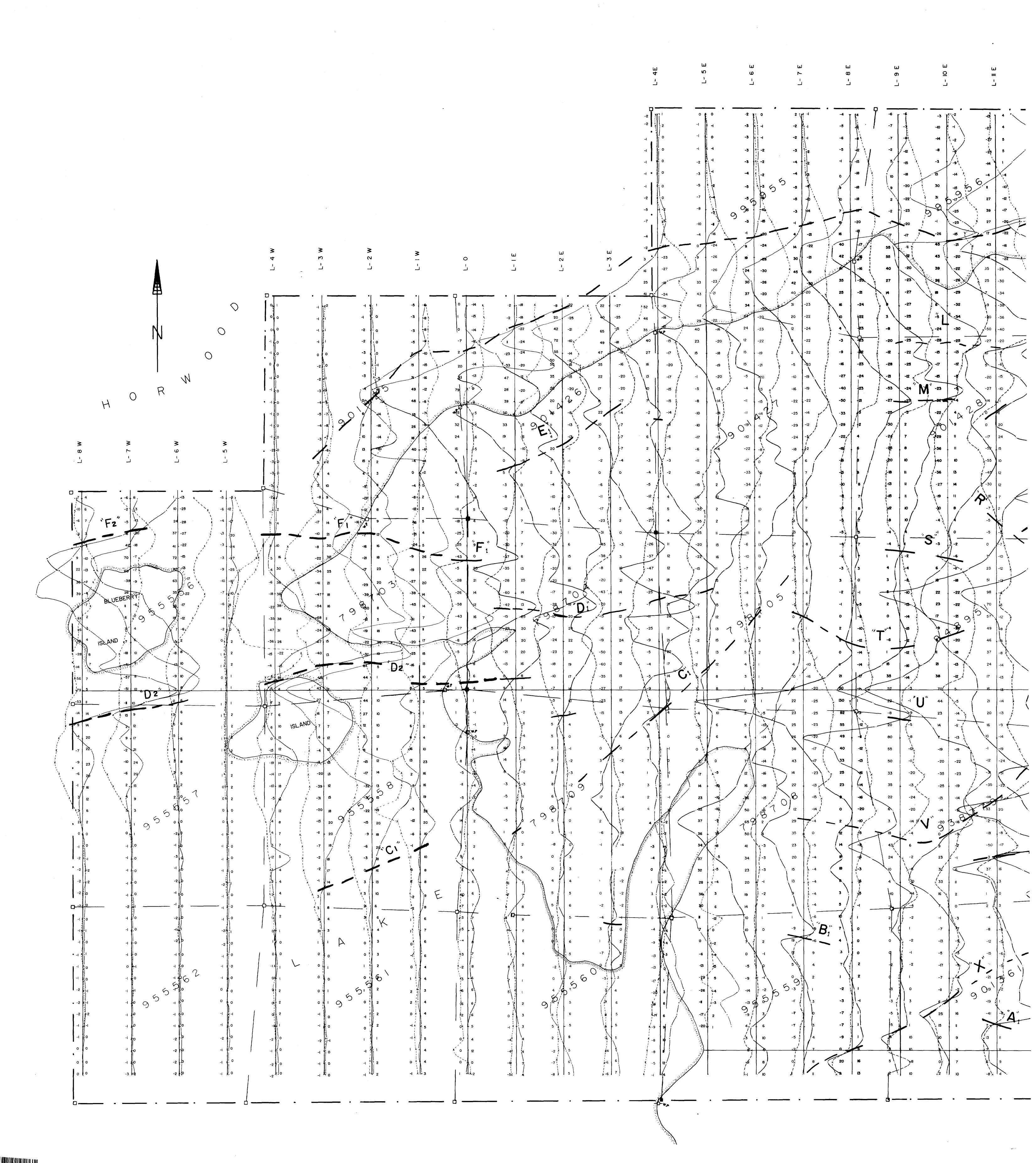
900

Type of Survey(s)  VLF ELECT	TROMAGNETIC & MAGNETOMETER				HORW	HORWOOD TOWNSHIP			
Claim Holder(s) PELANGIO	D LARDER MINES LTD.				Prospector's Licence No.				
Address						<u></u>	T-971 -		
BUX 1430; Survey Company	TIMMINS, ONTA	KIU	<del></del>	Date of Survey	Iteam Rital		Total Miles of line	- C-10	
GUY THIBA	ULT EXPLORATIO	N SERV	ICES	10 02 8		3 88 Mo.   Yr.	19.8 km	Cut .	
Name and Address of Author (o KEN GUY,	f Geo-Technical report) TIMMINS, ONTAR	210						-	
redits Requested per Each (			Mining C	laims Traversed (L	ist in nume	rical segui	ence)	<del></del>	
Special Provisions	Geophysical	Days per	M	lining Claim	Expend.		fining Claim	Expend.	
For first survey:		Claim	Prefix	Number	Days Cr.	Prefix	Number	Days Cr. 30 €M	
Enter 40 days, (This includes line cutting)	- Electromagnetic	40	P	995955 /			995956	POHAGE	
morado me datemay	<ul> <li>Magnetometer</li> </ul>	20		995956			995957	11	
For each additional survey: using the same grid:	- Radiometric			9,95957			995958	20 EY 15 HAC	
Enter 20 days (for each)	- Other			- <del>995958 -</del>			901426	BS EM IS MAG	
	Geological			901425 -			955 559	30 EM	
	Geochemical			901426			+ + + + + + + + + + + + + + + + + + + +		
Man Days	Geophysical	Days per Claim		955556			O GEOLOGICAL		
Complete reverse side	• Electromagnetic			-955557			SESSMENT F	t ES	
and enter total(s) here	I.V.E.D.						OFFICE		
	President of the control of			-955558 :		12h	MAY 3 0 198	00	
MAY 2	, , , ,			<del>955559 -</del>		-	1101 111 120	0	
er en	a - Other			955560			CEIVE	+	
MINING LAN	D5°SECTION			955561 -					
	Geochemical	<u> </u>		955562 -				• ]	
Airborne Credits		Days per Claim		798703 ·					
Note: Special provisions	Electromagnetic						**************************************		
credits do not apply to Airborne Surveys.	Magnetometer								
to time do traye.	Radiometric						.1	-	
Expenditures (excludes powe							MIX REA	CHED_	
Type of Work flet totoge 1	1 Stripping/			REC	ORC	En	1		
الكالألا بيويا	, A G			1		200			
Performed on Baim(s)	<b>2</b>								
MAY_3	1988			MA	Y -3	H)			
	1				•			<del> </del>	
Calculation of expenditure Days	٦	Total		<del></del>				<del></del>	
Total Expenditures	Oay:	Credits	TEN COLE			The state of			
\$	_   +   15   =   _						mber of mining vered by this	14	
Instructions Total Days Credits may be ap	portioned at the claim h	older's	·			report of	work.	17	
choice. Enter number of days in columns at right.			Total Day	For Office Use O	nly	Mining R	forder 1	<del></del>	
m colomba et right.	$\overline{}$		Recorded	May 3	188		1/1/1	<u>'</u> -	
	order Holder or Agent (S	Signaturel	1110	Date Approved		Branch D	A STATE OF THE STA		
April 27/88 // Certification Verifying Report	CONCERNATION OF THE PARTY OF TH	<u>~(</u>		L6 May	XO All	J M	com		
I hereby certify that I have a	personal and intimate kr						having performed	the work	
or witnessed same during and		and the ann	exed report is	true.					
MAURICE HIBBA							1	· · ·	

Date Certified
April 27/88

CONNAUGHT, ONTARIO





42B01SE0042 2.11186 HORWOOD

210

