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REPORT ON THE AIRBORNE MAGNETIC AND VLF-ELECTROMAGNETIC SURVEYS
ON THE PROPERTIES OF ALBERT CHITARONI SOUTH LORRAIN TOWNSHIP,
LARDER LAKE MINING DIVISION, ONTARIO.

BY

H. FERDERBER GEOPHYSICS LTD.

September 8, 1992 Val d'Or, Quebec

R.A. Campbell, B.Sc. Geologist Qu. 7.6619

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REPORT ON THE AIRBORNE MAGNETIC AND VLF-ELECTROMAGNETIC SURVEYS
ON THE PROPERTIES OF ALBERT CHITARONI SOUTH LORRAIN TOWNSHIP,
LARDER LAKE MINING DIVISION, ONTARIO.

#### INTRODUCTION

On August 10, 1992, airborne magnetic and VLF-electromagnetic surveys were completed on the property of Albert Chitaroni and surrounding areas, South Lorrain Township, Larder Lake Mining Division, Ontario. The magnetic and VLF-electromagnetic data was collected by the airborne division of H. Ferderber Geophysics Ltd. The survey was flown from a base at Val d'Or, Quebec. A total of 78.12 miles of data was collected.

The purpose of the magnetic and VLF-electromagnetic surveys was to collect data that outlines the positions of contacts, conductive zones, and structures which may contain base metals, precious metals, platinum group metals, and/or diamonds.

#### PROPERTY DESCRIPTION, LOCATION AND ACCESS

The property of Albert Chitaroni is comprised of 2 claims, 1118450 (block of 10) and 1179175 (40 acre claim) in northeastern South Lorrain Twp., Larder Lake Mining Division, Ontario. The claims are 1000 feet apart in a north-south direction and are registered with the office of the Mining Recorder at Kirkland Lake. These claims plus a large area to the north, covering approximately 2960 acres, were covered by the airborne surveys. The boundaries of the surveyed area and mining claims are indicated on each map sheet.

The surveyed area is located 17 miles south-southeast of the town of Cobalt and 16 miles east-northeast of Temagami. Provincial Highway 567, south from North Cobalt, bisects the property from the northwest to southeast. A hydro line trends southeast and south from the northwestern corner of the property.

Most of the surveyed area is forest covered. The eastern boundary is the western shore of Lake Timiskaming. Small lakes and swamps lie on the property and are connected by creeks. The

northeastern edge of Oxbow Lake is located across the western boundary and Maidens Lake lies 1000 feet north of the northwestern boundary. Topographical relief over the property is high with north and north-northeast trending hills providing relief of over 500 feet. Outcrop exposure over the surveyed area appears to be good.

Supplies, services and qualified manpower are available in the Cobalt-Temagami area.

#### GEOLOGY AND MINERALIZATION

Maps 19e, 2188, 2194, and 2361 produced by the Ontario Government define the geology and mineralization lying under the surveyed area and its surroundings. The oldest rocks in the area are Archean metavolcanic and metasedimentary rocks forming two northeast trending bands and a small north trending unit. irregular shaped south band strikes east to northeast across the southern part of the property. It is comprised of: intermediate to mafic metavolcanics; metadiabase, metagabbro or diabase flows; quartzite and greywacke; felsic metavolcanics with or without interbedded quartzite; pyroclastic rocks; quartz-feldspar porphyry and pillow lava. The middle band strikes northeast across the surveyed area to Lake Timiskaming, 1000 feet north of the south These rocks are mainly intermediate to mafic metavolcanics with minor metadiabase, metagabbro and diabasic flows; quartzite and greywacke; pyroclastic rocks; schist; and pillow Approximately 1/4 mile north of the west end of the middle band, a band of intermediate to mafic metavolcanic, intercalations of felsic metavolcanics and pyroclastics strikes north, just south of the northwestern boundary.

Early Proterzoic rocks of the Huronian Supergroup sediments underlie approximately 60% of the surveyed area. These are sediments of the Coleman Formation, east-northeast to east-southeast striking quartzose siltstone, greywacke arkose and conglomerate.

A narrow sill of Early Proterzoic Nipissing quartz diabase trends northeast from Oxbow Lake along the northern edge of the middle metavolcanic-metasedimentary band.

Five fault zones, including the Bulldog Fault in the southwest and Maidens Lake Fault in the centre of the property, strike southeast across the surveyed area. A east-northeast trending fault lies within the northeastern part of the Nipissing quartz diabase sill.

The surveyed area is located within the Cobalt Ag-Co camp. Eleven past-producing Ag-Co-Ni or Ag-Co Mines lie within 1 mile of the northern and northwestern boundaries. The Bulldog shaft and numerous exploration pits are located on claim 1118450. The past producing mines are in Archean metavolcanic-metasediments, Coleman Member sediments and Nipissing quartz diabase. The Bulldog Co prospect and the exploration pits lie along the southern edge of the southern metavolcanic-metasedimentary band. The Bulldog Prospect is located along the trending Bulldog Fault zone. Old pits have also been excavated in the middle and northern bands of metavolcanic-metasediments and in the Coleman Member sediments between two Nipissing diabase sills.

The rocks underlying the surveyed area are in an environment that can host 3 types of mineralization:

- 1) Ag-Co+Ni, + Cu in quartz-calcite veins along fractures
  - a) along the upper margin of the Nipissing quartz diabase sills.
  - b) in the lower part of the Coleman Member sedimentary rocks adjacent to the lower diabase contact.
  - 3) in Archean metavolcanic-metasedimentary rocks.
- Volcanogenic massive sulphides containing base metals in the more felsic metavolcanic flows and pyroclastic rocks.
- 3) Gold in quartz veins or deformation zones in the metavolcanicmetasedimentary bands or adjacent Nipissing diabase.

The property is located 67 miles south of the diamond bearing kimberlite pipes found by Sudbury Contact Mines in McVittie Twp. Generally these pipes produce distinct circular to sub-circular

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magnetic anomalies which can be detected by airborne magnetic surveying.

#### INSTRUMENT AND SURVEY METHODS

The survey was completed using a 1972 Cessna 172, fixed wing aircraft, call letters CF-EWK, owned and operated by H. Ferderber Geophysics Ltd. The pilot and navigator/operator were M. Turcotte and D. Monastesse respectively of Val d'Or and Vassan.

#### Magnetometer

The magnetometer used was GEM Systems GSM-11, high sensitivity airborne proton (Overhauser) magnetometer. The instrument continuously measures the Earth's magnetic field at a 0.01 gamma sensitivity for 1 reading per second to 10 readings per second at a 0.1 gamma absolute accuracy. For this survey 4 readings per second were collected. The analog output is on 3 channels, from 1 to 10,000 gammas full scale.

#### VLF-EM System

A Herz Totem 2A VLF-EM System was used to measure the changes in the total field and in the vertical quadrature field on two frequencies simultaneously, with an accuracy of 1%. The primary transmitting station of Cutler, Maine, (NAA), frequency 24.0 kHz was employed.

#### Radar Altimeter

The ground clearance was measured with a King 10/10 A radar altimeter. The survey was flown at a mean clearance of 300 feet with the altimeter producing an accuracy of 5% (15 feet) at this altitude.

#### Tracking Camera and Video Centre

A RCA TC-200 colour video camera and Galaxy 200 video centre was used to record the flight path on standard VHS type video tapes. Manual fiducials were indicated on the picture frames for reference with digital printout. Flight path recovery was aided using a Panasonic Colour Video Monitor-S1300 and Video Cassette Recorder AG-2500.

#### Data Acquisition System

A Picodas Group Inc. PDAS 1100 data acquisition system featuring seven analog inputs with two frequency inputs and external interfacing was used. A Termiflex Corp. ST/32 Keyboard control unit and Sharp Corp. LCD display unit are connected to the data acquisition system. At present this system stores the altimeter VLF-1 inphase, VLF-1 quadrature, VLF-2 inphase, VLF-2 quadrature, magnetic field (coarse), magnetic field (fine), and the fourth difference (noise), and fiducials on 3.5 inch floppy disk drive. The data is then printed out in digital and profile form. Survey Parameters

The survey was conducted on north-south lines, flown at an average aircraft altitude of 328 feet and a speed of approximately 90 miles per hour. Geophysical responses were collected at data points spaced at 33 foot intervals along the lines. The lines were spaced at 440 foot intervals. Navigation was visual using airphoto mosaics, at a scale of one inch to 1320 feet, manual fiducials and the flight path recovery system as references.

#### DATA PRESENTATION

Flight lines, fiducial points and geophysical responses were reproduced from the airphoto mosaics at a scale of one inch to 1320 feet (1:15,840). The outline of the surveyed area and Chitaroni claims are shown on each map sheet.

The aeromagnetic data was corrected for diurnal variations by using base lines as references. The data was then contoured at 20 gamma intervals and presented on Map MG-1.

The VLF-EM was transferred from the Totem 2AG memory to printed form. Base values were determined for the VLF-EM total field profiled data. These values were used to correct for variations in transmitter strength and the corrected total field values were plotted on Map EM-1. The positive values were contoured at intervals of 2%. The conductor axes were determined and labelled A, B, C, etc. No priority was attached to the labelling system.

Also included in the report is a geological compilation Map GI-1, at a scale of 1 inch equals 1320 feet, showing an interpretation of the geophysical data.

## SURVEY RESULTS AND INTERPRETATION

# Magnetic Survey

The most prominent features delineated by the data collected by the airborne magnetic survey are parallel east-northeast trending sets of lows and highs. The southern-most set of highs appears to be caused by intermediate to mafic metavolcanics rocks, containing varying amounts of magnetite, possibly intercalated with felsic metavolcanics and/or metasediments (see Map GI-1).

In the central part of the surveyed area numerous highs form a zone striking east-northeast north and then east-northeast across the property from the western boundary. These highs could be produced by the more mafic parts of the Nipissing quartz diabase sill and/or bands of intermediate to mafic metavolcanics. Weaker highs at the extreme northeastern edge of the survey define the location of the southern edge of a Nipissing quartz diabase sill.

The remaining areas are represented by magnetic lows, indicating that approximately 75% of the surveyed area is underlain by rocks of low magnetic susceptibilities, probably Coleman Member sediments.

The magnetic contour pattern is broken and distorted. These distortions and breaks form seven linear zones outlining the positions of south-southeast (F1, F2, F3, and F4), east-southeast (F5) and south striking (F6 and F7) fault zones.

# VLF-Electromagnetic Survey

Numerous VLF-electromagnetic anomalies, forming 13 conductive zones, are shown on Map EM-1. Descriptions, geological environments and causes are outlined on the following pages.

Zone	Topography
A	2nd Conductor from the east lies along the south edge of the swamp.

#### Magnetics

The 2 eastern conductors lie in or across lows.

## Environment/Causes

The 2nd conductor from the east is caused by conductive overburden. The long eastern conductor represents a possible shear in sediments, bent at the intersection with fault F5.

The western two conductors are in a high.

The western 2 conductors could be caused by small shears, possibly containing sulphide mineralization, in mafic to intermediate metavolcanics.

B Lies along a power line.

C

The western conductor is located in a swamp.

Crosses the contour pattern.

The western 2 conductors lie along the southern edge of a low.

Culture-power line.

The western conductor could be caused by conductive overburden. It lies near a shaft in sediments. The 2nd conductor from the west defines the location of a small shear in sediments near a contact with metavolcanics—diabase, between faults F3, F4 and F6.

The eastern 3 conductors cross highs and lows.

The third conductor from the east may be caused by a cross-cutting shear in metavolcanics or diabase, cut-off in the east by fault F3. The eastern two conductors represent shears in sediments with the 2nd from the east lying near a contact with the metasediments.

D Lies north of a swamp.

The western conductor is located just north of the northern edge of a lake.

Crosses the east end of a low.

The western conductor lies along the southern edge of broad highs.

Small cross-cutting shear in sediments.

The western conductor represents a small shear, possibly hosting sulphide mineralization in metavolcanics or diabase along a contact with sediments. Lies near old trenches, between 2 fault zones (F2 and F5).

The eastern two conductors are located along the southern edge of a low, trending east into a high.

The eastern 2 conductors may represent a shear in sediments, crossing and distorted by faults F6 and F7. The east end continues into metavolcanics.

Along the northern edge of a high.

Shear in Nipissing diabase, between a quartz vein to the west and a shear to the east.

In a weak high.

Small shear in sediments.

F

E

G

н	In and along the shore of Lake Timiskaming.	Along the southern edge of lows.	Conductive lake sediments - change in relief.
I		Along the contour pattern between 2 highs.	Shear or sulphide mineralization in metavolcanics or diabase, between faults F4 and F6.
J		Between a high and a low, along the contour pattern.	Shear along a metavolcanic-Coleman Member sediments contact, cut-off by fault F1.
K		Cross lows.	Possible cross- cutting shears in Coleman Member sediments, cut by fault F1.
L		Crosses the contour pattern between a low and high.	Shear cross-cutting a diabase-metavolcanic and sediment contact.
М		Crosses a high.	Fault F1 at the eastern edge of a metavolcanic unit.

## CONCLUSIONS AND RECOMMENDATIONS

The data collected by the airborne geophysical surveys show that the area surveyed is underlain by Archean mafic to intermediate metavolcanics, Coleman Member sediments and Nipissing diabase which have been highly faulted and sheared. A band of mafic to intermediate metavolcanic rocks strikes east-northeast across the southern part of the property. Nipissing diabase and/or mafic to intermediate metavolcanics underlie the western and northeastern areas, trending east-northeast, north and east-northeast across the property. Approximately 0.5 miles north of the diabase and/or metavolcanic band a Nipissing diabase sill strikes east-northeast across the northern boundary. The remaining 75% of the surveyed area appears to be underlain by Coleman Member sedimentary rocks.

The rocks underlying the property are highly deformed by sets of south-southeast, east-southeast, east-northeast and north trending faults and shear zones. The shear zones in Nipissing diabase, and adjacent metavolcanics and Coleman Member sediments (Zones C - 3rd conductor from the east and 2nd from the west, D, E - western conductor, F, G, I and L) could contain quartz or calcite veins hosting Ag-Co-Ni-Cu mineralization. The southern metavolcanic band has the potential to contain gold and or base metal mineralization in conductive zones representing shears or massive sulphide mineralization. The two western conductors of Zone A, the eastern end of the eastern most conductor of Zone E, and Zone J could contain gold and base metals.

Open ground in the above-mentioned areas should be staked and further explored on the ground by prospecting, geological mapping, sampling, and ground geophysical surveying (magnetic and horizontal loop-electromagnetic surveys). Areas of mineralization and/or deformation could then be stripped or tested by diamond drilling.

Respectfully submitted,

H. Ferderber Geophysics Ltd.

September 8, 1992 Val d'Or, Quebec

R.A. Campbell, B.Sc. Geologist

#### REFERENCES

- Born, P., 1986
  Geology of Cassels and Riddell Townships, District of Nipissing, P111-115 in Summary of Field Work and Other Activities, 1986, O.G.S. Miscellaneous Paper 132.
- Born, P. and Burbidye, G.H., 1987
  Geology of Bigstake and Kittson Townships, District of Timiskaming, p 198-204 in Summary of Field Work and Other Activities, 1987, O.G.S. Miscellaneous Paper 137.
- Eckstrand, O.R., 1984
  Canadian Mineral Deposit Types: A Geological Synopsis, G.S.C. Economic Report 36.
- Fyon, J.A. and O'Donnell, L., 1987 Metallogenic Studies in the Temagami Greenstone Belt, District of Nipissing, p. 190-197 in Summary of Field Work and Other Activities, 1987, O.G.S. Miscellaneous Paper 137.
- Good, D.J., 1987

  Platinum Group Element Studies: The Abitibi Greenstone
  Belt, p. 271-275 in Summary of Field Work and Other
  Activities, 1987, O.G.S. Miscellaneous Paper 137.
- Good, D.J., 1987
  Platinum Group Element Studies: The Kanichee Deposit, p. 276-280 in Summary of Field Work and Other Activities, 1987, O.G.S. Miscellaneous Paper 137.
- Hanneson, J.D. and Huxter, R.S., 1986
  The Detection and Mapping of Basement Conductors under Areas Covered by Thick Huronian Sedimentary Rocks, District of Timiskaming, p. 225-233 in Summary of Field Work and Other Activities, 1986, O.G.S. Miscellaneous Paper 132.
- Norther Miner, June 29, 1992 Sudbury Contact Drilling for Kimberlites on Panthco.
- Ontario Bureau of Mines, 1910 Cobalt-Nicket-Arsenic-Silver Area, near Lake Temiskaming, Ontario, Map 19e, scale 1:63,360.
- O.D.M., 1969
  South Lorrain Township, Map 2194, scale 1:31,680.
- O.D.M., 1969
  Sudbury-Cobalt Sheet Geological Compilation Series, Map 2188, scale: 1:253,440.

O.G.S., 1976

Sudbury-Cobalt Sheet - Geological Compilation Series, Map 2361, scale: 1:253,440.

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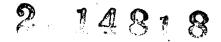
South Lorrain Township, Exploration Data Map, G.D.I.F. 480, scale 1:15,840

Owsiacki, L., 1986

Cobalt Resident Geological Area, Northeastern Region, p. 226-237 in Report of Activities, 1985, O.G.S. Miscellaneous Paper 128.

Rice, R.J., 1987

Regional Sedimentology of the Lorrain Formation (Aphebian) or Central Cobalt Embayment, p. 210-216 in Summary of Field Work and Other Activities, 1987, O.G.S. Miscellaneous Paper 137.





# H. FERDERBER GEOPHYSICS LTD. GEOPHYSICAL & GEOLOGICAL SURVEYS 169 PERRAULT AVENUE, VAL D'OR, QUEBEC J9P 2H1 TELEPHONE 819-824-2075

INVOICE 1789

September 14, 1992

Albert Chitaroni Target Geological Services P.O. Box 271 Cobalt, Ontario POJ 1C0

> Re: Airborne Geophysical Surveys South Lorrain Township, Ontario.

## South Lorrain Township

78.12 miles at \$40/mile		\$3,124.80
Mob-Demob		125.00
G.S.T. (R102341328)		227.49
Q.S.T. (Q1001806935)		139.09
	TOTAL DUE	53.616.38

Thank you!

H. Ferderber Geophysics Ltd.



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### South Lorrain Township

78.12 miles at \$40/mile	\$3,124.80
Mob-Demob	125.00
G.S.T. (R102341328)	227.49
Q.S.T. (Q1001806935)	139.09
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## Thank you!

H. Ferderber Geophysics Ltd.





# Albert Chitaroni

# 2.14818

**OPAP** 1992

# South Lorrain Township

Date	Hours	Duties/Functions
May 22, 1992	5	Gino Chitaroni/Glenn McBride
23	5	-prospecting/traversing Ditto
24	6	Ditto
25	7	Gino Chitaroni/John Gore -Rock-cut (minor) mapping /sampling/examinationand prospecting
26	5	Gino @ Albert Chitaroni
		-Drill-site preparation
July 14	8	Gino Chitaroni/Glen McBride
		<pre>-(minor) mapping/recon-</pre>
		niasance prospecting
Aug. 11	8	Gino Chitaroni/John Gore
		-Drill-site preparation/
	_	prospecting
Sept. 1	8	Gino Chitaroni
•	•	-Drill-site supervision
2 3 8	8	Ditto
3	8	Ditto
	8	Ditto
10 11	8 8	Ditto
<b>*</b> +	0	Gino Chitaroni/Glenn McBride -Drill-site supervision/ prospecting/sampling
12	6 DEOCH /E	Glen McBride
	° RECEIVED	-Drill-site supervision
14	6	Ditto
15	6 NOV 2 7 1992	Ditto
16	8	Gino Chitaroni
	MINING LANDS BrisCH	-Drill-site clean-up and core removal to Portage Bay Lodge (home in Cobalt)
17	8	Gino @ Albert Chitaroni -Core-logging,OPAP Inspector with Mr.Jim Ireland-Cobalt Resident Geologist inspection
18	8	Gino @ Albert Chitaroni -Core-logging

# 2.14818

Date		Hours	Duties/Functions
Sept.	26	8	Gino @ Albert Chitaroni -Core-logging/Report preparation
	27	8	Gino @ Albert Chitaroni -Report preparation
	28	8	Ditto
		Temagami Proj	ect
July	26	4	Gino Chitaroni
Aug.	9	6	-Prospecting/sampling Ditto
-	15	4.5	Ditto
	16	5	Gino @ Albert Chitaroni -Prospecting/sampling
	20	4	Gino Chitaroni -Prospecting/sampling @ picture taking

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### Albert Chitaroni

## OPAP 1992

# Expenditures

Dollar Value	Receipts
~\$3,135.00	Airborne Geophysical Survey (Ferderber Geophysics Ltd.)
7,078.05	Barron Diamond Drilling
~ 1,000.00	Glen McBride (labour/prospecting/supervision)
500.00	Albert Chitaroni (management fees, supervision, core logging assistant, OPAP report compilation, and contingency) (5 days @ 8 hrs/day @ \$100/day)
3,500.00 	Gino Chitaroni (labour, prospecting, supervision, core logging, sampling, report- making) (17.5 days @ 8 hrs/day at \$200/day)

- \* Not Included: assays
  - transportation
  - supplies
  - Mr.John Gore's time
  - prospecting in the Temagami-area and corresponding assays
- \* Receipts for items not included will be provided upon request.



# **Report of Work Conducted Before Recording Claim**

Transaction Number W9280.0021

**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.

0240 (03/91)

- instructions: Please type or print and submit in duplicate.
  - Refer to the Mining Act and Regulations for requi



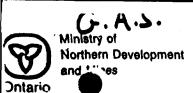
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	Date Notice for Amendment			

	Number	Value of Work		Value Applied to this Clair	n			_	
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andum of agreements, etc., with respect Examples of beneficial interest to the mining claims.

0240 (03/91)

7)



# Report of Work Conducted After Recording Claim

Transaction Number W 9280.00220

Ontari	0		ì	Mini	ng Act		-		
his coll	ection sh	ould be dire	on this form is obtained uncted to the Provincial Mans elephone (705) 670-7264.	der the authori iger, Mining L	ty of the Min ands, Minist	ing Act. This inforr ry of Northern De	velopment and	sed for corresponded Mines, Fourth Flo	or 15 Cedar Street,
nstru	ctions:		type or print and sub o the Mining Act and ler.			irements of fili	ng assessm	ent work or co	nsult the Mining
		- Techni	rate copy of this form cal reports and maps ch, showing the claim	must accor	mpany this	s form in dupli	cate.	s form.	2/2
Recorde	d Hojd∮r	<b>h</b> /						Client No.	36397
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<sup>2</sup> 0180	ns and	Survey C	company Who Perfor	med the W	ork (Give	Name and Ad	dress of Au	thor of Report)	
		Nar	7	11 -	$\overline{n}$		Address	/ • • • • •	
4.	Ferde	erboc G	rephysics Hd.	167	Porre	aut du	c, Val	19-824	Quebec
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Certifi	cation	of Benefi	cial interest * See i	NOTE NO. 1	on rever	Date Date	LANDS B	RANCH Holder or Agent (\$	Signature)
report	were rec		urrent holder's name or held					wit ch	
Certifi	ication	of Work	Report				•		
			onal knowledge of the facts direport is true.	set forth in th	is Work repo	ort, having perform	ned the work o	r witnessed same	during and/or after
		as of Person		<b>.</b>		- Po. S	30×27/		
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			Feb. 24/93 Date Notice for Amendment	. Sent				NOV 25	1992
								//2	
×241 (03/1	91)						— <u> </u>	VIE - CONTRACTOR	5 12-

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
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11. 12	<del>2</del>	1	7,211,00	\$2,211.00	0	10
(( CTC . 1 7	Total Number of Claims		Total Value Work	Total Value Work Applied	Tótal Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please which claims you wish to priorize the deletion of credits. Please mark (u) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
  - Credits are to be cut back equally over all claims contained in this report of work.
  - Credits are to be cut back as priorized on the attached appendix. લાં છ

In the event that you have not specified your choice of priority, option one will be implemented.

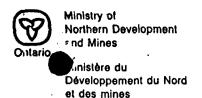
Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims. Note 1:

complete the following: If work has been performed on patented or leased land, please Note 2:

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

theer

0241 (03/91)



# Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Transaction No./No de transaction

Mining Act/Loi sur les mines

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 Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>6</sup> étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux

\*\* Note: When claiming Rehabilitation work Indirect costs are not

Description

#### 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	T TE C T T T T T T T T T T T T T T T T T		
Fees Droits de l'entrepreneur	Survey		<i>*</i>
et de l'expert- conseil	The state of the s	3,491.38	3.49/.30
Supplies Used Fournitures utilisées	Туре		,
Equipment	Type RECEIV	, D	
Rental Location de matériel	NOV 2 7	1992	
	MINING LANUS	i bith. (Ol	4
	Total Dir	ect Costs	3491 39

d'évaluation.

Type

Transportation Transport

Food and Lodging Nourriture et hébergement Mobilization and Demobilization Mobilisation et démobilisation

2. Indirect Costs/Coûts indirects

allowable as assessment work.

125.00 **Sub Total of Indirect Costs** Total partiel des coûts Indirects Amount Allowable (not greater than 20% of Direct Costs)

Amount

Montant

Totals

Total global

Montant admissible (n'excédant pas 20 % des coûts directs) Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)

Valeur totale du crédit < d'évaluation (Total des coûts directs et indirects admissibles

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.

Total des coûts directs

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**

- 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:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

# Remises pour dépôt

- 1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 2. 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 totale du crédit d'évaluation	Évaluation totale demandée
· × 0,50 =	

### **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.

Position in Son Park authorized MINING DIVISION (Recorded Holder, Agent, Position

to make this certification

OCT 28 1992

# 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 suis	autorisé
(titulaire enregistré, représentant, poste occupé dans la c		

à faire cette attestation.

	Signature	Date
	244 24 1	Not an
an Ca	albut Chitaveri	Ud. 10.1792
TIME // Ob A.M. Note: Dans cette for	ormule, lorsqu'il désigne des personnes, le masculir	est utilisé au sens neutre

### ASSESSMENT WORK CREDIT FORM

FILE NUMBER: 2.14818
DATE: March 8, 1993
RECORDER'S REPORT NUMBER: W9280.219

RECORDED HOLDER: Albert Chitaroni

CLIENT NUMBER: 117869

TOWNSHIP OR AREA: South Lorrain Township

CLAIM NUMBER	VALUE OF WORK DONE ON THIS CLAIM	VALUE APPLIED TO THIS CLAIM
L1118536	\$ 77	77
1118537	<u> 154</u>	<u> 154</u>
	231	231

## ASSESSMENT WORK CREDIT FORM

FILE NUMBER: 2.14818
DATE: March 8, 1993
RECORDER'S REPORT NUMBER: W9280.220

RECORDED HOLDER: Albert Chitaroni

CLIENT NUMBER: 117869

TOWNSHIP OR AREA: South Lorrain Township

CLAIM NUMBER	VALUE OF WORK DONE ON THIS CLAIM	VALUE APPLIED TO THIS CLAIM
L1118450	\$1025	1025
1179175	<u> 114</u>	<u> 114</u>
	1139	1139



Ministry of Northern Development

March 8, 1993

and Mines

Ministère du Développement du Nord

et des Mines

Mining Lands Branch Geoscience Approvals Section 933 Ramsey Lake Road

6th Floor

Sudbury, Ontario P3E 6B5

Telephone:

(705) 670-5853

Fax:

(705) 670-5863

Our File: 2.14818

Transaction: W9280.219

.220

Mining Recorder
Ministry of Northern Development
and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir/Madam:

**subject:** APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS L.1118536 ET AL. IN SOUTH LORRAIN TOWNSHIP

The assessment work credits for the Airborne Geophysical Surveys filed under Section 15 of the Mining Act Regulations have been approved as outlined on the attached Assessment Work Credit Forms.

Please note that the 45 days specified in the Notice of Credit Reduction have passed.

The approval date is March 3, 1993.

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

Yours sincerely,

Ron C. Gashinski

Senior Manager, Mining Lands Branch

Mines and Minerals Division

*∱*} ₩/j1

Enclosures:

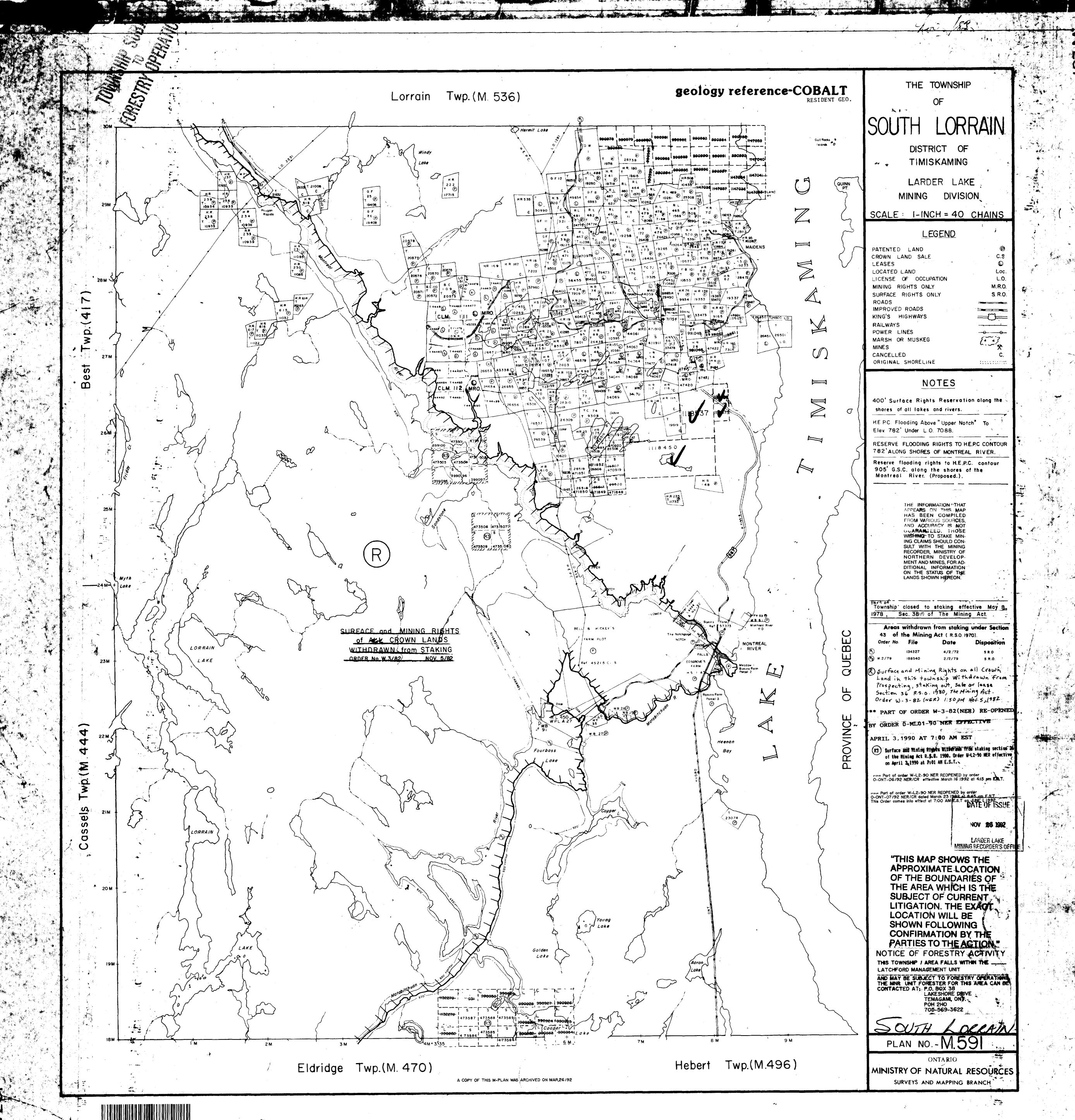
cc: Resident Geologist Cobalt, Ontario

ONTARIO GEOLOGICAL SURVEY GIS - ASSESSMENT FILES

MAR 3 0 1993

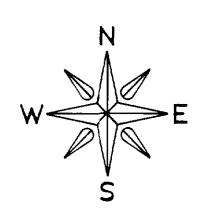
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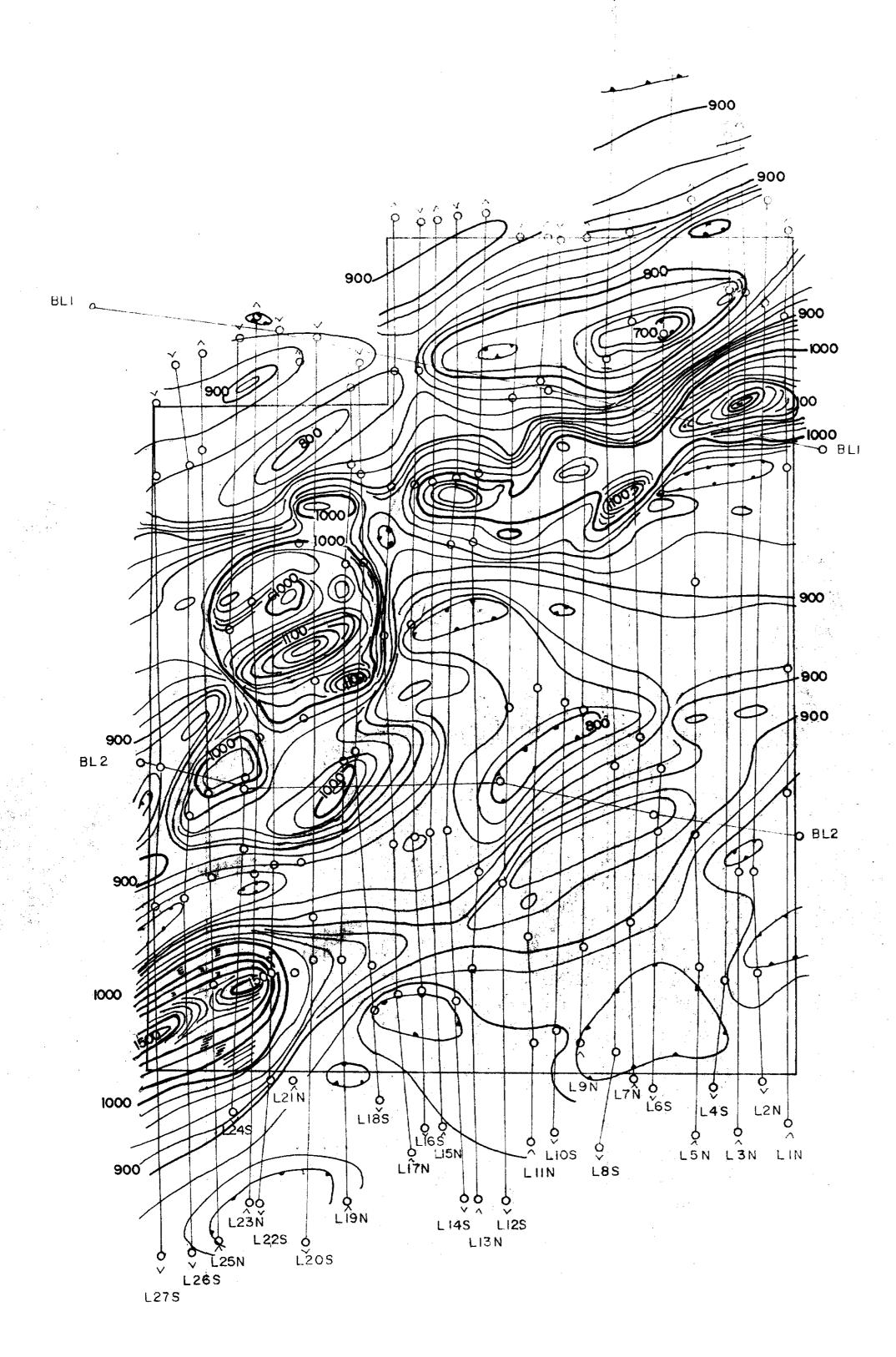
Assessment Files Library Toronto, Ontario



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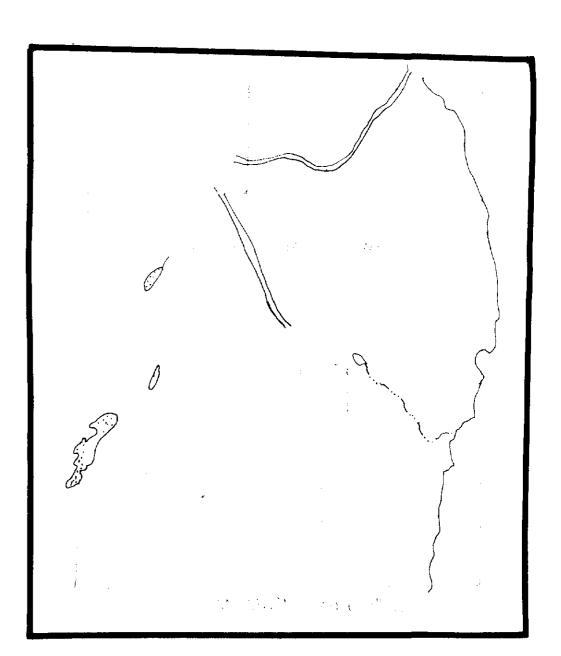




# **LEGEND**

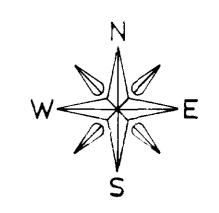
- TOTAL FIELD CONTOUR INTERVAL 20 GAMMAS
- O FIDUCIAL POINT
- > LINE DIRECTION

  BASE VALUE 57 ∞ GAMMAS 20
- MAGNETIC LOW



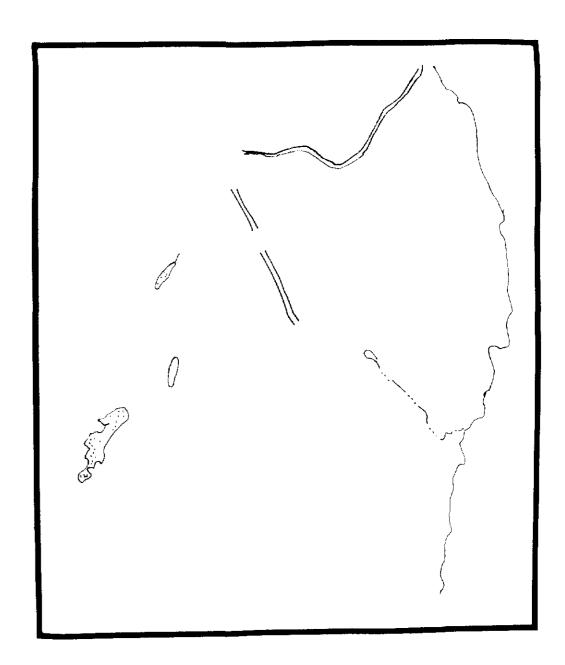
TAL FIELD	MAGNETIC SURVEY
	ARONIZ . 1401
MAP NO: MG-I	AREA SOUTH LORRAIN TWP ontario
er Geophysics Lt	I" = 1/4 mile  DRAWN BY  D. MARCOTTE
	MAP NO:  MG-I



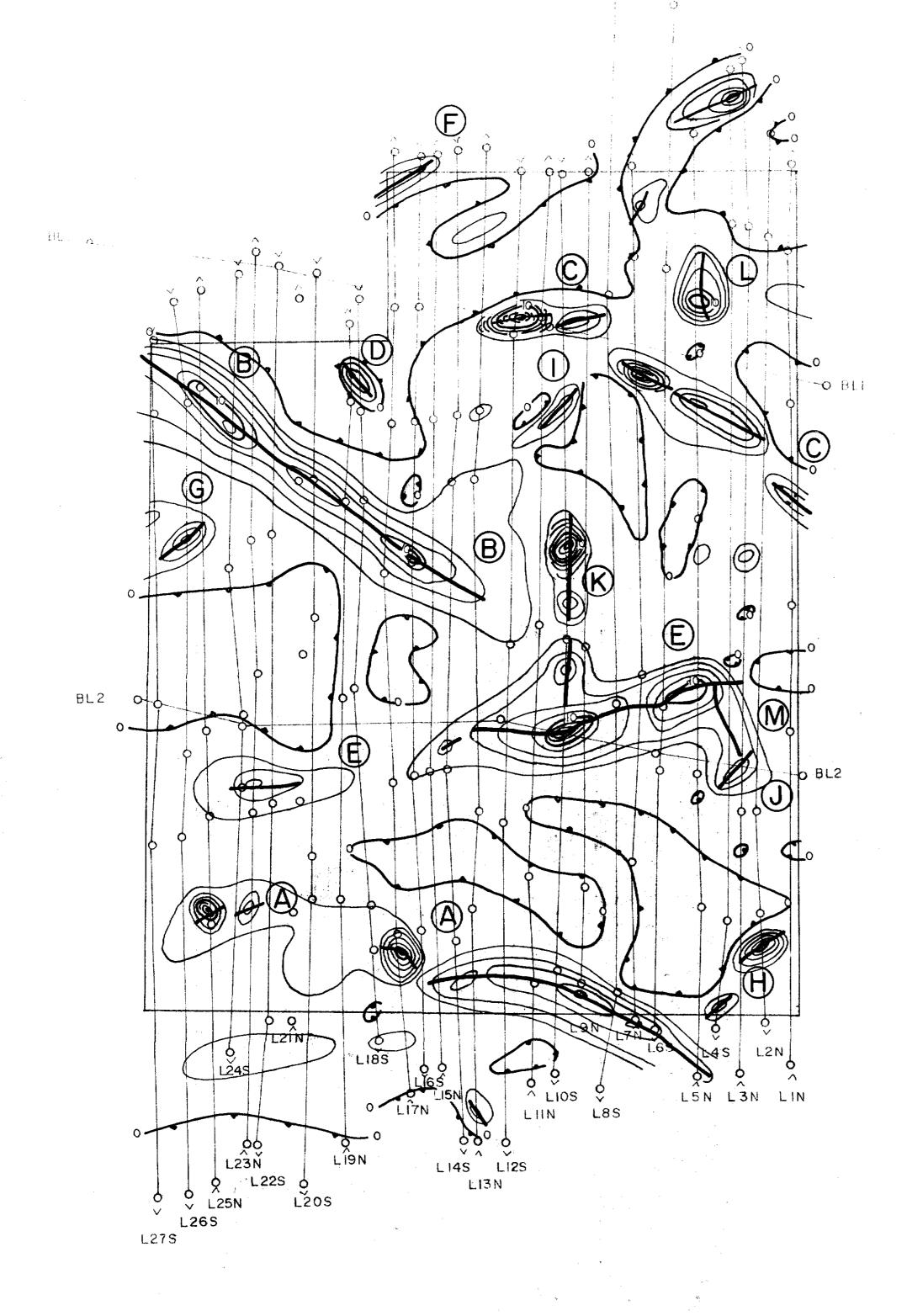


# **LEGEND**

- TOTAL FIELD CONTOUR INTERVAL 2 %
  CONDUCTOR AXIS
- O FIDUCIAL POINT
- > LINE DIRECTION
  STATION USED: CUTLER MAINE (NAA) 24.C kHz
- LESS THAN ZERO



TYPE OF WORK		
AIRBORNE VLF	- ELECTROMA	SNETIC SURVEY
CLIENT	T CHITARONI	20 140 20
SEPT. 1992	MAP NO:	SOUTH LORRAIN TWP Ontario
RA Cumpbell RA H. Ferderber	Geophysics Ltd.	DRAWN BY D. MARCOTTE





# LEGEND

- 3 NIPISSING DIABASE
- 2 COLEMAN MEMBER SEDIMENTS
- I INTERMEDIATE TO MAFIC METAVOLCANICS

# SYMBOLS

--- GEOLOGICAL CONTACT, (From the magnetic data)

- 555 555 POSSIBLE FAULT, (From geophysical data)
  - CONDUCTOR AXIS



TYPE OF WORK  GEOLOGICAI	L INTERPRE	ETATION
CLIENT	r CHITARON	1
DATE	MAP NO;	2.14818 AREA SOUTH
		2.14818
SEPT. 1992	MAP NO; GI-I	AREA SOUTH LORRAIN TWE Ontario  SCALE    " = 1/4 mile

