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# 608485 SASKATCHEWAN LTD. and 608487 SASKATCHEWAN LTD. JOINT VENTURE

#### **MAGINO MINE PROPERTY**

### HORIZONTAL LOOP GEOPHYSICAL SURVEY

### SAULT STE MARIE MINING DIVISION ONTARIO FINAN TOWNSHIP

N.T.S. 42 C/7

Toronto, Ontario September, 1995 David R. Healey 608485 Saskatchewan Ltd. 608487 Saskatchewan Ltd.

2.16211



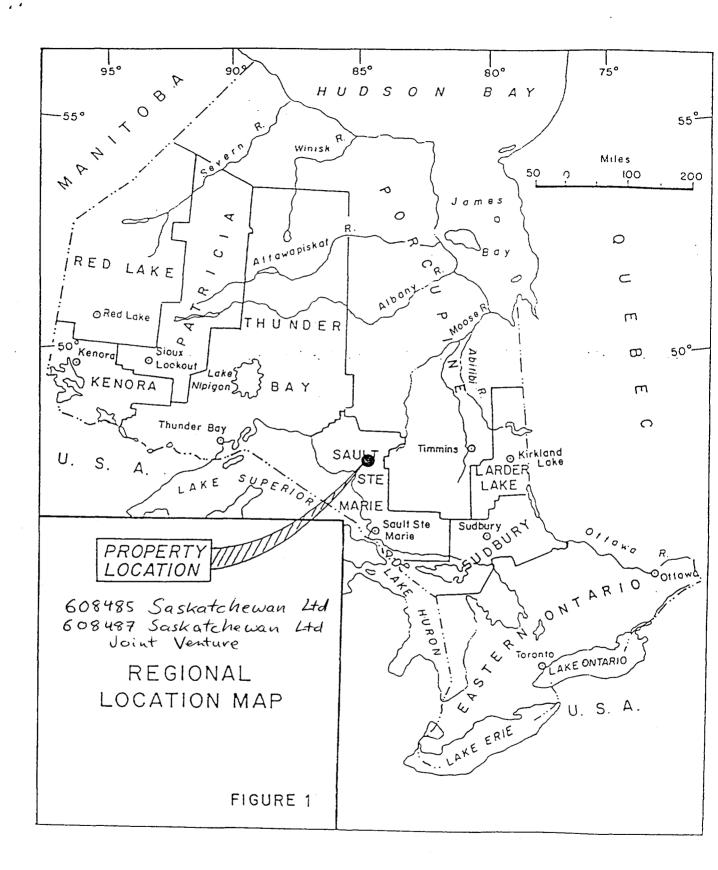
010C

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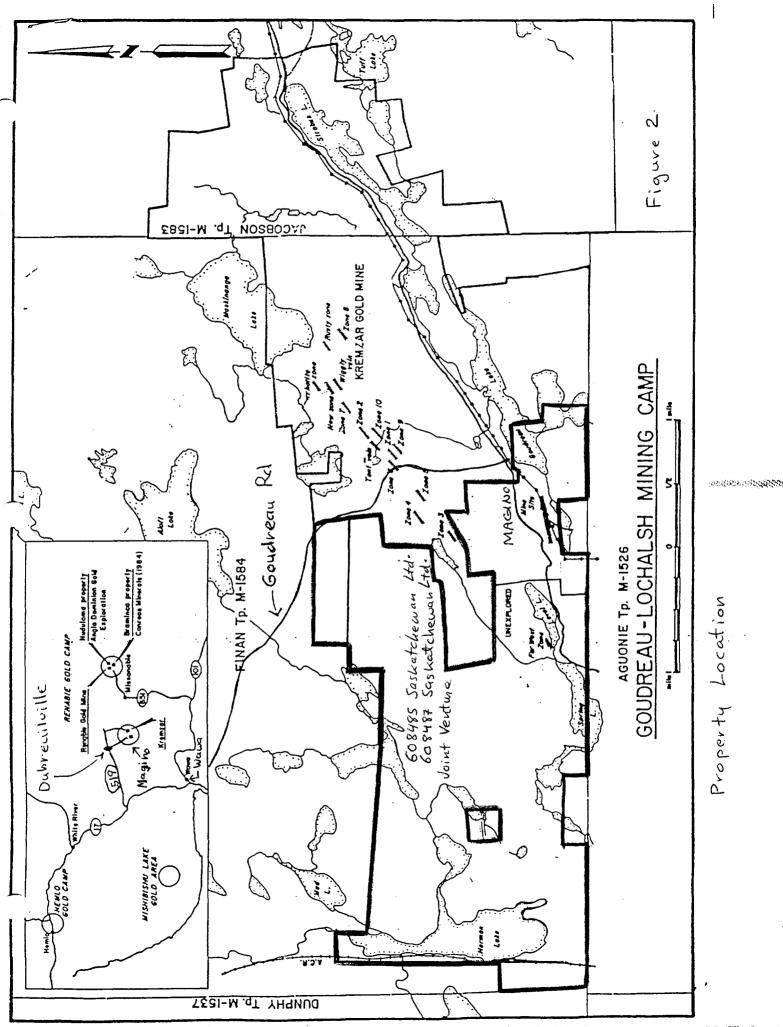
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## LIST OF PLATES

Plate I	Main Grid - 444 Hz profiles	(1:2400)
Plate II	Main Grid - 1,777 Hz profiles	(1:2400)



 $v_i^{\partial V_i^{\dagger}}$ 



Property Location

## 608485 SASKATCHEWAN LTD. and 608487 SASKATCHEWAN LTD. JOINT VENTURE

#### **MAGINO MINE PROPERTY**

#### HORIZONTAL LOOP GEOPHYSICAL SURVEY

#### SAULT STE MARIE MINING DIVISION ONTARIO FINAN TOWNSHIP

N.T.S. 42 C/7

#### **SUMMARY**

A total of 16.25 miles of Horizontal Loop (ground electromagnetics) Survey were completed over the "Main" grid. The survey was performed between March 3, 1995 and 10 March 1995 and June 27, 1995. The Magino Gold Property is a joint venture between 608485 Saskatchewan Ltd. and 608487 Saskatchewan Ltd. Both companies also have the same address: 365 Bay Street, 11th Floor, Toronto, Ontario M5H 2V1.

#### **INTRODUCTION**

A Horizonal Look Survey was completed on the Main Grid, which is immediately west of the Magino minesite. The claims covered by the geophysical survey are:

69866, 698667, 809963, 809969, 80972, 847804, 847805, 847806, 847,807, 1110086, 118352, 1174399, 1174400, 1174401, 1174402.

The purpose of this survey was to follow-up several strong conductors found during this winter's magnetometer - VLF survey. Horizontal Loop was chosen because a ground electromagnetic (E.M.) survey will give a deeper response and better define the width and conductivity of these conductors.

#### PROPERTY, LOCATION AND ACCESS

The Magino Gold Property is located in the Goudreau-Lochalsh area of Northwestern Ontario, approximately 50 km north of Wawa (figure I). The Magino Gold Property is located in the southwest corner of Finan Township (M-1584). The Magino minesite is also situated about 3 km southwest of the Kremzar minesite near Goudreau and Webb Lakes.

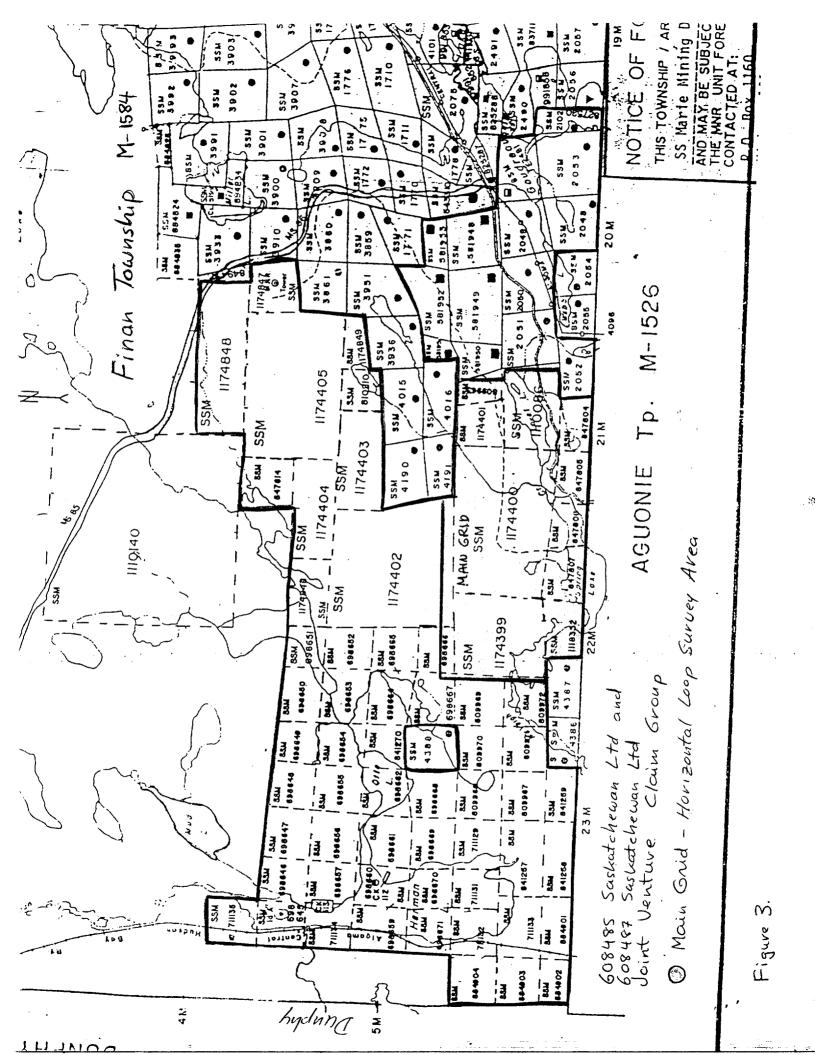
Excellent access is provided by the gravel Goudreau road which connects with the town of Dubreuilville, 15 km to the northwest. Access to the Trans-Canada, Highway 17 is 32 km west via the Dubreuilville Highway 519. Highway 519 hits the Trans-Canada or Highway 17 at the mid-point between Wawa and White River.

#### **REGIONAL GEOLOGY**

The Magino orebody is hosted in a granodiorite stock which is intruded into the Goudreau Deformation Zone (GDZ) (Yule). This gently arcuate brittle/ductile deformation zone of dextral horizontal displacement (Arias and Heather 1987) can be traced from southwest of Goudreau Station on the ACR Line to Lochalsh Station on the CPR Line, a distance of 29 km. The

Deformation Zone has been displaced by the McVeigh Creek Fault; the west block moved south about 1-1/4 miles. The GDZ in the mine area roughly coincides with the top of the second of 3 volcano cycles (Sage) which make up the bulk of the rocks in the Michipicoten Greenstone Belt. The second volcanic cycle consists of intermediate to felsic metavolcanic rocks which are capped by the Michipicoten Iron Formation. The iron formation is overlain by majic and intermediate flows and tuffs plus minor sediments and iron formations of the third volcanic cycle. These metavolcanics are followed by felsic metalvolcanics and clastic sedimentary rocks which make up the rest of the third igneous cycle.

The whole area has been isoclinally folded with east west or slightly north of east striking fold axes. It is regionally metamorphosed to greenschist facies and has been intruded by several igneous complexes.



#### **SURVEY PROCEDURES**

The Main grid used in this survey has a baseline that runs due east-west, and section lines that run due south. Section lines are every 400 feet and pickets are at 100 feet intervals.

The electromagnetic survey was conducted using an Apex MaxMin II in the horizontal mode. The instrument consists of a transmitting coil and a receiving coil connected by a reference cable of either 100, 200, 400, 600, 800 or 1,000 feet in length. The transmitting coil produces a primary electromagnetic field (e.m.f.) from the following five frequencies 222, 444, 888, 1,777 and 3,555 Hz. These frequencies are capable of inducing a current within a conductive body. This current in turn produces its own e.m.f. which is termed secondary.

The coil separation chosen for this survey was 400 feet, and two frequencies were used 444 Hz and 1,777 Hz.

The receiving coil measures the total intensity of the primary e.m.f. plus any resultant secondary e.m.f. It also breaks down the received signal to a real or in-phase (LP.) component and an imaginary or quadrature (O.P.) component by means of the reference cable. The two coils are used as an in-line system traversing across the presumed geological strike. If the coils straddle a conductor, the primary and resultant secondary field oppose each other causing a decrease in total field strength or a negative reading. In shallow overburden, a positive shoulder will occur when both coils are just off to one side of the conductor.

The range of penetration of the primary field is normally considered to be approximately one-half of the coil separation; however, other factors such as conductive overburden and topography must also be taken into consideration.

An indication of the conductivity of the body can be obtained by measuring the ratio of the real component to the imaginary component. As the conductivity of the body decreases, the stronger the imaginary component will be.

The horizontal loop profiles and readings were plotted on base maps at a scale of 1:2400 (1" = 200') and 1" = 20% for profiles.

Two maps were drafted, one for 444 Hz profiles and the other for 1,777 Hz profiles.

#### **SURVEY RESULTS**

The E.M. survey confirmed the conductors located by this past winter's mag-VLF survey. These same conductors also show up as weak to strong airborne conductors.

#### Conductor "A"

This conductor starts at L46+0OW/13+00S and strikes ENE to L24+00W/4+00S for 2,200 feet and continues off the property. This is a fairly wide conductor with moderate conductivity. The conductor also falls on the north flank of a moderate trending ENE magnetic high.

#### Conductor "B"

This conductor starts at L4+00W/17+00S and strikes ENE to L8+00E/U+00S and continues off the survey area to the east. This conductor was drilled 400 feet east of the survey area in hole JJ-18. The conductor was in intermediate volcanics occurring as sulphide rich section. From 81 - 116 feet this section ran 2% py,po with sporadic bands of sulphides ranging from 2' to 5' with 20 - 80% py,po,mg. also from 116' to 122' there was a massive sulphide section of py. and po. This conductor also coincides with a moderate to strong magnetic trend striking ENE

#### Conductor "C"

This conductor starts at 14+00W/26+00S and strikes east to L0+00/23+00S. The centre of this conductor is occupied by a granodiorite plug. The conductor follows an ENE magnetic trend while the granodiorite shows as a magnetic low. The conductor is moderately conductive, and is at its strongest for two lines on Lovel Lake. Also on the east boundary of the survey area a conductive response starts i[pm:9+00E/17+00S. This response is on strike with conductor "C", so it will be considered part of conductor "C".

#### Conductor "D"

On the last line to the west at L72+00W/30+00S we have a deep-seated bedrock response for one line. This is a short west striking conductor based on airborne data.

#### Conductor "E"

At the south end of the grid we have a three line conductor from L16+00W/41+00S to L8+00W/32+00S. This is a strong narrow conductor which has been drilled (DDH, W-2-7S). The conductor was a sulphide iron formation from 132 to 173 feet, consisting of py, po, mag which varied from 55 - 80%. This short conductor is also dominated by an isolated magnetic high.

#### Conductor "F"

On the last line to the east there is a response at L12+00E/26+00S. This is the start of a bedrock conductor which strikes to the east. There is no magnetic correlation with this conductor.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Numerous moderate to strong conductors were found with the EM survey, but few if any hold any promise for hosting economic gold mineralization based on geology and limited drilling.

Conductor "B", as previously mentioned, has been drilled just east of the surveyed area. The conductor proved to be a sulphide rich section of an intermediate volcanic; the gold background is in the 0.001 to 0.004 oz/ton range and rarely exceeds it. As the sulphide content decreases, the gold values go right down to nil. No further work is recommended for this conductor. Conductor "C" falls into the same category as Conductor "B" geologically, so no further work is recommended.

Conductor "D" only shows up on the last survey line to the west. Unless mapping and prospecting turns up something, this conductor remains unexplained for now and no further work is recommended.

Conductor "E", as previously mentioned, has been drilled and explained as a sulphide iron formation with nil gold values, except for a 0.01 oz/ton Au near the collar in mafic volcanics. No further work is recommended. Conductor "F" is on the last line to the east of the survey and is definitely a bedrock response. This conductor will remain unexplained for now and no further work is recommended unless mapping and prospecting turns something up.

Conductor "A" is untested and, after prospecting along and across its strike length, the conductor does not appear to come to surface. The rocks encountered were massive diorites and the odd massive mafic volcanics. This conductor is on strike with a stripped area to the north, property of Golden Myra. If it can be found that their stripping and channel-sampling encountered anomalous gold values, then further work may be considered, such as test trenches or a drill hole.

Overall no further work is recommended for any of the conductors, sheared felsic intrusives, such as the one hosting the Magino orebody, still hold the best potential for hosting economic gold mineralization.

Respectfully submitted,

David R. Healey

608485 Saskatchewan Ltd. 608487 Saskatchewan Ltd.

#### PROJECT PERSONNEL

Supervisor/Author

David R. Healey

Field Personnel

MaxMin Survey

David R. Healey Denis Ruff Wayne Ruff Dave Mitchell

#### **REFERENCES**

Ontario Geological Survey - Open File Report 5588
Geology of Aguonie, Bird, Finan and Jacobson Townships,
District of Algoma
R.P. Sage

Deevy, Anthony J.

Chief Mine Geologist, Magino Mine
- internal company report

Airborne Electromagnetic and Total Intensity Magnetic Survey, Wawa Area, District of Algoma, Sudbury and Thunder Bay, by Dighem Surveys and Processing Inc. for Ontario Geological Survey, Geophysical Series, Map 81008

1986 Apex MaxMin I EM System Operations Manual
Written by John Betz Limited in collaboration with Apex Parametrics

1976 Consideration Behind the Making of a Well Rounded Electromagnetic Exploration System, plus Case Studies
John E. Betz



0241 (03/91)

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

**Mining Act** 

TO DOCUMENT NO. W9550 000 57

Personal information collected on this form is obtained under the authority of ti this collection should be directed to the Provincial Manager, Mining Lands, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

900

- Instructions: Please type or print and submit in durdicate
   Refer to the Mining Act and Regulations for

Recorder.

- A separate copy of this form must be completed for each Work Group.

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Recorded Holder(s)	6084	185 Saskatel 87 Saskate	hewan	Ltd.		<u> </u>	Client No. 300 645 300 644
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Mining Decision	to, c	outario, MST	12VI	/Aree			/-4/6-363-//24 M or G Plan No.
Sault					Township		M-1584
Dates Work Performed	From:	03 March			To: 27 U	me '	95
		k One Work Group	Only)				
Work Grou					Type		
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nolaer c	annot ve	erity expenditures c	iaimed in th	e statement	of costs within 30 (	days of	a request for verification.
Persons and S	urvey Co	ompany Who Perfo	ormed the	Work (Give	Name and Address	of Auti	nor of Report)
	Nam				Addre	988	
David	R.c	Healey	607 Up	oper She	man Ave, H	lami	Iton, Out, LEV3M3
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Certification of	Benefic	ial Interest * Sec	Note No.	1 on revers		, ,	
	ed in the cu	vork was performed, the errent holder's name or he der.		In this work	21 Sept 95	Recorded De	Holder or Agent (Signature)
Certification of							
	e a persor	nal knowledge of the fac	cts set forth in	this Work repo	t, having performed the	work or	witnessed same during and/or after
Name and Address			507 C	lenes .	Shenman	1	
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\$ 3,684	,00	Deemed Approval Date	2/95	Date Approved	norre	J SAUL	TSTE. MARIE MINING DIVISION RECEIVED
7 01 40 1		Die 21/	95				SEP 2 2 1995
		Date Notice for Amendme	ents Sent			7.8	9,18,11,12,1,2,3,4, <b>5,6</b>
1	ł						

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, p which claims you wish to priorize the deletion of credits. Please mark (~) one of the following:	lease indicate from
1. Credits are to be cut back starting with the claim listed last, working backwards.	
2. Credits are to be cut back equally over all claims contained in this report of work.	· • • • • • • • • • • • • • • • • • • •
3. Credits are to be cut back as priorized on the attached appendix.	
In the event that you have not specified your choice of priority, option one will be implemented.	

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

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

١	I certify that the recorded holder had a beneficial interest in the patented	Signature	Date
I	or leased land at the time the work was performed.		
١		<del></del>	 



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/Lol sur les mines

DOCUMENT No. 7

2.16211

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, 4º 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	2430	2430
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's	Туре		
Fees Droits de I'entrepreneur			
et de l'expert- conseil			
Supplies Used Fournitures	Type 4A4 Batteries 2 mils elect tape 2 specific play	260	
utilisées	2 spent play visiter cap 6-9 Ucht betteries	3	
		526	
(	Report negat writing; drufting , supplies)		586
Equipment Rental	Type Show-inachino	160	
Location de matériel			
			160
	Total Di Total des coû	rect Costs its directs	3176

#### 2. Indirect Costs/Coûts indirects

\* 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	Description	Amount Montant	Totals Total global	
Transportation Transport	Туре			
Ecod end Lodging Nourriture et hébergement		208	208	
Mobilization and Demobilization Mobilisation et démobilisation	I day mob. I day demob	300	300	
Sub Total of Indirect Costs Total partiel des coûts Indirects				
	(not greater than 209 e (n'excédant pas 20	% of Direct Costs) % des coûts directs)	508	
Total Value of Asse (Total of Direct and . Indirect costs)	Allowable d'	leur totale du crédit évaluation stal des coûts directs	3684	

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.

et Indirects admissibles

#### **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:

× 0.50 =	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.
- 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.

that as 

| Recorded Molder, Agent, Résition in Company) | arm authorized

### 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 au'	à titre de				je suis	autoris
	(titulaire enregistré,	représentant,	poste occupé	dans la c	žompagni	•)

à faire cette attestation.

Signature	. [	Date
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favid FC	Kealey	of 1

to make this certification



Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

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

Telephone:

(705) 670-5853

Fax:

(705) 670-5863

Our File: 2.16211

Transaction #W9550.00057

November 14, 1995

Mining Recorder
Ministry of Northern Development & Mines
60 Church Street
Sault Ste. Marie, Ontario
P6A 3H3

Dear Mr. Morra:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS 698666 ET AL. IN FINAN TOWNSHIP

Assessment work credits have been approved as outlined on the original report of work forms for this submission. The credits have been approved under Section 14, Geophysics(EM), Mining Act Regulations.

The approval date is **November 10, 1995.** Please indicate this approval on the claim record sheets.

If you have any questions regarding this correspondence, please contact Bruce Gates at (705) 670-5856.

ORIGINAL SIGNED BY:

Ron Gashinski

Senior Manager, Mining Lands Section Mining and Land Management Branch

Mines and Minerals Division

Roncoale !

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Enclosure:

cc: Resident Geologist

Sault Ste. Marie, Ontario

Assessment Files Library Sudbury, Ontario

OF

FINA

THE TOWNSHIP

DISTRICT OF ALGOMA

SAULT STE MARIE

MINING DIVISION SCALE: 1-INCH = 40 CHAINS

DISPOSITION OF CROWN LANDS PATENT. SURFACE AND MINING RIGHTS \_\_\_\_ @

SURFACE RIGHTS ONLY \_\_\_\_ ROADS

IMPROVED ROADS KING'S HIGHWAYS RAILWAYS

LOWER LINES MARSH OR MUSKEG MINES CANCELLED

NOTES

400 surface rights reservation along

open for prosperting staking out AT 7-00 Am TANDARD Time JUNE 1/84

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED THOSE WISHING TO STAKE MIN ING CLAIMS SHOULD CON SULT WITH THE MINING RECORDER MINISTRY OF NORTHERN DEVLLOP MENT AND MINES FOR AD DITIONAL INFORMATION ON THE STATUS OF THE

LANDS SHOWN HEREON

534 PLAN NO

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

Wawa, Ontario POS 1KU (705) 856-2396 RL. Forest Management Activities

dispression of the constraints of the street of the street

HUOTARI To M-1586 SON 5M +~~ , 117440Q \$ 5M NOTICE OF FORESTRY ACTIVITY AGUONIE Tp. M-1526 THIS TOWNSHIP / AREA FAILS WITHIN THE SS Marie Mining Division (Wawa District) AND MAY BE SUBJECT TO FORESTRY OPERATIONS THE MAR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: Highway 101

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TRIM LINE

FINAN

123

