NORANDA EXPLORATION COMPANY, LIMITED
(no personal liability)

REPORT ON INDUCED POLARIZATION/RESISTIVITY SURVEY

GOLDLUND PROPERTY

N.T.S. 52F/16

NORTHWESTERN ONTARIO DIVISION

PROJECT NO. 2325
THUNDER BAY, ONTARIO
DECEMBER 9, 1991

Qual. 2.7574
JOHN GINGERICH
DIVISION GEOPHYSICIST

Table of Contents

List of Figures

List of Attachments

	Scale
IP Pseudosection Line 3400W	1:2400
IP Pseudosection Line 2400W	1:2400
IP Pseudosection Line 1600W	1:2400
IP Pseudosection Line 400W	1:2400
IP Pseudosection Line 400E	1:2400
IP Pseudosection Line 1400E	1:2400
IP Pseudosection Line 2800E	1:2400
IP Pseudosection Line 4000E	1:2400
IP Pseudosection Line 5700E	1:2400
IP Pseudosection Line 6900E	1:2400
IP Pseudosection Line 8100E	1:2400
IP Pseudosection Line 9300E	1:2400
IP Pseudosection Line 10400E	1:2400
IP Pseudosection Line 11600E	1:2400
IP Pseudosection Line 12800E	1:2400
IP Pseudosection Line 14000E	1:2400
IP Pseudosection Line 15200E	1:2400

1.0 INTRODUCTION

An IP/Resistivity survey was completed on a cut grid covering 49 claims located in Echo Township in the Patricia Mining Division, Ontario. The claims covered by the survey are patented or leased claims owned by Camreco Inc. (Goldlund Mines Ltd.), 55 University Avenue, Suite 320, Toronto, Ontario (Table I).

2.0 PROPERTY LOCATION

The property is situated 20 km north of Dinorwic on the northeast side of Highway 72 (Figure 1).

3.0 PROPERTY DESCRIPTION

The property consists of patented and unpatented mining claims located in the Sioux Lookout Mining District optioned by Hemlo Gold Inc. from Camreco Inc.

TABLE I

LIST OF CLAIMS

CLAIM NUMBERS	TOWNSHIP	OWNERSHIP
18719-727	Echo	Camreco Inc.
18767-775	"	"
18808-816	"	"
18830-838	"	"
18906	"	"
18908	"	"
21447-455	"	"
376474-478	"	"
436909	"	"
437013	"	"

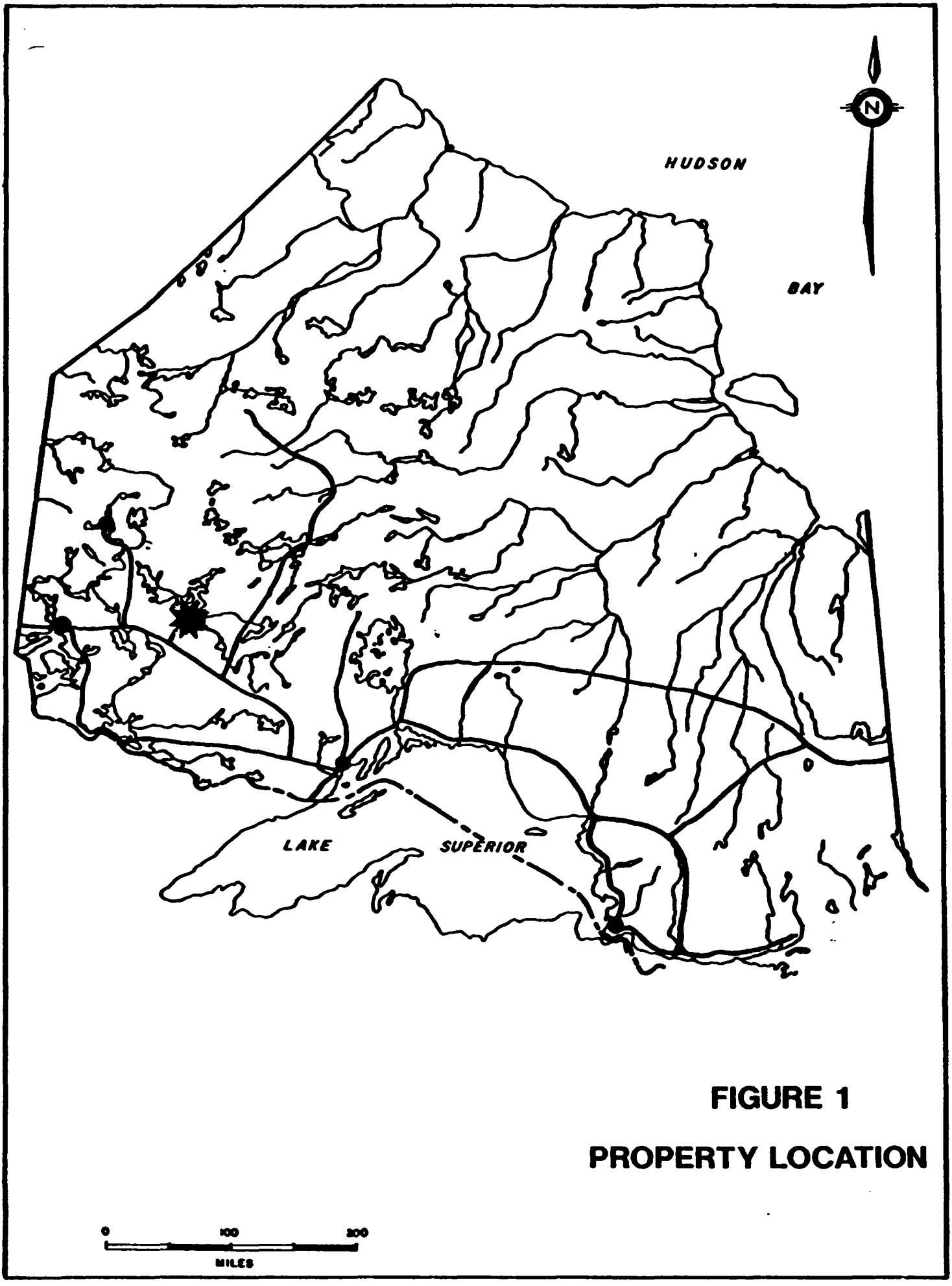


FIGURE 1

PROPERTY LOCATION

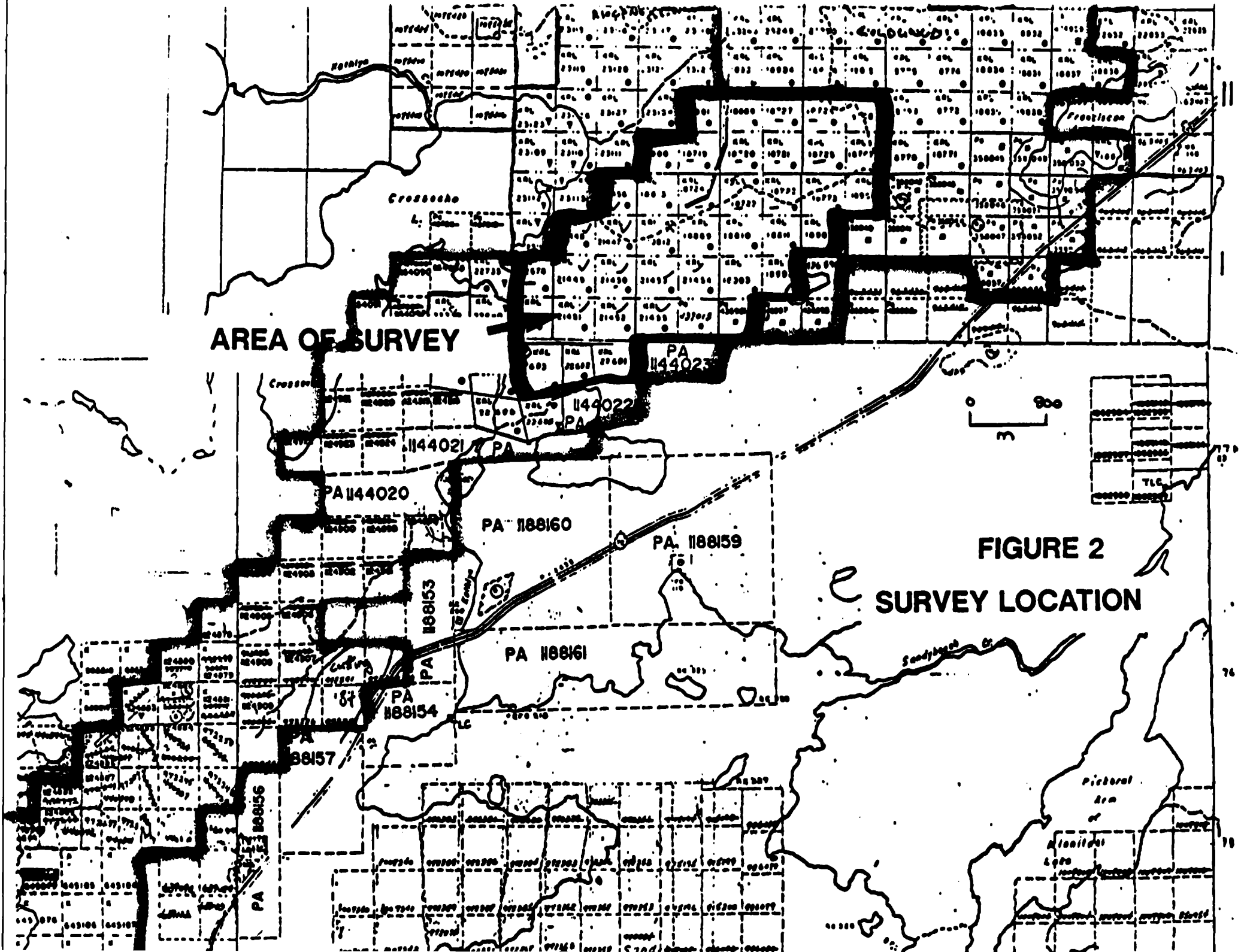


FIGURE 2

SURVEY LOCATION

4.0 PREVIOUS WORK

The following list presents a brief summary at the exploration history in the area covered by the lithogeochemical survey:

1941: Lunward Gold Mines discovered gold in quartz veins and trenching is completed on 2 zones.

1949: Newlund Gold Mines (formerly Lunward Gold Mines) sinks a shaft, later shuts down operation in 1952.

1972: Goldlund Mines (formerly Newlund Gold Mines) reactivated the mine and completed diamond drilling and feasibility studies.

1982: Mining operation resumed following feasibility work and closes in 1985 due to decreased gold prices.

1987: Camreco Inc. acquired the property in 1987 and completed diamond drilling and geophysical surveys.

1991: Noranda Exploration acquires the property and initiates exploration program of lithogeochemical sampling and core assaying.

5.0 GEOLOGY

The property is underlain by northeast striking massive to pillowed and variolitic mafic volcanic rocks, bordered to the south by intermediate volcanic flows and to the north by metasediments.

Narrow quartz-feldspar and feldspar porphyry dikes and sill oriented predominantly east-northeasterly cut the metavolcanic sequence.

The Goldlund Mine, situated in the central part of the claim group, contains gold mineralization associated with quartz veining within these narrow felsic intrusions.

6.0 PERSONNEL

The grid re-establishment was undertaken by G. Doucet, an employee of Noranda Exploration Company, Limited.

The IP/Resistivity survey was contracted to Canadian Mineral Exploration (CME) Consulting Ltd., 2406 - 555 West Hasting Street, Vancouver, BC, with field supervision provided by Dennis Morrison. The contract was supervised by J. Gingerich, Sr. Geophysicist, Noranda Exploration Company, Limited.

7.0 INSTRUMENTATION

The IP/Resistivity survey was undertaken by CME utilizing pole-dipole array, 'a' = 100 ft and spreads of n = 1 to 4. A 2.5 kw Pheonix generator and transmitter (IPT-1B) were used with the ELREC-6 time domain receiver.

The parameters measured at each station were current (I), electrode potential (V) and chargeability (M). The apparent resistivities (R) were calculated from the measured currents and potentials such the R = KV/I where K is a geometric factor related to the geometry of the array. The measured chargeability is a function of the polarizability of the ground and is expressed in MV/V.

8.0 DISCUSSION OF RESULTS

A total of 16 km (10 miles) of surveying was completed on large spaced lines (800 to 1200 ft) with detailed coverage (400') in the area of the south zone.

8.1 Resistivity Survey (Map 1)

The results of the resistivity survey indicate east-west electrical trends consistent with geologic mapping and previous magnetometer surveying. Resistivity values range from 50 to 60,000 ohm-m with lower values mapping overburden features and higher values siliceous lithology.

Resistivity results are affected by overburden effects which distort apparent resistivity readings. Therefore, determination of bedrock resistivities is largely subjective.

In the vicinity of the main zone granodiorite sill, the resistivity signature is highly variable. Discrete low resistivity features are locally defined which probably define

underground workings or cultural anomalies associated with the mine development. In almost all cases a break in resistivity is noted although the nature of the response is often ambiguous.

The eastern extension of the main zone displays a coincident high resistivity anomaly, RI. The high resistivity zone is coincident with a magnetic low which extends from the main zone east to where it is referred to as the Central Zone. The high resistivity zone and low magnetic trend are coincident. These anomalies are interpreted to map the strike extent of the main zone stratigraphy. Due to extensive overburden coverage, trenching of this zone may not be possible and drill testing may be necessary.

High resistivity features are also indicated in the vicinity of the porphyry, two, three, four and five zones. The higher resistivity is interpreted to map associated siliceous intrusives or silicification associated with alteration. Definition of these zones is generally incomplete due to the limited coverage.

A discrete low resistivity zone, C1, is mapped south of the main zone, coincident with VLF-EM anomaly A. The anomaly is generally coincident with a magnetic low interpreted to map felsic stratigraphy (dike?). The Tailing Pond zone lies on the strike of anomaly C1. Previous work appears to have stopped short of the main anomaly and trenching this zone is highly recommended.

A low resistivity feature, C2, is located in the southwestern portion of the survey coincident with the South Zone showing. Anomaly C2 likely reflects silicification (quartz stockwork) associated with the mineralization. Trenching of this zone is recommended.

8.2 IP Survey (Map 2)

The IP results are also affected by surficial effects which mask mineralization at depth. More importantly, weak IP zones hosted by resistive lithology are extremely difficult to resolve and targets such as these are considered primary exploration targets.

Results indicate grid east-west trends consistent with previous geophysics and local mapping. IP values range from approximately 1 to 50 mV/V. Bedrock response coverages from 4 to 8 mV/V with a slightly higher background response 8-14 mV/V in altered or weakly mineralized stratigraphy.

Discrete anomalous responses are defined which range from 2 to 8 times background. As with the resistivity survey, there is no definitive signature associated with the main zone mineralization as results are locally affected by mine development. The IP signature becomes more definitive to the east where an IP anomaly, IP-1, is coincident with the previously interpreted central zone, R1. As previously mentioned, evaluation of IP-1, R1 is highly recommended especially in the vicinity of the eastern stock.

Higher IP responses are also associated with the mineralized zones located north of the main horizon, (two, three, four, five and porphyry zones). There is insufficient coverage to resolve the extent of the IP anomalies. Resistivity and IP results over these known zones does indicate the prospective mineralized zones are characterized by a higher IP and resistivity signature.

A strong IP anomaly, IP-2, is coincident with VLF-EM anomaly A and low resistivity anomaly C1. The high IP and associated conductivity suggest significant increases in mineralization. Trenching has been undertaken north of this zone but, the main anomaly appears to be relatively untested. Further exploration along this anomaly is highly recommended.

Coverage was extended south to cover the south zone showing discovered during a reconnaissance mapping program. A strong IP anomaly, IP-3, is defined coincident with the zone which is also mapped by a lower resistivity signature. Trenching this target is considered a priority.

9.0 CONCLUSIONS

Results from the IP/Resistivity survey suggest that the "main zone" mineralization is mapped by a by a marginal high IP/high resistivity signature. Much of the coverage of the main zone is affected by effects from previous mine development. The eastern extension of the mine stratigraphy appears to be mapped by a high IP/resistivity zone (IP-1, R1) which is also coincident with a previously defined zone of low magnetic relief.

Responses over other known zones of mineralization suggest that prospective stratigraphy is signatured by an increase in both IP and resistivity. This is consistent with silicification and sulphidization associated with hydrothermal alteration. These observations do not necessarily preclude zones of elevated IP and lower resistivities which are interpreted to map higher concentrations of conductive mineralization and thus also warrant evaluation.

Survey results define three main anomalies, IP-1, IP-2 and IP-3 which display elevated IP response.

a) IP-1 is interpreted to map the strike extension of the main zone stratigraphy. Follow-up trenching is proposed on lines 8100E, 9300E and 5700E. If adequate, bedrock resolution is achieved; follow-up drill testing should be considered.

b) IP-2 is a strike extensive anomaly which is associated with a conductive zone. The anomaly is interpreted to map a zone of increased mineralization and warrants further evaluation. Trenching on line 2800E, 400E, 1400E, 3400W and 2000W is recommended.

c) IP-3 is a strong IP, low resistivity anomaly which is coincident with the "south zone" showing. The strength of the anomaly suggests the potential of a broad zone. Follow-up trenching on line 2000W and 2400W is highly recommended to determine whether a gold-sulphide association exists. This anomaly is considered the primary target outside the main zone mineralization.

10.0 RECOMMENDATIONS FOR FUTURE EXPLORATION

A program of trenching and diamond drilling is proposed to test several IP anomalies. These anomalies appear to have the best potential for hosting additional gold mineralization within quartz veins and fractures.

Respectfully submitted,

NORANDA EXPLORATION COMPANY, LIMITED
(no personal liability)

John Gingerich
Division Geophysicist
Northwestern Ontario Division

Thunder Bay, Ontario
December 9, 1991

REFERENCES

Ontario Geological Survey
Open File Report 5752, by L Chorlton, 1991
"Geological History of the Sandybeach Lake Area,
Sioux Lookout - Dinorwic Belt, Wabigoon Subprovince and its
Implications for Gold Exploration"

Ontario

52F16NW0012 2.14394 ECHO

900

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Toll Free: 1-800-465-3880
Telephone: (705) 670-7264
Fax: (705) 670-7262

March 3, 1992

Our File: 2.14394
Your File: W.9130.5013

Mining Recorder
Ministry of Northern Development
and Mines
Court House Building
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

SUBJECT: APPROVAL OF ASSESSMENT WORK SUBMITTED ON MINING CLAIMS KRL 18719 ET AL ECHO TOWNSHIP.

The assessment work credits for the Geophysical survey, section 14 Mining Act Regulations, submitted on the above work report have been approved as of March 3, 1992.

Please indicate this approval on your records.

Yours sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Branch
Mines and Minerals Division

1K TAA/jl
Enclosures:

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

Ministry of Northern Development and Mines

Ontario

Report of Work Conducted After Recording Claim

Transaction Number: W 9130-5013

MINING LANDS

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.

2.14294

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

2325 #1

Recorded Holder(s)	Client No.
Camreco Inc / Goldlund Mines Limited / Rein Van Eek	115290 / 137878 / 204162
Address c/o Nora Exploration, P.O. Box 2656, Thunder Bay, Ontario P7B 5G2	**Telephone No.** (807) 623-4339
Mining Division Patricia	**Township/Area** Echo Twp	**M or G Plan No.** G-3368
Dates Work Performed From: November 3, 1991	To: November 25, 1991

Work Performed (Check One Work Group Only)

	Work Group	Type
X	Geotechnical Survey	Induced Polarization/Resistivity Survey
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assig from Rese	

RECEIVED
DEC 23 1991
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 32,144

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
John Gingerich (Author)	c/o P.O. Box 2656, Thunder Bay, Ontario P7B 5G2
Canadian Mineral Exploration Consults	2406-555 W. Hastings, Vancouver, B.C.
G. Doucet	c/o P.O. Box 2656, Thunder Bay, Ontario P7B 5G2

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

	Date	Recorded Holder or Agent (Signature)
I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Dec.11/91	C Barrett

Certification of Work Report

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

Name and Address of Person Certifying		
Cecilia M. Barrett, P.O. Bo 2656, Thunder Bay, Ontario P7B 5G2		
Telepone No. (807) 623-4339	**Date** Dec. 11/91	**Certified By (Signature)** C Barrett

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
# 32144	DECEMBER 12/91	R. Mack	RECORDED DEC 12 1991
	Deemed Approval Date MARCH 12/92	**Date Approved**	Receipt SK
	Date Notice for Amendments Sent		

0241 (03/91)

Ontario

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

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 question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

2325

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	1,460	
	Field Supervision Supervision sur le terrain	1,240	2,700
Contractors and Consultants Fees Droits de l'entrepreneur et de l'expert conseil	Type CME Consultants	24,605	
			24,605
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		27,305

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.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement	Food & Lodging	1,239	1,239
Mobilization and Demobilization Mobilisation et démobilisation		3,600	3,600
	Sub Total of Indirect Costs Total partiel des coûts indirects		4,839
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		5,461
	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)**		32,144

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.

2. 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;

that as Land Administrator (Recorded Holder, Agent, Position in Company) I 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 _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé à faire cette attestation.

Signature	Date
C Barrett	Dec. 11/91

0212 (04/91)

Note : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Work Report Number for Applying Reserve	Claim Number	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned to this Claim	Reserve: Work to be Claimed at a Future Date
	KRL 376474		656	0	0	656
	KRL 376475		656	0		656
	KRL 376476	1	656	0		656
	KRL 376477	1	656	0		656
	KRL 376478	1	656	0		656
	KRL 436909	1	656	0		656
	KRL 437013	1	656	0		656
						0
						0
						0
	7		4,592	0	0	4,592
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

- ☐ Credits are to be cut back starting with 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 prioritized on the attached appendix.

I Certify that the recorded holder had a beneficial in the patented or leased land at the time the work was performed.	Signature	Date
		December 11, 1991

91 DEC 12 All : 20

MINING RECORDER
PATRICIA
MINING DIVISION

Page 1

Work Report Number for Applying Reserve	Claim Number	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
	KRL 18833	1	656	0	0	656
	KRL 18834	1	656	0	0	656
	KRL 18835	1	656	0	0	656
	KRL 18837	1	656	0	0	656
	KRL 18838	1	656	0	0	656
	KRL 18906	1	656	0	0	656
	KRL 18908	1	656	0	0	656
	KRL 21447	1	656	0	0	656
	KRL 21448	1	656	0	0	656
	KRL 21450	1	656	0	0	656
	KRL 21452	1	656	0	0	656
	KRL 21453	1	656	0	0	656
	KRL 21454	1	656	0	0	656
	KRL 21455	1	656	0	0	656
						1552
	42		27,552	0	0 800	26,752
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

☑ Credits are to be cut back starting with 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 prioritized on the attached appendix.

I Certify that the recorded holder had a beneficial in the patented or leased land at the time the work was performed.	Signature	Date
		December 11, 1991

Work Report Number for Applying Reserve	Claim Number	Number of Claim Units	Value of Assessment Work Done on this	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	KRL 18	1	656		0 ~~656~~	656 ~~0~~
	KRL 18720	1	656		0 ~~656~~	656 ~~512~~
	KRL 18721	1	[illegible]	0	0	656
	KRL 18722	1	656	0	0	656
	KRL 18723	1	656	0	0	656
	KRL 18724	1	656	0	0	656
	KRL 18726	1	656	0	0	656
	KRL 18727	1	656	0	0	656
	KRL 18767	1	656	0	0	656
	KRL 18768	1	656	0	0	656
	KRL 18769	1	656	0	0	656
	KRL 18770	1	656	0	0	656
	KRL 18771	1	656	0	0	656
	KRL 18772	1	656	0	0	656
	KRL 18773	1	656	0	0	656
	KRL 18774	1	656	0	0	656
	KRL 18775	1	656	0	0	656
	KRL 18808	1	656	0	0	656
	KRL 18809	1	656	0	0	656
	KRL 18810	1	656	0	0	656
	KRL 18811	1	656	0	0	656
	KRL 18812	1	656	0	0	656
	KRL 18813	1	656	0	0	656
	KRL 18815	1	656	0	0	656
	KRL 18816	1	656	0	0	656
	KRL 18830	1	656	0	0	656
	KRL 18831	1	656	0	0	656
	KRL 18832	1	656	0	0	656

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

June 9, 1992

Our File: 2.14394

Transaction #W9130.5013

Bob Owen
Mines and Minerals Information Centre
Assessment Files Office
MacDonald Block
Toronto, Ontario

Dear Sir:

The assessment work credits for the Induced Polarization Survey have been deleted from our records.

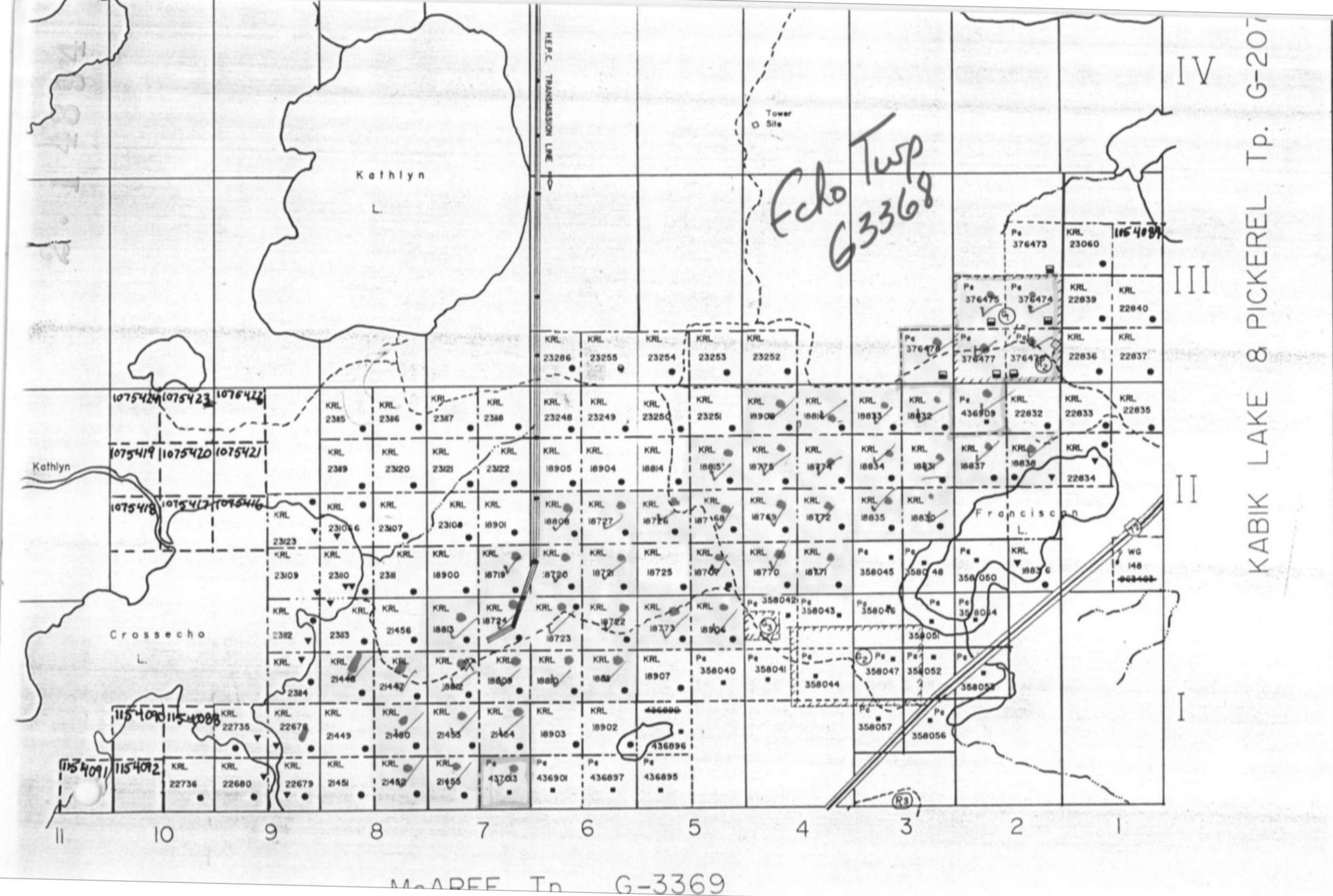
The company has requested the return of their reports and maps until their appeal to the Mining Lands Commissioner is settled.

Yours sincerely,

Jerome

Lucille Jerome
Geoscience Assessor
Mining Lands

cc: flimsies


Kathlyn L.
Crossecho L.
Kathlyn
Tower Site
H.E.P.C. TRANSMISSION LINE
Echo Twp G3368
KABIK LAKE & PICKEREL Tp. G-207
McAREE Tp. G-3369
SURFACE
MINING RIG
LICENSE OF OCCUP
CROWN LAND SALE
ORDER IN COUNCI
PESERVATION
CANCELLED
SAND & GRAVEL
SCALE : 1 IN
FEET 0 500 1000
METRES 0 200 40
TOWNSHIP
DISTRICT
MINING DI
MINISTI
SURV

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

June 9, 1992

Our File: 2.14394

Transaction #W9130.5013

Bob Owen
Mines and Minerals Information Centre
Assessment Files Office
MacDonald Block
Toronto, Ontario

Dear Sir:

The assessment work credits for the Induced Polarization Survey have been deleted from our records.

The company has requested the return of their reports and maps until their appeal to the Mining Lands Commissioner is settled.

Yours sincerely,

Jerome

Lucille Jerome
Geoscience Assessor
Mining Lands

cc: flimsies

Assess lib. Please pull & to be Lic copy.

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Toll Free: 1-800-465-3880
Telephone: (705) 670-7264
Fax: (705) 670-7262

March 3, 1992

Our File: 2.14394
Your File: W.9130.5013

Mining Recorder
Ministry of Northern Development
and Mines
Court House Building
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

SUBJECT: APPROVAL OF ASSESSMENT WORK SUBMITTED ON MINING CLAIMS KRL 18719 ET AL ECHO TOWNSHIP.

The assessment work credits for the Geophysical survey, section 14 Mining Act Regulations, submitted on the above work report have been approved as of March 3, 1992.

Please indicate this approval on your records.

Yours sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Branch
Mines and Minerals Division

TAA/jl
Enclosures:

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

RECEIVED
92 MAR 6 A9:48
MINING RECORDER
PATRICIA
MINING DIVISION

Work Report Approved by Recorder MAR 6/92

bcc: Assess
lib

March 6, 1992 **PRIORITY POST**

Noranda Exploration Company, Limited
960 Alloy Drive
Thunder Bay, Ontario
P7B 6A1

Attn: Ms Cecilia Barrett

Dear Ms Barrett:

Re: Reports of Work - Patented and Lease Mining Lands
Goldlund Property

As discussed, find enclosed your recent submission of Trenching and Assay results from your patented property. It is with great regret I have to refuse this comprehensive report for assessment credit.

After legal consultation, this ministry has adopted the literal interpretation of the phrase contiguous unpatented mining claims. The sections of the act which apply to assessment credits are as follows: Section 66(3) which sets out the terms for work on patented mining claims and Section 7(1) of the assessment regulations which prescribes the manner in which work may be performed on unpatented, patented and leased mining claims, in respect of contiguous unpatented claims. I have enclosed photocopies of these sections for your reference.

I will try to explain the interpretation with an illustration.

All of the claims (patented, leased and unpatented) are registered to the same holder.

"A" lease claim	"B" patent claim	"C" patent claim	#1 un patent claim	#2 un patent claim	# 3 un patent claim

Work performed on lease "A" and patent "B" is not acceptable for recording because these claims are not 'directly' contiguous to the unpatented claims. Only work performed on patent "C" is acceptable for recording to the contiguous unpatented claims.

/2 Patented Claims

However, the work performed on patent "C" can be applied to unpatented claim #3 even though this claim is not directly contiguous to the patent itself. This is apparently allowable through the existing policy of "linking" or bridging. This practice of linking or bridging, does not apply through the patents. This is the interpretation which has been adopted.

As the refusal to accept this work for assessment purposes is an administrative decision of the recorder, as always, you may appeal to the commissioner within 15 days of the date of this decision. I have enclosed the appropriate forms and info for your convenience. Should you choose this option, please return the completed forms to this office, and we will commence the procedure with the commissioner's office.

As an alternative, you may wish to pursue this matter with any or all of the following people:

Dr. John Gammon
Assistant Deputy Minister
Mines and Minerals Division
MNDM 7th Floor
159 Cedar Street
Sudbury, Ontario
P3E 6A5

Mr. Mark Hall
Chief Mining Recorder
Mining Lands Branch
MNDM 2nd Floor
159 Cedar Street
Sudbury, Ontario
P3E 6A5

There is a toll free number to Sudbury, 1-800-465-3880.

You also have industry representation on the Mining Act Advisory Committee. Your representative in Northwestern Ontario is Mr. Garry Clark. His address is listed below.

Mr. Garry Clark
618 North Vickers
Thunder Bay, Ontario
P7C 4B7

He can be reached at 345-2446.

I will be returning the original geotechnical reports from your first submission in December, upon receipt from mining lands in Sudbury. The original work report is enclosed. The timeliness of this decision to refuse the work for recording is based on the deemed approval date, which would have been March 12, 1992. Disregard any notice from mining lands regarding the approval of the geophysical program you may have already received.

W9130.5013

/3 Patented Claims

The unpatented claim(s) involved with this first submission have been relieved from forfeiture, by recorder's order, under Section 49, and the time extended a calendar year to refile work. Your copy of the order will arrive from the Kenora recorder.

I apologize for any misunderstanding which may have occurred in this situation. If you have any further questions in this matter please call.

Yours truly,

Ms Romona Majcher
Mining Recorder
Patricia Mining Division
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

807-737-2034

Encl.
/rm

cc: Garry Clark
Mark Hall

NOTES

100 surface rights reservationsalong the shores of all lakes and rivers

(R2) Sec. 43 SRO Res. May 10/71

(1) MTC Pit 1187

(5) MTC Pit 1186 (Cancelled March 13, 1985)

(6) Gravel File 125112

(5) Sec. 43 SRO Res 18/1/74 Order No. W174, File 125106

(6) MNR Gravel Pit 134 File 152273

LOMOND Tp. G-2876

Open June 1/88

Lateral

Hooch

Masserenge

Cabin Site

Kathlyn

Crossecho

Francisco

2.14394 IR

WEBB Tp. G-2888

KABIK LAKE & PICKEREL Tp. G-2079

McAREE Tp. G-3369

I II III IV V VI

12 11 10 9 8 7 6 5 4 3 2 1

LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASEMAP LINES ETC.
  - LOTS, MINING CLAIMS, PARCELS ETC.
- UNSURVEYED LINES
  - LINE
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NAVIGABLE STREAM
- FLOATING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◒
" MINING RIGHTS ONLY	◒
LEASE, SURFACE AND MINING RIGHTS	■
" SURFACE RIGHTS ONLY	□
" MINING RIGHTS ONLY	□
LICENSE OF OCCUPATION	▼
CROWN LAND SALE	C.S
ORDER IN COUNCIL	O.C
RESERVATION	®
PARCEL	X
SAND & GRAVEL	⊙

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 200 400 600 800 1000 2KM

ACRES	HECTARES
40	16

TOWNSHIP

ECHO

DISTRICT

KENORA

MINING DIVISION

PATRICIA

ONTARIO

MINISTRY OF NATURAL RESOURCES

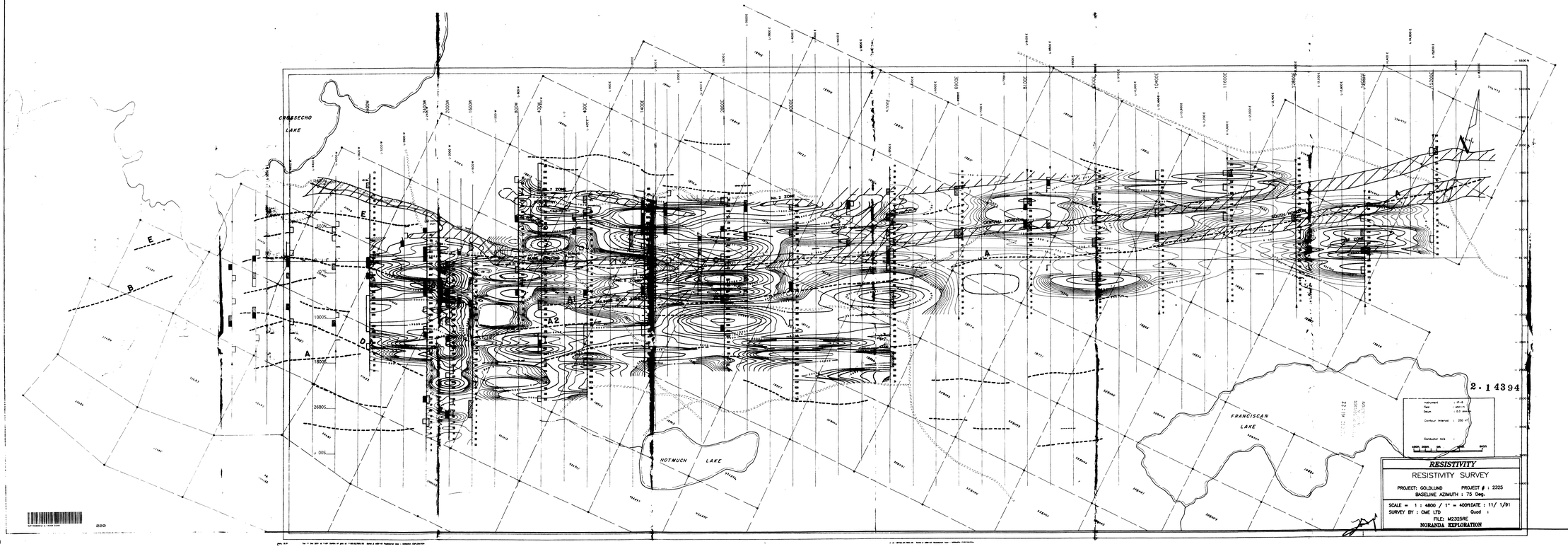
SURVEYS AND MAPPING BRANCH

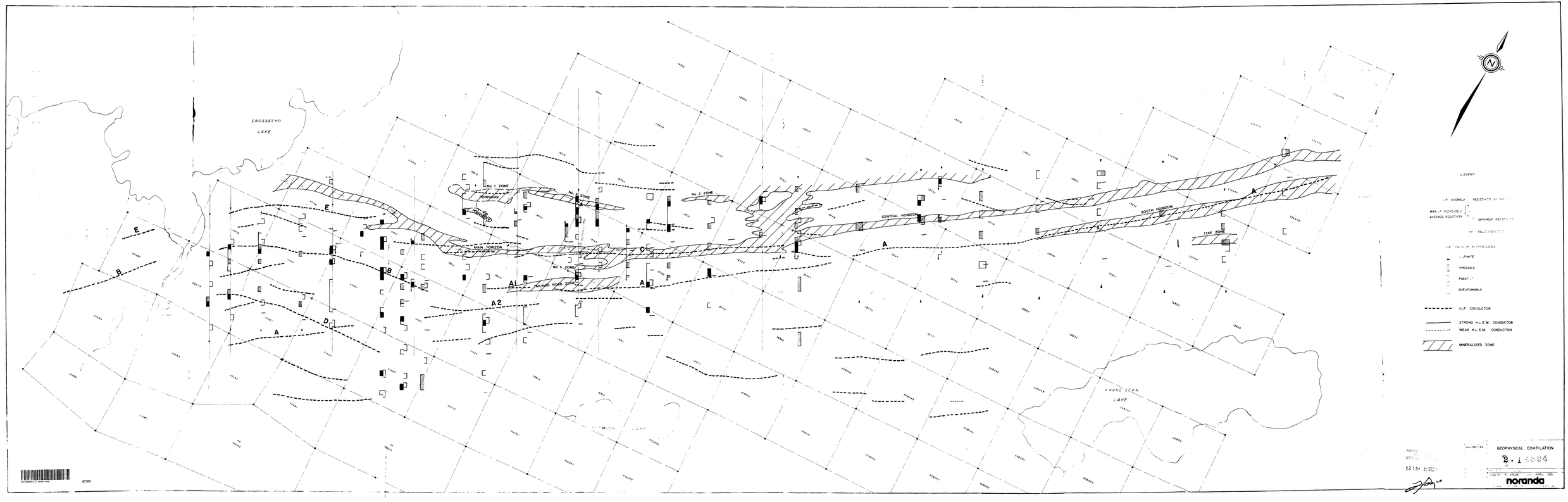
DATE Jan '13

WHITNEY BLOCK
QUEEN'S PARK ONTARIO

PLAN No. G-3368


CROSSECHO LAKE
NOTMUCH LAKE
FRANCISCAN LAKE
No. 7 ZONE
No. 2 ZONE
MAIN HORIZON
CENTRAL HORIZON
SOUTH HORIZON
A
A1
A2
B
D
E
2.1394
LEGEN
I.P. ANOMALY
MAX I.P. RESPONSE /
AVERAGE RESISTIVITY
I.P. ANOMALY
DEFIN
PROBA
POSSIB
QUESTIONABLE
VLF CONDUCTOR
STRONG H.L.E.M. CONDUCTOR
WEAK H.L.E.M. CONDUCTOR
MINERALIZED ZONE
400ft 200ft 0ft 400ft 800ft
GOLDLUND
IP SURVEY
PROJECT: GOLDLUND PROJECT # : 2325
BASELINE AZIMUTH : 75 Deg.
SCALE = 1 : 4800 / 1" = 400ft DATE : 11/ 1/91
SURVEY BY : CME LTD Quad :
FILE: M2325EA
NORANDA EXPLORATION
NOV 1992 / RK
GEOPHYSICAL COMPILATION
R KRUSE APRIL 1991
noranda

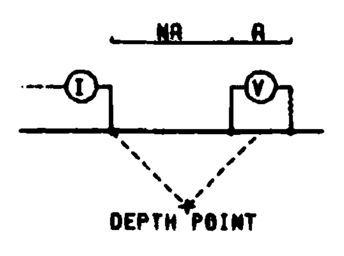

CROSSECHO LAKE
NOTMUCH LAKE
FRANCISCAN LAKE
2·14394
RESISTIVITY
RESISTIVITY SURVEY
PROJECT: GOLDLUND PROJECT # : 2325
BASELINE AZIMUTH : 75 Deg.
SCALE = 1 : 4800 / 1" = 400ft DATE : 11/ 1/91
SURVEY BY : CME LTD Quad :
FILE: M2325RE
NORANDA EXPLORATION
GEOPHYSICAL COMPILATION
noranda


CROSSECHO LAKE
No. 7 ZONE
PORPHYRY
No. 6 ZONE
No. 3 ZONE
MAIN HORIZON
No. 5 ZONE
A1
A2
HALINDS ROAD ZONE
CENTRAL HORIZON
SOUTH HORIZON
1566 ZONE
KIDD SCAN LAKE
LEGEND
I.P. ANOMALY RESISTIVITY SYMBOL
MAX. I.P. RESPONSE / AVERAGE RESISTIVITY
APPARENT RESISTIVITY
FAULT/CONTACT
I.P. ANOMALY CLASSIFICATION
DEFINITE
PROBABLE
POSSIBLE
QUESTIONABLE
VLF CONDUCTOR
STRONG H.L.E.M. CONDUCTOR
WEAK H.L.E.M. CONDUCTOR
MINERALIZED ZONE
GEOPHYSICAL COMPILATION
2.14884
noranda

LINE : 3400 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 100.0 FEET

2.14394

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

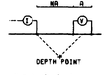
CME CONSULTING LTD.

240

LINE : 2400 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

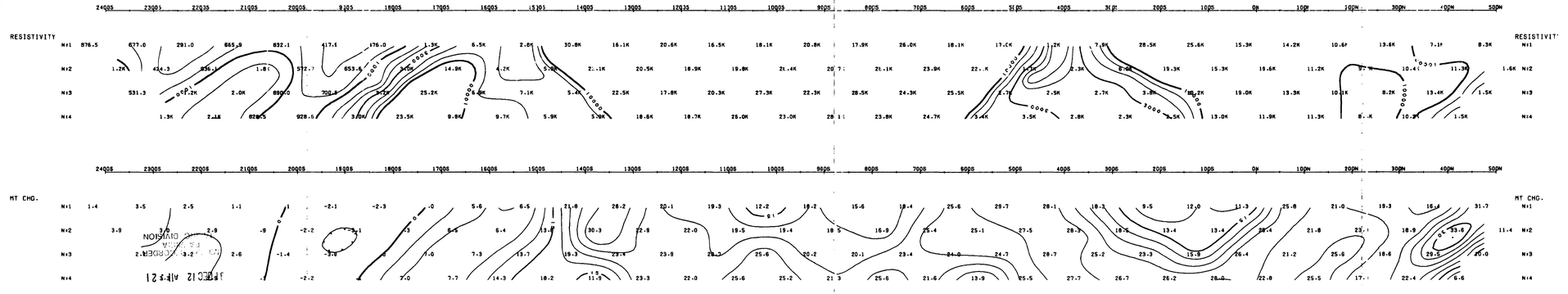
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

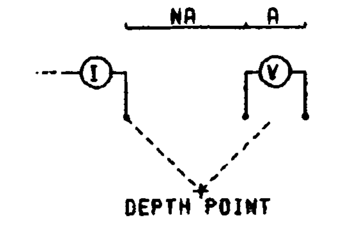
SCALE = 1:1200.0

CME CONSULTING LTD.



GOLDLUND

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 100.0 FEET

LINE 2000 W

2.14394

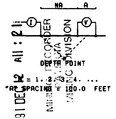
DATE : NOV. 1991	REF : P-18A

260

LINE : 1600 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



NORANDA EXPLORATION LTD.

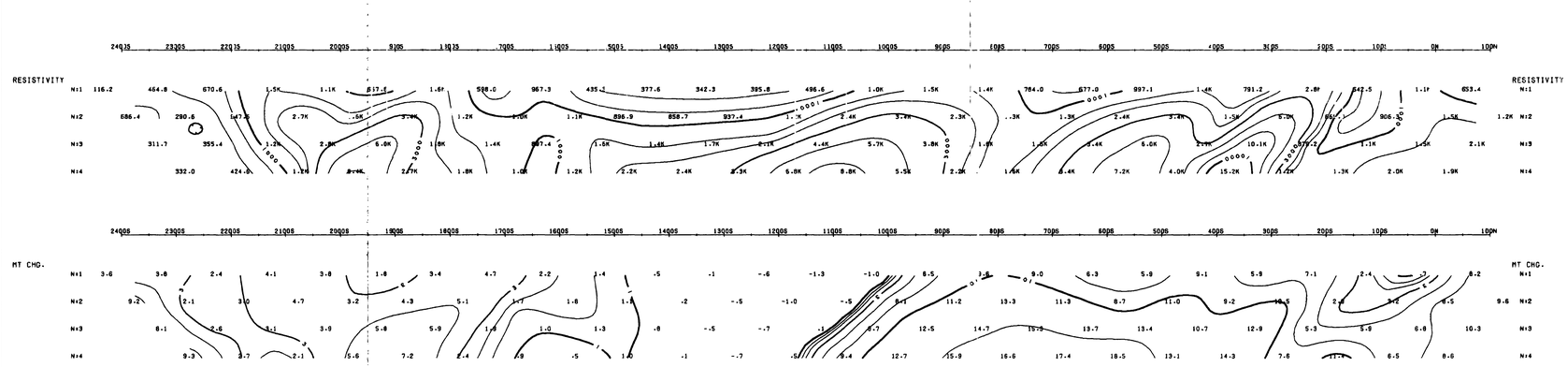
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

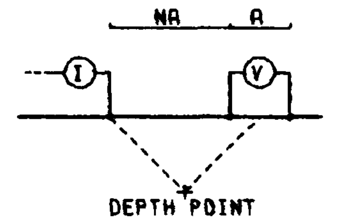
CME CONSULTING LTD.



LINE : 800 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 100.0 FEET

2.14394

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.

52F16NW0012 2.14394 ECHO

280

LINE : 400 W

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY

N = 1, 2, 3, 4, ...,
"A" SPACING = 100.0 FEET

RECEIVED
DEC 24 1991
MINERAL RESOURCES DIVISION
PA, ONTARIO

NORANDA EXPLORATION LTD.

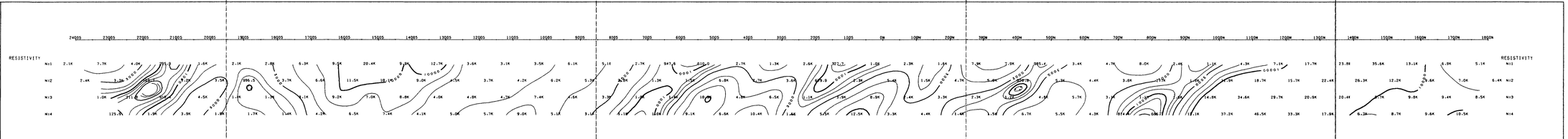
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

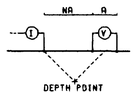
CME CONSULTING LTD.



LINE : 400 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1. 2. 3. 4. ...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

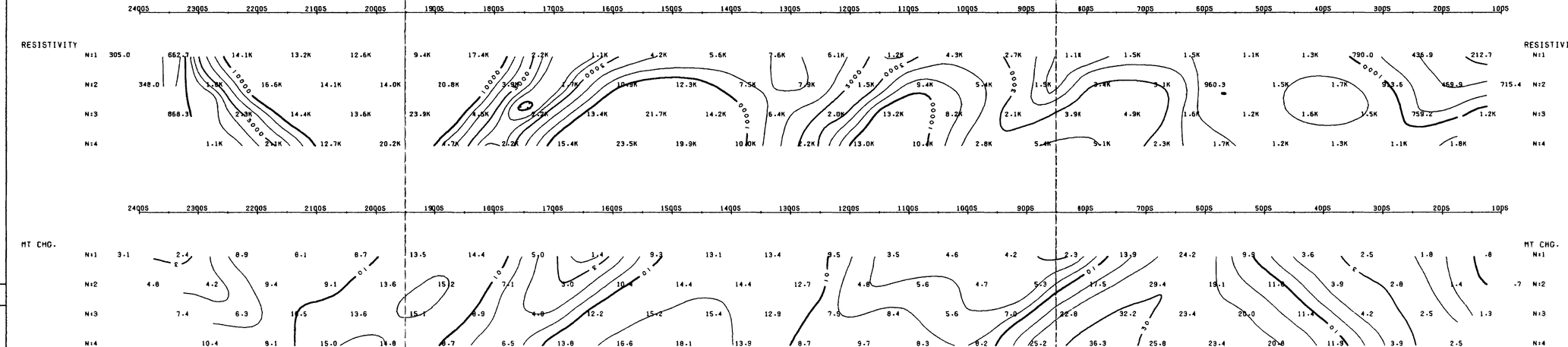
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

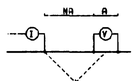
CME CONSULTING LTD.



LINE : 1400 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, ...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

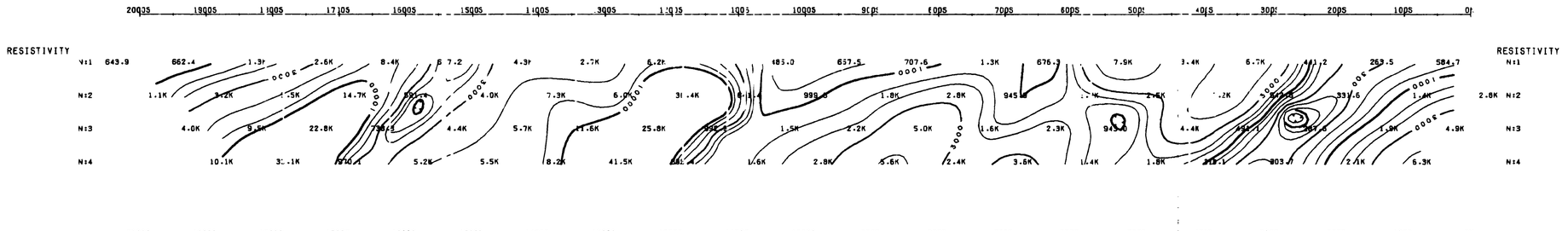
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

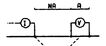
CME CONSULTING LTD.



LINE : 2800 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1. 2. 3. 4. ...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

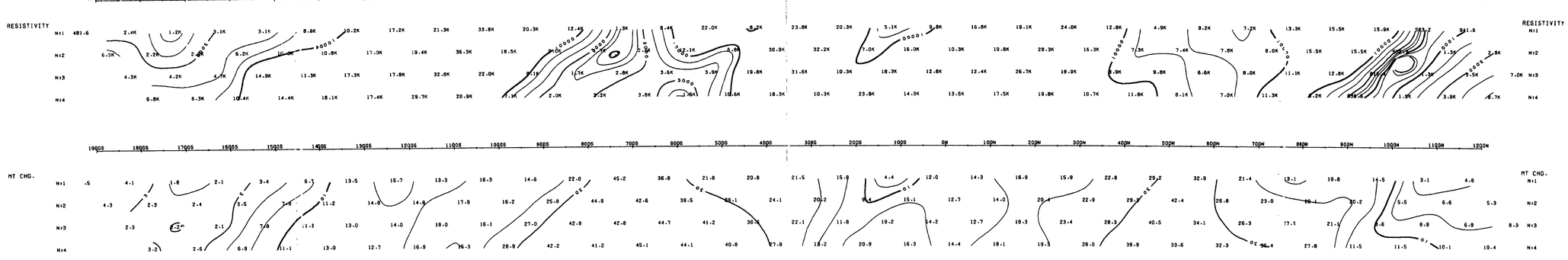
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.



LINE : 4000 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY

2.14394

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

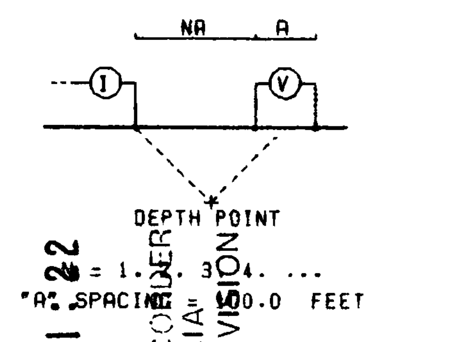
SCALE = 1:1200.0

CME CONSULTING LTD.

LINE : 5700 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



2.14394

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

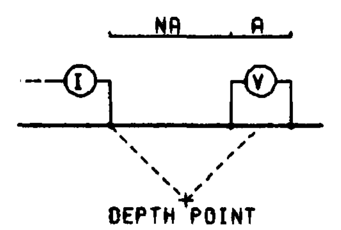
CME CONSULTING LTD.

340

LINE : 6900 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4 ...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

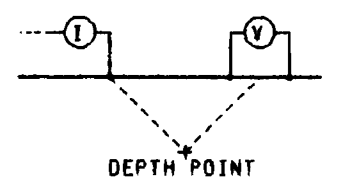
SCALE = 1:1200.0

CME CONSULTING LTD.

LINE : 8100 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 200.0 FEET

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.

360

LINE : 9300 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY

NA A

DEPTH POINT

N = 1, 2, 3, 4...
"A" SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.

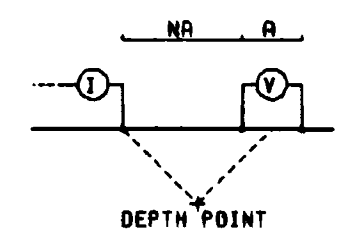
52F16NW0012 2.14394 ECHO

370

LINE : 10400 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
A SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.

380

LINE : 11600 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

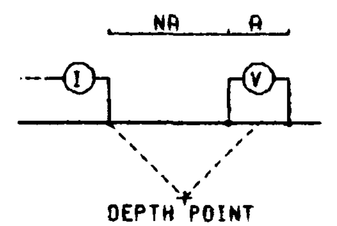
CME CONSULTING LTD.

390

LINE : 12800 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 4, ...

SPACING = 100.0 FEET

NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

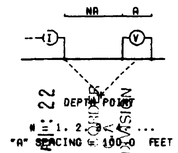
CME CONSULTING LTD.

400

LINE : 14000 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



NORANDA EXPLORATION LTD.

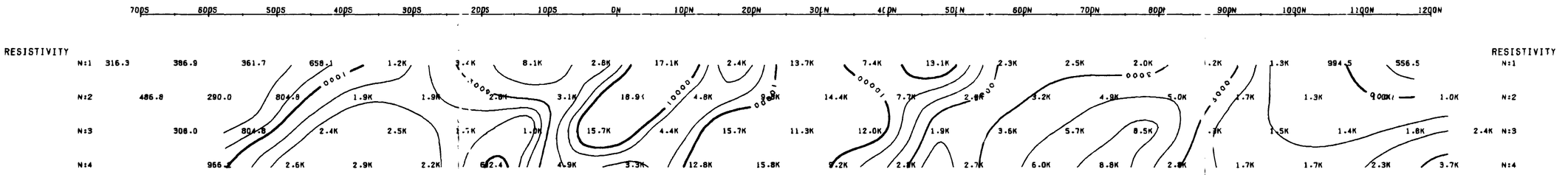
GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

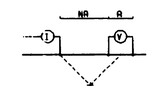
CME CONSULTING LTD.



LINE : 15200 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



NORANDA EXPLORATION LTD.

GOLDLUND OPTION

SIOUX LOOKOUT ONT.

DATE : NOV. 1991	REF : P-18A

SCALE = 1:1200.0

CME CONSULTING LTD.