

52011SW0034 52011SW0027 MCVICAR LAKE

NORANDA EXPLORATION COMPANY, LIMITED (no personal liability)

GEOLOGICAL REPORT

SHONIA LAKE PROPERTY

N.T.S 52 0/11

RED LAKE DISTRICT NORTHWESTERN ONTARIO DIVISION

RECEIVED

SEP 25 1984

MINING LANDS SECTION

THUNDER BAY, ONTARIO JULY 1984

IAN PERRY PROJECT GEOLOGIST



20115W0034 52011SW0027 MCVICAR LAR

Ø10C

(i)

Table of Contents

		Page
1.0	INTRODUCTION	1
2.0	LOCATION, ACCESS AND TOPOGRAPHY	1
3.0	CLAIMS STATUS	1
4.0	PREVIOUS WORK	2
5.0	REGIONAL GEOLOGY	2
6.0	PROPERTY GEOLOGY	
	6.1 Table of Formations	3
	6.2 Description of Units	3
	6.3 Property Geology	4
	6.4 Mineralization	4
7.0	CONCLUSIONS	5
8.0	RECOMMENDATIONS	6

List of Figures

Figure 1	Location Map				
Figure 2	Claim Sketch	1"	=	1/2	mile

1.0 INTRODUCTION

The Shonia Lake property, consisting of twenty-nine (29) claims, was staked by Noranda Exploration Company, Limited personnel in 1983. Geological mapping along the claim lines indicated only 9 claims to be of primary interest.

In July 1984, an exploration program consisting of detailed geological mapping and a VLF-EM survey was carried out over the 9 claims on a pace and compass grid with 100-meter line spacing. In addition, a small humus sampling program (approximately 90 samples total) was carried out over the two showings.

2.0 LOCATION, ACCESS AND TOPOGRAPHY (Figure 1)

The property is located approximately 54 miles WNW of Pickle Lake, and approximately 106 miles north of Sioux Lookout, Ontario. It is situated between McVicar and Lang Lakes and entirely covers Shonia Lake. The 9 claims over which the 1984 field work was carried out cover the peninsula which separates McVicar Lake from Shonia Lake.

Access to the property is by float- or ski-equipped aircraft from Pickle Lake (Austin Airways and Central Air Transport).

Topographically the property is generally fairly flat although several east/west trending ridges from 1-3 meters in height occur in the northern half. Forest cover ranges from open popiar groves to open spruce forest with minor swamp and alder cover.

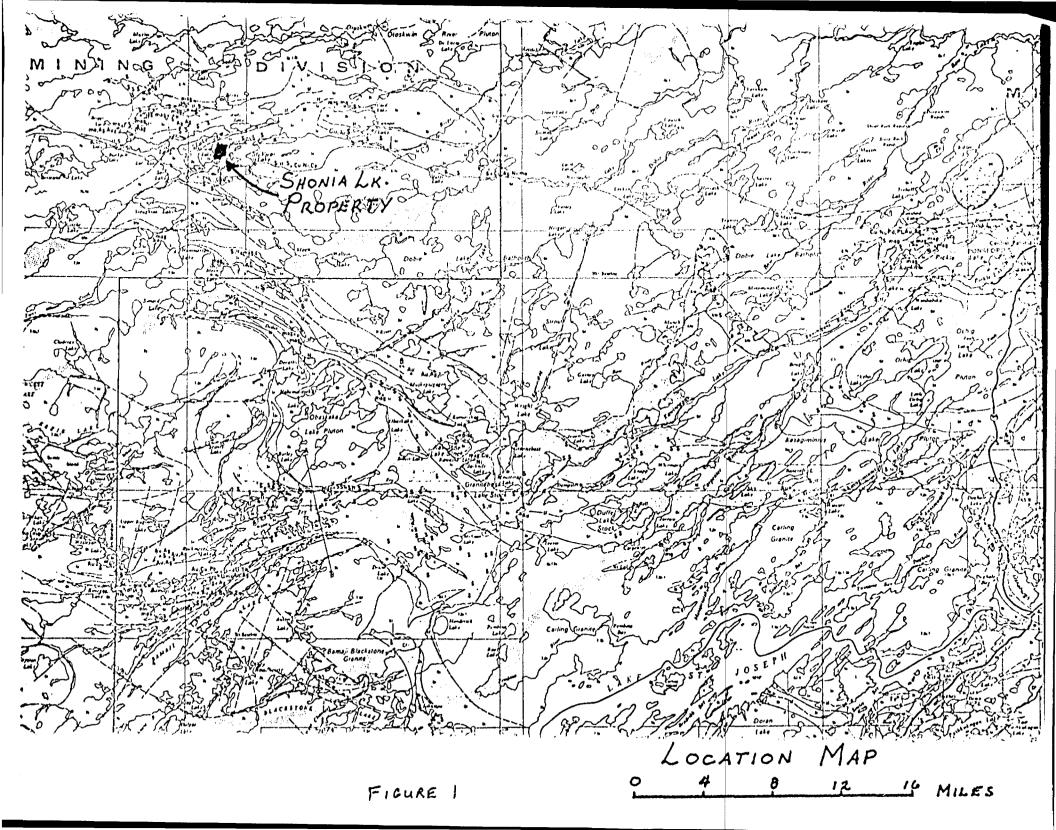
3.0 CLAIMS STATUS (Figure 2)

The following 29 unpatented claims in the Red Lake Mining Division comprise the Shonia Lake Property:

	CLAIM NUMBER	s no	O. OF	CLAIMS	RECORDI	NG D	ATE
KRL	732455-456			2	August	31,	1983
	745710-717,	inc.		8	August		
	745719			1	August	31,	1983
	745720-727,	inc.		8	August	9,	1983
	745728-729,	inc.		2	August	31,	1983
	768957-960,	inc.		4	August	31,	1983
	768967-968,	inc.		2	August	31,	1983
	768971-972,	inc.		2	August	31,	1983

Claims 745710-716, inclusive, 745725 and 745727 have been covered by geological mapping and VLF-EM surveys which are being filed for assessment purposes. These surveys were carried out from July 9-23, 1984, by Noranda Exploration personnel.

Claims are held by Noranda Exploration Company, Limited.



4.0 PREVIOUS WORK

Very little information on the Shonia Lake area is available from the Red Lake assessment files.

- 1) 1928 Initial discovery of the quartz vein system between Shonia and McVicar Lakes by Bill Smith and Stanley Watson, setting off a staking rush in the area.
- 2) 1928-1929 Property optioned by Northern Aerial Mineral Exploration Limited. Considerable trenching, clearing and channel sampling was carried out. Results were disappointing and the option was dropped.
- 3) 1970-1971 Hanna Mines Limited covered the Shonia Lake area as part of a large exploration program looking for base metals. Magnetometer, EM and geological mapping surveys were carried out on a cut grid with 100-meter line spacings. No detailed work was done the main showings.
- 4) 1983 Property staked by Noranda Exploration.

5.0 REGIONAL GEOLOGY

The Shonia Lake property lies within the Lang Lake belt of Keewatin age metavolcanic and metasedimentary rocks.

The major structural feature in the belt is a N70°E trending syncline (40-60°E plunge) the axis of which runs between Boyes and Lang Lakes. A second syncline with a parallel fold axis, has been interpreted south of the main syncline, running through the top Shonia Lake.

The Shonia Lake property and the mineralized granitic plug therein are interpreted to lie just south of the axis and east of the core of the south syncline.

Considerable igneous activity, mainly gabbroic to dioritic intrusions, has taken place along the southern side of the belt.

* (In part from OGS Report #207 "Geology of the Cat Lake-Pickle Lake Area", 1982.)

6.0 PROPERTY GEOLOGY

6.1 Table of Formations

[6] Granite - Trondhjemite
[5] Diorite - Gabbro
[4] Sediments
[3] Felsic Volcanics
[2] Intermediate Volcanics

6.2 Description of Units:

[1]

[1] Mafic Volcanics

This unit outcrops in the north and central portions of the property. It is typically dark green, extremely fine grained and nonfoliated. Compositionally it is classified as a Basalt. Carbonate and pyrite are accessory minerals.

Mafic Volcanics

[2] Intermediate Volcanics

This unit outcrops in the north central part of the property between the two bands of mafic volcanics. It is olive-green, fine grained and normally poorly foliated. Carbonate and pyrite are accessory minerals.

[3] Felsic Volcanics

This unit outcrops along the eastern edge of the property and is also found in one outcrop on claim 745710. It ranges from light grey to buff to black in colour, is extremely fine grained, and breaks with a conchoidal fracture. Weak carbonate is a frequent accessory.

[4] Sediments

None found on property.

[5] Diorite-Gabbro

This unit outcrops over much of the southeastern quarter of the property. It is extremely variable in both grain size and composition, ranging from a coarse-grained anorthosite to a fine-grained quartz diorite, and is occasionally feldspar-porphyritic. It appears most frequently as a medium-grained gabbro. Pyrite occurs occasionally, as does carbonate, normally along fracture planes in trace amounts.

[6] Granite (Trondhjemite)

This unit outcrops along the eastern shore of Shonia Lake, south of line 4+00S, and probably represents a small plug or an apophysis from a larger intrusion to the south. The rock is buff in

colour, equigranular, fine grained, and consists of approximately 40% quartz and 60% feldspar. No mafic minerals were observed in any of the outcrops. On fresh surfaces the rock frequently has reddish to greenish flecks of saussurite from alteration of the feldspars. Weak carbonate and pyrite are ubiquitous.

6.3 Property Geology

The Shonia Lake property can be divided into two geological environments: South of Line 3+00S the property is underlain primarily by intrusive rocks ranging from gabbro to trondhjemite; North of Line 3+00S it is underlain by volcanic rocks ranging from basalt to rhyolite. The contact between these two areas (L2+25S - L3S) is marked by a steep sided valley (1-3 meters) with some evidence of shearing (i.e. slickensides and strong carbonatization) in both the north and south valley walls. Towards the western end of the valley, in the area between the base line and Shonia Lake, a narrow dyke or plug of sheared, altered granitic rock outcrops within the valley. This intrusive is host to the North zone of mineralization.

A second intrusion of altered granitic rock extends from the East-West step on the eastern shore of Shonia Lake (at line 4S) to the southern property boundary and east from the lakeshore for approximately 1/4 mile. This intrusive hosts the south zone of mineralization.

The remainder of the southern portion of the property underlain by a mafic-intermediate intrusive complex, consisting of quartz diorite, diorite, gabbro, anorthosite and feldspar porphyritic gabbro.

The north half of the property is underlain by massive volcanic rocks making structural interpretations difficult. However, strikes and dips from several outcrops seem to indicate northeasterly trend in the west and a more easterly trend along the east side giving some evidence of the property lying near the nose a ENE trending syncline with the younger, felsic volcanics occupying the central portion of the fold.

Two outcrops of basic volcanics found at LON, 1+75W and L2E, 5+75N and showing an extremely contorted foliation and some silicification, are interpreted as being related to a fault represented by a ridge trending approximately 65° along which both outcrops are located.

6.4 Mineralization

Two zones of quartz-pyrite-gold mineralization have been found on the Shonia Lake property. Both are hosted by the altered (saussuritized, carbonatized, pyritiferous) granitic intrusives.

The largest zone, the "South Zone", is located on Line 5+50S, between 0+50W and 1+50W, and consists of two crosscutting sets of quartz veining. One set is oriented at 60° azimuth dipping 70°S, the other runs 0-10° and dips 75°E. Both veins and wallrock contain weak pyrite mineralization, but mineralization is best at the intersections of the two vein systems. Approximately 20 veins, ranging from 2" to in width, were exposed along the side of the hill at the showing by the pits and trenches blasted out in the 1920's.

Although none of the veins can be traced for any distance greater than 30' along strik, it is thought they might be fillings of tension fractures running across strike of the actual zone of weakness (approximately 85° azimuth).

The north zone of mineralization is located on Line 2+75S, between 0+10E and 0+75W. It consists of a single quartz vein approximately 2-4' in width, trending 82-96° azimuth and dipping 70-75°S. The vein itself consists of coarse quartz with numerous small, rusty fractures. The wall rock surrounding the vein consists of sheared, altered granitic rock with up to 10% pyrite locally and minor carbonate. The strongest mineralization is found in the footwall with only minor pyrite in the hanging wall. The vein can be followed on surface for about 100 feet, extending under heavy underbrush to the east and west. Nine trenches were blasted in the vicinity of the vein in the 1920's, but are now filled in with dirt or water. No assay values from the 1984 sampling are available to date, but one value of .34 opt/3.0' was obtained from this zone in the 1920's. The remainder of the values were "negligible".

No other zones of interest were observed on the property although most outcrops do contain traces of pyrite and carbonate.

7.0 CONCLUSIONS

- 1) Gold mineralization is related to fracture zones with in saussuritized, carbonatized, pyritiferous granitic intrusives.
- 2) "South Zone" mineralization is not cut off by the narrow basaltic dyke trending 5° across the main showing. Quartz veins bearing pyrite and gold occur both to the north and south of the dyke.
- 3) The Diorite-Gabbro unit which occurs in the southern portion of the property is assumed to be older than the granitic intrusive since the granite cuts the mafic unit into two parts and therefore should not cut off the "South Zone" mineralization to the east.
- 4) The apparent trend of both zones is between 82° and 90° Azimuth, indicating structural breaks in this direction.

8.0 RECOMMENDATIONS

- 1) An attempt should be made to follow out the zones along strike using geophysics, specifically I.P. since the VLF results appeared somewhat inconclusive.
- 2) If the zones prove traceable, a small drill program of approximately 1000 feet, should be considered.

Respectfully submitted

NORANDA EXPLORATION COMPANY, LIMITED (no personal liability)

fan U. Jany

Thunder Bay, Ontario July 31, 1984

Ian Perry Project Geologist - Red Lake Northwestern Ontario Division



52011SW0034 52011SW0027 MCVICAR LAKE

NORANDA EXPLORATION COMPANY, LIMITED (no personal liability)

REPORT OF WORK

VLF-EM SURVEYS SHONIA PROPERTY JARROW LAKE PROJECT

N.T.S 52/0/11

RECEIVED

SEP 25 1984

MINING LANDS SECTION

THUNDER BAY, ONTARIO SEPTEMBER 17, 1984

D. R. CARRIERE DIVISION GEOPHYSICIST NORTHWESTERN ONTARIO DIVISION



2011SW0034 52011SW0027 MCVICAR LAKE

Ø2ØC

(i)

TABLE OF CONTENTS

1.0 INTRODUCTION 2.0 LOCATION, ACCESS AND GRID 3.0 PERSONNEL 4.0 INSTRUMENTATION 4.1 VLF-EM System 5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST GRID		Page
2.0 LOCATION, ACCESS AND GRID 3.0 PERSONNEL 4.0 INSTRUMENTATION 4.1 VLF-EM System 5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP	1.0 INTRODUCTION	
3.0 PERSONNEL 4.0 INSTRUMENTATION 4.1 VLF-EM System 5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP		1
4.0 INSTRUMENTATION 4.1 VLF-EM System 5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE FAST/WEST CRID 1:1250		1
4.1 VLF-EM System 5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE FAST/WEST CRIP)
5.0 GEOLOGY 6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE FAST/WEST CRID 1:1250		
6.0 DISCUSSION OF RESULTS 7.0 CONCLUSIONS 2 LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE FAST/WEST CRIP		1
7.0 CONCLUSIONS LIST OF FIGURES Scale FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRID		1
FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP		2
FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRID 1:1250		2
FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRID 1:1250		
FIGURE 1 LOCATION MAP FIGURE 2 CLAIM SKETCH LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRID 1:1250	LIST OF FIGURES	
LIST OF MAPS LIST OF MAPS MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP	FIGURE 1 LOCATION MAP	Scale
MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP	OBOTH SKETLH	2 mile
MAP 1 VLF RESULTS OF THE NORTH/SOUTH GRID MAP 2 VLF RESULTS OF THE EAST/WEST CRIP		
MAP 2 VLF RESULTS OF THE NORTH/SOUTH GRID 1:1250	LIST OF MAPS	
MAP 2 VLF RESULTS OF THE EAST/WEST CRID	THE NORTH/SOUTH OF THE	
	MAP 2 VLF RESULTS OF THE EAST/WEST CDID	1:1250

1.0 INTRODUCTION

During the month of August, 1984, ground VLF-EM surveys were carried out on the ten (10) claims of the Shonia Lake Property in an attempt to locate any anomalous conductive responses.

2.0 LOCATION, ACCESS AND GRID

The property consists of 10 claims (numbered 745710 to 17, 745725 and 745727, in the Patricia Mining Division) located 54 miles WNW of Pickle Lake. Access to the property is by float or ski plane.

The surveys were carried out on a pace and compass grid using a line separation of 100 meters and a station separation of 25 meters. The property was surveyed in two directions as the structures of interest crosscut the strike.

PERSONNEL 3.0

The survey was carried out by L. Manson, an employee of Noranda Exploration Company, Limited.

4.0 INSTRUMENTATION

4.1 VLF-EM System

The VLF-EM system employed on this survey was the EM-16 unit manufactured by Geonics Limited of Toronto, Ontario. The survey parameters used were as follows:

> Transmitter Frequencies

: Annapolis, Md; Seattle, Wa.

: 21.4 KHz; 24.8 KHz

Reading Interval

: 12.5 meters

Measurements

: In-Phase and Quadrature

components in percent

The plan map presented is the Fraser Filtered in-phase data at a scale of 1:1250.

5.0 GEOLOGY

The property lies within the Lang Lake Belt of the Keewatin Age metavolcanic and metasedimentary rocks. The southern part of the property is underlain by intrusive rocks while the northern portion is underlain by volcanics which appear to trend northeast to east.

6.0 DISCUSSION OF RESULTS

The results of the survey done in a north/south direction located three anomalous responses labelled A to C:

Zone A is closely related to a topographic swampy low which may be causing the response. Near the baseline it is associated with rusty carbonate rocks which may be indicating another source.

Zone B, to the west of the baseline, is to the south of a group of mafic volcanics which contain up to 4% pyrite. This response may be a caused by sulphides.

Zone C is associated with a topographic swampy low that is felt to be the source of the response.

The results of the east/west survey also located three responses labelled \boldsymbol{A} to \boldsymbol{C} :

Zone A is open to the north but the response is in a topographic low covered by alders. The response is probably due to these conditions.

Zone B is also in a topographic low and is probably produced by these conditions.

Zone C appears to be related to the contact between the granite and the gabbro over a distance of 400 meters. Iron staining and pyrite was located in the area.

7.0 CONCLUSIONS

The results of the VLF survey have indicated two areas of possible interest, Zone B of the north/south grid and Zone C of the east/west grid. If these areas are of geological interest, it would be worthwhile carrying out some IP to better evaluate their sources.

Respectfully submitted

NORANDA EXPLORATION COMPANY, LIMITED (no personal liability)

D. R. Carriere

Division Geophysicist

D. R. Laviere

Northwestern Ontario Division

Thunder Bay, Ontario September 17, 1984



520115W0034 52011SW0027 MCVICAR LAKE

900



OFFICE USE ONLY

837 (5/79)

Ministry of Natural Resources

File_____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

10 with or	Area McV	icar Lake	Area	— MINING CLAIMS TRAVERS	ED
Claim Holder	(s) Nora	nda Explor	cation Company, Limited		
Survey Comp	anyNoran	da Explora	tion Company, Limited	KRL745710(prefix)	
Author of Re	port I. P	erry		745711	1
Address of A	uthor P.	0, Box 265	6. Thunder Bay, Ont. P7R	502	
Covering Date	es of Surve	cy July 9 -	- 23, 1984 (linecutting to office)	745712	
			(ancesting to onice)	745743	
والمراجع والمراجع المراجع المر		•		745714	
SPECIAL I			DAYS	1 1	
CREDITS			Geophysical per claim	745715	•••••••
			-Electromagnetic	745716	•
ENTER 40			-Magnetometer		
line cutting	g) for first		•	745725	
survey.			-Radiometric	745727	
ENTER 20	•		-Other	1 1	
additional same grid.	survey usii	n g	Geological 20		******
Same Bria.	الجواليوماسيار استنادات	·	Geochemical		
AIRBORNE	CREDITS	(Special provisi	ion credits do not apply to airborne surveys)		
Magnetomete	er		eticRadiometric		
		•	nys per claim)		
DATESept.	24, 198	4 SIGNA	TURE: Author of Report Agent	<u></u>	
			Author of Report or Agent		
				RECEIVED	••••
Res. Geol		Qualifi	ications	SEP 2 5 1984	*******
Previous Surv File No.		Data	Claim Holder		*********
FIIC INO.	Туре	Date	CISIM DOIGEI	MINING LANDS SECTION	
		ļ			
1	******				****
	I	<u> </u>			
	**********	1			Ì
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

File	



837 (5/79)

Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

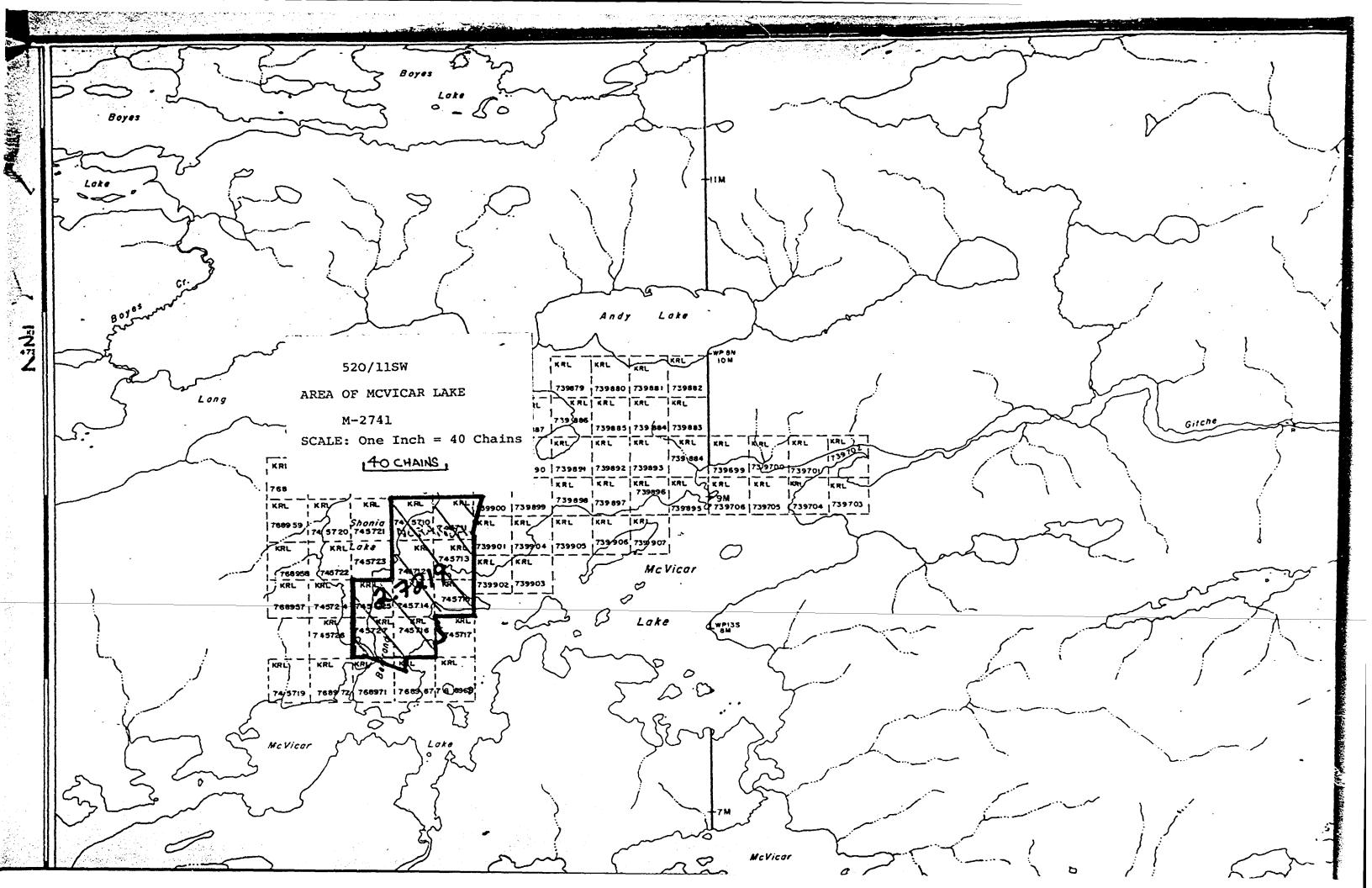
~ **					
Type of Survey(s) VI					_
Township or Area Mc\				MINING CLAIMS TRAVERSED	
Claim Holder(s) Nora		List numerically			
		Thunder Bay, Ont. P7B 5G2	r		
,		oration Company, Limited	— þ.	KRL745710 (number)	
Author of ReportD.			[745711	
Address of Author					
Covering Dates of Surv	ey July 9	745712	•••••		
Total Miles of Line Cu	ıt	(linecutting to office)	ļ.,	745713	
A V 100 110111 0 - 20111 0 - 20111			_	745714	1
SPECIAL PROVISION	ONG	DAYA	7		
CREDITS REQUES		DAYS Geophysical per claim.	-	745715	•••••
		-Electromagnetic 20		745716	
ENTER 40 days (inc		J		745725	
line cutting) for first		-Magnetometer	` <u> </u>		
survey.		-Radiometric	· .	745727	
ENTER 20 days for additional survey us		-Other	.		
same grid.	, mg	Geological	1 [
		Geochemical	:J ·		
	_	sion credits do not apply to airborne surveys) [.		
Magnetometer	Electromagn	neticRadiometric lays per claim)			
DATE: Sept. 18, 1	-	AM P.			
			ľ		
n Coal	O1!!	M -4	[.		
Res. Geol.	Quanı	ications	— I		
Previous Surveys File No. Type	Date	Claim Holder	1		
	T		\neg \mathbf{I}		•••••
				10 m	
	-	***************************************			
		***************************************			*****
		· · · · · · · · · · · · · · · · · · ·	-	or was before a second	
		***************************************		TOTAL CLAIMS 09	

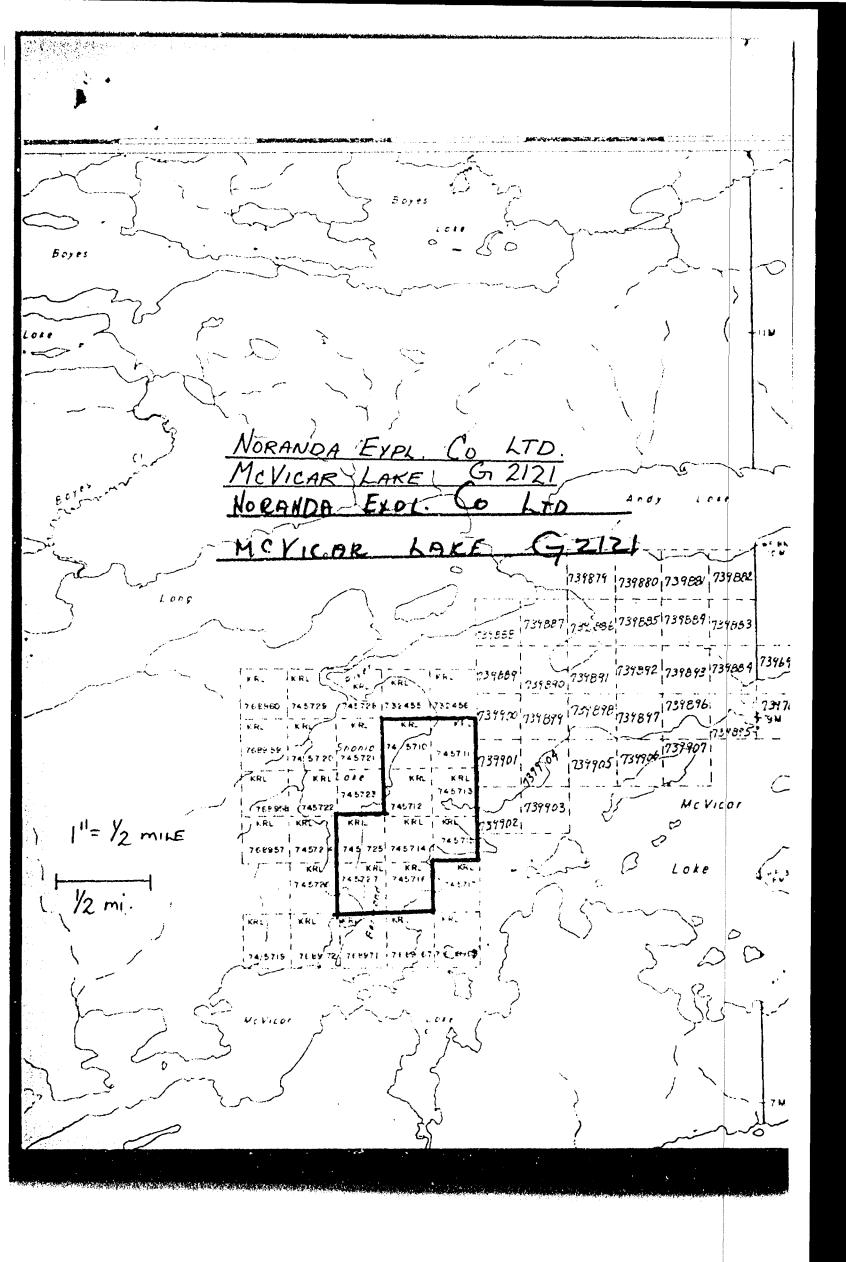
a sequencial titles the second of the second second of the second of the

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

N	umber of Stations 703	Number of Readings703	
s	tation interval 25m	Line spacing 100m	
	rofile scale	• •	Į.
	ontour intel (Pa) 20, 40, 50, 60, 70, 80%		
(1)	Instrument		
ij	Accuracy - Scale constant		
WA	Base Station check-in interval (hours)		
	Base Station location and value		
의	Instrument Geonics EM-16		
ET	Coil configuration Tilt angle		
V C	Coil separation		
OM	Accuracy174		
TR			arallel line
ELECTROMAGNETIC	Frequency 21.4 & 24.8	(assofu V.I. F. station)	
띠	Parameters measured Inphase component		
	Instrument		
Ž			
GRAVITY			
S	Base station value and location		
	Elevation accuracy		
	Instrument		
4	Method	Frequency Domain	
	Parameters - On time	Frequency	
	— Off time	Range	
RESISTIVITY	- Delay time		
	- Integration time		
ES	Power		
7 2	Electrode array		
	Type of electrode		





	1AITHE	WS_	The Minin	9 AFT 2.7		. Be 1191	nee snarten are as tie-	PM COUNTY
Geologi	cal liapping	North sings make at a boundary.			1		e Area	~
Noranda Exploratio		nited					ctor's Licence No.	
P.O. Box 2656, THU Survey Company Noranda Exploratio	INDER BAY, Onta on Company, Lin of Goo Technical reports	nited	e a comment de deservation de deserv	Date of Surve 09 07 Day Mc	84 23 Yl. Day		This Miss of he	V Cu:
Ian A. Perry, P.O. redits Requested per Each	Box 2656, THU Claim in Columns at	JNDER BA		io P7B 5G2 Daims Traversed		nerical se	quençel	
Special Provisions	Geophysical	Days per		Vining Claim Number	Expend Davs Cr.	Pref	Mining Claim	E . Dend
For first, survey:	Electromagnetic	·	· · · · · · · · · · · · · · · · · · ·	745710				
Enter 40 days, (This includes line cutting)	• Magnatometer			745711				
For each additional survey:	- Radiometric			745712				
using the same grid: Enter 20 days (for each)	- Other			745713				
Enter 20 days (10) each	Geological	20		745714				
	Geochemical	1.0	1	745715			The second secon	
Men Days	Gnophysical	Days per Claim	1	745716			le program come mante e que a come mante e	
Complete reverse side	Electromagnetic		1 1	,		REC	コンバラー	
and enter total(s) here	A STATE OF THE STA		1 1	` 7/5775	1 1	• 4 1/2 54		
	Magnetometer			745725			t may an interess of consequence of april 1	
		40 12 Sp 4 2 3 5	் ு ப்படும்	745727			1)-1-24	
	- Magnetometer - Magnetometer - Rediometric - Miller	Days per Claim	સ્ટાં તે કું	745727			N-1-04	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Radiometric Radiometric Geological Geochemical Electromagnetic Magnetometer Radiometric	Days per		745727		CIT	AKE IVED	
Airboine Credits Note: Spicial provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed	Radiometric Radiometric Geological Geochemical Electromagnetic Magnetometer Radiometric	Days per		745727		CIT	AKE IVED	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed	Radiometric Radiometric Geological Geochemical Electromagnetic Magnetometer Radiometric	Days per	स्थान में क्षित	745727		CIT	AKE NED	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed Performed on Claim(s)	Rediometric Interest Interes	Days per Claim		745727		CIT	AKE IVED	
Airborne Credits Note: Spicial provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed Performed on Claim(s)	Rediometric Apple 1994 Geological Apple 1994 Electromagnetic Magnetometer Radiometric ver stripping)	Days per		745727		CIT	AKE IVED	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed Performed on Claim(s) Calculation of Expenditure Day Total Expenditures S	Rediometric	Total ys Credits		745727		FORMS CONTRACTOR OF TOTAL	AKE IVED	9
Airboine Credits Note: Special provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed Performed on Claim(s) Ceiculation of Expenditure Day 'Total Expenditures	Rediometric Caclopical Cac	Total ys Credits holder's		Foi Office Use	Only	FORMS CONTRACTOR OF TOTAL	AKE DIVED 3 1394 Pumber of mining covered by this	9
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys. Expenditures (excludes pow Type of Work Performed Performed on Claim(s) Calculation of Expenditure Day Total Expenditures Sinstructions Total Days Credits may be a choice. Enter number of day in columns at right.	Rediometric Little Geological Geochemical Geochemical Geochemical Geochemical Flactromagnetic Magnetometer Magnetometer Flactromagnetic Magnetom	Total ys Credits holder's	Site: Cay	Foi Office Use	Only	FORMS CONTRACTOR OF TOTAL	AKE DIV. ED 3 1394 Pumber of mining covered by this of work.	9

Geophysical I.M. (V'?

Meranda Exploration Company, himited P.C. Box 2656, THUNDER EAY, Ontario PRE 502 Lagrancia Commission Noranda Exploration Community Limited Don Carrière, P.C. Box 2656. Thunder bay, Untario 1 1 501 ce a Semestro to Fee Communication of the Communication Profession 177 745719 20 Enter 40 pays of the discount of the cutting A appetomate 745711 Kalimmetri 745712 For each additional survey. using the tand one. 745713 Emer Dansey of clean 74571-Secureorica 745715 Grassissis 745716 Continue 745725 end enter the to 745727 Agrica Color Special En disk organisations At Anthony Edings Megrer, meter Expenditures (expludes nower stripping)
Ville Ct Violik Symptone a MINISTRY OF PRODUCE RESOURCES Perfore or Co Co or 6 OCT 02 1834 RESIDENT GEGLOGIST, RED LIKE are a green of Expensions Deas Greats 15 · AU4UST 2,1987 August 2,1984 Configure Ventury Benon of Von it topation Nevity its Percent of Viole

Taylog conty that Peace a personal approximate ki The control of the co Charles Achten Charles Certify no Don Carrière, P.O. Box 2656, Shunder Bay, Optario 1978 502 DON CARRIERE, P.O. BOX 2656, THUNDER BAY August 2, 1582 (61.9)



828 (83/6)

Technical Assessment Work Credits

		2.7	219	-
1984 11 15	Mining Ri Work No.	84-52	Report of 84-55	-

Cinalio	1984 11 15	4-55
Recorded Holder		
NORANDA EXPLORATION COM	MPANY, LIMITED	
Township or Area MCVICAR LAKE AREA		
Type of survey and number of		
Assessment days credit per claim	Mining Claims Assessed	
Geophysical 20		
Electromagnetic days		
Magnetometer		
Radiometric days		
Induced polarization days		
Other days		
Section 77 (19) See "Mining Claims Assessed" column		
Geologicaldays	KRL 745711 to 16 inclusive 745727	
Geochemical days		
Man days Airborne		
Special provision 🔀 Ground 🔀		
Credits have been reduced because of partial		
coverage of claims.		
Credits have been reduced because of corrections to work dates and figures of applicant.		
Special credits under section 77 (16) for the following m	nining claims	
10 DAYS ELECTROMAGNETIC	c	
10 DAYS GEOLOGICAL	<u>~</u> .	
KRL 747510 745725		
745725		
No credits have been allowed for the following mining cl	aims .	
not sufficiently covered by the survey	Insufficient technical data filed	
100 m		
The Mining Recorder may reduce the above credits if nece each claim does not exceed the maximum allowed as followed.	ssary in order that the total number of approved assessment days recorded on ows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19) —	€0:



not 30/84

1984 11 15

Your File: 84-52, 84-55 Our File: 2.7219

Mining Recorder
Ministry of Natural Resources
Ontario Government Building
Box 324
Red Lake, Ontario
POV 2MO

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

L S.E. Yundt

Director

Land Management Branch

Hitting Black, Buom buts Quant's Park Toronto, Ontario M7A 1W3

OD. Isherwood:mc

Encls.

cc: Noranda Exploration Company, Limited P.O. Box 2656
Thunder Bay, Ontario P7B 5G2
Attention: Don Carriere

cc: Noranda Exploration Company, Limited Suite 400 55 Yonge Street Toronto, Ontario

M5E 1J4

845

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner

Toronto, Ontario



Notice of Intent for Technical Reports

1984 11 15

2.7219/84-52, 84-55

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

		A						<u> </u>	
	Seal 1/2	em							
KRL-745710	1/2	2/1:							
1/_	V	1							_
. 12	V	V				which will be supported by the support of the suppo			_
13	1	1							
14	V	V							_
15	1/4.	1/4		<u> </u>					-
745716	V	V							
745725	~/2	2/4							
7115727	141	7/4							
		•				per standard territorial desiration and the second			
Secretary Control									_
							114		
	810 810 810			,	11		•		
	(4), (5) (5), (4), (4), (4), (4), (4), (4), (4), (4								
	-								
	• •	1 M				∮			
	1	•							
								İ	

15

Noranda Exploration Company, Limited (no personal flability) P.O. Box 2656 Thunder Bay, Ontario P7B 5G2

noranda

Telephone (807) 623-4339 Telex 073-4659

September 24, 1984

Lands Administration Branch Ministry of Natural Resources Room 6450, Whitney Block Queen's Park Toronto, Ontario M5A 1W3

Attention: Mr. E. F. Anderson

Dear Mr. Anderson:

Please find enclosed Report of Work and Pink Technical Data Statement in duplicate for the Geological survey which was done on the Shonia Lake Property covering claims KRL745710 et al.

Yours truly,

In a. I way

RECEIVED

et to see grad

Project Geologist-Red Lake Northwestern Ontario Division

MINING LANDS SECTION

IP: js

c. c. F. Tergie C. S. Wallis File 1332

Enclosure

Noranda Exploration Company, Limited (no personal liability) P.O. Box 2656 Thunder Bay, Ontario P7B 5G2

noranda

Telephone (807) 623-4339 Telex 073-4659

September 24, 1984

Lands Administration Branch Ministry of Natural Resources Room 6450, Whitney Block Queen's Park Toronto, Ontario

MSA /W3

Attention: Mr. E. F. Anderson

Dear Mr. Anderson:

Please find enclosed Report of Work and Pink Technical Data Statement in duplicate for the VLF-EM surveys which were done on the Shonia Property and Jarrow Lake Project covering claims KRL745710 et al.

Yours truly,

D. R. Carriero

RECEIVED

SEP 25 1984

D. R. Carriere Division Geophysicist Northwestern Ontario Division

MINING LANDS SECTION

DRC: js

c. c. F. Tergie C. S. Wallis File 1332

Englagues

1984 10 10

Your File: 2.7219

Mining Recorder
Ministry of Natural Resources
Ontario Government Building
Box 5003
Red Lake, Ontario
PDV 2M0

Dear Sir:

We received reports and maps on September 25, 1984 submitted for a Geophysical (Electromagnetic) and Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims KRL 745710 et al in the ARea of HcVicar Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is popularly filed with any prior to the submission of the submission as soon as possible.

Yours sincerely,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario H7A 1W3 Phone: (416)965-6918

A. Barrisc

cc: Noranda Exploration Company, Limited P.O. Box 2656
Thunder Bay, Ontario P7B 5G2
Attn: J. Perry D.R. Carriere

Noranda Exploration Company, Limited Sulla 400 55 Yonge Street Toronto, Ontario MSE 1J4

October 30, 1984

Ĭ

Horanda Exploration Company, Limited P.O. Box 2656
Thunder Bay, Ontario
P78 562

Attention: Don Carriere

Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining Claims KRL-745710 et al in the Area of McVicar Lake

Enclosed are the V.L.F. plans, in duplicate, for the above-mentioned survey. Please indicate the actual readings on the plans and return them to this office.

Sincerely yours,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario H7A 1N3

D. Kinvig: 1g

cc: Noranda Exploration Company, Limited Suite 400 55 Yonge Street Toronto, Ontario M5E 1J4

cc: Mining Recorder
Red Lake, Ontario
File #84-55

noranda

Telephone (807) 623-4339 Telex 073-4659

H. Bahar n. Frank

PUROLATOR

Land Management Branch Ministry of Natural Resources Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3

Attention: S. E. Yundt

Dear Miss Yundt:

RE: Your file 2.7219

With respect to your letter of October 30, 1984 please find enclosed two copies of the VLF plans with the raw data plotted on them as requested.

Yours truly,

NORANDA EXPLORATION COMPANY, LIMITED (no personal liability)

D. M. Parriere.

D. R. Carriere

Division Geophysicist

Northwestern Ontario Division

DRC: js

c.c. F. Tergie C. S. Wallis File 1332

Enclosures



1984 12 14

Your File: 84-52, 84-55

Our File: 2.7219

Mining Recorder
Ministry of Natural Resources
Ontario Government Building
Box 5003
Red Lake, Ontario
POV 2MO

Dear Sir:

RE: Notice of Intent dated November 15, 1984. Geophysical (Electromagnetic) and Geological Surveys on Mining Claims KRL 745710 et al in the Area of McVicar Lake.

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

S.E. Yundt Director

Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3 Phone:(416)965-6918

DD D. Isherwood:sc

cc: Noranda Exploration Company, Limited Suite 400 55 Yonge Street

Toronto, Ontario

M5E 1J4

Noranda Exploration Company, Limited P.O. Box 2656
Thunder Bay, Ontario

Thunder Bay, Ontario P7B 5G2

cc: Mr. G.H. Ferguson

Mining & Lands Commissioner

Toronto, Ontario

cc: Resident Geologist Red Lake, Ontario

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

 $52\phi/115W-0027 # 1-3$

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)

