

52G15NW0173 52G15NW0077A1 6IXMILE LAKE

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REPORT

F O R

CANADEX MINING CORP. LIMITED

covering MAGNETIC and ELECTROMAGNETIC surveys over their Sturgeon Lake area claim group

PATRICIA MINING DIVISION, ONTARIO

MARCH 1970

#### CLAIMS, LOCATION & ACCESS

The group consists of 24 contiguous claims numbered 227230 to 227241 and 227243 to 227248 and 227251 to 227256 all inclusive. They are located between Lyon Lake and Sturgeon Lake, 4.5 miles northeast of the Mattagami Lake Mines orebody located on Abitibi Pulp and Paper Block #7. Access is via winter road from the Mattagami mine site or via Sturgeon Lake.

#### PREVIOUS WORK & REPORTS

The Ontario Department of Mines, 1930 report Part II,
Sturgeon Lake Area indicates the area primarily underlain by
rhyolitic type rocks. The airborne magnetic map 1118 G,
indicates a magnetic anomaly immediately south of Lyon Lake.
There is no record of any previous exploration work having been
carried out on the Canadex claim group.

#### LINECUTTING

A total of 22.4 miles of line were cut with a 400° line interval. The work was under contract to George Potter of Kirkland Lake, Ontario with work being carried out between October 15 and November 5, 1969.

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#### INSTRUMENTS USED & OPERATORS

Magnetic - A Sharpe Fluxgate, vertical component magnetometer was used for the survey, reading directly in gammas with an accuracy of  $\frac{+}{2}$  15 gammas. Normal drift and diurnal corrections were applied to the readings.

Electromagnetic - The Crone Shootback EM method and equipment were used with a 200° coil separation and a basic reading frequency of 1800 Hz. Low Frequency readings taken at 480 Hz are marked L.F. Recorded reading is the "resultant dip angle in degrees" with an accuracy of plus or minus 1 degree.

Total mileage of the magnetic and electromagnetic surveys was 22.4. Some additional 300° coil separation electromagnetic coverage was carried out over the ice of Sturgeon Lake. Since these latter readings were all 0 or -1, they were not plotted on the map. A limited amount of vertical loop detail over the anomalous readings aided in the interpretation.

Both magnetic and electromagnetic surveys were carried out under the supervision of Garnet Flaherty of Bracebridge, Ontario during the period October 20 to November 20, 1969.

#### INTERPRETATION

Six separate conductive zones were detected on the claim group. The dip angles are not large, usually in the order of -5 to -6 degrees. This indicates that an excellent conductor

is detected under heavy overburden in the order of 100° to 150° or a moderate conductor is being detected under shallower overburden. Three of the conductors have direct magnetic correlation varying from two hundred to eight hundred gammas. These conductors will be described starting from the south of Lyon Lake and moving northward.

Conductor "A" This conductor occurs within 400° of the south boundary of the claim group under Lyon Lake. It appears wide and formational. It is associated with a magnetic high of 300 to 700 gammas. Overburden is expected to be in the order of 75°. A test hole has been spotted on Line 24 + 00E; 69 + 50S drilling grid south at -550° for a depth of 550°.

Conductor "B" This also occurs under Lyon Lake 500° north of conductor "A". It has weak magnetic correlation in the order of 200 gammas, everburden is expected to be approximately 75°. A test hole has been spotted on line 20E, 64 + 50S drilling south at -550° for 550°.

Conductor "C" This is a short conductor on line

16 + 00E immediately north of Lyon Lake. It is coincident

with an 800 gamma magnetic high with overburden expected to be

in the order of 40 feet. A test hole is spotted at 57 + 50S

line 16 + 00E drilling grid south at -45° to a depth of 400°.

Conductor "D" This conductor crosses the width of the claim group at approximately 48 + 00 south. On lines 12E to 20E the conductor appears to be associated with near by parallel conductors thus it may be a banded formation. Magnetic correlation is very weak to nil. A test hole is spotted on line 12 + 00E, 45 + 50S drilling grid south at -45° to a depth of 700°. Overburden is expected to be in the order of 75° to 100°.

Conductor "E" This conductor is located immediately north of Base Line 30 + 00S between line 0 + 00 and line 20 + 00W. This conductor appears to be in the order of 600° wide with overburden approximately 100° deep. There is no magnetic correlation. One drill hole has been spotted to test the southern half of this conductor - if any values are obtained in this hole then another identical hole should be drilled from a position 400 feet grid north of this hole. The first hole is collared on Line 8 + 00W, 25 + 00 south, drilling at -45° to a depth of 700 feet.

Conductor "F" This conductor at first appears to be a continuation of conductor D, being located approximately at 22 + 00 south between lines 8 + 00E and 12 + 00E. However this conductor has a flanking magnetic high of 2500 to 5000 gammas immediately to the south. Width of the conductor is in the order of 50 feet to 100 feet and depth less than 50 feet. A test hole has been spotted at 20 + 00S, line 12 + 00E dril—ling at -45° in a due south direction for 500 feet.

#### CONCLUSIONS

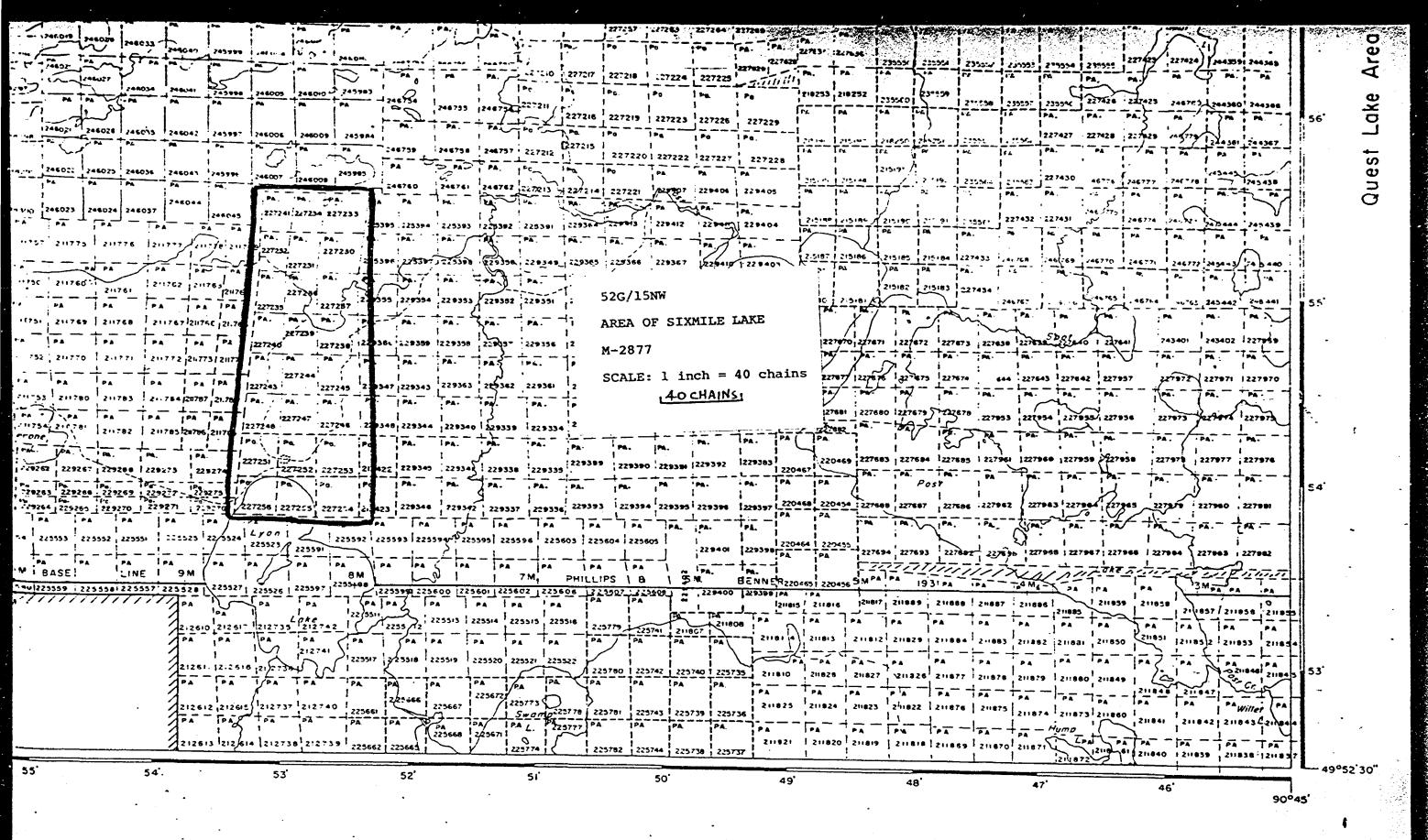
Six conductors were located all striking N 65° W.

The conductors in most cases appear to dip between vertical and 70°N. They are usually of considerable width (greater than 100 feet) but most of this width being fracture filling type sulphide mineralization or interconnected bands of graphite.

A hole has been located to test each conductor. If values are intersected in a conductor then it is recommended that a RADEM-VLF-EM survey measuring dip angle and field strength be carried out on a detail grid with 200° line interval over the length of the conductor. This would assist in locating follow-up drill holes.

Respectfully submitted;

J. Duncan Crone, B.A., P. Eng. Geophysicist.



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### SPECIAL PROVISION

#### ASSESSMENT WORK DETAILS

#### Magnetic Survey

NAMES AND ADDRESSES						
Chief Line Cutter or Contractor	George Potter,	Kirkland Lake,	Ontario			
Party Chief	Garnet Flaherty,	Bracebridge,	Ontario			
Consultant	Duncan Crone,	Port Credit,	Ontario			
CGVERING DATES			•			
Line Cutting	October 15 to Nove					
Field and Office	October 20 to Nove	ember 30, 1969	har andreasanne saguin quasinguayayayay yinda di sumasannah d			
•						
INSTRUMENT DATA	Charma Plananta I	ar1				
Make, Model and Type			ed talkii kilisee eesaja aasaga aa aga gaab aga ab aa dhirii Albar Virtaa abbiilii.			
Scale Constant or Sensitivity						
Total Number of Stations Within Claim Group	1068					
Number of Miles of Line cut Within Claim Group						
	•					
ASSESSMENT WORK CREDITS REQUESTED						
Geological Survey Days per Claim						
Geophysical Survey 40 Days per Claim						
MINING CLAIMS TRAVERSED	n. 007000 n. 0070	33 DA 337334	PA 227235,			
PA 227230, PA 227231,						
PA 227236, PA 227237,						
PA 227243, PA 227244,						
PA 227251, PA 227252,	PA 227253, PA 2272	54, PA 227255,	Ph 227256,			
	TOTAL	24				
DATEApril 20, 1970	(C)	),, (a				
UNIE BPELL 24 1914	SIGNED		- CANA			

#### SPECIAL PROVISION

#### ASSESSMENT WORK DETAILS

#### Electromagnetic Survey

Chief Line Cutter or Contractor	George Potter,	Kirkland Lake,	-Ontario-		
Party Chief	Garnet Flaherty,	Bracebridge,	Ontario		
Consultant	Duncan Crone.	Port Credit,	Ontario		
COVERING DATES					
Line Cutting	October 15 to Nov	rember 5, 1969			
Field and Office	October 20 to Nov	ember 30, 1969			
INSTRUMENT DATA					
Make, Model and Type	Crone Shootback	JEN - 480 - 1800 I	12		
Scale Constant or Sensitivity or provide copy of instrument data fr.					
Total Number of Stations Within Clai	m Group1072				
Number of Miles of Line cut Within C	Claim Group 22.4				
ASSESSMENT WORK CREDITS REQ  Geological Survey Days p  Geophysical Survey Days p	per Claim				
MINING CLAIMS TRAVERSED					
PA 227230, PA 227231	, PA 227232, PA	227233, PA 227234	, PA 227235,		
PA 227236, PA 227237	, PA 227238, PA	227239, PA 227240	), PA 227241,		
PA 227243, PA 227244	, PA 227245, PA	227246, PA 227247	, PA 227248,		
PA 227251, PA 227252	, PA 227253, PA	227254, PA 227255	5, PA 227256,		
**************************************		TOTAL 24			
DATE April 20, 1970		ED Dung	a Com		
A separate form is required for each type of survey					

52 1/15 NW WHITNEY BLOCK. QUEEN'S PARK. 63.2815 TORONTO 182, ONT

AREA CODE ---416 TELEPHONE --365-6918



#### DEPARTMENT OF MINES AND NORTHERN AFFAIRS MINING LANDS BRANCH

November 10th, 1970.

Mr. V. A. Buchan, Mining Recorder, Court House. Sloux Lookout, Out.

Dear Sir:

Hining Claim no. Pa. 227230 et al, Sixuile Lake Area.

The Geophysical assessment work credits as shown on the attached list have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Motthews,

P. Britisher

Supervisor.

Projects Section.

/dg.

c.c. Gordon C. Flaskett, 1501-380 Bay Street, Toronto, Ont.

c.c. H. L. King, Resident Geologist, BOB Robertson St.. Kenora, Ont.



#### DEPARTMENT OF MINES AND NORTHERN AFFAIRS

FILE: 63.2815

#### TECHNICAL ASSESSMENT WORK CREDITS

Recorder Holder	ordon G. Plaskett		
χουν επίφους AreaS.	ixmile Lake		
Type of Survey and number of Assessment Days Credits per clai		Mining Claims	
GEOPHYSICAL Airborne G	round X		
Magnetometer40	days		
Electromagnetic20	days	Pa. 227230 to 41 incl.	
Radiometric	days	227243 to 48 incl.	
***************************************		227251 to 56 incl.	
GEOLOGICAL	days		
GEOCHEMICAL	days		
SECTION 84 (14)	days	•	
Special Provision X Mar	days 🔲		
NOTICE OF INTENT TO BE ISSUE	<u>:D</u>		i
Credits have been reduced by partial coverage of claims.	ecause of		
Credits have been reduced to corrections to work dates and applicant.			,
NO CREDITS have been allow following mining claims as they sufficiently covered by the surv	were not		
		•	
•			
		•	

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical – 80; Geological – 40; Geochemical – 40;

## SEE ACCOMPANYING MAP(S) IDENTIFIED AS

526/15NW-0077-A1#1-2

# LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)

