



52G15SW0032 52G15SW0029A1 BELL LAKE

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FALCONBRIDGE NICKEL MINES LIMITED

REPORT OF GEOPHYSICAL ASSESSMENT WORK

NEW BRUNSWICK URANIUM METALS AND MINING LIMITED CLAIMS

PATRICIA MINING DISTRICT

PROSPECT DIVISION
TORONTO
R E C E I V E D
OCT 15 1970
7:30 AM 10:11:12:13:4:5:8 PM

INTRODUCTION

This report describes surveys and interprets results over fifty-three (53) claims in the Patricia Mining Division, names and numbers of which appear on the accompanying map.

Claims may be located on Ontario Claim Map M-1888, Bell Lake. Ground Magnetometer and AFMAG - Longwire Surveys were carried out over these claims by Central Geophysics of Winnipeg. Dates of Surveys are shown on individual survey sheets.

Claim corners have been located with respect to the geophysical grid, position name and number of all claim posts are itemized on each survey sheet.

GEOPHYSICAL SURVEYS

A Barringer Nuclear Precession Magnetometer was used for determining magnetic intensity, and all readings have been converted to gammas and plotted on the right hand side of grid lines on the accompanying maps.

AFMAG - Longwire is a specialty of Central Geophysics Limited, using an AFMAG detector with grounded longwires as a signal source. This particular method is known as the AFMAG - AFLEC Survey. AFMAG results have been plotted to the left of grid lines on the accompanying maps.

Magnetometer and AFMAG readings were carried out at 100-foot intervals on picket lines spaced 200 feet along a cut base line. Contours have been drawn at suitable intervals and AFMAG profiles have been included on maps to aid interpretation.

INTERPRETATION

For purposes of interpretation, AFMAG Longwire anomalies can be divided into these three (3) principle types:

1. Bedrock Anomalies
2. Overburden Anomalies
3. Fault or Slip Anomalies

Bedrock Anomalies are those which are caused by conductive material such as sulphide and/or graphite. These show varying degrees of strength depending upon amount of concentration of conductive material. Correlation with respect to magnetic anomalies can be read directly from geophysical maps by using contours of magnetic intensity. Direct correlation of magnetic and electromagnetic anomalies indicate the presence of magnetic sulphide such as pyrrhotite or mixtures of magnetite and graphite. These types of anomalies have been marked on the accompanying maps as follows:

1. A - 1 Strong Conductivity
2. A - 2 Moderate Conductivity
3. A - 3 Low Conductivity

Overburden Anomalies are caused by lenses of conductive gravel, sand and/or clay. Usually intensity of response is a function of shape of overburden lens. Strength of anomaly increases as the ratio thickness; breadth of the overburden lens increases. Overburden Anomalies have been classified and marked B - 1, B - 2 and B - 3 respecting strong, medium and weak conductive responses.

Conductivity is often detected along narrow, wet shears or faults in bedrock. These usually respond in a characteristic manner and are identified as C - 1, C - 2, and C - 3 respecting strong, medium and weak conductivity.

Each anomaly on the accompanying survey sheets has been marked with the appropriate classification described above. This classification in conjunction with configuration of magnetic contours should be reviewed and reinterpreted in light of the individual reader's geological background in the area.

CONCLUSIONS

Two distinct magnetic bands traverse the northern part of the property.

Continued...

CONCLUSIONS:

These may represent more basic volcanic bands in an intermediate or acid volcanic environment.

There are a large number of electromagnetic anomalies which have been classified according to the scheme presented above. All of the anomalies are weak. The significance of these anomalies will have to be interpreted when geological maps are completed and data on overburden depths is known.

AUGUST 18, 1970



ROY N. SAUKKO



PERFORMANCE & COVERAGE CREDITS

ASSESSMENT WORK DETAILS

Township or Area Claim Nap M. 1888, Bell Lake
 Type of Survey Electromagnetic
A separate form is required for each type of survey
 Chief Line Cutter Central Geophysics Limited
 or Contractor 736 Osborne St, Winnipeg 13, Manitoba
Name Address
 Party Chief H. Nilsson
Name Address
o/o Central Geophysics
Name Address
 Consultant _____
Name Address

COVERING DATES

Line Cutting January 29 - February 23, 1970
 Field February 15 - February 23, 1970
Instrument work, geological mapping, sampling etc.
 Office March 3 - March 23, 1970

INSTRUMENT DATA

Make, Model and Type Afmag Mark IV - Aflec Longwire Sys.
 Scale Constant or Sensitivity Reads Dip Angle in Degrees
Or provide copy of instrument data from Manufacturer's brochure.
 Radiometric Background Count _____
 Number of Stations Within Claim Group 1520
Minimum 2710
 Number of Readings Within Claim Group _____
 Number of Miles of Line cut Within Claim Group 42.5
 Number of Samples Collected Within Claim Group _____

CREDITS REQUESTED

	<u>20 DAYS</u>	<u>30 DAYS</u>	<small>Includes (line cutting)</small>
	<small>per claim</small>	<small>per claim</small>	
Geological Survey	<input type="checkbox"/>	<input type="checkbox"/>	
Geophysical Survey	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Show Check ✓
Geochemical Survey	<input type="checkbox"/>	<input type="checkbox"/>	

DATE October 13, 1970
 SIGNED [Signature]

MINING CLAIMS TRAVERSED

List numerically

225694	225790
225697	225791
	225792
	225793
225714	225794
225715	225795
225716	225796
	225797
225721	225798
225722	225799
225723	225800
225724	225801
	225802
225730	225803
225731	225804
	225805
	225806
225758	225807
225759	225808
225760	225809
225761	225810
225762	
225763	
225764	
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225767	
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225769	
225770	
225771	
225772	
225784	
225785	
225786	
225787	
225788	
225789	



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TOTAL 53 Claims

Send in duplicate to:
 FRED W. MATTHEWS
 SUPERVISOR-PROJECTS SECTION
 DEPARTMENT OF MINES &
 NORTHERN AFFAIRS
 WHITNEY BLOCK
 QUEEN'S PARK
 TORONTO, ONTARIO

If space insufficient, attach list

AREA CODE -- 416
TELEPHONE -- 365-6918



2.121

WHITNEY BLOCK
QUEEN'S PARK
TORONTO 182. ONT

DEPARTMENT OF MINES AND NORTHERN AFFAIRS
MINING LANDS BRANCH

March 11th, 1971.

Mr. W.A. Buchan,
Mining Recorder,
Court House,
Sioux Lookout, Ontario.

Re: Mining Claims PA. 225694 et al,
South of Sturgeon Lake Area,
File No. 2.121

Dear Sir:

The Geophysical (Magnetometer and Electromagnetic) assessment work credits as listed with my Notice of Intent dated February 23rd, 1971, have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Matthews,
Supervisor,
Projects Section.

c.c. Falconbridge Nickel Mines Ltd.,
21st floor, 7 King Street E.,
Toronto 210, Ontario.

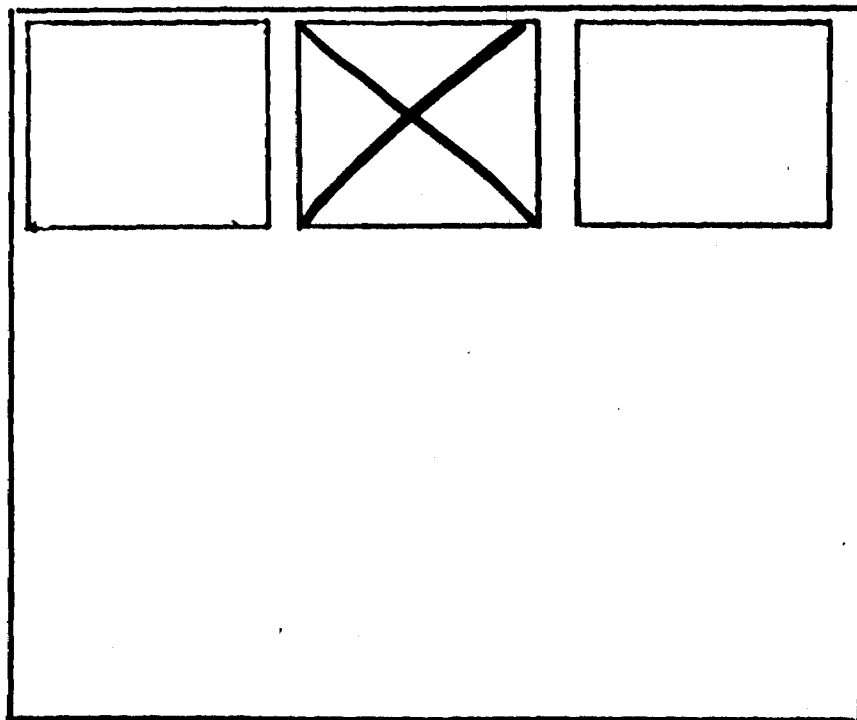
c.c. Mr. H.L. King,
Resident Geologist,
808 Robertson St.,
Kenora, Ontario. ✓

FWH/mr

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

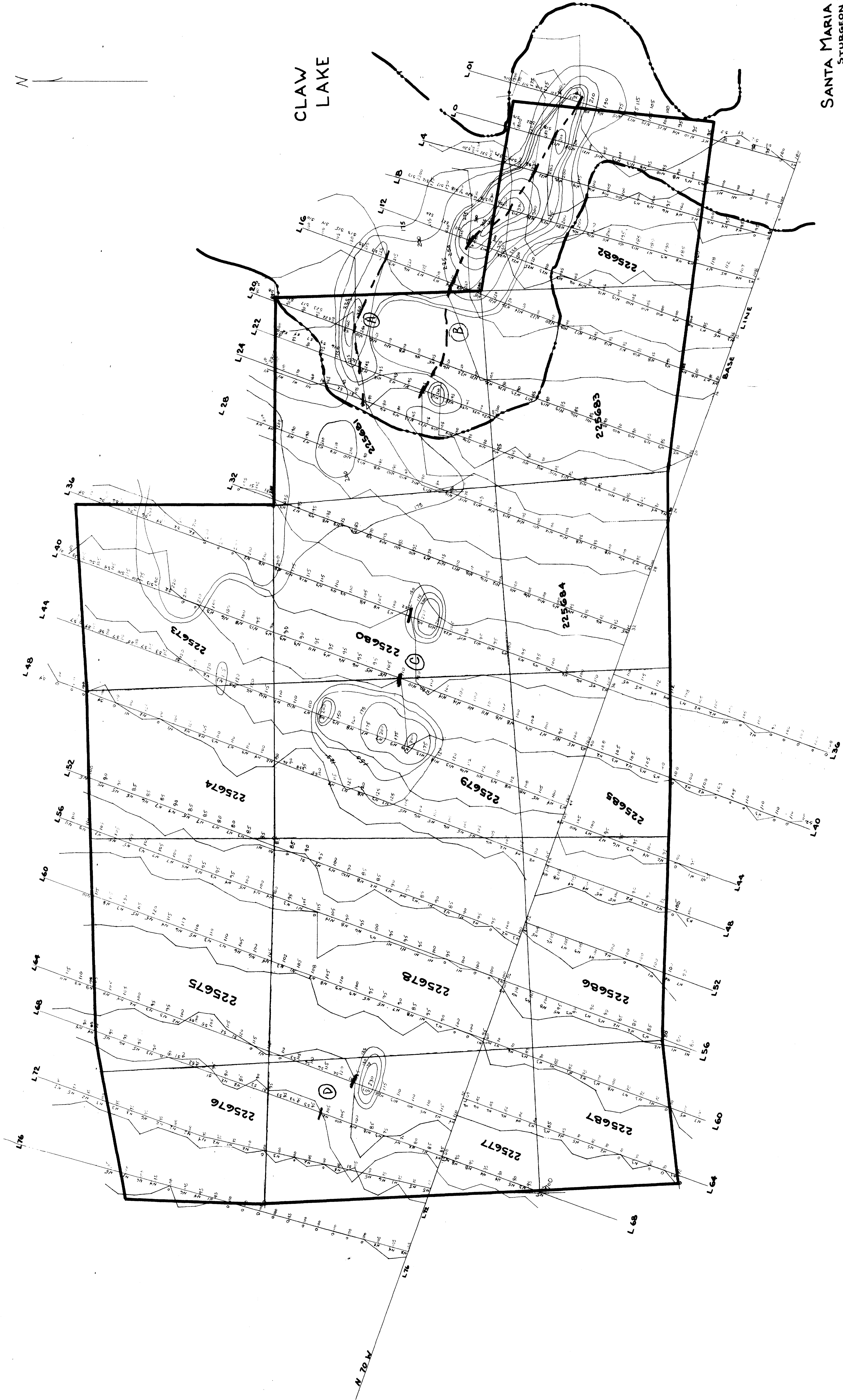
52G/15SW-0029-~~84~~# 1

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (x)





CLAW
LAKE



SANTA MARIA MINES LTD
 STURGEON LAKE
 ONTARIO
 SCALE 1" = 200 FT.

L.J. CUNNINGHAM B. Sc. P.E.M.C. 10494111

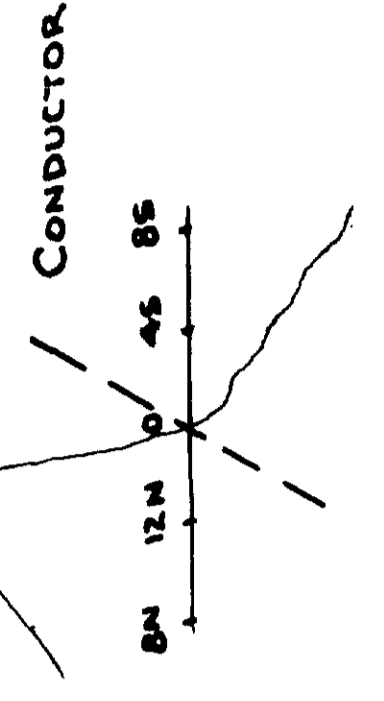
LEGEND

DIP ANGLE OF V.L.F. FIND IN DEGREES 1° 10'

FIELD STRENGTH READINGS

FIELD STRENGTH CONTOURS

STATION USED - SEATTLE WASHINGTON



526/15 SW-00 29 -A1 #1



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