



41010NE1011 2.5558 GARNET

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GEOPHYSICAL REPORT
FOR
GARNET GROUP 2
GARNET TOWNSHIP
DISTRICT OF SUDBURY

RECEIVED

MAY 18 1983

MINING LANDS SECTION

LACANA MINING CORPORATION
MARCH 25, 1983

RONALD C. WELLS
KIRKLAND LAKE, ONTARIO

R.C. Wells
11/5/83

INTRODUCTION

Lacana Mining Corporation holds 4 unpatented mining claims in the southwestern part of Garnet Township, District of Sudbury. The claims were staked to cover electromagnetic anomalies that were indicated by the airborne electromagnetic survey by Questor Surveys for the Ontario Geological Survey (1982). Two isolated six-channel EM anomalies occur on the property and lie on the southern flank of a regional magnetic 'high'.

PROPERTY

The property originally consisted of 5 claims which had the following numbers:

627977, 636389, 647798-799-800.

The southwestern claim 647798, staked by D. Gonzales, was lost in a claim dispute with T. Hussey leaving 4 claims with an approximate area of 160 acres.

LOCATION AND ACCESS

The claims are located in southwestern Garnet Township, 1/2 mile to 1 mile west of Fawn Creek. Old forestry roads from the Eddy Lumber Road give access by truck to the southern part of Garnet Township, leaving a short walk to the property from Fawn Creek.

PREVIOUS WORK

No previous work is recorded on the property. International Nickel Company of Canada Limited drilled a couple of holes in 1966 on Fawn Creek, northeast of the property, and intersected conductive graphite in a shear zone 8 m wide.

REGIONAL GEOLOGY

The property lies in the Swayze metavolcanic-metasedimentary belt which is part of the Abitibi Greenstone Belt (subprovince) of the Superior Province. Garnet Township has been geologically mapped by the Ontario Geological Survey on two occasions - firstly by V. B. Meen (Map No. 51f) in 1942 and secondly by G. M. Siragusa (Preliminary Map P2340) in 1978. The mapping by Meen gives more detail in the property area and shows northwesterly to westerly striking mafic metavolcanic flows with iron formation and metasediments. Felsic intrusive rocks with northerly trend are shown to cut the metavolcanic sequence north and east of the property.

While working on the property, mafic metavolcanics, metasediments and iron formation were observed but no evidence was found for felsic intrusive rocks.

GEOPHYSICS, 1982 SURVEYS

Method

A grid was cut to cover the original 5 claims. Because of the distance between the two six-channel airborne EM anomalies, two base lines were used for control. Geophysical surveys were conducted on the property by Lacana staff during July, 1982.

A horizontal shootback EM survey using Crone CEM electromagnetic instruments was used to try and locate the airborne EM anomalies on the ground. Both high and medium frequencies were used during the survey with 300 foot coil separation.

Horizontal shootback CEM is a well-known electromagnetic method which is accurate under conditions where the elevation, separation and direction between the transmitting coil and receiving coil are highly variable.

Results

The results of the horizontal shootback survey are plotted as profiles in Figures 1 and 2. Figure 1 covers the southern part of the property, while Figure 2 covers the most northerly claim.

A well-defined conductor of short strike length was outlined in claim 627977 (Figure 1). The profile indicates that the conductor dips steeply, is fairly narrow and is close to surface.

A series of moderately strong anomalies of short strike length were outlined in a swampy part of claim 636389 (Figure 2) on Line 8W. The profiles suggest steep dip, shallow overburden cover and close spacing of the anomalies/conductors.

Conclusions and Recommendations

The ground EM survey located both six-channel airborne EM anomalies. The anomaly in claim 627977 occurs in an area where there are numerous outcrops of iron formation and argillite with some visible graphite; drilling is not recommended. A series of anomalies occur in claim 636389; further detailed geophysics is required.



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

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May. 23 rd

#80



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The Mi: 2.5558 GARNET TOWNSHIP

Type of Survey(s):

Claim Holder(s): LACANA MINING CORPORATION Prospector's Licence No. 7814

Survey Company: LACANA MINING CORPORATION Survey Dates (linecutting to office): 1 6 82 / 1 5 83 Total Miles of line Cut: 5.0 MILES

Name and Address of Author (of Geo-Technical report): RONALD C. WELLS PO BOX 338 KIRKLAND LAKE, ONTARIO.

Special Provisions Credits Requested

Instructions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	• Electromagnetic	40
	• Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	• Radiometric	
	• Other	
	Geological	20
	Geochemical	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim		Expend. Days Cr.	Prefix	Mining Claim		Expend. Days Cr.
	Number	Number			Number	Number	
		627977					
		647799					
		647800					
		636389					

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APR 11 1983
MINING LANDS SECTION

Man Days

Instructions	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	• Electromagnetic	
	• Magnetometer	
	• Radiometric	
	• Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.	Geophysical	Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ 15000.00 + P11 15 = Total Days Credits 15

RECORDED
MAR 24 1983
Receipt No.

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Report Completed

Date of Report: _____ Recorded Holder or Agent (Signature): _____

For Office Use Only

Total Days Cr. Recorded: 160 Date Recorded: MAY 24/83 Mining Recorder: _____

Date Approved as Recorded: 83.09.09 Regional Branch Director: _____

Total number of mining claims covered by this report of work: 4

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: RONALD C. WELLS, P O Box 338 KIRKLAND LAKE, ONTARIO

Date Certified: 21/3/83 Certified by (Signature): R.C. Wells



June 13/83

Mining Lands Comments

To: Geophysics *Mr. Barlow.*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Sept 1/83</i>	Signature <i>R. Barlow</i>
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To: Geology - Expenditures

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Geochemistry

Comments

LD

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1983 05 02

2.5558

Mr. William L. Good
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
TIMMINS, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electro-magnetic) survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims P627977 et al in the Township of Garnet.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1380

A.Barr:eib

cc: Lacana Mining Corporation
Suite 3701
P.O. Box 354
Royal Trust Tower
TD Centre
Toronto, Ontario
M5K 1K7

cc: R.C. Wells
P.O. Box 338
Kirkland Lake, Ontario
P2N 3J1



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) GEOPHYSICAL
Township or Area GARNET TWP
Claim Holder(s) LACANA MINING CORPORATION
Survey Company LACANA
Author of Report R. C. WELLS
Address of Author PO Box 338 KIRKLAND LAKE, ONT
Covering Dates of Survey 1-4-82 to 1-3-83
(linecutting to office)
Total Miles of Line Cut 6.0 MILES

MINING CLAIMS TRAVERSED
List numerically

687977
(prefix) (number)
647799
647800
636389

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical
-Electromagnetic 40
-Magnetometer _____
-Radiometric _____
-Other _____
Geological _____
Geochemical _____

DAYS
per claim

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 4th May 1983 SIGNATURE: R. C. Wells
Author of Report or Agent

Res. Geol. _____ Qualifications 2.3507

Previous Surveys

File No.	Type	Date	Claim Holder

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MAY 18 1983

MINING LANDS SECTION

TOTAL CLAIMS 4

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 250 Number of Readings 234 x 2
Station interval 100 x 50 FEET Line spacing 400 FT
Profile scale 1" = 20'
Contour interval

MAGNETIC

Instrument
Accuracy - Scale constant
Diurnal correction method
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument CRONE CEM
Coil configuration HORIZONTAL SHOOTBACK
Coil separation 300 FEET
Accuracy 1%
Method: [] Fixed transmitter [x] Shoot back [] In line [] Parallel line
Frequency (specify V.L.F. station)
Parameters measured

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method: [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

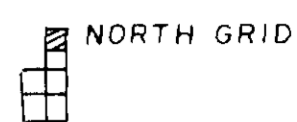
Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

1" = 2 mi.

GARNET TWP.



CLAIM LOCATION MAP

N



L12W

L8W

L4W

LFCEND

Instrument: Crone Electromagnetic System

Survey Method: Horizontal shootback

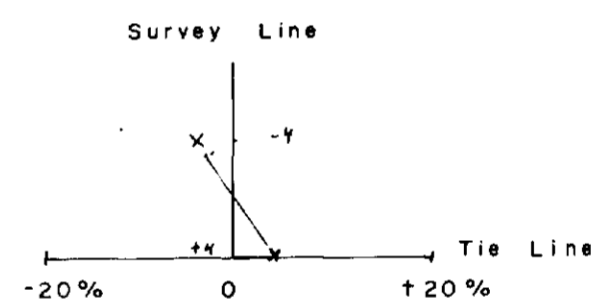
Frequency: High (3530 Hz) & medium (1830 Hz)

Coil separation: 300'

Operators: LACANA

Date: July, 1982

PLOTTING CONVENTION



1" = 20%

- x — x High frequency (3530 Hz)
- Medium frequency (1830 Hz)
- +6, +4 Readings: highest frequency, lowest frequency
- Claim post & claim line

BL 290°Az

636389



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25558

LACANA MURPHY OIL COMPANY LTD
CONVENTURES LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

C.E.M. HORIZONTAL SHOOTBACK

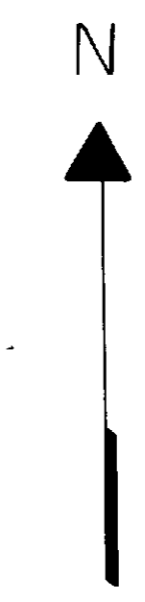
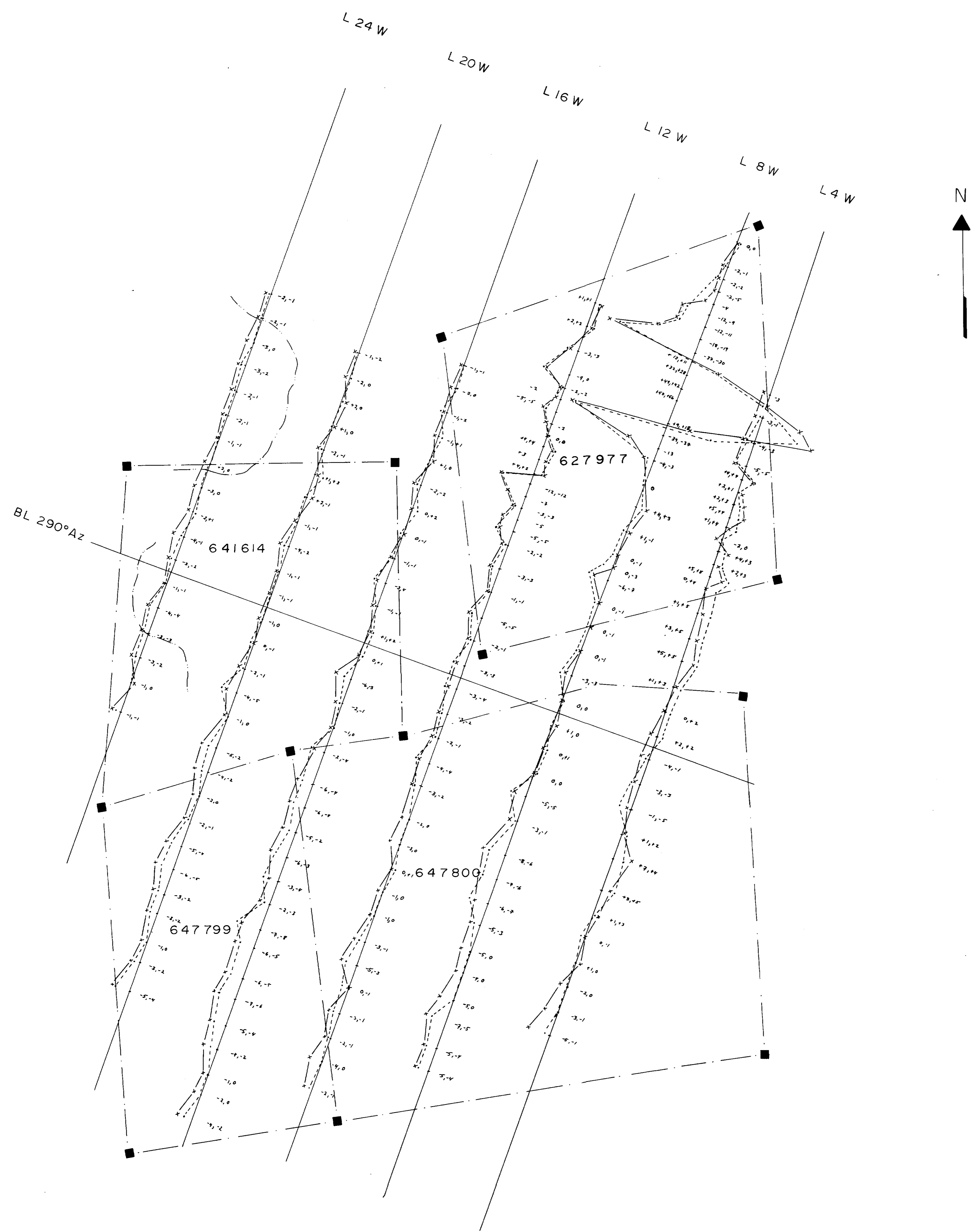
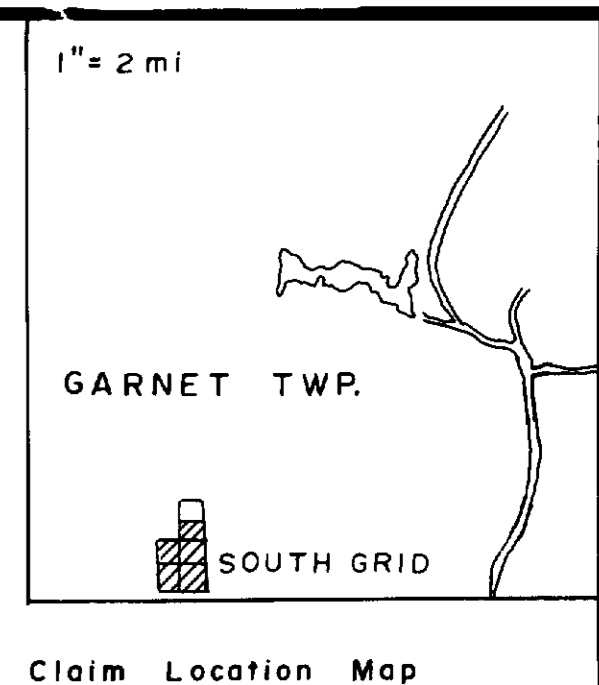
SURVEY

SWAYZE PROJECT

GARNET² NORTH GRID

PREPARED BY:	SCALE	DATE	N T S SHEET	FIGURE
RW/KG	1" = 200'	May/83	410/010	2

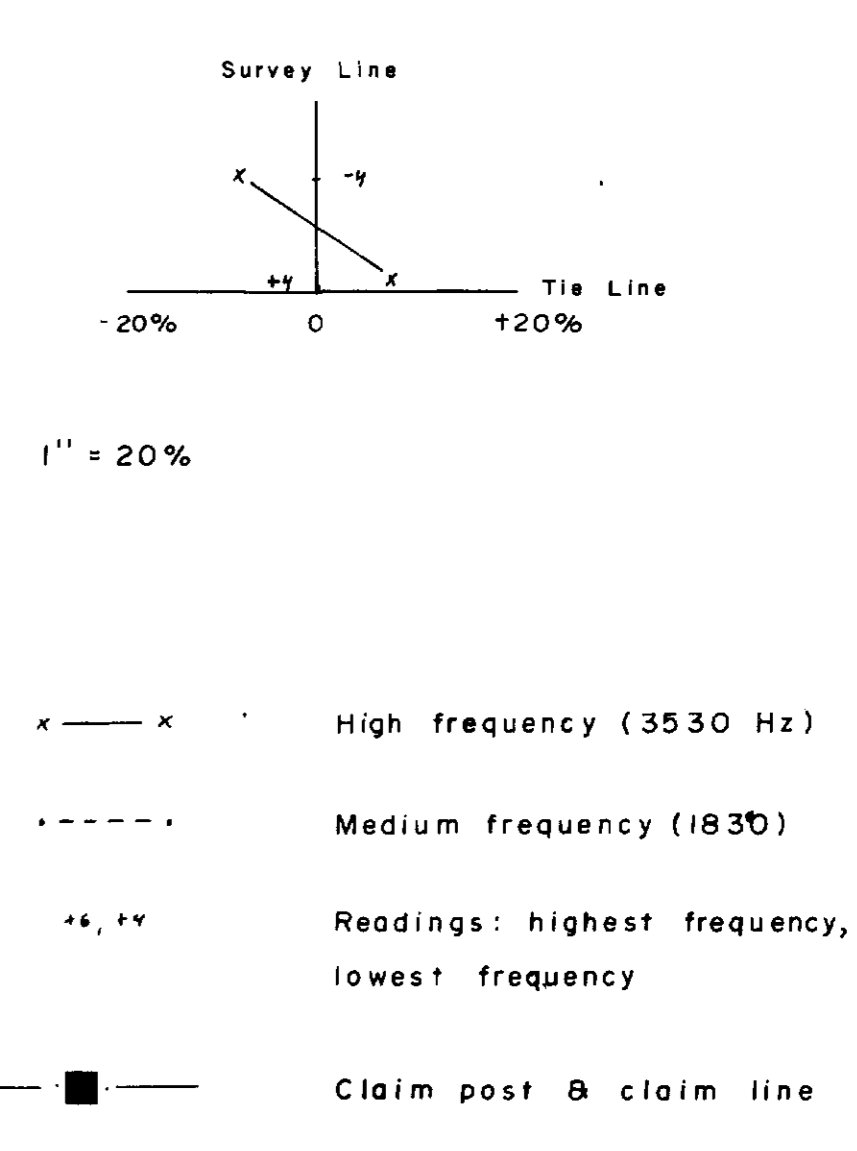
R. Kelly 11/5/83



LEGEND

Instrument: Crone Electromagnetic System
 Survey Method: Horizontal shootback
 Frequency: High (3530 Hz) & medium (1830 Hz)
 Coil separation: 300'
 Operators: LACANA
 Date: July, 1982

PLOTTING CONVENTION



LACANA				MURPHY OIL COMPANY LTD CONVENTURES LTD LACANA MINING CORPORATION
CANADIAN MINERALS JOINT VENTURE				
C.E.M. HORIZONTAL SHOOTBACK SURVEY				
SWAYZE PROJECT				
GARNET² SOUTH GRID				
PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
RW/KG	1" = 200'	May/83	410/010	1

2.5558

A. J. Wilby 11/5/83