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MARINE LANDE SECTIO

Assessment Report

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Radem VLF-EM Survey

Group ^B Dyment-Kidston Claims

Teck township

Larder Lake Mining Division

Jomi Minerals & Expediting Ltd. Report by Tarzwell, Untario L. Mike Lyment July 2, 1981

SUMMARY

The property is part of Group <u>B</u> of two properties held by Dyment-Kidston in the southeastern part of Teck Twp. totalling 34 claims. These properties were previously held in small separate groups and were given very little thorough attention in the early days of the Kirkland Lake camp, probably because of their location off the main Kirkland Lake Break. The present holders have put a larger group together and have been pursuing a methodical program of exploration since 1978.

INTRODUCTION

With the advent of higher gold prices and the economic feasibility of mining lower grade ore, more attention can be paid to properties off the main Kirkland Lake Break. These properties were staked and exploration begun with an eye to both gold and base metal possibilities.

LOCATION AND ACCESS

The property is located approximately 7000 feet South of the main Kirkland Lake Break which itself is dipping South. Highway 112 cuts the property in half.

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SURVEY METHOD

(a) <u>Dip Angle of Resultant field</u> This is the angleosf
inclination, measured from the horizontal in degrees, of the
direction of the resultant VLF field. The VLF field is normaly
horizontal (Q dip). The dip angle measurement is independent of
the strength of the field and the gain setting of the Radem
receiver. When plotted on a profile the dip angles usually form
a crossover pattern above the conductor as with the standard
vertical loop EX method. To measure the dip angle the Radem is
held with the instrument face horizontal and rotated until a null
is obtained. This aligns the Radem with the direction of the VLF
field. The Radem is then held vertically and tilted from right to
left until another null is obtained. The instrument is held steady
in this position and the dip angle read from the inclinometer.
(b) <u>Horizontal Component of the Field Strength</u>. This is simply

the strength of the field in the horizontal plane. It is the maximum reading obtained from the Field Strength meter when the instrument is rotated in the horizontal plane. The field strength of VLF stations drifts with time. A base station should be established in a normal area and the hadem adjusted to a Horizontal Field Strength of "100" on the "C - 300" scale by means of the volume control pct. This base station should be read every one to two hours as in a magnetic survey.

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PREVIOUS WORK

A search of the Resident Geologist's files in Kirkland Lake failed to locate any record of previous work. There are, however, several pits put down in massive and disseminated sulphides which appear to be of 1920 or 1930 vintage. The only other work done on this property consists of Magnetometer, VLFEM, and Radiometrics done by the author of this report and his partner, and these records are on file.

SURVEY METHOD

An established grid was used as control and traverses were made East and West between lines. Moss was removed and special attention was given to areas of interest pinpointed by previous Magnetometer, EM, and Radiometrics surveys.

GENERAL GEOLOGY

The rocks occuring in the area surrounding Kirkland Lake are Precambrian. The oldest and most extensive is the Keewatin which consists of highly metamorphosed lavas and diabase and quantities of Iron Formation and Volcanic Tuffs. It is in this type of formation that the ores of the former Boston Creek camp are found.

In the Kirkland Lake camp itself, the productive ore

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is associated with rocks younger than the Keewatin. These rocks consist mainly of Timiskaming sediments and intrusive masses of symmitic types. These intrusives have been considered to be offshoots from the Algoman granite of which there are extensive exposures to the South.

Also in the Kirkland Lake area is the Larder Lake fault which has been traced westward from the Quebec border to the edge of the syenite batholith in Lebel Twp. There are many different theories concerning the origin and makeup of the Larder Lake fault but none deny the significance of this occurence. The precise location of ful this fault west from Lebel Twp. has varied over the years with the imagination and needs of the mapmakers.

Survey Results

EM crossovers are noted on the profile map enclosed. These anomalies are designated A, B, C. All anomalies are covered with overburden and further prospecting will be required and detailed mapping to arrive at an explanation of their cause.

CONCLUSION AND RECOMMENDATION

The VLFEM survey has fulfilled its requirement in furt ther aiding the explorationist in pinpointing areas of interest on his property. A more conventional EM (Horizontal Loop) used on this property would be of assistance as would more detailed mapping, stripping and trenching.

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Certificate

I, Leslie Michael Dyment, residing in the township of Marquis, Ontario, and having a mailing address Jomi Minerals & Expediting Ltd., RR#1, Tarzwell, Untario, do hereby certify:

- That I am a Mining Technician having taken the two year course at Haileybury School of Mines, Haileybury, Ontario,
- (2) That I have been employed in all phases of mining exploration and developement for 19 years,
- (3) That I did personally accumulate and set forth the facts and knowledge in the accompanying report and maps,

(4) That the accompanying report is true.

Dated January 22, 1981 Tarzwell, Ontario

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Michae. Dyment

	File	
GEOI Ontario		
TO BE ATTACHED AS AN APPENDIX TO TECHNIC FACTS SHOWN HERE NEED NOT BE REPEATED IN TECHNICAL REPORT MUST CONTAIN INTERPRETATION, (N REPORT CONCLUSIONS ETC.	
Type of Survey(s) ULF EM GEOPHYSICS		
Claim Holder(s) L.M Dyment.	MINING CLAIMS TRAVERSED List numerically	
Survey Company Jomi Minerals 2 Expediting Ltd.		
Author of Report h. M. Dymen't.	(prefix) (number) 	
Covering Dates of Survey MARCH 5,69,10 MAYO, 14, 15, July 1-2. (linecutting to office)	53/068 v 545717 V	
Total Miles of Line Cut <u>4.4. miles</u>	565195 -	
SPECIAL PROVISIONS CREDITS REQUESTEDDAYS per claimGeophysicalDAYS per claim	565/471	
ENTER 40 days (includes line cutting) for first ————————————————————————————————————		
survey. –Radiometric ENTER 20 days for each –Other		
additional survey using Geological same grid. Geochemical		
AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)		
MagnetometerElectromagneticRadiometric (enter days per claim) 2,2903 DATE:BSIGNATURE:Author of Report or Agent ·		
Res. Geol Qualifications		
File No. Type Date Claim Holder		
	TOTAL CLAIMS	

837 (5	/79)
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OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

9	GROUND SURVEYS – If more than one survey, specify	data for each type of survey		
1	Sumber of Stations 27/	Number of Readings	265	
S	tation interval 100'	Line spacing $200'$ s	A00'	
I	rofile scale $/'' = 40^{\circ}$	· · · · · · · · · · · · · · · · · · ·		
	Contour interval			
MAGNETIC	Instrument Accuracy – Scale constant Diurnal correction method Base Station check-in interval (hours) Base Station location and value			
ELECTROMAGNETIC	Instrument <u>Crone Radem</u> Coil configuration <u>Coil separation</u> Coil separation <u>Infinite</u> Accuracy <u>±</u> Method: <u>¥</u> Fixed transmitter <u>Shoot back</u> <u>In line</u> <u>Parallel line</u> Frequency <u>Culter Moine</u> 17.8 KH2 <u>& Appapoli's Maryland ZI.4 KH</u> (specify V.L.F. station) Parameters measured <u>Dip Angle</u> .			
	Instrument			
	Scale constant			
ΤY	Corrections made			
GRAVI	Base station value and location			
	Elevation accuracy			
	Instrument			
	Method I Time Domain	Frequency Dom	ain	
	Parameters – On time	Frequency	······································	
ΙΛ	- Off time	Range		
	- Delay time			
SIS	- Integration time			
RE	Electrode array	· · · · · · · · · · · · · · · · · · ·		
	Electrode spacing	· · · · · · · · · · · · · · · · · · ·	· · · · ·	
	Type of electrode			
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GROUP B

VLF-EM SURVEY Dip Angle Profiles DYMENT-KIDSTON CLAIMS Teck twp LARDER LAKE MINING DIV NTS 42A/1

LEGEND





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