GEOPHYSICAL REPORT FOR *LARRY GERVAIS* ON THE *BYERS-LOVELAND PROPERTY* BYERS-LOVELAND TOWNSHIPS PORCUPINE MINING DIVISION NORTHEASTERN, ONTARIO

2.29953

Prepared by: J. C. Grant, May. 2005



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ABSTRACT

Historically there are numerous ore grade rock floats in Loveland Township about 3 miles south-southeast of the Byers property. These floats range in size from 2 feet to 20 feet across and have assays ranging from 2 to 3% nickel and 1-3% copper. These floats are slightly magnetic and lie in an area of 100 feet wide by 300 feet long and generally align in a north-south direction.

The Byers-Loveland Property is the Cominco property that has a small deposit of 130,000 tons of copper-nickel. It is also in close proximinal to the Hollinger deposit that has about 420,000 tons of copper-nickel. This deposit has historical drill assays of 0.71% nickel and 0.42% copper. This property has had in excess of 15000 ft of drilling, assorted EM, VLF and magnetic surveys as well as boulder prospecting, geological mapping and line cutting, all from 1970 to 1977.

INTRODUCTION:

The services of Exsics Exploration Limited were retained by Mr. Larry Gervais to complete a report for a ground geophysical program that had been completed over a small grid that was cut across his claim unit in Byers and Loveland Townships. The grid and ground geophysical program was completed by D.Clement and the data was then turned over to Exsics for plotting, interpretation and for the preparation of this report.

The Gervais claim block is situated in the northeast quadrant of Byers Township and the northwest section of Loveland Township. Both of these townships are situated in the Porcupine Mining Division of Northeastern Ontario. Refer to figures 1 and 2.

The purpose of this program was to satisfy the assessment required to hold the claim unit as well as to test the property for base metal potential. The close proximity of the Hollinger deposit, approximately 1200 meters to the south, along with the historical Cominco deposit which lies under claim P-1243976 enhances the potential of the ground.

In all, a total of 1.4 kilometers of grid lines were cut and 6.6 kilometers were re-brushed for a total of 8 kilometers of grid lines. Once this was completed, the entire 8 kilometers was then covered by a Horizontal Loop electromagnetic, (HLEM), survey.

PROPERTY LOCATION AND ACCESS:

The Byers-Loveland claim block is situated in the northwest section of Loveland Township and the northeast section of Byers Township. Loveland Lake is situated approximately 900 meters to the south of the claim block. The entire property is situated about 45 kilometers north-northwest of the City of Timmins.

The access to the property during the survey period was relatively easy. Highway 101 travels west from Timmins to the junction of the Kamiskotia Highway, which runs northnorthwest to Kamiskotia Lake and a good gravel road locally called the Abitibi road. A 9kilometer ride, north along this gravel road will access a secondary gravel road that generally travels west across the central section of Loveland Township. An ingress gravel road running northwest off of this west road approximately 1600 meters east of the Byers Township line will provide access to within about 800 meters of the Byers grid. A foot access along a cut trail will bring one to the grid. Refer to Figures 1 and 2.





CLAIM BLOCK:

The claim numbers that make up the Byers-Loveland property are as follows.

P-1249929	1 unit
P-1249932	1 unit
P-1243976	1 unit
P-3005414	1 unit
P-3005415	1 unit
P-3005416	1 unit
P-3015369	3 units

Refer to figure 3 copied from MNDM Plan Maps of Byers and Loveland Townships for the positioning of the grid and the claim numbers.

PERSONNEL:

The field crew directly responsible for the collection of the raw data was D. Clement and a helper. Once the data was collected, J. C. Grant of Exsics Exploration Limited was responsible for the plotting and interpretation of the results.

GROUND PROGRAM:

The ground program was completed in two phases. The first phase was to re-establish the original grid that was first cut in the summer of 2003. This was done by D. Clement. The lines that were re-cut were lines 200MN to 500MS all of which were turned off of a north-south baseline. In addition to these lines, Lines 200MN and 100MN were extended 600 meters to the west and lines 0, 100MS, 200MS and 300MS were extended 200 meters to the west. This was done to get maximum coverage of the suspected conductive and or magnetic zones. All of the cut lines were chained with 25-meter pickets that had been metal tagged. In all, a total of 1.4 kilometers of new grid lines were cut and 6.6 kilometers were re-established across the property.

Upon the completion of the cutting, a detailed HLEM survey was completed across all of the lines. The magnetic survey was completed in May of 2003 and the HLEM was done to follow up on those results. The HLEM survey was completed with the Apex Parametrics MaxMin II system. Specifications for the MaxMin II system can be found as Appendix A of this report.

The following parameters were kept constant throughout the survey.



HLEM SURVEY

Line spacing	
Station spacing	
Reading intervals	
Coil separation	150 meters
Theoretical search depth	
Frequencies recorded	1777Hz and 444Hz
Parameters measured	Inphase and quadrature components of the
	secondary field.

Upon the completion of the surveys, the collected data was plotted directly onto a base map at a scale of 1:2500, one such base map for each frequency, and then the data was profiled at 1 cm to +/- 10 % whereever possible. A copy of each of these profiled base maps is included in the back pocket of this report.

A copy of the 2003 magnetic survey map is also included in the back pocket of this report. The HLEM conductors have been placed on this mag map for interpretation purposes.

SURVEY RESULTS:

The HLEM survey was somewhat successful in locating and outlining two conductive targets on the grid.

The first zone was noted on line 100MN at 80ME and correlates with a possible contact zone between a magnetic high, (dike) and magnetic low. The 1777 hz frequency suggest that this zone may be part of a longer structure that extends as far as line 400MS and generally parallels the dike like feature to the immediate west.

The second conductive zone is also on line 100MN at 455ME. The zone correlates to the eastern edge of a modest magnetic high zone that extends from 200MN to and including 0+00. This zone appears to be at a depth of 70 meters and it has a conductivity of 32 mohs. The zone appears to be near vertical in dip. The zone strikes off of the grid to the south.

CONCLUSIONS AND RECOMMENDATIONS:

The HLEM survey was successful in locating and outlining a good conductive zone that is open to the south as it extends off of the grid to the south. The zone appears to relate to a legitimate bedrock conductor possibly at the search depth limits of the present survey.

This conductive zone should be followed up to the south to define its strike length. Grid line 0+00, 100MS and 200MS should be extended to the east for about 400 meters each to better define the zone. These lines should also be covered by magnetics to better define the magnetic high, which correlates to the conductive zone.

Drilling of this target would then be based on the results of this follow up program.

Respectfully submitted

J. C. Grant May, 2005



CERTIFICATION

I, John Charles Grant, of 108 Kay Crescent, in the City of Timmins, Province of Ontario, hereby certify that:

- 1). I am a graduate of Cambrian College of Applied Arts and Technology, 1975, Sudbury Ontario Campus, with an Honors Diploma in Geological and Geophysical Technology.
- I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited, (5 years), and currently as Exploration Manager and Geophysicist for Exsics Exploration Limited, since 1980.
- 3). I am a member in good standing of the Certified Engineering Technologist Association, (CET), since 1984
- 4). I am a Fellow of the Geological Association of Canada, (FGAC), since 1986.
- 5). I have been actively engaged in my profession since the 15th of May of 1975, in all aspects of ground exploration programs, including the planning and execution of field programs, project supervision, data compilation, interpretations and reports.
- 6). I have no specific or special interest in the herein described property. I have been retained by the property holders and or their Agent as a Geophysical Consultant and Contract Manager.

John Charles Grant, CET., FGAC.



APPENDIX A



AXMIN II Offable Em







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SPECIFICATIONS :

personal d	Frequencies	000 444 000 1777 DEEE UT	Depertability	+0 25% to +1% popmally depending
	-requencies:	222,444,888,1/// and 3000 Hz.	Repeatebility;	on conditions, frequencies and coil
Ţ	Modes of Operation:	MAX: Transmitter coil plane and re- ceiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer cable.	Transmitter Output:	 222Hz : 220 Atm² 444Hz : 200 Atm²
_		MIN: Transmitter coil plane horizon- tal and receiver coil plane ver- tical (Min-coupled mode). Used with reference cable.	Section Estance	$\begin{array}{r} - 888 \text{Hz} : 120 \text{Atm}^2 \\ - 1777 \text{Hz} : 60 \text{Atm}^2 \\ - 3555 \text{Hz} : 30 \text{Atm}^2 \\ \end{array}$
_		V.L. : Transmitter coil plane verti- cal and receiver coil plane hori- zontal (Vertical-loop mode). Used without reference	Piezerve: Laboeriee.	Life: approx. 35hrs. continuous du- ty (alkaline, 0.5 Ah), less in cold weather.
		cable, in parallel lines.	Transmitter	
-	Coil Separations:	25, 50, 100, 150, 200 & 250m (MMI) or 100, 200, 300, 400, 600 and	Batteries:	12V 6Ah Gel-type rechargeable battery. (Charger supplied).
_		800 ft. (MMIF). Coil separations in V.L.mode not re- stricted to fixed values.	Reference Cable :	Light weight 2-conductor teflon cable for minimum friction. Unshield- ed. All reference cables optional at extra cost. Please specify.
	Parameters Read:	- In-Phase and Quadrature compo- nents of the secondary field in MAX and MIN modes.	Voice Link:	Built-in intercom system for voice communication between re-
1		- Tilt-angle of the total field in V.L. mode .		ceiver and transmitter operators in MAX and MIN modes, via re- ference cable.
-	Readouts:	- Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No null- ing or compensation necessary.	Indicator Lights:	Built-in signal and reference warn- ing lights to indicate erroneous readings.
-		- Tilt angle and null in 90mm edge- wise meters in V.L.mode.	Temperature Range	-40°C to +60°C (-40°F to +140°F).
	Scale Ranges:	In-Phase: ±20%,±100% by push-	Receiver Weight	6kg (13 lbs.)
_		button switch . Quadrature: ±20%, ±100% by push-	Transmitter Weight:	13kg (29lbs.)
,		Tilt: ±75% slope . Null (V.L.): Sensitivity adjustable by separation switch.	Shipping Véeighe	Typically 60kg (135 lbs.), depend- ing on quantities of reference cable and batteries included. Shipped in two field/shipping cases.
	Readability:	In-Phase and Quadrature:0.25 % to 0.5 % ; Tilt: 1% .	Specifications subject	ct to change without notification

A PARAMETRICS LIMITES 200 STEELCASE RD. E., MARKHAM, ONT., CANADA, LOR 162





