GEOPHYSICAL SURVEY
property of
HUNTER AND ASSOCIATES
COOPER Project
Prevert & Carpiquet Townships
Province of Quebec
April 1991

G. Lambert R. Turcotte

VAL D'OR
GÉOPHYSIQUE

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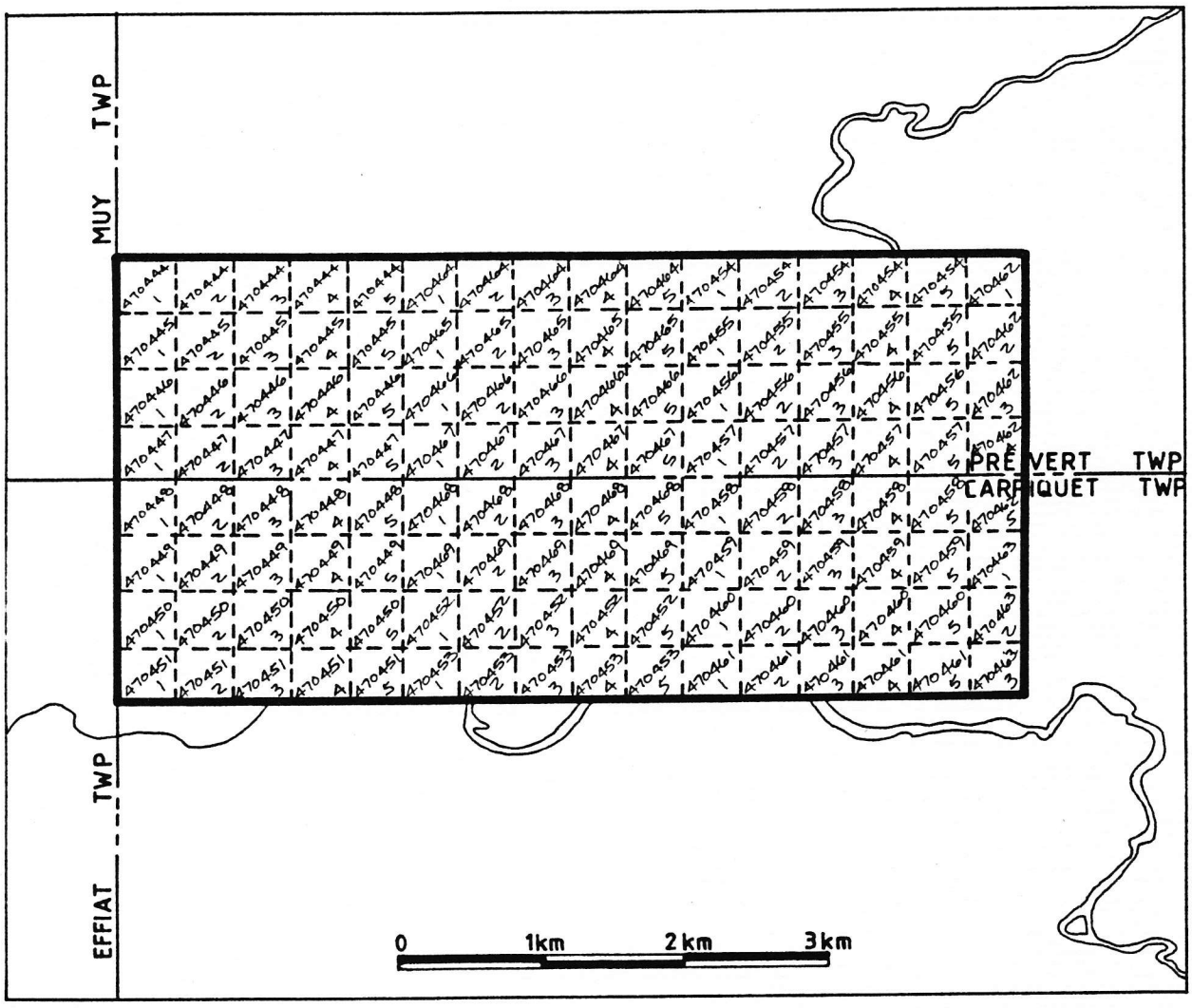

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Figure #1: Index of claims

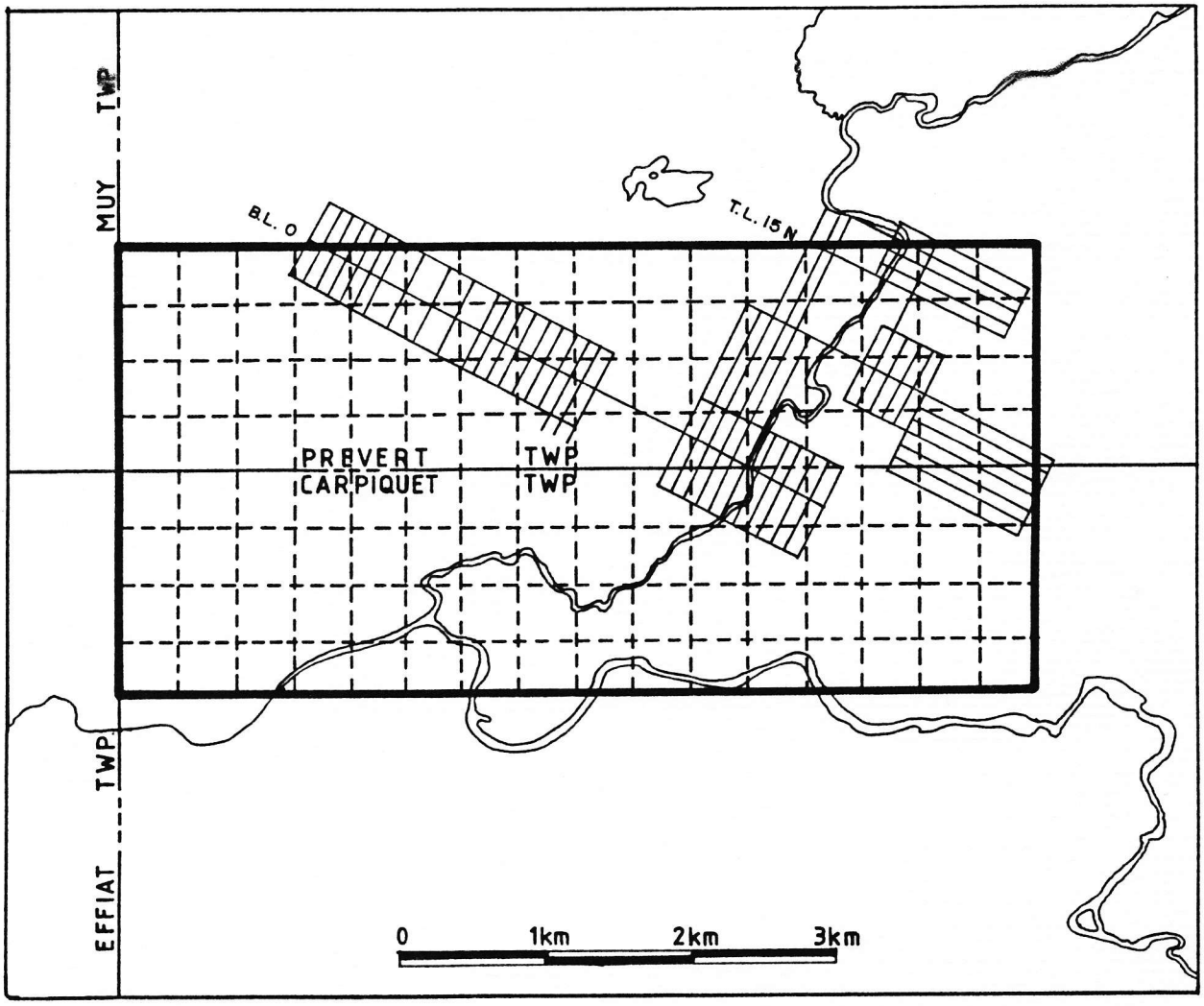

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Figure #2: Area surveyed

INTRODUCTION

In March and April 1991, magnetic survey and electromagnetic EM-VLF survey were carried out on properties owned by HUNTER AND ASSOCIATES, COOPER Project, in Prevert and Carpiquet Townships, province of Quebec.

These surveys were designed to locate structures favorable for gold or base metal deposition.

PROPERTY, LOCATION AND ACCESS

The property is located approximately 80 kms East of the town of Lebel-sur-Quevillon, in Prevert and Carpiquet Townships, province of Quebec.

The property is accessible by the logging road #104.

The property claims have been registered with the Quebec Department of Natural Ressources and the numbers are presented on the figure #1 of this report.

GEOPHYSICAL WORK

A total magnetic field survey and an electromagnetic EM-VLF survey were carried out on the property between March 31 to April 11, 1991.

A total of 50.4 kms were covered by the magnetic survey and 32.2 kms by the electromagnetic EM-VLF survey using the EDA OMNI-PLUS instrument.

SURVEY SPECIFICATIONS

The geophysical surveys were carried out along a North West - South East grid lines cut at 100 metres intervals. The lines were chained and stations marked at 25 metres intervals.

The magnetic readings were taken with a proton precession magnetometer recording simultaneously the value of the total magnetic field with a precision of 0.1 gamma. The readings were taken systematically every 12.5 metres.

A base station magnetometer measuring the variation of the total magnetic field at 20 seconds intervals was used as a reference for correction of the diurnal variation.

The EM-VLF survey was conducted with a EDA OMNI-PLUS unit measuring the vertical component (In phase - Out of phase) of the secondary field. Readings were taken systematically every 12.5 using the NAA (Cutler) station for crosslines and for baseline and tie line.

RESULTS AND INTERPRETATION

The magnetic relief is generally subdued, with a background level of about 58050 ±100 gammas. Several magnetic horizons have been mapped by the survey. Most of these horizons have a NW-SE strike direction and display variable susceptibility-thickness, as shown by the changing amplitudes along the same units.

The causes of the magnetic anomalies probably relate with the presence of mafic bands such as gabbro sills or basalt flows within felsic or sedimentary rocks. The interpreted depths vary between 5 and 20 metres. Two cross-cutting faults were interpreted in the eastern portion of the surveyed areas.

As for the VLF-EM survey, we have interpreted three conductors of probable bedrock metallic nature (graphite, sulphides) one of which coincides with the Cooper showing in the area of 2200E/275S. Five or six other conductive lineaments were also identified but their general character is more diagnostic of electrolytic conductors (structure ?) or at best of poorly-conductive metallic mineralization such as stringers or veins of sulphides.

The dominant features evidenced by the VLF-EM survey consist of apparent resistivity variations, sometimes quite sharp, and most likely related with the bedrock surface topography.

Resistive zones of thin or inexistant overburden cover are evidenced by reversed crossovers, sometimes fairly wide, on the in-phase component. Conversely, wide, broad normal crossovers are usually due to zones of low resistivity associated with bedrock valleys and deeper overburden.

In the Southeast, a sharp contrast between high and low resistivities suggests the presence of a WNW-ESE fault or shear zone. The presence of mineralisation is however not clear and further studies are warranted in this area.

CONCLUSION AND RECOMMENDATIONS

The geophysical investigations which were carried out on the COOPER showing and adjoining ground have successfully mapped the presence of some metallic mineralization in the bedrock near surface, as well as numerous zones of contrasting resistivity, most likely related with the bedrock surface topography.

Recommending further work, we think that geological mapping, prospecting and sampling is in order, considering the presence of a fair number of zones of thin overburden where subcrop or outcrop could be found.

As well, an air photo lineament study would nicely complement this mapping. A more discriminating geophysical technique such as induced polarization is also proposed, in order to adequately map any non-conductive sulphide concentrations such as commonly found with structure-hosted precious metal occurences. A particular attention should be given to the NNW-ESE fault interpreted in the Southeast sector.

Respectfully submitted,
VAL D'OR GEOPHYSIQUE LTEE

By :

Gérard Lambert, B.Sc.A., Ing.
Consulting Geophysicist

And by :

Robert Turcotte, T.Sc.A.

CERTIFICATE

I, undersigned, Gérard Lambert, P. Eng., certify that:

I reside at 679 Murdoch ave, Rouyn-Noranda, Quebec, since 1983.

I am a graduate of Université Laval, Quebec where I have obtained a B.Sc.A. in Geological engineering in 1978.

I have been engaged in Exploration Geophysics since 1972 and have been practicing as a professionnal engineer since 1978.

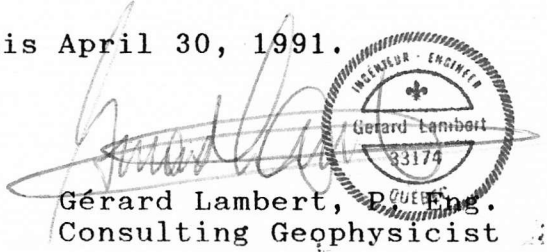
I am a member of the Ordre des Ingénieur du Québec since 1978.

I am a member of the Quebec Prospector Association, the Prospector & Developers Association of Canada, the Society of Exploration Geophysicist, the European Association of Exploration Geophysicists and the Canadian Institute of Mining & Metallurgy.

This report is based on the information contained in the survey described. The interpretation of the data was made using methods known in the literature and based on my personnal experience.

I have not received, nor do I expect to receive directly or indirectly any interest in the claims that belong to HUNTER AND ASSOCIATES.

Rouyn-Noranda, this April 30, 1991.



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CERTIFICATE

THIS IS TO CERTIFY THAT:

I am a resident of Val d'Or, province de Quebec, since 1977.

I am a technologist graduated from "Collège du Nord-Ouest", Rouyn, Quebec in 1977.

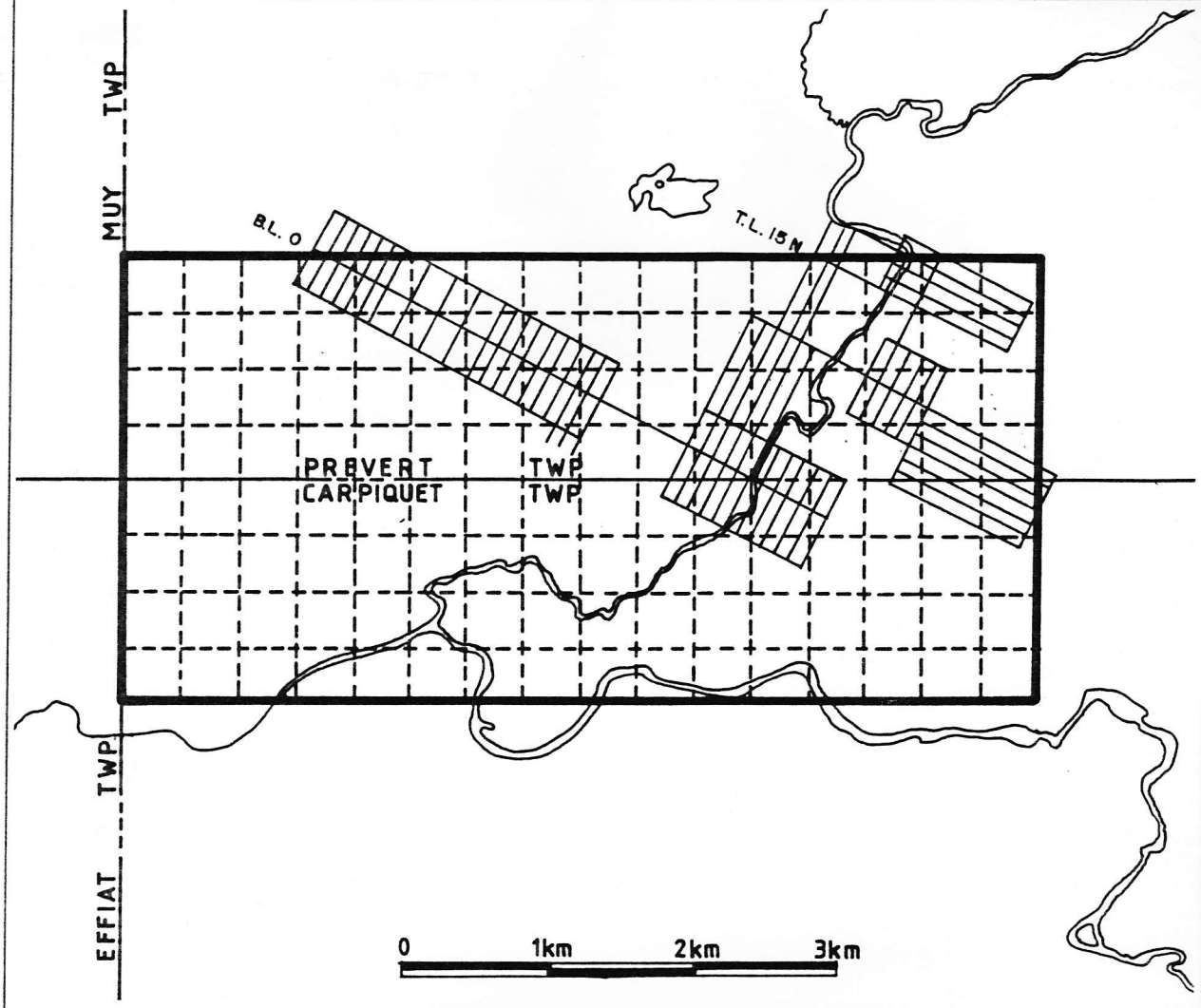
I have been actively engaged in geophysical exploration since 1977 and have acquired a wide range of experience in geophysical methods and techniques.

I am a member of "Corporation professionnelle des Technologues des Sciences Appliquées du Québec" and also a member of the Quebec prospectors association and of the Canadian Institute of Mining and Metallurgy.

I do not hold nor do I expect to receive an interest of any kind in these claims held by HUNTER AND ASSOCIATES.

Signed in Val d'Or, this April 30, 1991.

By:
Robert Turcotte, T.Sc.A.



HUNTER AND ASSOCIATES

COOPER PROJECT

PREVERT - CARPIQUET TWPS

MAGNETIC SURVEY

TOTAL FIELD CONTOURS

VAL D'OR GEOPHYSIQUE LTEE

Interpreted by: G. Lambert, P.Eng. Date 04/1991

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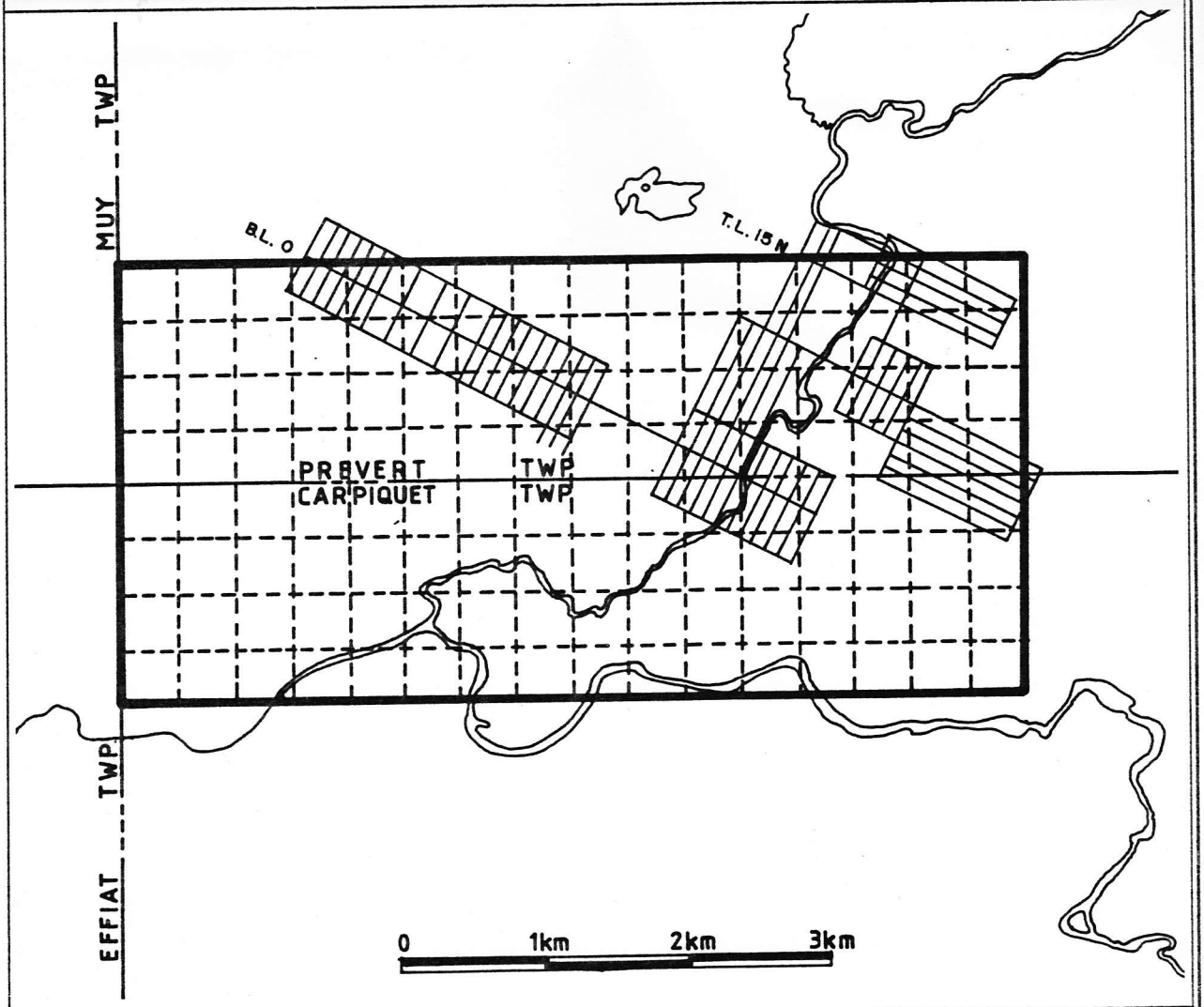

HUNTER AND ASSOCIATES

COOPER PROJECT

PREVERT - CARPIQUET TWPS

MAGNETIC SURVEY

TOTAL FIELD PROFILES

VAL D'OR GEOPHYSIQUE LTEE

Interpreted by: G. Lambert, P.Eng. Date 04/1991

Scale 1 : 5000 Drawing no. 91-674-1.2