GM 43837

REPORT ON THE LOUVICOURT PROPERTY

Documents complémentaires

Additional Files





Licence



License

Cette première page a été ajoutée
au document et ne fait pas partie du
rapport tel que soumis par les auteurs.

Énergie et Ressources naturelles
Québec

ABITIBI RESOURCES LIMITED

REPORT ON THE LOUVICOURT PROPERTY

LOUVICOURT TOWNSHIP

QUEBEC, CANADA

Ministère de l'Énergie et des Ressources
Service de la Géoinformation
Date: 2 MARS 1987
No G.M.: 43837

MINISTÈRE DE L'ÉNERGIE ET DES RESSOURCES
REÇU
13 AOUT 1985
VAL D'OR
MINES

May 10, 1985

Jean Descarreaux, Ph.D.
Consulting Geologist

TABLE OF CONTENTS

	PAGE
Table of contents.....	2
Summary.....	3
Certificate.....	4
Introduction.....	5
Location and access.....	5
Previous work.....	5
General geology.....	7
Geology of the property.....	7
Economic geology.....	8
Conclusions.....	9
Recommendations.....	10
Selected bibliography.....	13

Figure 1 - Map of Northwestern Quebec Mining Areas.

Figure 2 - Geology of Louvicourt township.

Figure 3 - Compilation map of the property 1:10,000.

Figure 4 - Claim map.

Tableau I - Claim list.

Tableau II - List of assessment work files.

Tableau III - Estimated tons and grade of potential copper-bearing material.

SUMMARY

The Louvicourt property of Abitibi Resources Ltd. consists of a group of 19 claims for a total of approximately 247 hectares or 612 acres. It is located 25 kilometres (15.5 miles) east of Val d'Or, Quebec.

The property is underlain by tuffs, agglomerates, felsic volcanics, diorite sills and feldspar porphyries. Present and past gold and base metals producers are numerous in the vicinity.

Limited geophysical surveys and geological mapping have been carried out on the property since the 1940's. Diamond drilling has been concentrated in the northeast part of the claim group where a deposit of copper-bearing material of over 1,000,000 tons averaging 0.76% Cu was delineated. Low gold, copper and zinc values have also been intersected in a few holes drilled to test geophysical anomalies elsewhere on the claim group in interesting geological contexts.

The horizons of pyroclastics and the sills of diorite are considered to be the best geological targets for gold mineralization. It is recommended to continue the exploration program undertaken recently to re-evaluate the potential of the property along new metallogenic concepts and to try to discover new zones of economic interest, specially for gold.

C E R T I F I C A T E

THIS IS TO CERTIFY THAT:

I am a resident of Val d'Or, province of Quebec, since 1971.

I have been engaged in mining exploration since 1964 and have been a consulting geologist since 1972.

I am a graduate of Université de Montréal (B.Sc. 1964 and M.Sc. 1967) and of Université Laval (Ph.D. 1973) in Geology.

I am a Fellow of the Geological Association of Canada and also a member of the Quebec Prospectors Association, of the Association Exploration Geochemists and of the Canadian Institute of Mining and Metallurgy.

I have worked intermittently in Louvicourt township and in the surrounding area since 1964.

This report is based on the author's twenty one years experience in the district, on a comprehensive study of all the assessment work records and on geological maps and reports published on the area of interest by the Quebec Department of Energy and Resources and by the Geological Survey of Canada.

I have disclosed in this report all relevant material which, to the best of my knowledge, might have a bearing on the viability of the project or the recommendations.

I have not, directly or indirectly, received or expect to receive any interest, direct or indirect, in the property of Abitibi Resources Ltd. or any affiliate, nor beneficially own, directly or indirectly, any securities of that company or any affiliate. I am not an insider of a company having an interest in the subject property nor in any other property in Louvicourt township.



May 10, 1985
JD/lc

Jean Descarreaux, Ph.D.
Consulting Geologist
Val d'Or, Québec, Canada

REPORT ON THE LOUVICOURT PROPERTY, ABITIBI RESOURCES LIMITED

INTRODUCTION

Abitibi Resources Ltd. owns a mining property in Louvicourt township, northwestern Quebec. It consists of 19 unpatented mining claims for a total of 247 hectares or 612 acres. The claims are listed in table I.

The available assessment work files recorded at the Quebec Department of Energy and Resources have been carefully studied and compiled on a geological map (figure 3). Geological reports and maps published by the Quebec Department and by the Geological Survey of Canada have also been reviewed.

This report includes an appraisal of the available data and recommendations to carry out an exploration program for gold.

LOCATION AND ACCESS

The Louvicourt property is located 22 kilometres (14 miles) east of Val d'Or, less than 1 kilometre (3,000 feet) south of highway 117. A good gravel road and numerous tractor roads link the property to the main highway.

Suppliers, contractors and qualified manpower are available from Val d'Or, a city of 35,000 people serviced by 3 airlines. Water and electricity are readily available.

The topography of the property is rather flat. A small lake straddles the west boundary of the claim group and low grounds predominates elsewhere. Outcrops are mostly located in the southeastern part of the property and are not very numerous elsewhere. Overburden is relatively thin.

PREVIOUS WORK

The Louvicourt property of Abitibi Resources Ltd. has been explored intermittently since 1942 when Kencour

Prospecting Syndicate carried out geological and Dip Needle surveys. The surveys were followed by 15 exploration diamond drill holes for a total of 3,000 metres (10,000 feet) scattered throughout the claim group. At the same time, Orcour Gold Mines Ltd. drilled four joint holes (R-1 to R-4) on the west boundary. The work resumed in 1950 when Abitibi Metals Mining Ltd. drilled 13 holes (1,800 metres or 6,000 feet) as follow-up to the digging of trenches and a magnetic survey. Those holes delineated a copper zone on the northeast corner of the property. Abitibi Metals Mining Ltd. carried out induced polarization and magnetic surveys on a part of the property and drilled 39 additional holes from 1960 to 1970. Out of those 39 holes, 34 were drilled to better delineate the copper deposit. The five remaining holes were drilled to test I.P. or magnetic anomalies elsewhere on the property.

A total of 67 holes have been drilled on the property so far; 42 on the copper deposit; 7 on a small copper-zinc showing located 500 metres (1,650 feet) southwest of the main copper deposit; 5 on the west boundary (ranges VI and VII); 13 in the central and eastern parts of the property. The latter 13 exploration diamond drill holes intersected low gold, copper and zinc values. Gold values up to 0.05 ounce per ton have been obtained, the best ones are located on figure 3.

Abitibi Resources Ltd. carried out an Induce Polarization survey in early 1985 on almost the whole property. Only the extreme eastern part of the property, where the already known low grade copper deposit is, was not covered by this survey. Six good anomalies were found. Only one of them was previously drilled and explained by graphite.

REPORT ON THE LOUVICOURT PROPERTY, ABITIBI RESOURCES LIMITED

GENERAL GEOLOGY

The Louvicourt township is located in the southern part of the Abitibi volcanic belt of the Superior province of the Canadian Shield. The Precambrian volcanic, sedimentary and intrusive rocks of the area are Archean in age, except for late diabase dykes.

The volcanic flows of Keewatin-type are the oldest rocks. They range in composition from basalt to rhyolite and are interbedded with numerous horizons of tuffs and agglomerates. Temiscaming-type sedimentary rocks are absent elsewhere in Louvicourt township. The numerous concordant and discordant intrusives range in composition from ultrabasic to granitic. They are found as bodies of various sizes. Almost all the rocks are affected by a regional foliation which strikes roughly east-west and dips steeply. Metamorphism is of the greenschist facies.

Unconsolidated materials cover more than 95% of the area and include varved clays, eskers, moraines and glacial erratics.

GEOLOGY OF THE PROPERTY

The property is underlain by tuff, agglomerate, dacite, rhyolite, diorite, andesite and feldspar porphyry, in decreasing order of abundance. Outcrops are abundant at a few places only. The overburden is relatively thin.

The pyroclastics (tuff and agglomerates) are by far the most abundant rock type occuring on the property. They are interbedded with thin continuous or lenticular horizons of felsic to intermediate volcanics and with sills of diorite. The feldspar porphyries are of limited extend and appear as dyke-like bodies within the volcanic flows or pyroclastic rocks. The volcanic flows and the pyroclastics beds are locally affected by chloritic and sericite alteration. The rocks are metamorphosed to the greenschist facies.

The bedding and the foliation of the rocks are parallel, strike at 80° to 90° and dip very steeply. Several shears have been mapped on the property. They are usually parallel to the foliation, in the volcanics and in the pyroclastics. One cross-fault striking north-northeast has also been noted in the northeastern corner of the claim group.

ECONOMIC GEOLOGY

The property is well located in Louvicourt township, being one of the most active area for gold exploration in the Val d'Or mining camp. Several current and former gold producers are surrounding the claim group owned by Abitibi Resources Ltd.

The property is bordered to the east by the grounds of Mid-Canada Gold and Copper Mines Ltd. and to the southeast by the Quebec Gold Belt property, the latter now belonging to Sigma Mines Ltd. The latter company mine sporadically a gold deposit since two years on the Quebec Gold Belt property. The gold, averaging 0.15 oz/ton, is found in fracture-filling quartz veins within a quartz-diorite sill. The mineralized zone is at or near surface.

Several other former mines in the area are now being reevaluated. The gold is usually found within or near plugs, sills and dykes of diorite, granodiorite or feldspar porphyry. Sometimes, gold, copper and silver are associated with tuffs, such as at the former Dunraine Mine (now owned by Soquem) located at approximately 4.5 kilometres (3 miles) to the west and on strike with the property owned by Abitibi Resources Ltd.

A low-grade copper deposit has been delineated by drilling in 1962-1970 in the eastern part of the property. It occurs in chloritized and carbonatized basic tuff and consists of magnetite, chalcopyrite and pyrite as well as some gold and silver. Magnetite is the most abundant mineral

and occurs in narrow bands and disseminated in close association with the sulphide minerals. Pyrite is in about equal proportion to the chalcopyrite, with both sulphides occuring as disseminations, fracture fillings and massive replacements of the host rocks. The strike of the mineral deposit is roughly east-west and it dips from 65 degrees north to vertical.

Table III shows the estimates of potential tons and grade of copper-bearing material indicated and inferred from seven core-drill sections at 50-foot intervals along a strike length of 350 feet, drilled to 1,550 feet vertical, on the main copper deposit. The data are from 38 drill holes totalling approximately 12,200 metres (40,000 feet). These estimates were calculated by A.S.Bayne, P.Eng. (Ontario) in 1970. They were checked by the author and found to be adequate.

Bayne (1970) observed that the mining width of the copper deposit substantially increases with depth. The copper values tend to be less erratic and better distributed across greater widths on the lower levels.

The geological environment of the property is favourable for the discovery of gold mineralization of the Quebec Gold Belt type. The thick horizons of pyroclastic rocks could also be the loci of volcanogenic gold-copper-silver deposits similar to the deposits of the former Dunraine Mine or Louvem Mine. Gold has been reported in several drill holes on the property. The best sections are 0.05 oz/ton gold for 0.37 metre (1.2 foot) and 0.04 oz/ton gold for 0.58 metre (1.9 foot), intersected in pyroclastics.

CONCLUSIONS

The property of Abitibi Resources Ltd. is well located in the Val d'Or mining camp. A low grade copper deposit has been discovered several years ago in the eastern part of the

claim group. However, it is believed that the property has much more economic potential but that new metallogenic concepts and new exploration techniques must be used to properly evaluate this potential, mainly for gold of volcanic origin.

Most of the property is underlain by tuff and agglomerate. These types of rocks are the host to several volcanogenic deposits of precious and base metals in northwestern Quebec, such as the Doyon gold deposit and the Louvem copper-zinc deposits.

The diorite sills that were mapped on the property should be considered as good geological targets for gold mineralization. A gold deposit was found in a similar sill, a short distance south of the property under study (Quebec Gold Belt), is now in production.

RECOMMENDATIONS

It is recommended to undertake a program (a)- of soil (humus) sampling and analyses for gold, arsenic, copper and zinc, (b)- of detailed geological mapping with emphasis on structural geology and alterations, (c)- of whole rock analyses to try to detect anomalies of major elements (Na_2, K_2O, MgO) and trace elements (Au, As, Cu, Zn), and also (d)- to complete the Induced Polarization survey on the yet uncovered part of the property.

Five (5) diamond drill holes are recommended to test five already known Induced Polarization targets. The locations of these holes are shown on figure 3 but they could be changed according to the results of the surveys recommended above.

Phase I - Surveys and drilling.

-Soil (humus) sampling, 50 metre (164 foot) spacings on lines 100 metres (328 feet) apart, total of 450 samples X $20./sample, analyses and report included.	$9,000.00
-Detailed geological mapping, rock sampling, one geologist and one assistant for two weeks, all included.	$4,000.00
-Whole rock analyses, 30 samples X $50./sample.	$1,500.00
-Induced Polarization survey on the eastern part of the property, lines 100 metres (328 feet) apart, total of 6.1 kilometres (3.8 miles) X $50./ kilometre ($800./mile), including line cutting.	$3,000.00
-Five (5) diamond drill holes on Induced Polarization targets detected in 1985, total of 850 metres (2,800 feet) X $85./metre ($25.91/foot), including moves, water, supervision, logs and assays.	$72,000.00
-Contingencies (12%).	$10,500.00
Total of phase I	$100,000.00

Phase II - Additional diamond drilling, if and where justified by the results of phase I.

-Ten (10) diamond drill holes, total of 1,470 metres (4,825 feet) X $85./ metre ($25.91/foot), including moves, water, supervision, logs and assays.	$125,000.00

-Contingencies (12%).	$15,500.00
Total of phase II	$140,000.00



May 10, 1985

Jean Descarreaux, Ph.D.
Consulting Geologist

SELECTED BIBLIOGRAPHY

Quebec Department of Energy and Resources,
Geoscientific Compilation, Map 32C/3-0201, 1977.

Quebec Department of Energy and Resources,
Special Study #2. "Metallic Mineralization, Areas of Noranda, Matagami, Val d'Or, Chibougamau" Quebec, 1977.

Sharpe, J., 1968
Geology of the Louvicourt township, Quebec Dept. of Natural Resources, Prel. Report 135, map at 1:12,000.

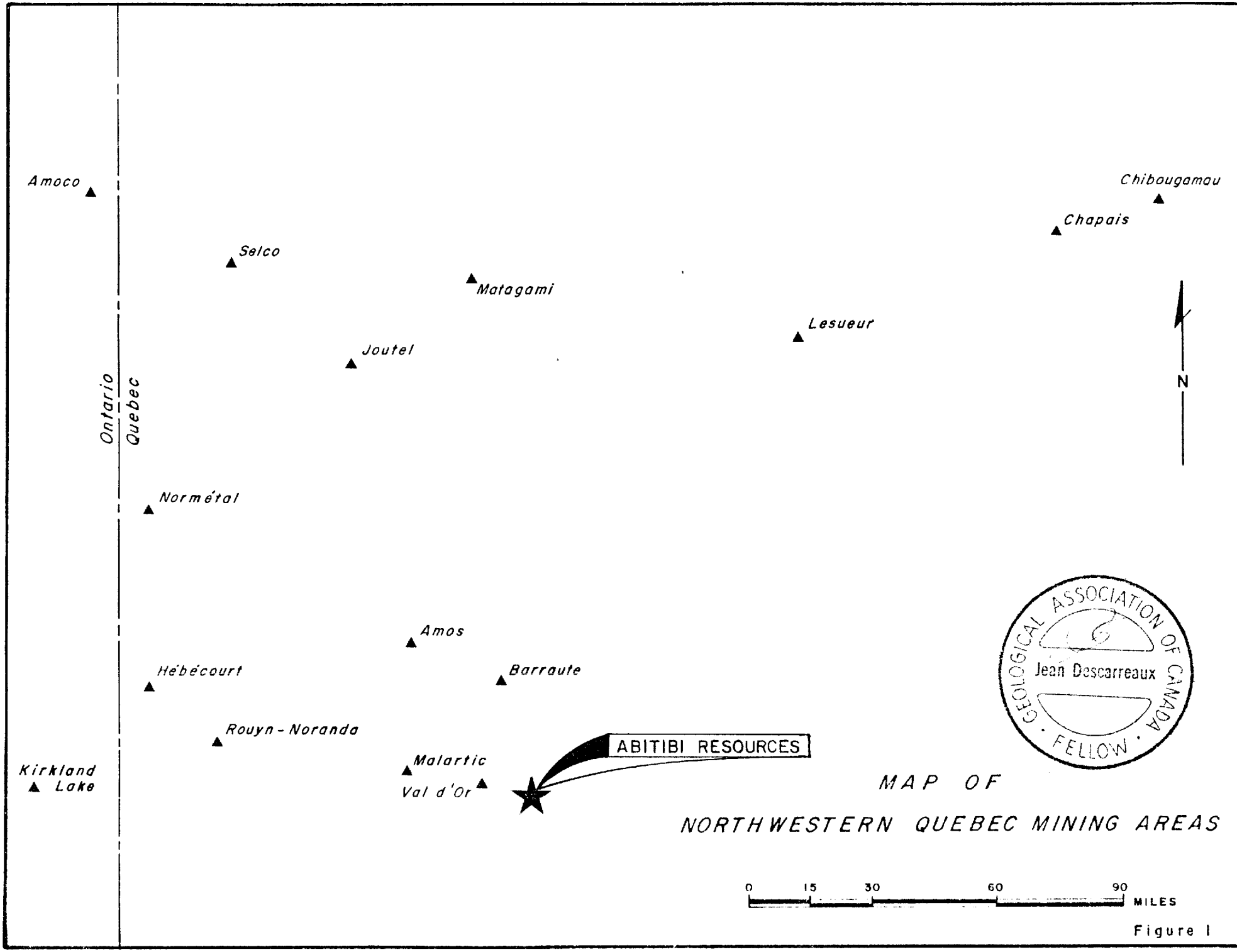
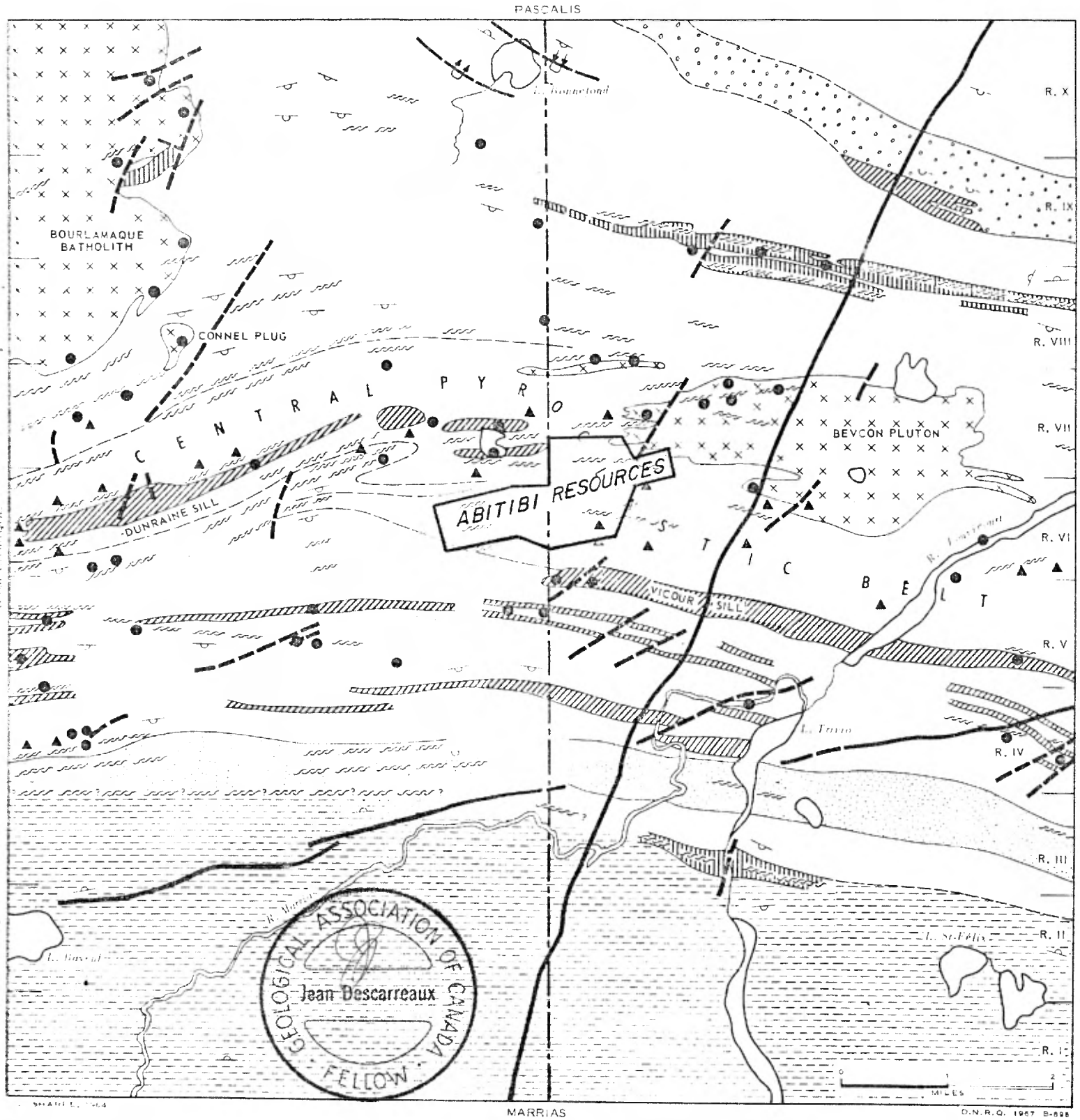

Amoco
Selco
Matagami
Chibougamau
Chapais
Lesueur
Joutel
Ontario
Quebec
N
Normétal
Amos
Hébécourt
Barraute
Rouyn - Noranda
Malartic
Kirkland Lake
Val d'Or
ABITIBI RESOURCES
GEOLOGICAL ASSOCIATION OF CANADA
Jean Descarreaux
FELLOW
MAP OF
NORTHWESTERN QUEBEC MINING AREAS
0 15 30 60 90
MILES

Figure 1



GENERAL STRUCTURE AND STRATIGRAPHY

Figure 2

LOUVICOURT TOWNSHIP

LATE PRECAMBRIAN

- Diabase dike

EARLY PRECAMBRIAN

- Granodiorite and allied rocks
- Diorite gabbro
- Serpentinized ultrabasic rocks
- Mainly volcanic rocks

PONTIAC GROUP

- Metasedimentary schists

TRIVIO GROUP

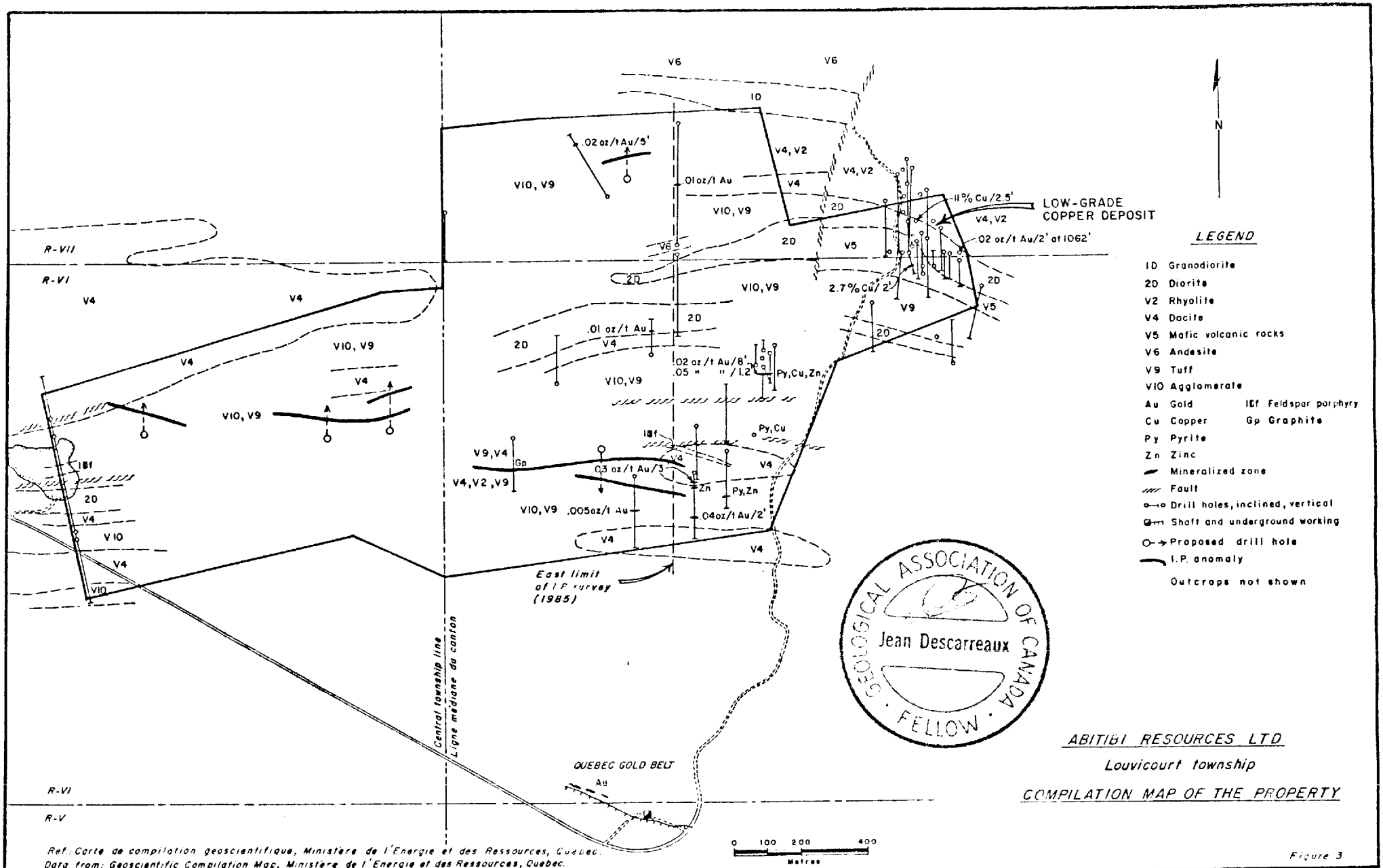
- Sedimentary rocks

GARDEN ISLAND LAKE GROUP

- Sedimentary rocks

SYMBOLS

- Copper, zinc
- Gold
- Top determination
- Longitudinal shear zone
- Assumed transverse fault
- Fold axis: (a) anticline, (b) syncline



GEOLOGICAL ASSOCIATION OF CANADA
Jean Descarreaux
FELLOW

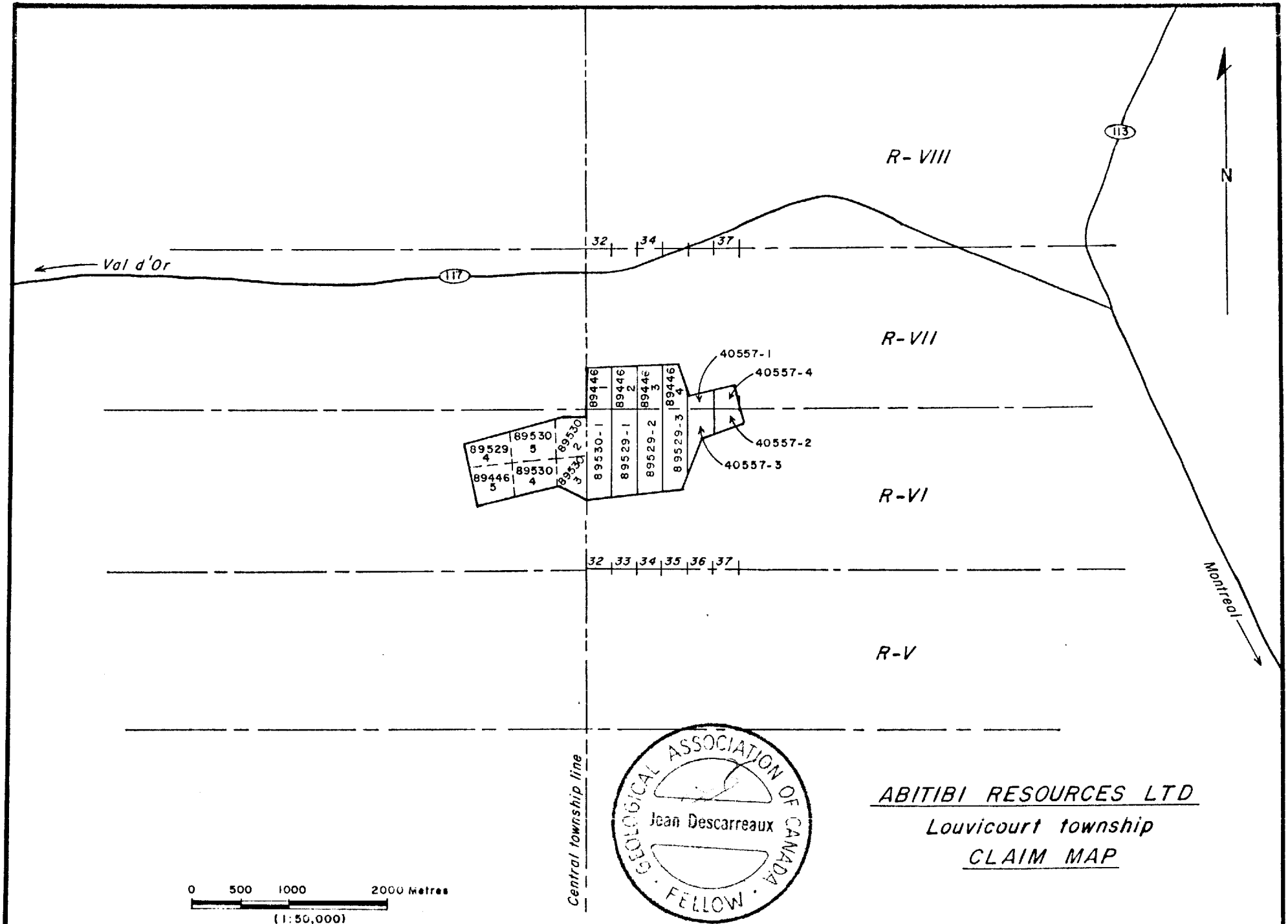
ABITIBI RESOURCES LTD

Louvicourt township

COMPILATION MAP OF THE PROPERTY

Ref.: Carte de compilation geoscientifique, Ministère de l'Energie et des Ressources, Québec.
Data from: Geoscientific Compilation Map, Ministère de l'Energie et des Ressources, Quebec.

Figure 3



ABITIBI RESOURCES LTD

Louvicourt township

CLAIM MAP

Figure 4

TABLE I - CLAIM LIST

Claim No.	Claim No.
40557-1	89529-1
40557-2	89529-2
40557-3	89529-3
40557-4	89529-4
40557-5	89530-1
89446-1	89530-2
89446-2	89530-3
89446-3	89530-4
89446-4	89530-5
89446-5	

Total of approximately 247 hectares (612 acres). The 19 contiguous claims are located located in ranges VI and VII of Louvicourt township, northwestern Québec.

TABLE II - LIST OF ASSESSMENT WORK FILES

GM-809-A, B	Vicourt Mines Ltd., Louvicourt township, A) Geological plan of Callahan Option, C.Rovertson, 1950. B) Report on magnetometer survey on the Callahan Option, Anonymous author, 1950.
GM-1403-A, B	Abitibi Copper Mines Ltd. Louvicourt township, A) Report on the Callahan group, R.Hoiles, 1951. B) Report on the Callahan group, R.Hoiles, 1951.
GM-1403-C	Abitibi Metals Mines Ltd., Louvicourt township, DDH logs for holes 1 to 13 by G.Dumont, 1952.
GM-1748-B	Abitibi Metals Mining Ltd., Louvicourt township, Report on Louvicourt property by G.Dumont, 1950.
GM-2264	Abitibi Copper Mines Ltd., Louvicourt township, Report on the property by W.N.Ingham, 1951.
GM-4111	Quirion, Bizier et Béchard, Louvicourt township, Levé Mag., G.H.Dumont, 1956.
GM-4196	Martin-Sweet Claims, Louvicourt township, Report on the Martin-Sweet Claims group, R.Taschereau, Dept. Nat. Res., 1932.
GM-7088	Kencour Prospecting Synd., Louvicourt township, Report on Geology and Dip Angle Survey, J.D.Turner, 1942.
GM-8380	Kencour Gold Mines Ltd., Louvicourt township, Report on the property, DDH logs, holes 1 to 15, W.N.Ingham, 1945.
GM-11890	Abitibi Metals Mines Ltd., Louvicourt township, Report on Abitibi Metals Mines, B.Marcotte, 1962.
GM-11891	R.Joseph Claims, Louvicourt township, Report on the R.Joseph Claims, B.Marcotte, 1962.
GM-11937	Abitibi Copper Mines Ltd., Louvicourt township, Geological Report and DDH logs for holes A-1, A-2, P.F.Dumont, 1960.

GM-12043 Abitibi Copper Mines Ltd., Louvicourt township, DDH logs for holes A-3 to A-10, G.Dumont, 1962.

GM-13110 Abitibi Metals Mines, Louvicourt township, DDH logs for holes A-1 to A-15, G.Dumont, 1962.

GM-14155 Dumond Nickel Ltd., Louvicourt township, Report on Louvicourt township property, B.Marcotte, 1964.

GM-14328 Abitibi Copper Mines Ltd., Louvicourt township, Report on Louvicourt property, J.Honsburger, 1964.

GM-16362 Dumont Nickel Corp., Louvicourt township, Report on Louvicourt township property, R.Joseph Claims, B.Marcotte, 1965.

GM-16364 Abitibi Copper Mines Ltd., Louvicourt township, Report on work on Louvicourt township property, J.Honsburger, 1965.

GM-17573 Abitibi Copper Mines Ltd., Louvicourt township, DDH logs for holes A-16 to A-34, G.Dumont, 1966.

GM-19492 Abitibi Copper Mines Ltd., Louvicourt township, DDH logs for holes A-35 to A-39 and C-1, G.Dumont, 1966.

GM-23668 Dumont Nickel Corp., Louvicourt township, Report on the Dumont Nickel Corp., Joseph Claim group, A.Pudifin, 1968.

GM-24196 Abitibi Copper Mines Ltd., Louvicourt township, DDH logs for holes AC-1 and AC-2, G.Dumont, 1969.

GM-24741 Abitibi Copper Mines Ltd., Louvicourt township, Progress Report, A.Pudifin, 1969.

GM-25938 Abitibi Copper Mines Ltd., Louvicourt township, DDH logs for holes 70-1 and 70-2, G.Dumont, 1970.

----- Orcour Gold Mines, Louvicourt township, Quebec, DDH logs for holes R1 to R4, 1946.

----- Abitibi Copper Mines Ltd., Louvicourt township, Quebec, report by A.S.Bayne, 1969.

-- ---- Abitibi Copper Mines Ltd., Louvicourt township, Quebec, report by A.S.Bayne, 1970.

-- ---- Abitibi Resources Ltd., Report on the Louvicourt property, by J.Descarreaux, 1983.

-- ---- Abitibi Resources Ltd., Induced polarization survey on the Louvicourt property, by E.Gaucher & Associates Ltd., 1985.

TABLE III - Estimated tons and grade of potential copper-bearing material.

	IN-PLACE CUT-OFF	
	0.50% copper across 4.0ft width	1.00% copper across 7.0ft width
Estimated tons	(1)1,348,662	(2)375,862
(3)Estimated average copper content	0.757%	1.36%
Estimated average gold content	0.006 oz/ton	0.006 oz/ton
Estimated average silver content	0.15 oz/ton	0.15 oz/ton
Range of true mining widths	3.0 to 66.0 feet	4.3 to 32.0 feet
Average true mining width	16.36 feet	12.49 feet

(1) Note: Includes 15.14% waste rock dilution.

(2) Note: Includes 19.10% dilution rock averaging 0.21% copper.

(3) Note: Based on weighted average assays of drill cores. Especially rich copper sections were cut to 5.00% copper for estimating purposes.