GM 56536

REPORT ON CENTRAL MANICOUAGAN PROPERTY

Documents complémentaires

Additional Files

Licence

License

Énergie et Ressources naturelles
Québec

AMADEUS RESOURCES LTD

REPORT ON

CENTRAL MANICOUAGAN PROPERTY

MANICOUAGAN AREA, QUÉBEC
NTS 22N/07

Prepared by

Roger Moar, B.Sc.

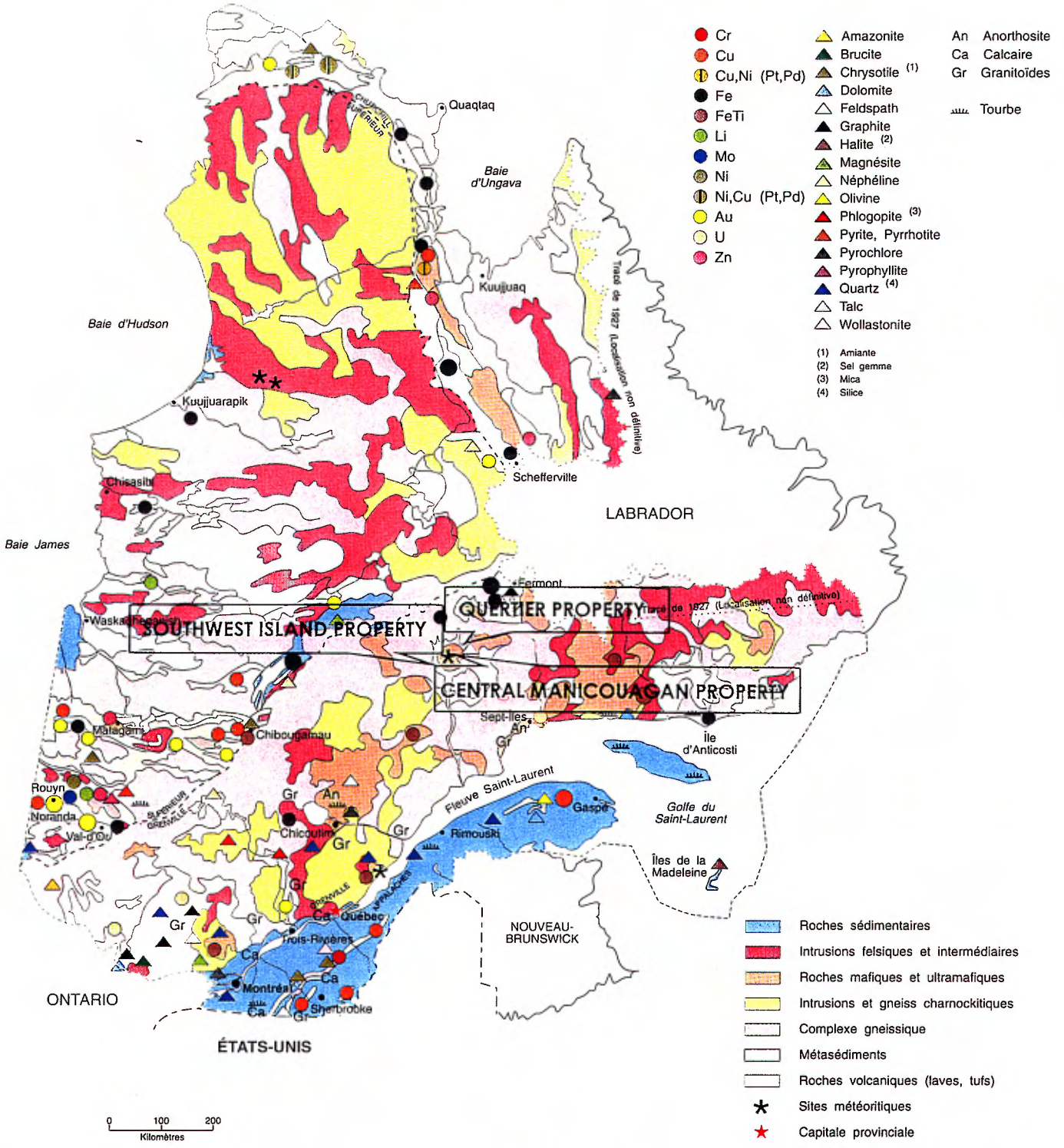
MRN-GÉOINFORMATION 1999

GM 56536

February 1998
Montreal, QC

Gouvernement du Québec
Ministère de l'Énergie et des Ressources
Direction générale de l'Exploration géologique et minérale

CARTE MINÉRALE DU QUÉBEC, CANADA
MINERAL MAP OF QUÉBEC, CANADA



Représentation simplifiée de la carte originale à l'échelle de 1: 1 500 000

Centre de diffusion
5700, 4e Avenue ouest, local A-201
Charlesbourg (Québec) G1H 6R1
Téléphone: (418) 643-4601
Télécopieur: (418) 644-3814

FIGURE 1

Québec

Compilé par L. Avramtchev
Service d'information et de soutien à l'exploration minière

PRO 93-06
(Remplace le PRO 87-01)

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ANNEXE I

CORE LOGS

ANNEXE II

LIST OF AMADEUS RESOURCES CLAIMS

IN POCKET

COMPILATION MAP (1: 20 000)
WORK LOCATION MAP (1: 50 000)
RADARSAT, LANDSAT AND THEMATIC MAPS (6 MAPS, 1: 250 000)

SUMMARY

The Manicouagan crater area (100 km. wide) is the result of a hypervelocity meteorite impact which occurred about 200 million years ago when the area was located in the center of the only continent on earth. It can be considered in the same mega-size category as the Vredefort crater in South Africa (and the Bushveld complex as well, because evidence is mounting for its origins as a contemporaneous impact event with Vredefort) and the Sudbury crater in Canada. Both these craters are well-known for their world-class mining camp status and for the cratering event being largely responsible for the accumulation, if not the genesis of their mineral ores. A study of the inventory of terrestrial-based impact sites and their likelihood to host mineral deposits by Grieve and Masaitis in 1994 clearly indicates a much larger statistical probability of encountering economical mineral deposits in these contexts than in any other known general geological context. About 25 % of their inventory contain economic mineral deposits, half of which are being mined today or were mined in the past. We do not know how many of them have been explored. This study and its many implications are very little-known by today's exploration workers or geologists who are prospecting for ore deposits, but are very important, but not the most important considerations, in weighing the merits of the Manicouagan exploration play.

This report will serve as a descriptive outline of the geological environment of the Manicouagan crater area and as a summative evaluation of the relevant work done in the past in accumulating the data which is most pertinent to discuss the potential for finding economic mineralization.

Amadeus Resources Ltd acquired the property on the basis of a very unusual, extremely strong bulls-eye magnetic anomaly dead center in the crater, and this claims group covers what appeared to be the best parts of the anomaly. Testing the cause of this anomaly, which appears to be a buried body about 1.6 km. wide is the main focus of the Company's exploration program herein recommended.

The Central Manicouagan Property consists in 561 contiguous claims of 16 hectares each covering a total surface area of 8976 hectares in the region of Manicouagan, Quebec (NTS Series 022N/07, Mont de Babel Sheet). All claims are owned 100% by Amadeus Resources Ltd and are in good standing.

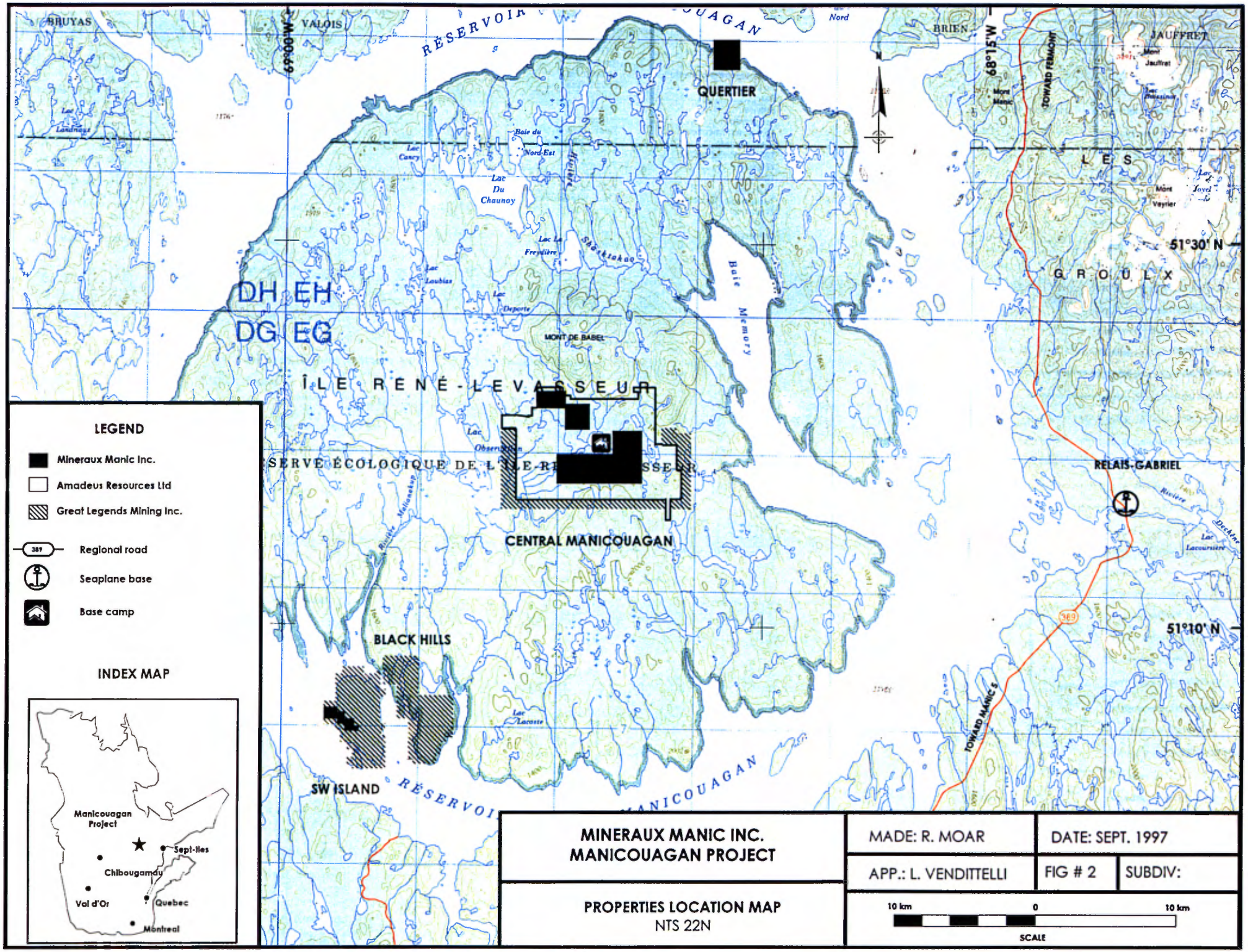
This report is largely based on a previous geological report authored by L. Venditelli (1997) on the Manicouagan Impact Structure for Min/raux Manic Inc. This report is a summary of all exploration conducted during November and December 1997 on the Amadeus claims; including results from diamond drilling and geophysical survey (EM MaxMin).

1.0 LOCATION AND PHYSIOGRAPHY

The Central Manicouagan Property consists of one block of claims located in the central portion of the Manicouagan crater which is located 300 km due north from the city of Baie-Comeau, Quebec (Fig. 2). The property is accessible from the company's base camp situated in the the middle of René-Levasseur Island.

The regional highway 138 leads to Baie-Comeau, located at approximately 670 km from Montreal and at 400 km from Quebec. From Baie-Comeau, one takes the regional highway 389 north which links Baie-Comeau to Fermont, until one reaches the Manic 5 hydro dam, some 235 km. to the north of Baie-Comeau. A gravel road from there leads to a float plane and bush plane base 5 km. away. The Company's base camp is 80 km. from there, in the middle of the René-Levasseur Island and a flight would take about 40 minutes. If one prefers, one can drive all the way from the Manic 5 hydro dam, along the highway 389 to Relais-Gabriel, 120 km. away from Manic 5 and a short flight from this road would take about 15 minutes to reach the base camp.

The Central Manicouagan Property is located in the central part of the Province of Québec between latitude 51°20' N and 51°25' N and longitudes 68°45' W and 68°37' W (NTS 22N/07 Manicouagan Reservoir sheet).


BRUYAS
VALOIS
RÉSERVOIR MANICOUAGAN
Nord
BRIEN
JAUFFRET
68°51'W
QUERTIER
TOWARD FERMONT
Mont Manic
Mont Jauffret
Lac Passionné
Baie du Nord-Est
Lac Canry
Lac Du Chaunoy
Rivière Shaktakao
Lac La Frenière
Lac Laubias
Lac Déporte
Baie Memory
L E S
Mont Voyer
Lac Voyer
51°30' N
G R O U L X
DH EH
DG EG
MONT DE BASEL
ÎLE RENÉ-LEVASSEUR
Lac Observation
RÉSERVE ÉCOLOGIQUE DE L'ÎLE-RENÉ-LEVASSEUR
RELAIS-GABRIEL
Rivière Mallenstein
CENTRAL MANICOUAGAN
Rivière Dechêne
Lac Lacoursière
BLACK HILLS
389
51°10' N
Lac Lacoste
TOWARD MANIC 5
SW ISLAND
RÉSERVOIR MANICOUAGAN
LEGEND
Mineraux Manic Inc.
Amadeus Resources Ltd
Great Legends Mining Inc.
389
Regional road
Seaplane base
Base camp
INDEX MAP
Manicouagan Project
Sept-Iles
Chibougamau
Val d'Or
Quebec
Montreal
MINERAUX MANIC INC.
MANICOUAGAN PROJECT
PROPERTIES LOCATION MAP
NTS 22N
MADE: R. MOAR
DATE: SEPT. 1997
APP.: L. VENDITTELLI
FIG # 2
SUBDIV:
10 km
0
10 km
SCALE

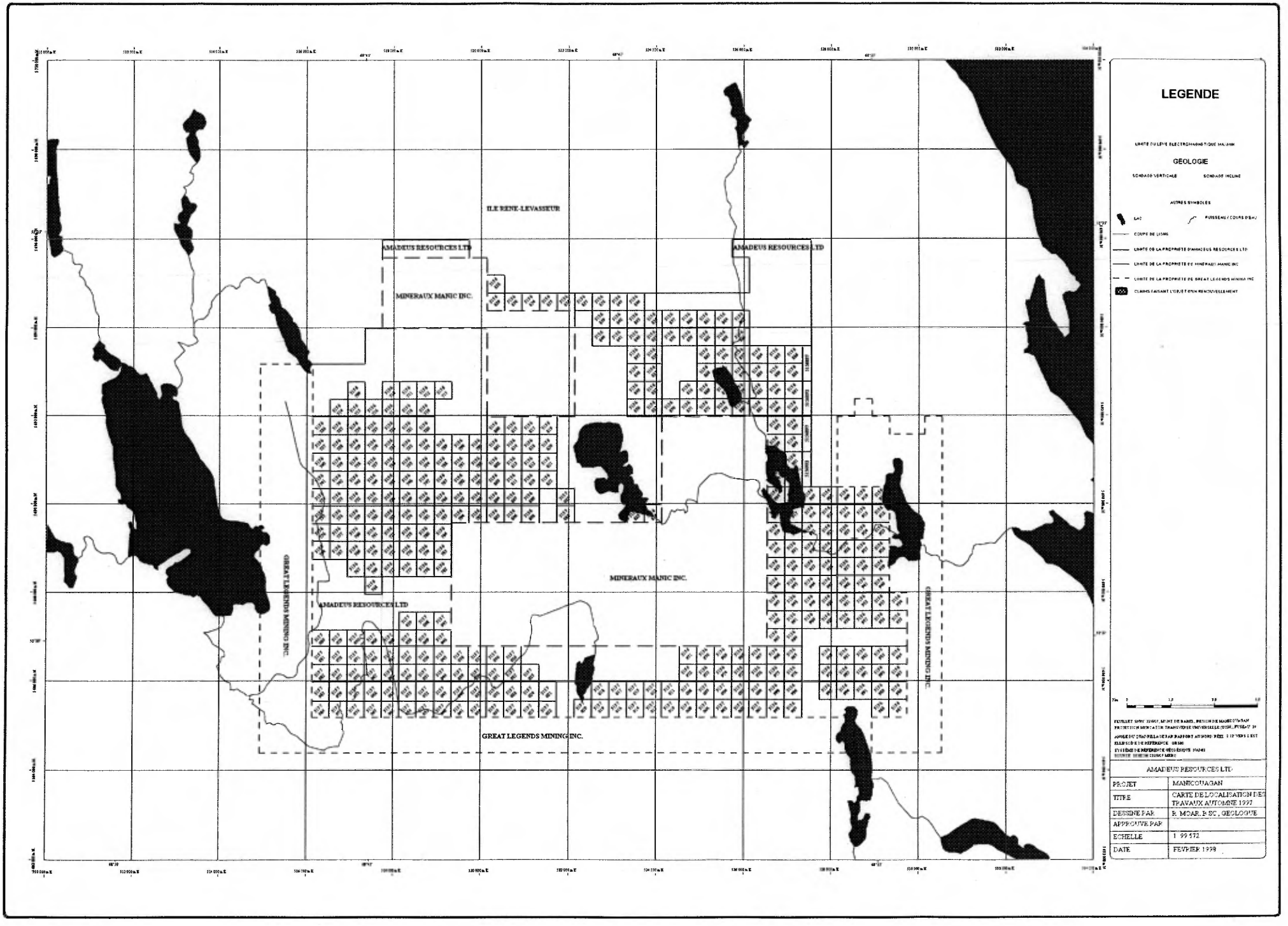
The crater interior is bounded by a circular reservoir created by the flooding of steep river beds surrounding one of the craters' rims after Hydro Quebec built the Manic 5 dam to the south.

Four physiographic features comprise the interior of the Manicouagan Impact Structure. An outer lowland lies just inside the reservoir. An annular plateau formed by nearly flat-lying Triassic igneous rocks is immediately inside, and topographically higher than, the outer highlands, and locally stepped, cliffs that culminate in bare vertical faces. The elevation of the highest parts of the plateau is about 715 m The third features is an inner lowland that lies between the annular plateau. The maximum elevation of the inner lowland is about 460 meters. The fourth important feature is the central uplift called the Mont de Babel. The Mont de Babel rises about 460 m above the inner lowland with a highest peak at an elevation of 957 m above sea level

2.0 PROPERTY DESCRIPTION

Amadeus Resources Ltd holds 561 claims in the geographic center of René-Levasseur Island (Fig. 3) in the Manicouagan crater, approximately 300 kilometers North of Baie-Comeau (NTS Series 022N/07, Mont de Babel sheet). The claims are grouped in one block of 561 contiguous claims. Each claim covers 16 hectares for a total of 8,976 Ha. All claims are owned 100% by Amadeus Resources Ltd. In Quebec the minimum work requirement for a standard claim is $500, so the total work required to keep the property in good standing through another term is $185,000.

A complete list of cliams is provided on Annexe II.


ILE RENE-LEVASSEUR
AMADEUS RESOURCES LTD
MINERAUX MANIC INC.
AMADEUS RESOURCES LTD
MINERAUX MANIC INC.
AMADEUS RESOURCES LTD
GREAT LEGENDS MINING INC.
GREAT LEGENDS MINING INC.
GREAT LEGENDS MINING INC.
LEGENDE
GÉOLOGIE
SONDAGE VERTICALE
SONDAGE INCLINE
AUTRES SYMBOLES
LAC
RUISSEAU / COURS D'EAU
COUPE DE LIGNE
LIMITE DE LA PROPRIETE D'AMADEUS RESOURCES LTD
LIMITE DE LA PROPRIETE DE MINERAUX MANIC INC
LIMITE DE LA PROPRIETE DE GREAT LEGENDS MINING INC
CLAIMS FAISANT L'OBJET D'UN RENOUVELLEMENT
AMADEUS RESOURCES LTD
PROJET
MANICOUAGAN
TITRE
CARTE DE LOCALISATION DES TRAVAUX AUTOMNE 1997
DESSINE PAR
R. MOAR, B.SC., GEOLOGUE
APPROUVE PAR
ECHELLE
1 : 99 572
DATE
FEVRIER 1998

3.0 REGIONAL GEOLOGY

The property is located within the Grenville structural province of the Canadian shield. On a regional scale the rocks are metamorphosed to upper amphibolite and locally granulite facies trending northeast-southwest. This structural fabric is interrupted by the Cretaceous-Tertiary meteor impact structure which created a unique suite of rocks.

Impacted rock consists of diverse Precambrian metamorphic and plutonic rocks; Ordovician sedimentary rocks; and their shock metamorphosed equivalents. Breccias (tagamites), impact melt, and suevite, and post-impact intrusive constitute the Triassic Manicouagan Complex.

According to Murtaugh (1976), the relative ages of the Precambrian rocks as indicated in the Table of Formation (Table 1), is at best tentative. Problems arise from the polymetamorphic and multideformational history of the rocks; abundant glacial and vegetative cover and scarcity of outcrops and exposures.

The crater morphology and resultant geology is typical of large craters on Earth and on the Moon, and the reader may refer to a vast literature of expertise and research on the subject which is not usually in the scope of knowledge of most current workers in exploration, and which the author feels inadequate to represent with justice in the context of the present report. Suffice it to say that the regional stratigraphy underlying all the claims groups of the Manicouagan Properties are represented from top to bottom by:

1. Gradationally bedded suevite (fall-back breccia of basement rocks in fine-grained matrix)
2. Impact melt of monzonitic composition, also gradationally layered with larger fragments of basement rocks, and in some cases suevite, assimilated closer to the base units grading into finer more homogeneous grained higher units, which also may contain blocks or fragments of suevite.
3. Impact and post- impact mechanical brecciation of all units - tagamite
4. Post-impact ultramafic dykes and breccia dykes
5. Ordovician sedimentary rocks

Table 1 Table of Formation
(Modified after Murtaugh (1976))

AGE	UNIT	SUBUNIT AND LITHOLOGY
CENOZOIC (PLEISTOCENE, RECENT)	Glacial Deposits, Alluvium	Till, outwash, esker, glaciofluvial deposits; alluvium
MESOZOIC (TRIASSIC)	MANICOUAGAN COMPLEX	
	Contact metamorphosed country rocks	Contact metamorphosed by monzonite/latite. Rocks with decomposed mafic mineral, zeolitized rocks, hornfelsed anorthosite, melted and vesiculated gneissses
	Monzonite	Medium to coarse-grained brown, grey, or red massive rock with lath-shaped pyroxene phenocryst (may be younger than latite)
	Latite	Aphanitic to fine grained brown, red, or grey massive rocks; Medium-grained latite. May be part of mozonite unit or transitional between latite and monzonite.
	Basalt	Aphanitic black rock, locally glassy, locally vesicular. Red or greyish-black spherulitic rocks that grade to basalt, red breccia, and suevite
	Breccias	Autochthonous breccias. Rotated fragments in comminuted matrix. Suevite. Brown, green, or red polymict breccia with heterogeneous glasses and mixed shocked and unshocked fragments. Red breccia, nearly monomict breccia with heterogeneous glasses and shocked fragments. May be correlative with suevite. (pt) Pseudotachylite Rock of stage stages 0, I, II of Stoffler (1971) (See text)
PALEOZOIC (ORDOVICIAN)	Sedimentary rocks	Limestone; minor shale, siltstone.

Table 1 Table of Formation
(Modified after Murtaugh (1976))

AGE	UNIT	SUBUNIT AND LITHOLOGY
PRECAMBRIAN	Anorthosites	Metamorphosed garnetiferou anorthosites, minor gabbroic anorthosite including minor peridotites, pegmatites, and breccia pipe. Mont de Babel anorthosite
	Granitic gneiss	Undiffentiated granitic gneiss, minor granite, probably of several age. Mixed granitic gneiss and grey gneiss
	Grey gneiss complex	Hornblende-biotite-quartz-feldspar gneisses, commonly garnetiferous, locally with sillimanite or kyanite. Metamorphosed mafic and ultramafic rocks.

6. Basement Grenvillean gneisses and anorthositic rocks

All basements units have undergone various degrees of shock metamorphism and other processes from the impact event. The above units have been mapped and identified by L. Boivin during the past 5 field seasons. They differ somewhat from the regional geology as represented by figure 6 depicting very easily interpretative work on the following pages, mainly due to the reported absence in the field (as noted by L. Boivin) of any indication for the presence of mafic gneisses with the noted exception of the mafic gneisses located in the Black Hills on the Southwestern portion of the crater. The "tagamites" can be found on the eastern and northern shores of the crater island and the post-impact dykes and breccias can be found on the Quertier and Southwest Island Properties.

Physically, the impact structure is a 100 km circular basin with a central uplift composed of anorthositic rocks (Mont de Babel) as a result to lithostatic rebound. The structure is evident on Landsat photographs. These anorthosites are surrounded by melt rock, rimmed by a margin of latite and suevite (fall back breccia). The ring of water was formed when two narrow crescent shaped rivers, Manicouagan and Mouchalagane, and surrounding incised lands were flooded in 1974 by Hydro-Québec dam Manic 5, to form the Manicouagan Reservoir.

3.1 MELT ROCKS

TAGAMITE

Autochthonous breccia, (see Property geology description), consisting of rotated fragments in a comminuted matrix, crops out sporadically near the bounding lakes.

SUEVITE

Suevite is an allochthonous polymictic breccia containing shocked and unshocked fragments and heterogeneous glassy blebs in a matrix that can be clastic, cryptocrystalline, or glassy. Suevite crops out inside the René-Levasseur Island near the base of the outer edge of the annular plateau of igneous rocks. Dykes of suevite intrude both autochthonous breccia and unbrecciated country rocks, but locally grade into very fine grained suevite. Thin sheets of suevite locally overlie country rocks.

The suevite is red or green and grades locally into shocked and partly melted country rock, and may grade into the overlying latite in places.

Pseudotachylite is a glassy rock, charged with small inclusions, that forms irregular veins, dykelets, and rootless pods in a country rocks inside the annular plateau of igneous rocks.

IMPACT MELT: LATITE / MONZONITE

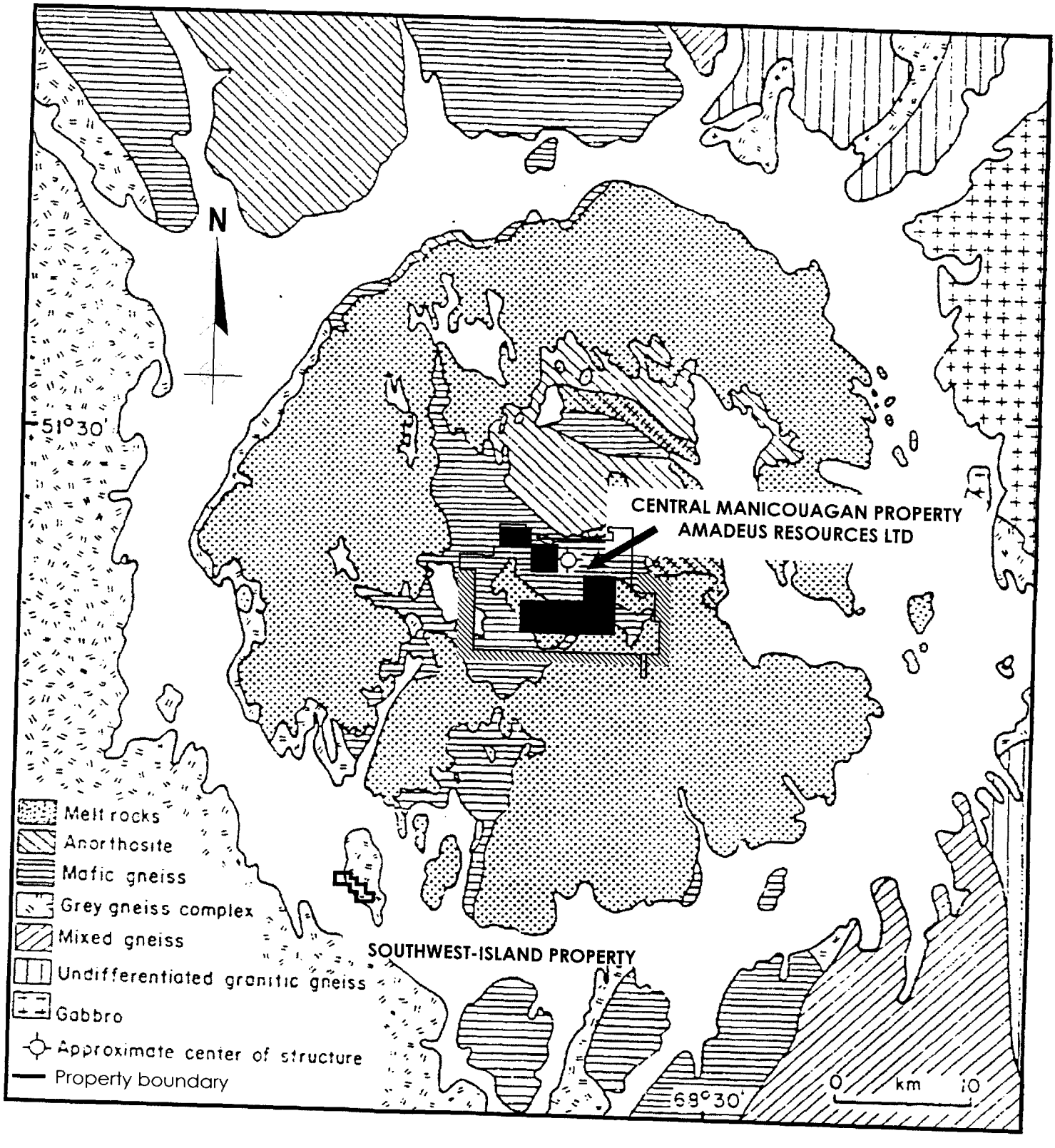
The annular ring consits of an igneous subhorizontal sheet of latite and monzonite. The latite is the lower unit containing fragments of other rock grading abruptly upward into homogeneously red grained melt rock. No evidence of flow structure or individual units was found. Dikes and tabular subhorizontal bodies of latite and monzonite crop out in the interior of the structure. The latite contains inclusions of highly shocked and thermally metamorphosed country rocks. Both the heterogeneous (latite) and the homogeneous melt rock have identical monzonitic composition.

3.2 UNDIFFERENTIATED GRANITIC GNEISSES

Undifferentiated granitic gneisses and grey gneisses of varying composition and textures, with different ages were mapped as a single unit by Murtaugh (1976). Most of the different types were described by Kirsk (1968), and he did not map them separately. Granitic gneiss is abundant in the northeastern and southeastern parts of the area. Bassaget (1968) described the granitic gneiss in the southeast, and Kish (1968) described that in the northeast. The granitic gneiss is more abundant in the southeast portion and is composed of a medium-grained pink colored rock made up mostly of quartz, microcline microperthite, and plagioclase. Biotite, hornblende, chlorite, garnet, allanite, apatite, zircon, opaque minerals, and rare muscovite are accessory minerals. Kish (1968) distinguished three type of granite in the northeast on the basis of feldspar composition and feldspar ratios. He described two-feldspar granite, albite granite, and microcline granite, but did not map them as separate unit. These rocks contain as much as 11 percent mafic mineral, and are therefore generally more mafic that the granitic gneiss in the southeast. The rocks range from slightly to well-foliated, or have flaser structure. Kish (1968) also described lit-par-lit mixtures of granitic and grey gneiss. These rock are shown on the simplified geologic map of the Manicouagan structure as mixed gneiss.

SIMPLIFIED GEOLOGIC MAP OF THE MANICOUAGAN STRUCTURE AND OUTLINE OF PROPERTIES

MODIFIED AFTER GRIEVE AND FLORAN (1978)



3.3 GREY GNEISS COMPLEX

The grey gneiss complex consists of amphibolite facies gneisses and associated metamorphosed mafic and ultramafic rocks. The gneisses are predominantly quartz-plagioclase-biotite and hornblende rocks.

3.4 MAFIC GNEISS

Bodies of metamorphosed mafic and ultramafic gneisses in the central and in the southwestern part of the area range in size from a few meters to nearly a kilometer across. A typical specimen of the most common type weathers reddish-brown and is speckled reddish-black where fresh. Poorly defined foliation, or lineation, is formed by an inconspicuous layering or alignment of mafic mineral. Coarse granitic pegmatites cut these rocks in few places. A typical specimen of the most common type consists mainly of almandine garnet, clinopyroxene, hornblende and plagioclase. Accessory minerals are sphene, biotite, epidote, apatite, quartz, microclin, and opaque minerals.

3.5 ANORTHOSITE

The Mont de Babel is about 50 km long and 15 km wide and occupies the center of the Manicouagan Impact Structure. The Mont de Babel anorthosite differs from the Lake Tetepisca anorthosite to the northwest in that it contains only fine to medium-grained plagioclase with probably no mafic component.

3.6 ORDOVICIAN SEDIMENTARY ROCKS

Ordovician sedimentary rocks (not shown on Fig. 6) lie unconformably on, or are in fault contact with Precambrian rocks. They outcrop probably as slumped fragments (allochthonous) only within the Manicouagan Impact Structure, mostly along the shores of the René-Levasseur Island. The are predominantly limestones, but thin basal units of siltstone and shale are exposed in a few places.

3.7 SHOCK METAMORPHOSED ROCKS

Shock metamorphism is the progressive breakdown in the structural order of minerals and rocks due to the passage of a high-pressure shock wave. Effects of shock metamorphism in the country rocks

are: zeolitization of anorthosites and gneisses; transformation of mafic minerals to magnetite within the entire diameter of René-Levasseur Island; planar deformation features in tectosilicates and other such microscopic effects as catalogued extensively by previous workers in the Manicouagan Impact Structure (Dence (1964); Bunch *et Al* (1967); Dworak (1969)).

4.0 PROPERTY GEOLOGY AND MINERALIZATION

The circular structure is considered to be the product of a hypervelocity-meteorite impact with the Earth (astrobleme). Relatively few rocks outcrop on the crater structure called René-Lavasseur Island which hosts the crater geology and the Central Manicouagan Property. The main lithology of the Manicouagan structure is a flat-lying sheet of clast bearing impact melt (Manicouagan melt rock) some 100 to 200 meters thick and 55 kilometers in diameter which is found within the central part of the structure (Fig. 6). The original thickness of this sheet may have been up to 400 meters. Plagioclase, sanidine and augite are the main minerals present in the matrix of the melted rocks while hypersthene, quartz, iron oxides and smectite are minor components.

The crater topography is a series of annular plateaus, and the highest part is the central uplift of anorthositic shock-metamorphosed massif to the north of the Central Manicouagan Property named the Mont de Babel. The Central Property contains no confirmed surface outcrops, which is typical of the geomorphology of the area. Outcrops in the crater are constrained to the northern and eastern section composed of suevite with impact melt in the rest of the crater interior, and the Grenvillean shock-metamorphosed basement exposed as flat outcrop along the beaches of the circular lake surrounding René-Levasseur Island.

During the Company's first field season, extensive occurrences of buried boulders were mapped and subsequently reassessed in the field and eliminated as outcrop. The only remaining area where outcrop remains a possibility is in the southwestern part of the property as indicated in the compilation map located in the Previous Work section of this report , series NC-10. The Company also performed compilation work in 1996 of the outcrop data located by previous workers Grieve et al, as collected by the GSC and has assured itself that this is true.

As to the property geology, the most reliable source of information remains the drill core extracted from one drill hole as described hereinafter. The drill core consists of shock-metamorphosed leuco-cratic Grenvillean gneisses with little or no mafic or magnetic component, typical of much of the Grenvillean geology surrounding the island. This was a surprise to Company geologists (verbal communication L. Boivin) who expected to intercept rocks similar to those outcropping everywhere else in the middle of the crater, i.e. impact melt. After consultation with recognized crater geology

experts (Grieve), the Company learned that this is indeed typical of impact geology, where most often the impact melt is "splashed" off center out of the middle part.

The drill hole mentioned above was begun in 1990-1991. Minéraux Manic Inc. drilled hole # MC-1 (at grid co-ordinates L14E, 28 + 00N) to a depth of 471.53 meters. The hole was extended to 919 m in fall 1997. This hole was drilled to test the eastern part of the elliptical magnetic anomaly where it also coincides with a Maxi-Probe electromagnetic anomaly that possessed both the typical horizontal component so often detected in this property, as well as a rarer vertical component. This hole was designed to cross the entire width of the magnetic anomaly and explain the source of the magnetism. The log of the core obtained describes the rock as being mostly shock-metamorphosed Grenville leucocratic quartzofeldspathic gneisses cross-cut by occasional small veins of meteorite-caused tachylite.

The absence of a magnetic source rock at the depths this hole reached indicates the increased probability that the magnetic body is centered lower than the depths permissible for an intrusive model of origin (Paterson 1994). Certainly the airborne work performed by the Company over this property concurs with this in that no conductive rocks occur above about 125 meters deep.

Otherwise, the Property can consist of rocks similar to those already identified elsewhere in the crater, as described below:

The Manicouagan melt rocks have been petrologically subdivided by Floran *et al.* (1978) into a lower, middle and upper unit.

MANICOUAGAN MELT ROCKS

The lower unit has a pseudoporphyritic texture in which abundant clasts of plagioclase, quartz and anorthosite reside in a very fine-grained matrix. At the base this unit is in unconformable contact with an undulating basement of Precambrian Grenville rocks. Here clasts and blocks up to 50 meters in size are noted.

The middle unit is characterized by a fine-grained, clast-bearing matrix and a poikilitic texture. This texture is described as being reminiscent of some lunar impact-melt rocks.

The upper unit is observed to be relatively coarse grained, but comparatively clast-poor. These units are overlain by suevite. Finally, suevite forms a very heterogeneous unit, consisting of 35% subangular partially digested gneiss fragments in a dark grey vesicular (10%) groundmass. The fragments vary greatly in size from a few millimeters up to 10 centimeters. The groundmass is siliceous with 5% felsic laths (up to 2 mm) and 2% angular glass-like shards.

PRECAMBRIAN BASEMENT ROCKS

Precambrian rocks include anorthosite, gabbro and a variety of gneissic rocks. Gneissic rocks can be grouped into quartz-feldspar (grey) gneiss and a series of mafic, charnokitic and transitional gneisses. The anorthosites occupy a prominent uplifted block within the center of the Manicouagan structure.

Remains of sedimentary rocks of Paleozoic-age (Ordovician) may occur locally on a regional scale and can be found as rare inclusions within the melt. This could provide the source of carbon for the formation of VD or normal diamonds in the area.

In an inward traverse from the outer limits of the impact zone toward the center of the crater, the intensity of the impact fracturing increases within the paragneiss basement suite. It commences with three moderately spaced (10 to 15 cm) planes of brittle fracture, resulting in blocky outcrops, and within a space of less than ten meters the blockiness increases significantly due to narrowly spaced fractures and occasional narrow shears.

5.0 SOME PREVIOUS WORK BY OTHER WORKERS

A.P. Low (1897), was the first geologist to give a geological description of the Manicouagan area. Hammond (1945) briefly described the geology along the shores of Lake Mouchalagane and suggested that the apparently flay-lying igneous rocks along the inner shores were late Precambrian or Early Paleozoic in age. Rose (1957), of the GSC, worked in the area and published a geologic reconnaissance map showing the major geology features. Bérard (1962), of the Department of Natural Resources, Quebec, mapped the perimeter of the Manicouagan impact structure and a small part of the interior. His work was confined below an elevation of 1 200 feet, an area that would be flooded upon the completion of Manic 5 dam. Kirsh (1962, 1963, 1968), of the Department of Natural Resources, Quebec, mapped the northeastern corner of bounded by latitudes 51°30' and 51°45', and longitudes 68°00' and 68°30'. Kirsh was primarily concerned with the rocks east of the Manicouagan impact structure. During an expedition in 1963, Dence of the Dominion Observatory of Canada discovered the first evidence of shock metamorphism in the structure. Currie (1964) of the GSC was the first geologist to begin detailed mapping of the Manicouagan Impact Structure and subsequently proposed a volcanic-tectonic origin. Murtaugh and Currie collaborated to produce a preliminary report and map in 1969.

5.1 PRELIMINARY STUDY OF THE MANICOUAGAN STRUCTURE. By J.G. Murtaugh and K.L. Currie (1969)
STUDY OF THE GEOLOGY AND PETROLOGY OF THE MANICOUAGAN RESURGENT CALDERA. By K.L. Currie (1972)

Currie interpreted the Manicouagan structure as a resurgent caldera and proposed a volcanic-tectonic model as its mode of origin. In this model, Currie proposes the updoming of an area larger than the present structure followed by radial explosions along marginal radial fractures then by explosions in voids in the interior of the structure. He interprets these explosions as having been chemical in nature caused by detonation of water-poor, hydrogen-rich gas emanating from a magma at depth. Such detonations everywhere caused the shock metamorphism and, in voids in the fractured center of the dome, produced the shatter cones. Degassing caused the collapse of the dome. This collapse was followed by the intrusion and eruption of alkali basalt and intrusion of larvikite (Murtaugh's monzonite) and at the base of this, trachyandesite (Murtaugh's latite). Currie interprets the pseudotachylite as a mixture of droplets of magma mixed with rock powder from the walls of the fractures. Currie proposes Mont de Babel rose on subterranean igneous rocks. This was followed by normal faulting which downdropped parts of the Manicouagan Complex.

This theory has since fallen into disfavor with the subsequent evidence and scientific evolution of knowledge of the Sudbury and other impact features. Murtaugh himself converted with the times as his subsequent work indicates. As one of the few existing references on the impact site at the time, it is not surprising that elements of Currie's musing with respect to magnetization and structural events were constructed and built upon by later workers who adopted some of the ideas and applied them to geophysical models and studies written by geophysicists.

5.2 GEOLOGY OF THE MANICOUAGAN IMPACT STRUCTURE. By J.G. Murtaugh (1976)

Murtaugh (1976) fully mapped and described the geology of the Manicouagan structure and proposed an alternate model for its origin. He proposes that a hypervelocity impact of a cosmic body formed the structure. According to him, the breccias of the Manicouagan Complex were formed by or were related to the impact melt. Murtaugh also states that the igneous rocks of the Manicouagan Complex may be of endogenous origin, but that field relations suggest they were impact melt.

Murtaugh classified the rocks of the Manicouagan Complex into four categories: shock metamorphosed rocks, breccias, igneous rocks and contact metamorphosed country rocks. He also classified the shock metamorphosed rocks into six shock stages based on the extent of shock effects observed.

Based on the presence of diaplectic glass, Murtaugh determined the rocks were shocked to pressures of 350 kb which are beyond the pressures generated by known volcanic explosions. Also, shock metamorphism in the country rocks indicates that Manicouagan is an impact structure. He suggests it is unlikely a magma could produce, mix, disperse and quench the different types of heterogeneous glasses observed.

Local suevite selvages on basalt suggest that the two rocks may have been formed contemporaneously. Murtaugh describes the ellipsoids and lenticles of glass, devitrified glass or recrystallized material in tachylite at Manicouagan as similar to the spheroids from the West Clearwater Lake impact crater. He interprets the basalt as being impact melt from a totally vaporized or fused part of a turbulent cloud of volatilized, fused and fragmented country rock that deposited the suevite.

Murtaugh points out that the contact metamorphic aureoles around some tabular bodies of igneous rock are of extraordinary widths. In order to account for the observed contact metamorphic effects, he proposes the country rocks were preheated to high temperatures, as evidenced by a thin vein of pseudotachylite bordered by altered hypersthene and vitrified scapolite. The pseudotachylite alone could not have contained sufficient heat to have caused vitrification of scapolite and then cooled to a glass. Murtaugh proposes the source of preheating was the residual shock heat from the hypervelocity impact of an extraterrestrial body. He suggests that the rocks near the surface of the

primary crater would be intruded and overlain by impact melt before the residual shock heat could dissipate.

The hills around Mont de Babel and in its meridian valley are interpreted by Murtaugh as blocks that became detached from the mountain at the time of uplift. He interprets the observation that rocks at the summit of Mont de Babel show decomposition of mafic minerals only near veins of pseudotachylite as suggesting that Mont de Babel rose above the main body of the impact melt. Zeolitization of the anorthosite on the mountain suggests Mont de Babel was at one time covered by fallback melt.

5.3 CENTRAL MAGNETIC ANOMALY STUDY. By R.L. Coles and J.F. Clark (1978)

The basis for this study by Coles and Clark (1978) was a 1969 GSC aeromagnetic survey flown with a nominal spacing of 800 meters at altitudes of 300 meters, which yielded the signature of a wide elliptical magnetic anomaly. Coles and Clark concluded that highly magnetic rocks occur close to the surface over an area of about 8 x 12 km with a depth to the base of the magnetic body at not more than 3 km. They suggested that the cause of the anomaly could be the impact-generated magnetization of a mafic body which was subsequently uplifted.

From systematic sampling and measuring of the magnetic susceptibility of the country and melt rocks, Coles and Clark concluded that none of the samples, with the exception of two shocked ultra-mafic rocks, is sufficiently magnetic to form any significant portion of the causative body of the central anomaly.

Coles and Clark discuss the cause of the proposed mafic or ultra-mafic body perhaps underlying the central anomaly. They suggest it is unlikely that thermal magnetization could have caused the remanent magnetization as there is little evidence that the temperature below the melt rock would be as high as the Curie temperature over a large enough volume. They believe that a shock pressure-induced magnetization is adequate to produce the magnetization of the mafic minerals, as such an impact can produce an order of magnetization of 20 to 30 GPa, which decreases rapidly downward and outward. Coles and Clark are of the opinion that the steep vertical gradient of the central magnetic anomaly can be explained by the rapid decrease in pressure downward and outward and would be further delineated by rapid uplift of the affected area.

With respect to the Coles and Clark interpretation, L. Boivin (1994) concludes that the mafic body which would have been magnetized would have had to be the only plug-like mafic geological unit in a rather large region and that these rocks would have had to be ultra-mafic in order to produce 100% magnetite equivalent. To her knowledge, there are no ultra-mafic units of that size in this Grenville region, although there are occurrences of mafic gabbroic gneisses in the NE region of the crater. These mafic gabbroic gneisses do not demonstrate the high magnetization gradient of the central rocks, despite the fact that virtually all mafic minerals within the confines of the crater have

been transformed to magnetite. The central rocks could not have produced a higher magnetization than other rocks of similar composition especially when created by the same event at the same geological time.

5.4 CHEMICAL STUDIES OF THE MANICOUAGAN IMPACT MELT

CHEMICAL INTERPRETATION OF THE MANICOUAGAN IMPACT MELT BY GRIEVE AND FLORAN (1978)

The Triassic melt rocks at the Manicouagan structure have been interpreted both as volcanic (Currie, 1972) and as the product of impact melting (Dense, 1971; Murtaugh, 1976; Floran *et al,* 1976). The data base for this study consists of earlier major element data from the GSC study (Currie, 1972) and major and trace element analysis performed at the Johnson Space Center in Houston (Floran *et al* 1976, 1978). In this study, Grieve and Floran favor the impact melting interpretation and present chemical arguments compatible with the impact origin. They comment on the composition of the melt and its relationship to the underlying basement units. In addition, Grieve and Floran used the chemical and petrographic data to constrain a model for the formation of the melt and the Manicouagan structure in a hypervelocity impact event.

Grieve and Floran conclude that the melt sheet is compositionally homogeneous in relation to the underlying and surrounding basement rocks. They have successfully modeled the melt for both major and trace elements as a mixture of chemically distinct lithologies, a property considered characteristic of impact melts. The mixture of diverse target lithologies to form a generally homogeneous melt composition is a result of the dynamic conditions accompanying melt genesis.

Their model for the generation of the Manicouagan structure and melt sheet in a hypervelocity impact event proposes that compositional homogeneity results from the melted portion of the target containing internal velocity gradients of several kilometers per second and the melt being driven into the expanding cavity as a high velocity turbulent flow of superheated silicate liquid. During movement the silicate liquid incorporates crystalline inclusions the number and type of which are a function of the path travelled by the melt. In general, the number of inclusions decreases upward and toward the center of the structure establishing a lateral and vertical stratigraphy in an otherwise coherent melt sheet. These internal relationships derived from the cratering model are consistent with the detailed stratigraphy of the melt sheet described by Floran *et al,* 1978.

STUDY OF THE STRATIGRAPHY, PETROLOGY AND CHEMISTRY OF THE MANICOUAGAN IMPACT MELT BY FLORAN *ET AL* (1978)

Floran *et al* (1978) studied a sheet of clast-laden impact melt that forms an annular plateau surrounding an uplift of shocked anorthosite. The researchers analysed 24 representative melt rocks.

Based on internal stratigraphy, petrology and major and trace element geochemistry, they present a three-dimensional model for the crystallization history of the Manicouagan melt rocks.

Floran *et al* determined the bulk composition of the melt rocks to resemble that of terrestrial andesites and monzonites. They also found chemical homogeneity to be a major characteristic of the Manicouagan impact melt and suggest that homogenization was achieved early in the melt's history. They attribute the undifferentiated nature of the impact melt to the extreme sheetlike form of the melt body and to the viscosity of the clast-laden melt during crystallization. These researchers also found that textural heterogeneity is a major feature of the Manicouagan impact site. This textural diversity in the melt sheet reflects variation in pyroxene and feldspar morphology, matrix grain size and clast content. Superimposed on the dominant chemical and textural features of the melt are second-order effects leading to chemical heterogeneity on a local scale and textural homogeneity on a limited regional scale.

Based on decreasing clast abundance and on coarsening of the melt above the base, Floran *et al* divide the melt sheet into three vertically gradational units; a lower unit, a middle unit and an upper unit. The mineralogy of the three units is similar. The upper unit contains inverted pigeonite and pseudomorphs after olivine while the middle and lower units contain rare biotite and hornblende.

The lower unit is very fine-grained, clast-rich and dominated by a pseudoporphyritic texture. This unit contains a local facies called Subunit A, which is found only as dykes and pods of melt rock adjacent to large basement rocks or inclusions. This subunit forms a spherulitic to basaltic textural sequence with skeletal crystal morphologies indicative of extreme undercooling.

The middle unit is fine-grained, clast-rich and consists of a variety of textural types including microophitic, poikilitic and transitional. Development of the poikilitic texture within this unit can be modeled by a two stage cooling history in which the mafic composition of the melt permitted augite to be the liquidus phase. Supercooling caused by a high clast content initiated nucleation of augite adjacent to plagioclase clasts which then preferentially nucleated on relict clasts and enveloped earlier formed augite during growth. A similar model is applicable to some of the aluminous Apollo 17 poikilitic-textured impact melt rocks.

The upper unit is medium-grained and clast-poor with a hypidiomorphic granular texture. Textural homogeneity is most typical of this unit. It is similar in grain size and texture to hypabyssal intrusions. The continuous nature of this unit and its consistent texture indicate a more uniform and slower cooling history than that experienced by the bulk of the clast laden melt.

All three melt units are variable in thickness with the coarser-grained middle and upper units becoming more prominent closer to the center of the structure. According to Floran *et al*, this suggests the melt cooled more slowly in the central region, possibly due to the high post-shock residual temperature of the basement and included clasts.

6.0 PREVIOUS EXPLORATION WORK

No other mining company or prospecting outfit has performed mineral or conventional exploration in the crater region other than Minéraux Manic Inc and Amadeus Resources Ltd.

A compilation map showing previous work done by Minéraux Manic Inc. and Amadeus Resources Ltd in the Central Manicouagan Properties is provided in the back pocket of this report and in the Previous work section respectively.

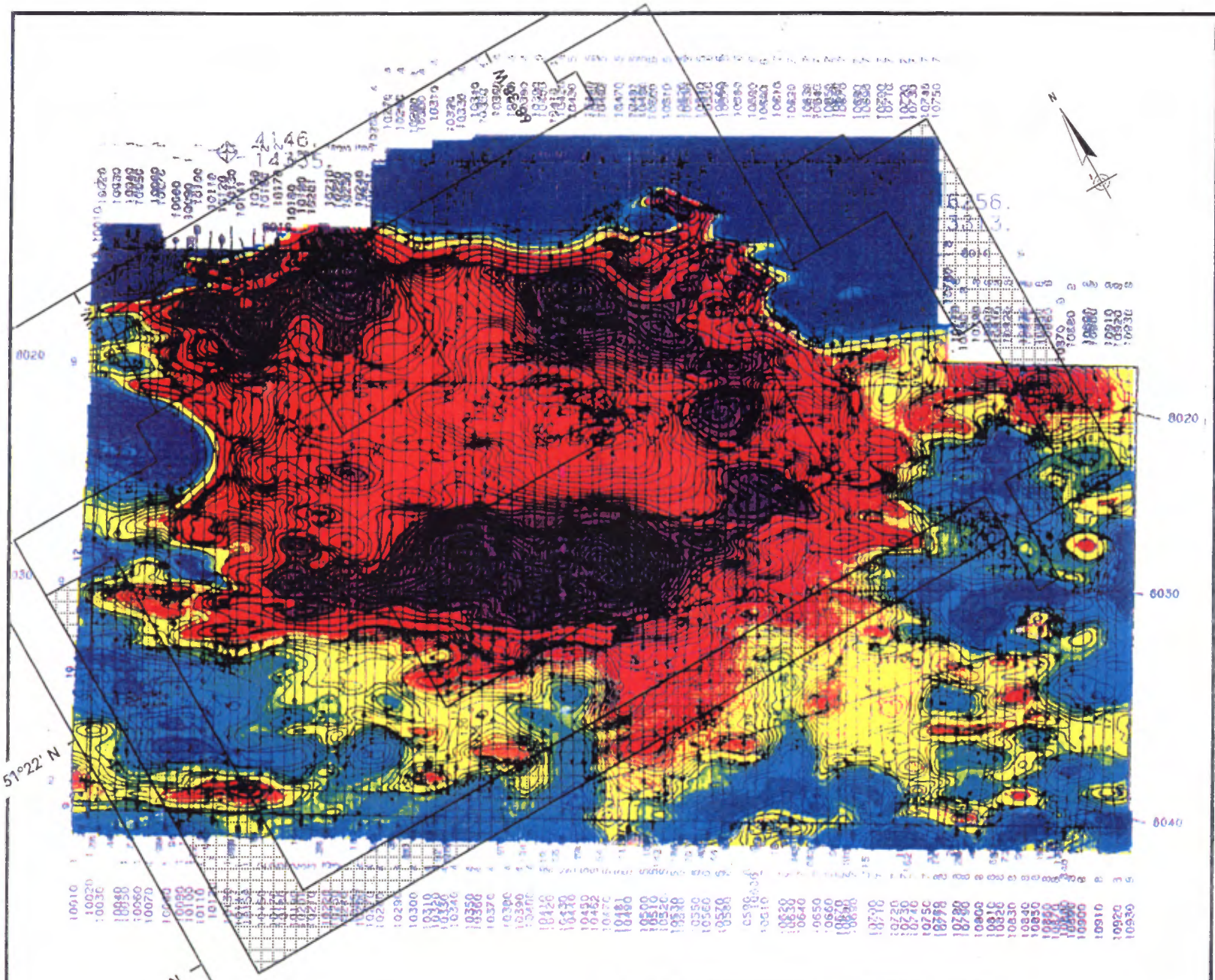
6.1 1990 WINTER SEASON EXPLORATION

AIRBORNE SURVEY

This airborne survey carried out by Aerodat Limited, Toronto, Ontario, over the Central Manicouagan Property was flown during the period of July 3 to 5, 1990. Nine flights were required to complete the survey with flight lines oriented at azimuths of 030-210 degrees and flown at a nominal spacing of 200 meters at a mean terrain clearance of 60 meters. A total of approximately 1000 line kilometers, including tie lines, of the recorded data were compiled in map form. Equipment operated included a four frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two-frequency VLF-EM system, a power line monitor, a video tracking camera, an electronic positioning. Electromagnetic, magnetic, and altimeter data were recorded both in digital and analog form.

Positioning data were stored in digital form. Visual check of position were also recorded on the flight path navigation by the operator during the flight. Subsequently, Aerodat produced a derivative gradient map of the central anomaly. This survey was done with hopes of providing the means for an interpretation of the depth to the summit of the magnetic body. The results obtained from this survey do not give this information but the survey confirms and enhances the previous GSC survey of the area (i.e. 0.2 km line spacing and sensor height of 45 m above ground level compared to the 0.8 km and 300 m of the prior federal survey) (Fig. 7).

Aerodat Limited interprets the form of the magnetic anomaly as conforming to the response from a thick plate, slightly dish shaped along its top surface. They state that the upper surface of a large intrusive body would create a similar response but would require the intrusive to be more magnetic at this surface. A separate, surficial or near surface sheet-like body overlies the main magnetic structure. This surficial sheet produces narrow, northwesterly magnetic trends that complicate the magnetic response from the main body.



LEGEND

FLIGHT PATH

Navigation and recovery using a Global Positioning System (GPS). Average terrain clearance 60 m. Average line spacing 200 m.

MAGNETICS

Total Field Magnetic Intensity contours in nT. Cesium high sensitivity magnetometer. Sensor elevation 45 m

60300.
59140.
58850.
58700.
58580.
58490.
58410.
58300.
58170.
58060.
57950.
57840.
57740.
57670.
57610.
57550.
57500.
57460.
57410.
57380.
57340.
57290
57240.
57170.
57050.
56860.
56620.
55650.

GREAT LEGENDS MINING INC.
MANICOUAGAN PROJECT

TOTAL MAGNETIC FIELD - AERODAT LTD
CENTRAL MANICOUAGAN PROPERTY

MADE: R. MOAR

DATE: SEPT. 1997

APP.: L. LEVENDITELLI

FIG # 6

SUBDIV:

0 5 km

SCALE 1: 1 000 000

6.2 1991 SUMMER FIELD WORK

GEOLOGICAL MAPPING

Field reconnaissance mapping work commenced in the summer of 1990. This work was performed for the purposes of mapping of lithological units on the property and the evaluation of the economic mineral potential, which at the time was represented to a large degree by seeking the cause of the strong magnetic anomaly situated in the centre of the Manicouagan impact crater. Particular attention was paid to boulders found on the Property, in order to evaluate the likelihood of finding mineralization.

The mapping work referred to here was mostly concentrated on the Central Manicouagan Property, on along claims lines oriented N-S at a spacing of 400 meters. Areas believed more likely to contain outcrops were prospected by foot and compass between the lines in supplementary traverses. Outcrops were localized using air photos to the scale of 1:15,840 and were compiled on base maps at a scale of 1:20,000 (see compilation map in pocket).

There are very few outcrops on the property, which is generally covered by thick overburden of glacial deposits. Rocks generally outcrop only if they form part of vertical cliffs. A total of about 30 outcrops were mapped on the Property. The two principal lithologies encountered were: Precambrian rocks (gneiss and anorthosite) which had undergone shock metamorphism and/or Triassic age rocks resulting from the melting in situ of the basement during the impact (latite and monzonite). The melt rocks have a monzonitic composition and these represent the most common rocks found on the Central Property.

No explanation for the central magnetic anomaly was found from the geological mapping.

MAXIPROBE HORIZONTAL LOOP ELECTROMAGNETIC SURVEY

During the month of August 1991, a MaxiProbe horizontal loop EM survey was performed on the Central Manicouagan Property of Amadeus Resources Ltd in order to determine whether or not deep seated conductors were present on the Property. The work was performed over the areas of high magnetism by the geophysical consulting company Geoprobe Limited of Toronto. The table below summarizes the lines covered.

Table 2 Lines covered by the EM-MaxiProbe in 1991 - Central Manicouagan Property

LINES	STATIONS	DISTANCE (km)
L26+00 E	14+25S-0+00	1.425
L29+00E	14+00-0+00	1.4

Table 2 Lines covered by the EM-MaxiProbe in 1991 - Central Manicouagan Property

LINES	STATIONS	DISTANCE (km)
L32+00E	14+25S-0+00	1.425
L26+00W	14+50N-20+50N	0.6
	TOTAL	**4.85**

The equipment used in this survey was a portable version of the MaxiProbe EMR-16. There is no physical connection between the transmitter and the receiver. The transmitter is activated by two batteries of 12 volts, the transmitter loop has a length of 50 meters and is laid-out in a circular fashion on the ground. At each station, the receiver measures the vertical magnetic electromagnetic field and the horizontal field simultaneously on about 12 different frequencies varying from 0.22 to 17.57 kHz. For each frequency, measurements were taken of the difference in amplitude of the vertical electromagnetic field with respect to the horizontal electromagnetic field, as well as the phase difference between these two. During this survey, the distance between the transmitter and the receiver was 550 m during the entire survey. Readings were taken at 25 meters stations on each line. The depth of penetration was estimated to be about 700 meters vertical. In addition, it is important to note that the MaxiProbe system is an asymetrical system that is, best results are obtained if the transmitter is positioned down dip with respect to the receiver. Results are presented in the form of tilt angle and depth section (apparent resistivity as a function of depth). The tilt angle parameter is indicative of the conductivity in the ground. The tilt angle response is weak when a conductor is weak at low frequencies and it increases progressively towards higher frequencies. The peak in intermediate frequency ranges corresponds to the position of the conductor. A migration of peaks starting from high frequencies towards low frequencies indicates a conductor that is dipping. The peak of an anomaly in high frequencies moves towards the up-dip side of the conductor. With respect to the depth-section, it indicates the source and the depths of the anomaly. It also helps in distinguishing anomalies originating from overburden and adjacent rocks. In effect, a more or less horizontal contour in the shallow parts of the depth-section generally represents an anomaly caused by conductive overburden.

The MaxiProbe EM survey detected one EM conductor on L26+00W / 14+50N.

TOTAL FIELD GROUND MAGNETIC SURVEY

In August 1991, Amadeus Resources Ltd carried out a total field ground magnetic survey on the Central Manicouagan Propety. This survey was designed to localyze magnetic features outlined in a previous airborne survey.

A total of 23.1 km was carried out over 946 stations (See table X). The stations were 25 meters apart and formned part of two cut and chained N-S grids with varying line intervals. The line intervals were dependant on the airborne feature to be investigated, therefore only selected areas were targeted for survey.

The magnetic readinds were taken with a Exploranium G816 proton precession magnetometer recording the total magnetic field, with a precision of ±1 gamma. The sensor height was 2.0 meters above the ground. No base station magnetometer was used, but survey loops were closed at each day to correct diurnal variation. Since this survey was intented to localize on the ground large (>500 gammas) deviations form background (58,100 gammas), then any diurnal variation less than 50 gammas was not corrected for.

Table 3 Lines covered by the total field ground magnetic survey- Central Manicouagan Property in 1991

LINES	STATIONS	DISTANCE (km)
L26+00 E	6+00N-14+25S	2.025
L29+00E	6+00-14+25S	2.025
L32+00E	6+00N-14+50S	2.05
L35+00E	0+00-14+50S	1.45
BL 0+00	21+75E-35+12E	1.337
L4+00E	12+25S-24+50S	1.225
L8+00E	12+25S-24+00S	1.175
L12+00E	12+25S-23+75	1.15
TL 28+00N	18+07W-52+00W	3.4
L52+00W	34+10N-27+00N	0.71
L50+00W	36+00N-27+00N	0.9
L48+00W	35+00N-26+00N	0.9
L46+00W	35+00N-26+00N	0.9
L38+00W	26+75N-14+00N	1.275
L34+00W	27+00N-14+00N	1.3
L28+00W	27+00N-14+00N	1.3
	TOTAL	**23.122**

The magnetic relief is, for the most part quiet. Except for a small negative anomaly in the north (lines 26E, 29E and 32E) and a small positive anomaly on line 35E, all other magnetic activity appears as weak discrete features. The general anomaly strike of the magnetic horizons is WNW-ESE. The anomaly on line 35E is interpreted as being the western flank of a broad strong magnetic high, as seen in the airborne survey data, and is likely an expression of magnetite or pyrrhotite band in the fractures basement gneisses.

6.2 1996 SUMMER FIELD WORK

GROUND MAGNETIC SURVEY AND ELECTROMAGNETIC (EM-VLF NAA/NSS) SURVEYS

Line cutting as well as ground magnetic and electromagnetic (EM-VLF) surveys were performed by the personnel of J.A. Macleod Explration Reg'd on the Amadeus Resources claims during May and June 1996. The survey objectives were to determine whether anomalous zones which may indicat the presence of favourable iron-massive sulfide-bearing horizons and/or structures are present. The survey also served to more precisely locate the anomalies revealed by an the airborne geophysical survey performed by Aerodat Ltd in 1990.

A total of 190.20 km of lines were cut and chained at intervals of 25 m. A total of 168.90 km was carried out over 6760 stations. The stations were 25 m apart and formed part of two cut and chained N-S grids with varying line intervals. The lines intervals were dependant on the airborne features to be investigated, therefore only selected areas were targeted for surveys.

The magnetic readings were taken with a Exploranium G816 proton precession magnetometer recording the total magnetic field, with a precision of ±1 gamma. The sensor height was 2.0 meters above the ground. No base station magnetometer was used, but survey loops were closed at each day to correct diurnal variation. Since this survey was intented to localize on the ground large (>500 gammas) deviations form background (58,100 gammas), then any diurnal variation less than 50 gammas was not corrected for. Ground magnetic survey indicates that portions of Grid 2, 3 and 4 are covered by magnetic highs that range from several gammas above background. In all cases the highs are only partially covered by the survey. Isolated and less intense highs flank the main bodies. In contrast mag lows can be seen in contact with the highs on Grid 2 and 4. The magnetic signature on Grid 1 are subtle in nature with the exception of a low entering the grid from the NW, co-incident with the long lake. The half-east of this grid appears to be quiet while the west-half has some interest subtle highs trending east-west. The intense magnetic highs are characteristic of ultramafic intrusive bodies. The lows on Grid 2,3 and 4 and the flat background mag on Grid 1 indicate homogeneous geology. The case show a misture of isolated highs near the boundaries of massive highs and could possibly have relation.

The VLF-EM survey was conducted using the EM-16 instrument manufactured by Geonics Ltd. The Cutler (NAA), Maine, was used on the N-S lines. The Annapolis (NSS), Maryland was used on the

E-W lines. A total of 17.7 km were covered by this survey. The in-phase and quadrature component profiles of the EM-VLF survey were drawn on 1: 5000 scale map. The EM-VLF survey picked up strong conductors on the west end of Grid 1 and 3. Several subtle or marginal conductors are scattered over most of the surveyed area.

6.3 OTHER STUDIES PERFORMED ON THE MANICOUAGAN PROPERTY

REPORT ON THE SURFICIAL GEOLOGY OF THE MANICOUAGAN STRUCTURE.

In 1994, The Manicouagan impact structure was mapped at 1:50,000 scale by Geovision International, Boucherville, Quebec, in the hopes that the nature, extent and thickness of surficial deposits would provide information useful for planning further exploration activity and subsequent property development.

The surficial deposits and the estimated thickness of the deposits over local bedrock subcrops were interpreted from stereo sets of 1:50,000 scale airphotos taken in 1976 covering a study area of 644 km^2. Twelve types of surficial deposits and four depth classes were mapped and characterized. Results were presented as nine annotated airphotos and the interpretations were transferred to a 1:50,000 digitized planimetric map base.

LITHOCHEMICAL STUDY OF THE MANICOUAGAN IMPACT SITE

In 1994, Amadeus Resources Ltd commissioned J.M. Siriunas of NR & J Resource Associates Limited, Toronto to produce a study involving the re-evaluation of samples collected in the vicinity of the Manicouagan structure and analysed for whole rock and trace elements. This re-examination attempted to seek lithologic evidence for the nature of the meteoric body at the Manicouagan site and/or any lithochemical anomalies that may be of economic significance.

Siriunas observed the Manicouagan melt rocks to be intermediate in the sense that they are compositionally intermediate (andesite) and that their bulk composition lies intermediate to the country rocks of the region. The composition of the melt rocks is very homogeneous. Only three samples vary chemically from the bulk composition of the melt-rock samples. Two of these samples have higher lime and magnesia contents. According to Grieve and Floran (1978), this local heterogeneity may be due to the assimilation of mafic clasts in the immediate vicinity of these samples. Siriunas notes that since the iron oxide content of these samples matches that of the bulk content, the additional lime and magnesium could have been supplied by local inclusions of limestone.

This study was inconclusive in showing that the Manicouagan melt rocks have any affinity for an extraterrestrial body, but nickel and the platinum group metals (including iridium) were not included in the data analysed. The geochemistry of melt rocks is not expected to reflect any association with

spatially-related magmatic base metal deposits since ore-forming processes are not directly linked to the formation of an impact melt.

Siriunas suggests that continued exploration work on the property, especially in the form of diamond drilling, may intersect additional igneous lithologies on which lithochemical studies can be performed and evaluated for their PGE potential.

GENERATION OF A MANICOUAGAN DATABASE AND ASSOCIATED MINERAL POTENTIAL DATA PRODUCTS.

The primary goal of the effort is to construct a Manicouagan database, using a Geo-referenced Information System (GIS) based toolset, which will allow for the generation of thematic and interpretive maps to support the mineral exploration of the Manicouagan impact site. The secondary objective, and the motivating factor for the GSC participation, is the evaluation of Radarsat data as a correlative data source for the analysis of mineral potential analysis. The output from the exercise will be utilized, in cooperation with the claims holders in the publication of research results by Richard Grieve of GSC.

The database covers all of NTS 22N (Manicouagan Reservoir sheet), half of the 22O (Lac Fouquet sheet) and 22K (Berté Lake sheet) and a quarter of the 22J (Sept-Iles sheet). The equivalent UTM (Zone 19, NAD 83) are:

Maximum Northing:	5770000 mN	Maximum Easting:	627000 mE
Mimimum Northing:	5590000 mN	Minimum Easting:	420000 mE

The primary tools to be used are remote sensing data. The GSC contributed remote sensing data including: Radarsat I Synthetic Aperture Radar (SAR) data, Landsat TM, airborne wide swath SAR, European Resource Satellite (ERS-1) SAR data; digital topography data (1: 250 000); and geological data including gravity, magnetics, geochemical and rock sample data. Amadeus Resources Ltd contributed their exploration results including airborne and ground geophysical, geological and geochemical data. First Mark Technology Ltd contributed their expertise in processing the data. This information will be converted to a single geo-reference base and single map projection. The database will take the final form of a single integrated GIS using a software package which will run on a PC Windows-based platform.

The Manicouagan Database development effort was broken down into three phases. The Phase I focussed upon the collection, input and rationalization of the core "regional" datasets. These datasets included the topographical data, the geological and a subset of the remote sensing data. The volume of remote sensing datasets to be processed and input has been limited to the Radarsat and Landsat TM. Based upon an analysis of this data, and driven by the quality and coverage of that data, ERS-1 has been used to supplement the space-borne radar data. The Phase II focussed on the analysis of the Phase I products and identification of areas/features of interest. Based upon this analysis, Canada

Centre for Remote Sensing (CCRS) airborne SAR data for the areas of interest has been input to create a series of "local" datasets. The volume of data associated with the airborne SAR, and its resolution (15 metres versus 30 meters for space-borne SAR), suggested that costs are optimized if data is input and analysed on an "as required" data basis. The Phase III focussed upon the production of a series of integrated products to support exploration plans for the Manicouagan impact site.

Five regional plots has been produced for analysis and a preliminary interpretation has been performed and has been revised based on the knowledge of local geology supplied by Richard Grieve, and Lauri Boivin. These products are regional plots of the Radarsat and Landsat data; regional plots of integrated Radarsat/geology, Radarsat/gravity and Radarsat/magnetics.

As a preliminary interpretation, an overlay was prepared by extracting faults and foliation from Murtaugh's published geology map. Additional information was added to the overlay by interpreting the lineament and textural information within both the Radarsat dat and integrated composite images. Lineament information supported the foliated measurements highlighting the continuity of regional structure. Textural information was used to infer lithological contacts and dissect the image.

Radarsat data was useful in defining the extent of the melt sheet lineament information related to foliation was highlighted in units of gneissic lithology. North of the reservoir, the information in the Radarsat image is dominated by north-south fluted lineaments inferring the glacial deposition of till and fluvial deposits. This cover masks underlying bedrock structure. The composite of Radarsat and regional magnetics was invaluable for interpreting faulting and foliation as the subtle Radarsat lineaments are supported by contoured trends/patterns interpreted from the regional magnetics.

8.0 RESULTS OF EXPLORATION PROGRAM 1997

TRAVAUX D'EXPLORATION - ETE 1997

8.1 VALIDATION OF SATELLITE IMAGERY'S INTERPRETATION ON THE FIELD

En août 1997, l'auteur, assisté de J.A. Macleod, a effectué des travaux de reconnaisance sur la propriété d'Amadeus Resources Ltd et en périphérie du site d'impact de Manicouagan afin d'évaluer sur le terrain l'utilisation de cartes thématiques Radarsat comme outil de planification et d'optimisation des travaux d'exploration; d'examiner le caractère de certains linéaments géologiques évidents sur les images Radarsats; et finalement, de procéder au répérage et à la cartographie de certaines zones affleurantes mises en évidence sur les images Landsat TM en bordure de certains lacs et rivières sur la propriété. Considérant la nature extensive des travaux à effectuer, l'utilisation d'un hélicoptère a été s'est avérer utile afin d'atteindre les régions les plus éloignées.

Les travaux visant à évaluer certains secteurs affleurants en bordure de lacs et de rivières susceptibles d'affleurer se sont avérer négatifs. En effet, la plupart se sont avérer comme étant une accumulation de bloc erratiques en périphérie des cours d'eau. Les secteurs présentant un faible couverture végétatives représentant le plus souvent des escarpements, des falaises, les secteurs en périphérie du réservoir ou des sommet de montagnes sont cependant très bien représenté sur les images Landsat TM. Cependant l'auteur est d'opinion que l'utilisation des images Landsat TM à des fins de reconnaisances lithologiques et structurales dans la région du cratère de Manicouagan présente peu d'intérêt considérant le caractère superficiel et non-pénétratif des données Landsat TM. En effet, la surface de l'Ile René-Levasseur est à toute fin couverte d'environ 85% de forêt, 10% de plans d'eau et 5% de zones affleurantes couvrant essentiellement le Mont de Babel.

Les données Radarsat ont mis en évidence 2 linéments sub-parallèles orientés NE jusqu'à maintenant inconnus au SE du Lac Observation. Les travaux de reconnaisance sur le terrain ont permis d'identification du caractère géologique de ces linéaments. Ces linéaments suivent, en effet, le contact monzonite-latite le long d'un escarpement au SE du Lac Observation.

L'utilisation de cartes thématiques Radarsat sur le terrain peut s'avérer un outil précieux de planification et d'optimisation des travaux d'exploration dans la région de Manicouagan. Les cartes thématiques superposées au données Radarsat facilite grandement les travaux de cartographie géologique à l'échelle régionale dont certains secteurs sont peu affleurant. L'uilisation des données Radarsat permettra de plus réduire les coûts d'exploration en ciblant certains secteurs d'intérêts dès les premières phases des travaux d'exploration.

TRAVAUX D'EXPLORATION - AUTOMNE 1997

La période de travail sur les claims d'Amadeus Resources à l'automne 1997a été de 392.5 jours personne en 1997 et s'est déroulée du 7 septembre au 12 décembre 1997. Ces travaux se sont déroulé en collaboration étroite avec Minéraux Manic. Inc. qui effectuait une campagne de forage au diamant sur ses terrains minier.

Durant cette période, l'ensemble des travaux suivant ont été effectué:

1) *Mobilisation / démobilisation de l'équipement, du matériels et du personnel;*
2) *Construction des batiments;*
3) *Travaux de reconnaisance sur le terrain, positionnement des sondages ainsi que la préparation des set up pour le forage au diamant;*
4) *Mobilisation / démobilisation de la foreuse de type Gopher;*
5) *Forage au diamant;*
6) *Transport des carottes de sondages du Camp principal-Relais Gabriel-Chambly;*
7) *Mobilisation / demobilisation des coupeurs de lignes*
8) *Travaux de coupe de lignes;*
9) *Mobilisation / demobilisation des opérateurs Maxmin;*
10) *Levé électromagnétique de type MaxMin.*

Le tableau suivant présente les personnes ayant été affectées au projet, leur fonction, leur période sur le site ainsi que le nombre de jours ayant été affecté aux travaux sur la propriété Centrale Manicouagan d'Amadeus Resources Ltd.

COMPAGNIE	NOM	FONCTION	PERIODE	JOURS	JOURS AMADEUS
DAVINCO INC.	D. BOIVIN	SUPERVISEUR	03.10.97-12.12.97	70	35.5
MINERAUX MANIC INC. /	L. CHAN	TECHNICIENNE	03.10.97-12.12.97	70	18
AMADEUS RESOURCES LTD	R. MOAR	GEOLOGUE	23.10.97-12.12.97	50	23
	E. GAMACHE	CUISINIER	20.11.97-10.12.97	20	10
	H. TREMBLAY	AIDE DE CAMP	20.11.97-12.12.97	22	11
	A. VACHON	COUPEUR DE LIGNE	29.10.97-07.12.97	39	19.5
	E. ST-ONGE	COUPEUR DE LIGNE	29.10.31-07.12.97	39	19.5
	R. ROUSSELOT	CUISINIER	06.11.97-16.11.97	10	5
	B. BANK	AIDE DE CAMP	02.11.97-17.11.97	15	7.5
			11.12.97-12.12.97	1	0.5
J.A MACLEOD EXPLORATION	J.A. MACLEOD	SUPERVISEUR	04.10.97-04.10.97	2	2
			07.11.97-09.10.97	2	2
	A. GUNNER	JOURNALIER	07.09.97-17.11.97	71	30.5
	AL. GUNNER	JOURNALIER	07.09.97-17.11.97	71	30.5
	E. GUNNER	CUISINIERE	07.09.97-17.11.97	71	30.5

	J. BLACKSMITH	JOURNALIER	09.10.97- 09.11.97	31	15.5
	R. MATOUSH	JOURNALIER	07.11.97-17.11.97	10	10
	B. MATOUSH	JOURNALIER	07.11.97-17.11.97	10	10
	T. MACLEOD	JOURNALIER	07.11.97-17.11.97	10	9
MAJOR DOMINIK INC.	C. LAFLAMME	SUPERVISEUR	17.10.97-08.12.97	52	18
	M. ROSS	FOREUR	17.10.97-30.11.97	44	1
	E. PICHE	FOREUR	17.10.97-29.11.97	43	14
	S. BELAND	FOREUR	17.10.97-30.11.97	44	4
	M. LABRECHE	FOREUR	30.10.97-06.12.97	37	4
	Y. BENOIT	FOREUR	30.10.97-06.12.97	37	4
	G. TETU	FOREUR	30.10.97-06.12.97	37	14
HELI-MANICOUAGAN INC.	P. OTIS	PILOTE	16.10.97-05.11.97	20	7
			20.11.97-12.12.97	22	8
	E. PERRON	MECANICIEN	17.10.97-05.11.97	20	7
			20.11.97-12.12.97	22	8
	M. LAPOINTE	PILOTE	17.10.97-20.10.97	3	1
			05.11.97-19.11.97	14	5
	E. DEMERS	MECANICIEN	05.11.97-19.11.97	14	5
SERVICES EXPLORATION ENR.	M. EMARD	TECHNICIEN	08.11.97-18.11.97	10	8
			JOURS PERSONNE	1033	392.5
			%	62	38

8.2 DIAMOND DRILL PROGRAM

Le programme de sondage aux diamant, effectué par Amadeus Resources Ltd sur sa propriété, a totalisé 164 m de forage au diamant repartis sur 7 court sondages. Ces travaux ont été réalisés au cours du mois de novembre 1997.

Le programme proposé visaient à approfondir les connaissances stratigraphiques actuelles de l' impact melt, de permettre la localisation stratigraphique du contact gneiss/impact melt sur la propriété et d'évaluer le potentiel diamantifère de l'intérieur du cratère de Manicouagan des roches de haute température et de haute pression. Le terme latite a été attribué aux unités de l'impact melt de la structure d'impact de Manicouagan. Cette impact melt est constitué essentiellement de plagioclase, de feldspath potassique et de pyroxene et s'apparente chimiquement et texturalement à une roche volcanique de composition latitique. La base de cette unité présente un % variable de fragments / inclusions

Des travaux de reconnaissances ont été effectué au cours du mois d'octobre 1997 et visaient à évaluer l'épaisseur du mort-terrain ainsi que la proximité d'un plan d'eau compte-tenu qu'une foreuse portative de type Gopher serait utilisé. La compagnies Major Dominik Inc. a réalisé les

sondages essentiellement au cours du mois de novembre 1997. Deux sondages ont du être abandonné à cause d'une épaisseur trop importante de mort-terrain. Aucun des sondages n'a intersecté le contact gneiss- impact melt. Aucune section minéralisée n'a été intersecté dans aucun des sondages. Les journaux de sondages se retrouvent à l'Annexe 1 du présent rapport.

SONDAGE AMA-97-01

Le sondage AMA-97-01 (Fig. 8), d'une longueur de 36 m est situé aux coordonnés UTM (NAD 27) 5690589 m M et 527192 m E à environ 3.8 km à l'est du camp principal sur le titre minier 5156902.

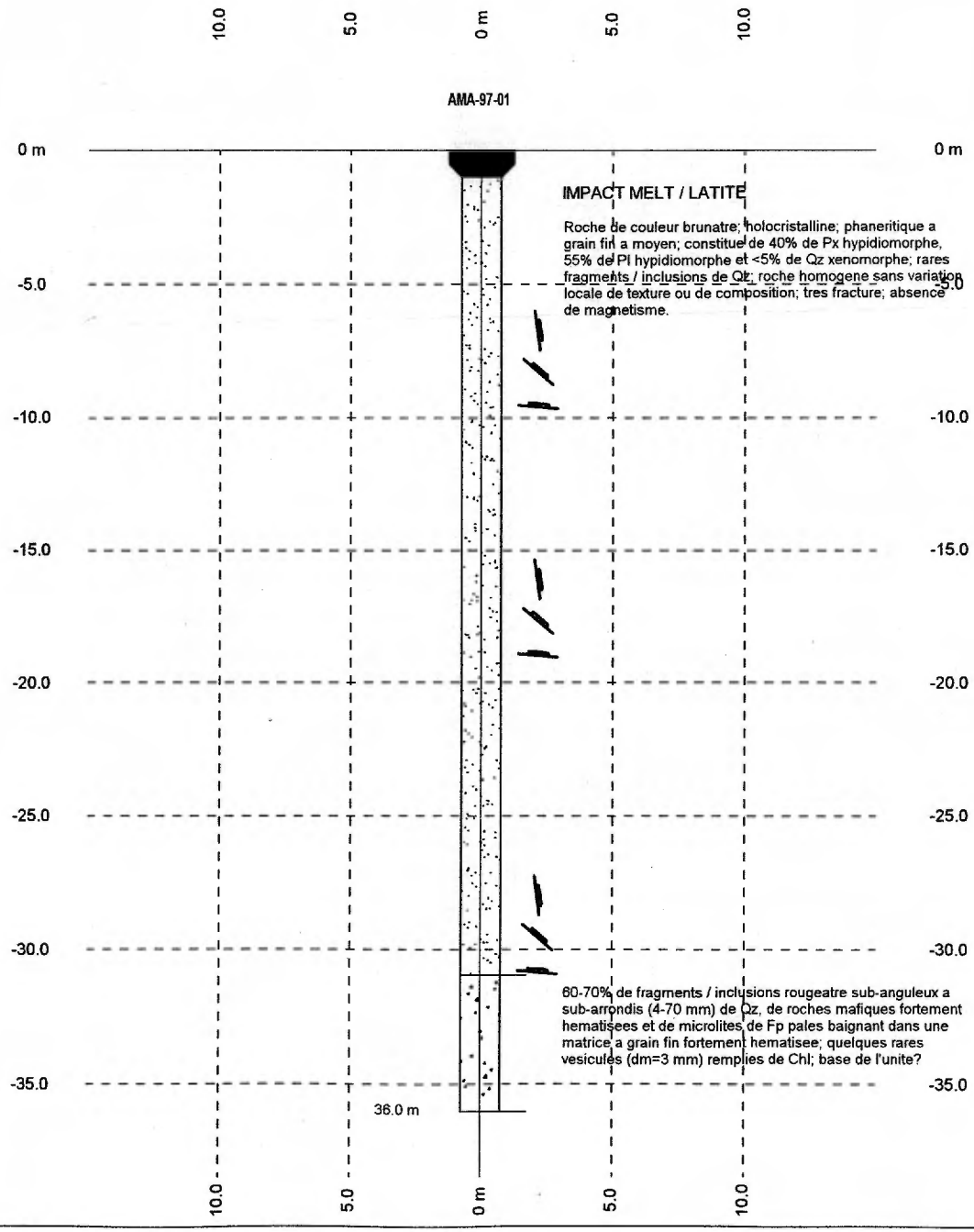
Le sondage dune plongée de -90 ° a recoupé sur toute sa longueur une séquence d'impact melt / latite. Sous une épaisseur de 1.0 m de mort-terrain, le sondage recoupe une unité d'impact melt / latite de couleur brune à grain fin à moyen. Cette unité fortement hématisé présente quelques rares inclusions / fragments sub-anguleux à sub-arrondis de quartz. La roche, quoique très fracturée, est très homogène et ne montre aucune variation locale de texture ou de composition. De 30.95 a 36.00 m, le sondage intersecte une sequence de latite/impact melt a texture bréchique constituee de 60-70% de fragments/inclusions (4-70 mm) sub-anguleux a sub-arrondis essentiellement de quartz, de fragments rougeatres de roche mafiques fortement hematises et de microlites de feldspath. On note de la presence de vesicules (3 mm) parfois remplies de Chl.

Le sondage a été interrompu a 36.00 m et le tubage retiré.

SONDAGE AMA-97-02

Le sondage AMA-97-02 (Fig. 9), d'une longueur de 32.57 m a été implanté aux coordonnés UTM (NAD 27) 5686150 m N et 522632 m E sur la ligne 12+90W à la station 17+10S. Ce sondage se situe sur le claim 5045834 detenus par Amadeus Resources Ltd.

Le sondage d'une plongée de -90 ° a recoupé sur toute sa longueur une séquence d'impact melt / latite. Sous une épaisseur de 3.66 m de mort-terrain, le sondage intersecte une unité d'impact melt / latite de couleur grise à brunâtre à grain fin à moyen. On observe des variations tres nette de granulometrie dans cette unité. De 13.92 a 14.52 m, le sondage intersecte une sequence de latite/impact melt à texture brechique constituee de 50-60% de fragments/inclusions (3-5 mm) sub-anguleux a sub-arrondis de quartz baignant dans une matrice latitique. A partir de 21.05 m, sur une épaisseur de 7.90 m, une seconde unité de latite à texture bréchique est intersecté. Cette intersection est constituée de 25-45% de fragments / inclusions (1.5-8 mm) anguleux à sub-anguleux de quartz et est recoupée de bandes de latite à grain fin à moyen avec absence de fragments / inclusions. Le sondage s'est poursuivi jusqu'à une profondeur de 32.57 m où il a été interrompu et le tubage retire.



LEGENDE

GEOLOGIE

LITHOLOGIES

ROCHES TRIASSIQUES
STRUCTURES D'IMPACT DE MANICOUAGAN

IMPACT MELT / LATITE

BRECHES D'IMPACT MELT / LATITE

SYMBOLES STRUCTURAUX

JOINTS	FAILLES
A) HORIZONTALE	A) HORIZONTALE
B) INCLINEE	B) INCLINEE
C) VERTICALE	C) VERTICALE

VEINES

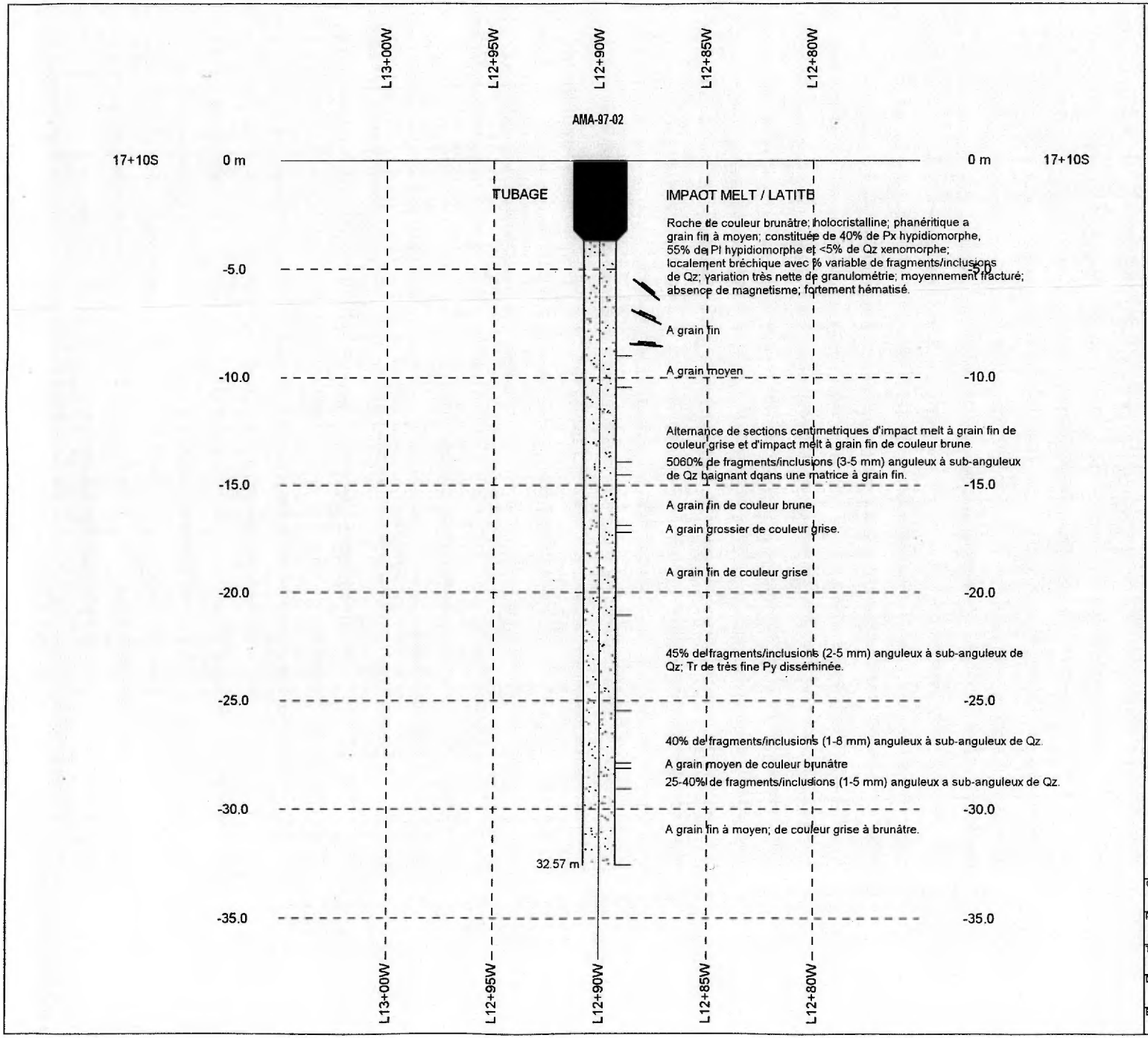
- A) HORIZONTALE
- B) INCLINEE
- C) VERTICALE

ABREVIATIONS

Py	Pyrite	Qz+	Silicifie
Cp	Chalcopyrite	Chl+	Chloritise
Po	Pyrrhothite	Ep+	Epidolise
Ilm	Ilmenite	Hem+	Hematise
Mt	Magnetite	Se+	Sericitise

0 5 m

COMPAGNIE	AMADEUS RESOURCES LTD	
PROJET	CENTRAL MANICOUAGAN	S.N.R.C. 22N/07
TITRE	SECTION GEOLOGIQUE DU SONDAGE AMA-97-01	
DESSINE PAR	R. MOAR, B.Sc.	APPROUVE PAR / REV
ECHELLE	1: 250	DATE FEVRIER 1997 / FIGURE 8



LEGENDE

GEOLOGIE

LITHOLOGIES

ROCHES TRIASSIQUES
STRUCTURES D'IMPACT DE MANICOUAGAN

IMPACT MELT / LATITE

BRECHES D'IMPACT MELT / LATITE

SYMBOLES STRUCTURAUX

JOINTS	FAILLES
A) HORIZONTALE	A) HORIZONTALE
B) INCLINEE	B) INCLINEE
C) VERTICALE	C) VERTICALE

VEINES

- A) HORIZONTALE
- B) INCLINEE
- C) VERTICALE

ABREVIATIONS

Py	Pyrite	Qz+	Silicifie
Cp	Chalcopyrite	Chl+	Chloritise
Po	Pyrrhotite	Ep+	Epidotise
Ilm	Ilmenite	Hem+	Hematise
Mt	Magnetite	Se+	Sericitise

0 5 m

COMPAGNIE	AMADEUS RESOURCES LTD	
PROJET	CENTRAL MANICOUAGAN	S.N.R.C. 22N/07
TITRE	SECTION GEOLOGIQUE DU SONDAGE AMA-97-02	
DESSINE PAR	R. MOAR, B.Sc.	APPROUVE PAR / REV
ECHELLE	1: 250	DATE FEVRIER 1997 / FIGURE 9

SONDAGE AMA-97-03

Le sondage AMA-97-03 (Fig. 10), d'une longueur de 33.21 m a été implanté aux coordonnés UTM (NAD 27) 5687136 m N et 521534 m E sur la ligne 23+70W à la station 7+25S. Ce sondage se situe sur le claim 5037675 detenus par Minéraux Manic Inc..

Sous une épaisseur de 2.00 m de mort-terrain, le sondage d'une plongée de -90 ° a recoupé sur toute sa longueur une séquence d'amphibolite injectée de quelques veinules de Qz±Ca±Hem et de quelques veinules de tachylite de couleur brune à rougeâtre. La roche est très homogène sans variation locale de texture ou de composition. Le sondage s'est poursuivi jusqu'à une profondeur de 32.57 m où il a été interrompu et le tubage retire. Aucune minéralisation n'a été intersectée.

SONDAGE AMA-97-04 / AMA-97-07

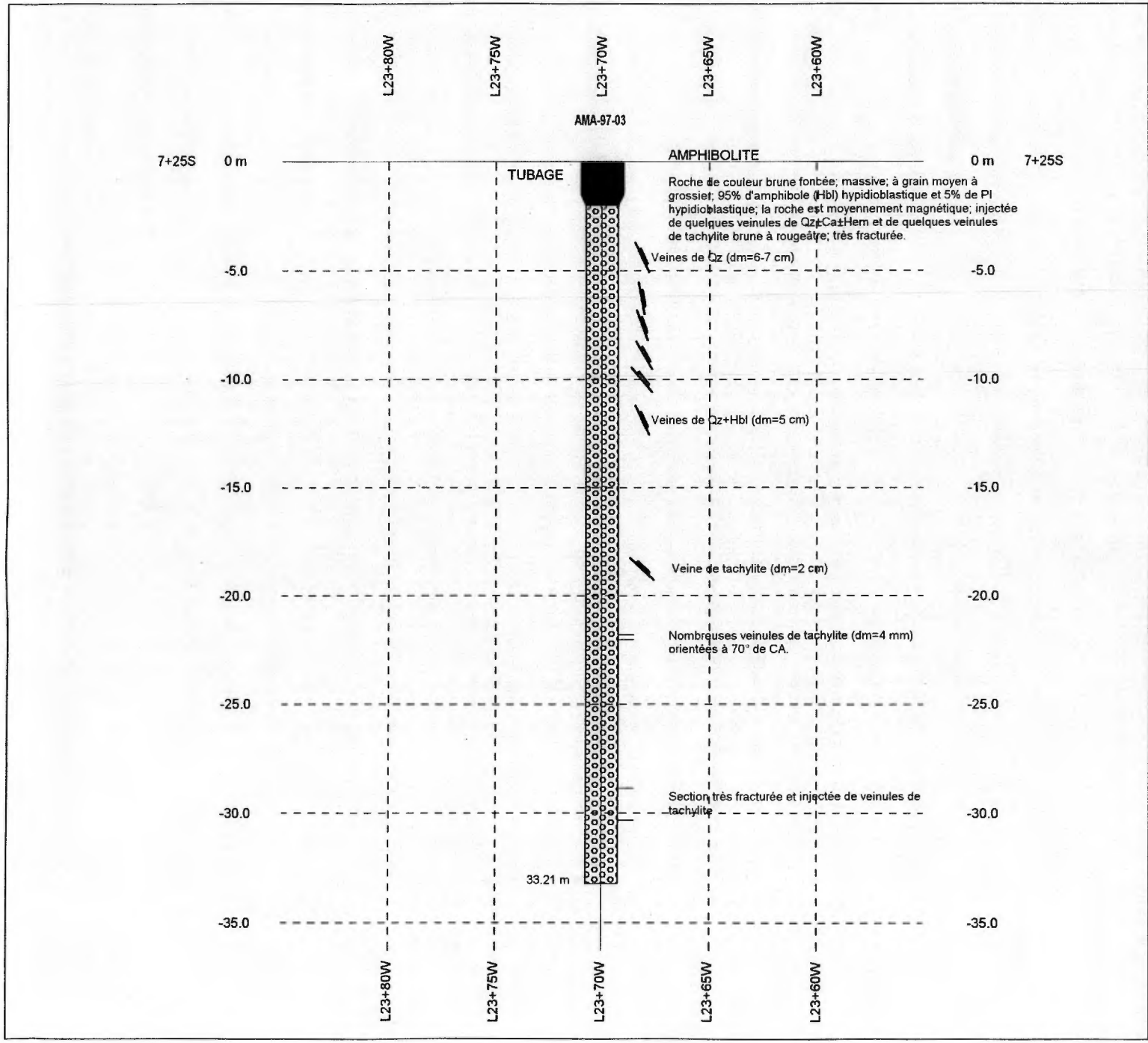
Le sondages AMA-97-04 et AMA-97-07 implantés à 7.2 km au SW du camp principal, à l'extremité sud de la propriété d'Amadeus Resources Ltd, sur le claim 5157053 ont été respectivement abandonné à 14.60 m et 14.00 m dans le mort-terrain.

SONDAGE AMA-97-05

Le sondage AMA-97-05 (Fig. 11), d'une longueur de 33.00 m a été implanté aux coordonnés UTM (NAD 27) 5686140 m N et 529150 m E à environ 5.6 km ESE du camp principal, au sommet d'une falaise d'une élévation d'environ 1700 pieds. Le sondage d'une plongée de -90 ° a recoupé sur toute sa longueur une séquence d'impact melt / latite identique à celle décrite précedemment. Le sondage se situe sur le claim 5156925 detenus par Amadeus Resources Ltd. Le tubage a été retiré à la fin du sondage.

SONDAGE AMA-97-06

Le sondage AMA-97-06 (Fig. 12), d'une longueur de 33.00 m a été implanté aux coordonnés UTM (NAD 27) 5686495 m N et 518290 m E à environ 5.2 km à l'ouest du camp principal. Le sondage a intersecté sur toute sa longueur une séquence d'impact melt / latite à grain fin à moyen caractérisé par une absence de fragments/inclusions. Le contact impact melt / latite et les unités Grenvilliennes n'a pas été intersecté. Ce sondage se situe sur le claim 5156746 detenus par Amadeus Resources Ltd. Le tubage n'a pas été retiré à la fin du sondage.



LEGENDE

GEOLOGIE

LITHOLOGIES

ROCHES TRIASSIQUES
STRUCTURES D'IMPACT DE MANICOUAGAN

IMPACT MELT / LATITE

AMPHIBOLITE

SYMBOLES STRUCTURAUX

JOINTS	FAILLES
A) HORIZONTALE	A) HORIZONTALE
B) INCLINEE	B) INCLINEE
C) VERTICALE	C) VERTICALE

VEINES

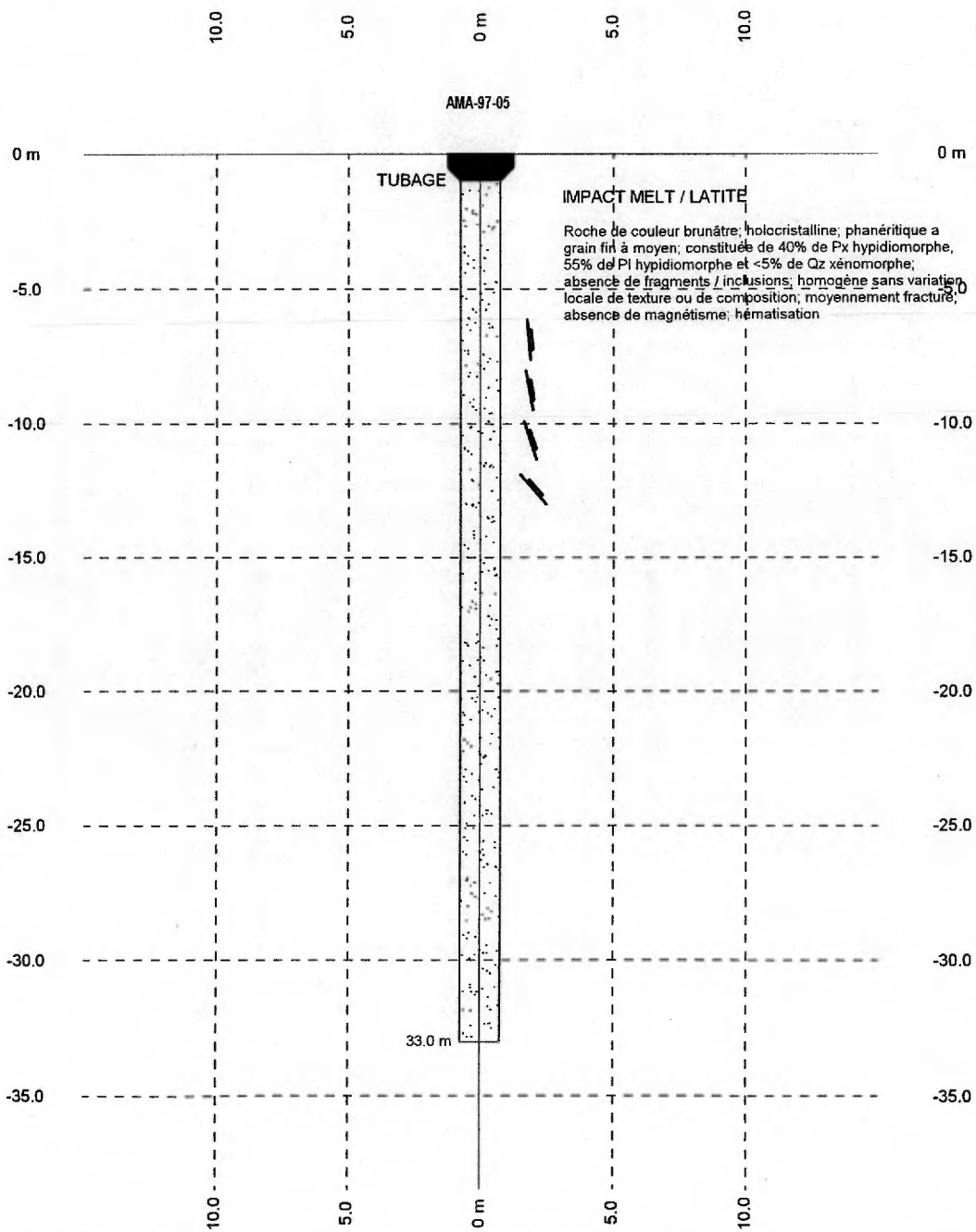
- A) HORIZONTALE
- B) INCLINEE
- C) VERTICALE

ABREVIATIONS

Py	Pyrite	Qz+	Silicifie
Cp	Chalcopyrite	Chl+	Chloritise
Po	Pyrrhotite	Ep+	Epidotise
Ilm	Ilmenite	Hem+	Hematise
Mt	Magnetite	Se+	Sericitise

0 5 m

COMPAGNIE	AMADEUS RESOURCES LTD	
PROJET	CENTRAL MANICOUAGAN	S.N.R.C. 22N/07
TITRE	SECTION GEOLOGIQUE DU SONDAGE AMA-97-03	
DESSINE PAR	R. MOAR, B.Sc.	APPROUVE PAR / REV
ECHELLE	1: 250	DATE FEVRIER 1997 / FIGURE 10



LEGENDE

GEOLOGIE

LITHOLOGIES

ROCHES TRIASSIQUES
STRUCTURES D'IMPACT DE MANICOUAGAN

- IMPACT MELT / LATITE
- BRECHES D'IMPACT MELT / LATITE

SYMBOLES STRUCTURAUX

JOINTS	FAILLES
A) HORIZONTALE	A) HORIZONTALE
B) INCLINEE	B) INCLINEE
C) VERTICALE	C) VERTICALE

VEINES

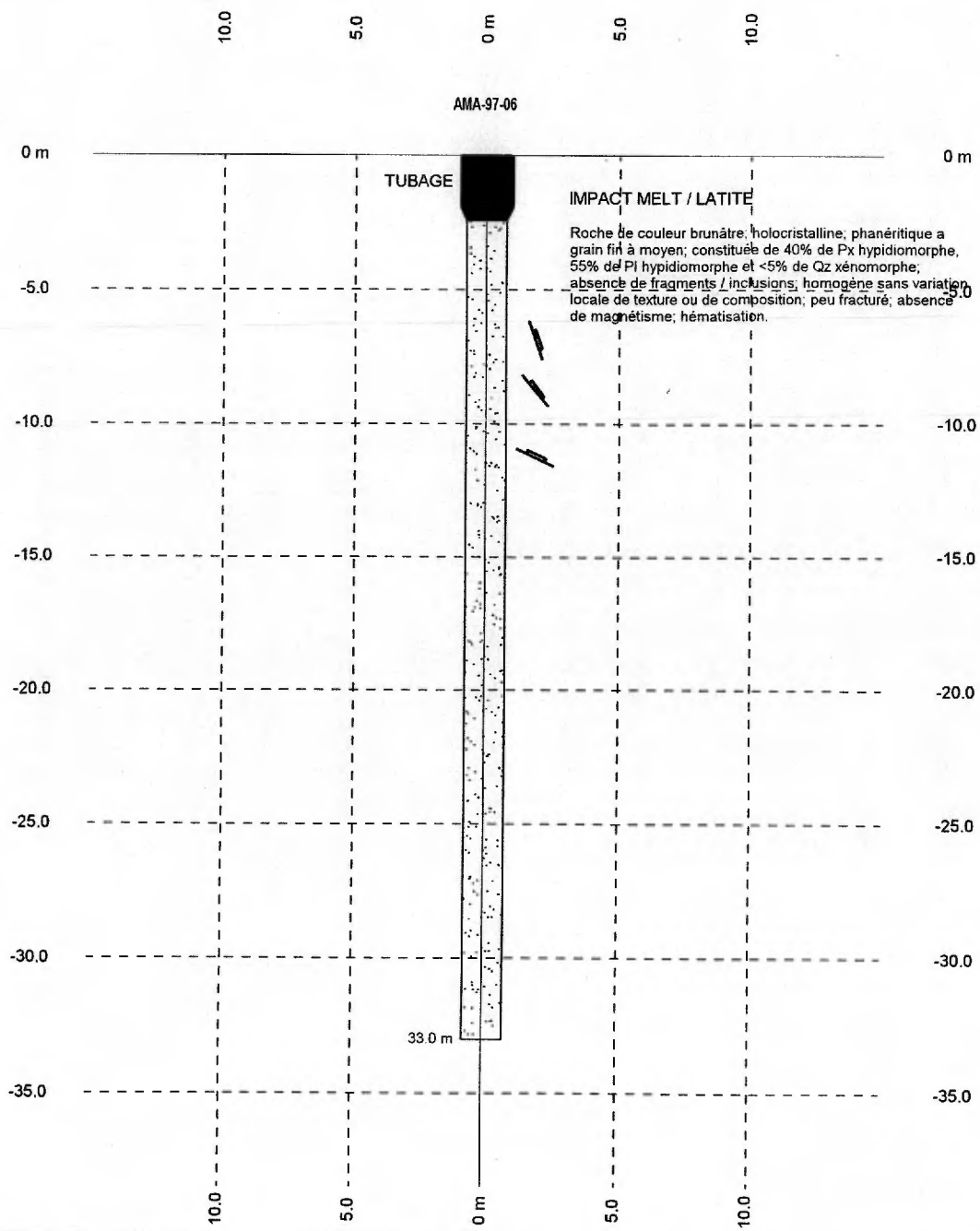
- A) HORIZONTALE
- B) INCLINEE
- C) VERTICALE

ABREVIATIONS

Py	Pyrite	Qz+	Silicifie
Cp	Chalcopyrite	Chl+	Chloritise
Po	Pyrrhothite	Ep+	Epidolise
Ilm	Ilmenite	Hem+	Hematise
Mt	Magnetite	Se+	Sericitise

0 5 m

COMPAGNIE	AMADEUS RESOURCES LTD	
PROJET	CENTRAL MANICOUAGAN	S.N.R.C. 22N/07
TITRE	SECTION GEOLOGIQUE DU SONDAGE AMA-97-05	
DESSINE PAR	R. MOAR, B.Sc.	APPROUVE PAR / REV
ECHELLE	1: 250	DATE FEVRIER 1997 / FIGURE 11



LEGENDE

GEOLOGIE

LITHOLOGIES

ROCHES TRIASSIQUES
STRUCTURES D'IMPACT DE MANICOUAGAN

- IMPACT MELT / LATITE
- BRECHES D'IMPACT MELT / LATITE

SYMBOLES STRUCTURAUX

JOINTS	FAILLES
A) HORIZONTALE	A) HORIZONTALE
B) INCLINEE	B) INCLINEE
C) VERTICALE	C) VERTICALE

VEINES

- A) HORIZONTALE
- B) INCLINEE
- C) VERTICALE

ABREVIATIONS

Py	Pyrite	Qz+	Silicifie
Cp	Chalcopyrite	Chl+	Chloritise
Po	Pyrrhothite	Ep+	Epidotise
Ilm	Ilmenite	Hem+	Hematise
Mt	Magnetite	Se+	Sericitise

0 5 m

COMPAGNIE	AMADEUS RESOURCES LTD	
PROJET	CENTRAL MANICOUAGAN	S.N.R.C. 22N/07
TITRE	SECTION GEOLOGIQUE DU SONDAGE AMA-97-06	
DESSINE PAR	R. MOAR, B.Sc.	APPROUVE PAR / REV
ECHELLE	1: 250	DATE FEVRIER 1997 / FIGURE 12

8.3 LEVE ELECTROMAGNETIQUE MAXMIN

Les résultats du levé électromagnétique de type Maxmin font l'objet d'un rapport séparé. Cependant, les résultats sont présentés ici de façon succinte. Le levé de type MaxMin a été réalisé par Services Exploration Enr. de Val D'Or au cours de la période du 10 au 18 novembre 1997 sur trois grilles distintes tolisant 28.5 km, piquetées et chaînées à tous les 25 mètres avec un espacement des lignes aux 200 m. Les travaux de coupe de lignes ont été confiés à J.A. Macleod Exploration Enr., Baie du Poste. Le levé électromagnetique de type MaxMin a été effectué afin d'évaluer à faible profondeur la présence de conducteurs associés aux fortes anomalies magnétique présente sur la propriété.

Un appareil de type MaxMin II à boucle horizontale a été utilisé avec un espacecement transmetteur-récepteur fixé à 100 m. Le levé totalise 28.5 km et recouvre partiellement les claims de Minéraux Manic Inc. sur les grille 2 et 3. Les lectures ont été prises à tous les 25 m à des fréquences de 444, 1777 et 3555 Hz. Les résultats ont été rapportés sur des cartes à l'échelle 1:5 000. Aucune anomalies significatives n'a été observé par cette méthode.

7.0 GENERAL DISCUSSION

7.1 GENERAL DISCUSSION OF THE MANICOUAGAN IMPACT

Several facts related to the age of the impact event conspire against a typical Sudbury model. At the moment of the Sudbury impact 2.1 Ga, the crust was thin and still hot, and the forces could provoke the ascension of mantle material into near surface conditions. The later mineralization was formed mainly due to gravitational differentiation and post-event magmatism.

In the case of the Manicouagan impact, the continental crust into which the meteorite fell was probably at least 100 km thick, and was cold and hardened, as the result of crustal differentiation and cooling over the long period of the planet's history. The impact site was located in the center of the single planetary continental craton. Therefore, while it may appear debatable that the force of the impact was sufficient to provoke the intrusion of mantle material, there is certainly sufficient field evidence to indicate that the force was sufficient to generate post-impact magmatism in the form of ultramafic sulfide mineralized dykes and breccia dykes and mineralized breccia zones. The activation of post-impact magmatic events and possible hydrothermal recirculation of fluids in the host rocks could certainly provoke the remobilization of ore elements which could be later concentrated in favorable environments such as faults, shear zones, breccia zones and dyke formations.

Certainly, a cursory review of meteorite impact data indicates that, economic resources occur in approximately 25% of known terrestrial impact structures. Of these, 12% are either currently being exploited or have been exploited in the recent past. The current worth of economic materials produced from impact structures is estimated at five billion dollars per year for North America alone. Grieve and Masaitis (1994) have classified the larger economic deposits as progenetic, syngenetic and epigenetic.

Syngenetic deposits include impact diamonds at several structures and Cu-Ni-PGE ores of the Sudbury Igneous Complex, interpreted as part of the impact melt system of the Sudbury Structure. Company field workers have certainly obtained evidence that similar Sudbury type structures and mineralization are present in the Manicouagan Basin.

Epigenetic deposits include post-impact hydrothermal and sedimentary related deposits as well as hydrocarbon deposits such as at Ames, U.S.A.

Progenetic deposits include iron and uranium ore exploitable due to central uplift structures at Ternovka, Russia (375+/-25 Ma) and Carswell, Canada (115 +/- 25 Ma) as well as gold and uranium deposits in the Vredefort impact structure, especially the Witwatersrand Basin gold fields.

7.2 MODELS FOR THE MANICOUAGAN IMPACT SITE

As discussed above, and elsewhere in this report, there is strong evidence that the Manicouagan Impact Structure can host mineralization of a type and nature similar or identical to the Sudbury Impact Structure, which is a famous world-class mining camp for base metals. However, in addition to a magmatic and/or hydrothermal model for mineralization which, despite the very high magnetism and the relatively deeper depths at which the magnetic body is suspected to be located in the central area of the crater, still remain distinct possibilities for the explanation of the very high magnetic anomaly, there is a third very probable explanation for the magnetic anomaly and for the potential discovery of economic mineralization. The third model would be that of the remnants of an iron-nickel meteoritic body which could generate the magnetic readings currently observed in the field. This model i.e. iron-nickel remnant, is the first explanation that came to the mind of Dr. Norman Paterson, (see references and Annexe V.C of the present report) in which his computer modeling of the anomaly indicated a magnetic susceptibility greater than 80% of the body that might cause this anomaly if the center of the body causing this anomaly was located at depths of about 1,000 meters. Since iron formation has a magnetic susceptibility ranging from 7-12% and since magnetite is the most magnetic mineral known to man on earth, it is obvious that a body buried at that depth would have to be many times more magnetic that of magnetite to account for such a anomaly. The two minerals present in iron-nickel meteorites, kamacite and taenite, possess magnetism substantially higher than magnetite (7 times higher).

It has been said that any object travelling at cosmic velocities and impacting over the hard rocks of the Grenville metamorphic province, would generate and release such an amount of energy that they would vaporize instantly. However, there is no proof or actual studies undertaken that would conclusively support this contention. There are scientists who claim to have found evidence of meteorites which, according to their theories, should not have survived an impact (Schultz, 1992).

Therefore, in summary, mineralization models involving magmatism and hydrothermal activity, as indicated by discoveries made on the Quertier and Southwest Island blocks deserve to be pursued in the future in exploration programs. In addition, special attention must be made in determining the cause of the high intensity magnetism emanating from the area surrounding the point of impact of the meteorite i.e. the center of the Manicouagan crater. The Company's best efforts, in fact, have been made in the past and will be made in the future on this promising central zone. The hydrothermal or magmatic models merit serious investigation in this area of the Property as well. However, the third model with the potential discovery of an iron-nickel meteorite remnant is also one of the strongest scientific possibilities to explain the very strong (6-8,000 gammas above background central anomaly. The Company has dedicated efforts using totally conventional geological, geophysical and other approaches in its preliminary search for the cause of this magnetic body. In so doing and with the aid of recognized experts in their fields, the Company has arrived at the consideration of what appears, at this time, to be an unconventional model. However, it must be pointed out that this unconventional model fits geophysical data far better and far more aptly than any other presently known. Besides these three models above indicated, we can exclude the

possibility that the deposit is an iron formation, and field observation and other avenues of enquiry have eliminated for now the possibility that the anomaly is due to any topographical or known metamorphic phenomenon which could be responsible for the magnetism.

Before drawing any other theoretical conclusions, we should take a moment to discuss the topic of induced magnetization, a phenomenon that is not unfamiliar to meteorite impact sites around the world. Many large meteorite impact sites have magnetic features in their centre (personal communication Mark Pilklington - GSC), however, according to the experts who have catalogued such phenomenon, none resemble in strength and intensity the anomaly present in the centre of the Manicouagan crater. There is little doubt that the entire interior of the Manicouagan crater has been magnetized by shock metamorphism. Company workers have certified the presence of magnetite replacing all mafic minerals present in the impacted basement rocks. For this reason, the crater should normally possess a uniform magnetism over its entire magnetized area. Such is not the case. In fact, gneisses transformed to pure magnetite gneisses in areas of the Grenvillean basement inside the crater do not show-up in the regional magnetic maps, or they may be too small in aerial extent to do so. Some lunar basalts (personal communication Peter Schultz - 1997) demonstrate induced magnetization of several thousands gammas. The Manicouagan Central anomaly is 6-8,000 gammas above background, possibly a magnetization that if it were induced might exceed that of the admittedly little studied lunar basalts. Therefore, in the absence of further significance scientific developments in the understanding of magnetism we can reduce the possible models proposed to explain the positive body of the magnetic anomaly as below:

1) **Magnetization of a shallow ultra-mafic body** located originally in the Grenville basement rocks. This model is the least plausible. Field geology has proven to contradict some of the basic premises that this model is based on.

2) **A well-mineralized gabbroic or ultra-mafic shallow intrusion** having a magnetic susceptibility equivalent to about a third of that of iron formation. This is a popular theory and models like that described by Orphal and Schultz (1978) for Manicouagan, suggest the possibility of a ring dyke intrusion along steeply dipping faults that would have been the result of subsidence of the central uplift peak-ring along these faults subsequent to an intrusion -related uplift into the brecciated part of the crater floor. Problems with this model are firstly, even a shallow intrusion would have a root (there is no evidence of a deep root in the magnetic modelling) and secondly, a diapir-like magma emplacement at shallow depth as a result of magmatic differentiation of continental crust would be predictably felsic.

Ultramafic post-impact dyke intrusions mineralized with massive Cu-Ni rich sulfides occur outside the central magnetic highs mapped for the Manicouagan anomaly. These indicate the Sudbury Intrusion Model is a possibility and a strong economic incentive for exploration.

3) **Nickel-iron meteorite remnants**, buried at depth between 1,500 and 12,000 vertical feet. This metallic material is seven times more magnetic than magnetite and could clearly account for the gravity, magnetic and resistivity data accumulated to date.

The meteorite model could explain a number of observed properties such as the steep gradient , sharp contacts and uniform high-intensity across large widths of the magnetic anomaly as well as the absence of a magnetic 'root' and the location of the magnetic anomaly directly encircling the point of impact. This model also explains the coincidence of the gravity anomaly over the magnetic anomaly. The strongly magnetic nature of the dust matrix of the suevite and the unusually high ratios of ferric iron to ferrous iron in the whole rock lithochemistry of the impact melt rocks could also be explained.

The magnetic anomaly is different to any other known or similar structural feature, both in terms of size and intensity. The form of the magnetic anomaly is essentially an oval-shaped, northwest-southeast trending annulus open at the northwest end, and would conform to a geophysical response from a thick plate, slightly dish-shaped along its top surface. The upper surface of a large sharply-defined intrusive body would also create a similar response, but would require the intrusive to be much more magnetic at shallow, detectable depths..

Another very important premise on which the above models are based is that the magnetic anomaly was created and originated at the very moment of impact of the Manicouagan meteorite. This has been proven in paliomagnetic studies such as the one referenced to in this report. The age and cause of the magnetic anomaly is directly related to the age and timing of the meteorite impact event. This fact substantially reduces the number of potential causes for the magnetic anomaly. In addition, we must also consider the fact that three gravity peaks occur in the center of the crater. The two northernmost peaks are over anorthositic rocks of high elevation and the third is over a central low-lying plateau coincident with an extremely intense magnetic anomaly. The magnetic anomaly may be related to the related to the coincident gravity anomaly, which occurs over rocks different to what has generally been considered uplift rocks. Reliable in-situ rock samples in this area come from one deep drill hole which has intersected mostly leucocratic Grenville gneisses similar to those outcropping on the craton perimeter, with proportionally less massive anorthositic orthogneisses.

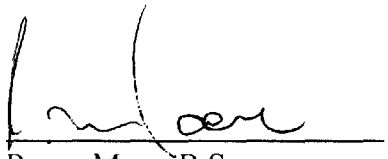
8.0 CONCLUSIONS AND RECOMMENDATIONS

Although the general region has been the subject of base metal exploration from such companies as Hudson Bay (1970's), during its prospecting and drilling campaign on the Manicouagan plateau some 60 km. to the east and in recent years by companies such as Falconbridge, Tiomin, Soquem, and other mining companies who are prospecting and continuing to explore the base metal showings within the Grenvillean gneisses, which is a very encouraging endorsement to the mineralization potential of the region.

Although few would argue with the advisability or merits of exploration in the Grenvillean province per se, as is attested to by the list of companies above who are energetically pursuing such efforts, the fact is that until now the only producing mines located in the Grenvillean province are those of the Sudbury Basin and more is due to their meteorite impact origin then is due to their location in the Grenvillean province.

The basic recommendations I have to offer would be the continued indepth pursuit of the programs and strategies already underway by the Company. Therefore a follow-up deep electromagnetic (MT) and detailled seismic survey are recommended to define possible dril targets over magnetic anomalies prior to any drilling program.The continued development of the Radarsat and remote sensing compilation will be most useful in obtaining a better estimate of the economic potential of the entire area. On a reconnaissance level, large scale geochemical studies may be recommended in the future for regional evaluation purposes.

Respectfully submitted,



Roger Moar, B.Sc.

10.0 REFERENCES

Bassaget, J.P.,
1968 Géologie des Monts Manicouagan. Quebec Dept. Nat. Resources. DP 459, 44 p..

Berard, J.,
1962 Summary geological investigation of the area bordering Manicouagan-Mouchalagane Lakes, Saguenay County. Québec Dept. Nat. Resources, PR No. 489, 14 pp.

Coles, R.L. and Clark, J.F.,
1978 The Central Magnetic Anomaly, Manicouagan Structure, Québec. Journal of Geophysical Research, Vol.83, No. B6, pp. 2805-2809.

Currie, K.L.,
1972 Geology and petrology of the Manicouagan resurgent caldera. Geol. Surv. Can. Bull., 198, 153 pp.

Dence, M.R.,
1964 A comparative structural and petrographic study of probable Canadian meteorite craters. Meteoritics, Vol 2, p. 249-270.

1971 Impact melts. Journal of Geophysics Research, Vol.76, pp.5552-5565.

Floran, R.J. *et Al.*
1978 Manicouagan impact melt, Québec, 1, Stratigraphy, petrology and chemistry. Journal of Geophysics Research, Vol. 83, No B6, pp. 2737-2759.

Grieve, R.A.F., and Floran, R.J.,
1978 Manicouagan impact melt, Québec 2. Chemical interrelations with basement and formational processes. In Journal of Geophysical Research, Vol. 83, No. B6, pp. 2761 - 2771.

1978 Manicouagan impact melt, Québec 2. Chemical interrelations with basement and formational processes. In Journal of Geophysical Research, Vol. 83, No. B6, pp. 2761 - 2771.

Grieve, R.A.F. and Masaitis, V.L.,
1994 The Economic Potential of terrestrial Impact Craters. In International Geology Review, Vol.36, pp. 105-151.

Hammond, D.W.,

1946 Geology of the Mouchalagan lake area, Saguenay County, New Quebec; M. Sc thesis; University Toronto.

Kish, L.,
1962 Preliminary report on the lower Hart-Jaune River area, Saguenay County. Quebec Dept. Nat. PR 486, 9 p..

1963 Geology of middle Hart-Jaune River area, Saguenay country. Quebec Dept. Nat. Resources, PR 507, 8 p..

1968 Hart-Jaune River area. Quebec Dept Nat. Resources, RG 132, 98 p..

Larochelle, A. and Currie, K.L.,
1967 Paleomagnetic study of igneous rocks from the Manicouagan structure, Québec. Journal of Geophysical Research, 72, p. 4163-4169.

Low, A.P.,
1897 Report on explorations in the Labrador Peninsula, along the East Main, Kohsoak, Hamilton, Manicouagan, and portions of other rivers in 1892-1895. Geol. Survey Canada Ann. Rept. No 8, pt. L.

Marcotte, D. and Fox, J.S.,
1989 Analyse multidimensionnelle de données geochimiques de sediments lacustres dans la region de Manicouagan Quebec Dept. Nat. Resources, MB 89-58, 62 p..

Murtaugh, J.G. and Currie, K.L.,
1969 Preliminary study of the Manicouagan Structure. Québec Department of Natural Resources, Mines Branch, PR 583, 9 p.

Murtaugh, J.G.,
1976 Manicouagan Impact Structure; Québec Department of Natural Resources Report DPV-432,180pp.

1976 Stream sediment geochemistry, Manicouagan area, Saguenay County. Quebec Dept. Nat. Resources. DP 443, 9 p..

Oronato, P.I.K. *et Al.*
1978 The thermal history of the Manicouagan impact melt sheet, Québec. Journal of Geophysical Research, pp. 2789-2712.

Orphal, D.L., and Shultz P.H.,
1978 Manicouagan, a Terrestrial analog of Lunar Floor-Fractured craters?. Meteoritics. Vol. 13, No. 4, pp. 591 - 593.

Plante, L.,
1985 Étude métallogénique des indices de Cu-Ni-Co du Haut Plateau de la Manicouagan.

Quebec Dept. Nat. Resources
1981 Carte de location des travaux géoscientifique 022N, 1 carte (1: 250 000), CL 022N.

Robertson, W.A.,
1967 Manicouagan, Québec, Paleomagnetic Results. Canadian Journal of Earth Sciences, pp. 641-649.

Roest, W.R. and Pilkington M.,
1994 Manicouagan Crater. Identifying remanent magnetization effects in magnetic data. Geophysics, Vol. 58, No. 5.

Rose, E.R.,
1955 Manicouagan-Mushalagan lakes area, Quebec. Geol. Survey Canada, Paper 59-2 (geol. map with marginal notes.

Siriunas, J.M.,
1994 A Lithogeochemical Study of the Manicouagan Impact Site. Private Report. 31 p.

Vendittelli, L.,
1997, Evaluation Report, Manicouagan Properties, Manicouagan Area (Quebec); Minéraux Manic Inc.; 74 p., 1 map (1: 20 000).

ASSESSMENT WORK

GM 51166 EXPLORATION MINIERE LASARRE INC.; Report on a geological survey - Manic Project by Podolsky, T., Salamis, C., Boivin, L., 1990, 23 p..

GM 51168 SOCIETE EXPLORATION MINIERE LA SARRE INC.; Rapport d'un levé électromagnétique (MaxiProbe) - Projet Manicouagan, by Chabot, N. and Kenwood, J, 1991, 91 p..

GM 51170 SOCIETE EXPLORATION MINIERE LA SARRE INC.; Rapport de sondage au diamant avec 1 journal du trou MC-1, Projet Manicouagan, by Chabot, N. and Boivin, L., 1991, 18 p., 1 plan.

GM 51186 419947 ALBERTA LTD; Leve électromagnétique (MAXI-PROBE), Projet Manicouagan by Chabot, N, 1991, 24 p.. 2 plans.

GM 51188 419947 ALBERTA LTD; Report on a total field magnetic survey, Manicouagan Property by Kenwood, J., 1991. 7 p., 4 plans.

GM 51197 419947 ALBERTA LTD; A combined helicopter-borne magnetic (total field & vertical gradient) and electromagnetic (AERODAT 4-frequency, V L F-NLK & NSS) survey Manicouagan Reservoir Property by Podolsky, G., 1990, 39 p., 10 plans.

GM 51247 419947 ALBERTA LTD; Levé géologique Ile René-Levasseur - Propriété Manicouagan. By Chabot, N., 1990. 24 p., 2 plans.

ANNEXE I

CORE LOGS

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-01
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 18.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 19.11.97 *DATE TERMINATED*
TUM: 5690589N **ZONE:** 19U *UTM* 527192E **DATUM:** NAD 27	**ORIENTATION:** N/A **ANGLE:** 90° *BEARING* *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5156902	**LONGUEUR TOTALE:** 36 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 1.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-01
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	1.00	**MORT-TERRAIN**												
1.00	36.00	***IMPACT MELT* / LATITE** Roche de couleur brune à rougeâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-1.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; présence de rares inclusions/fragments sub-anguleux à sub-arrondis de Qz; la roche est généralement homogène sans variation locale de texture ou de composition; très fracturée avec débit variant de 6 à 33 cm avec fractures orientées à 8°, 50° et 85° de CA; fortement hématisée; absence de magnétisme; absence de vésicules et de structures de coulée. 18.00-18.13 Echantillon-type récupéré de la boîte # 3. 33.13-33.30 Echantillon-type récupéré de la boîte # 5. 30.95-36.00 60-70% fragments rougeâtres sub-anguleux à sub-arrondis (dm= 4-70 mm) essentiellement de Qz, de fragments de roches mafiques fortement hématisées et de microlites de Fp pâle baigant dans une matrice à grain fin fortement hématisée; rares vésicules (dm= 3 mm) remplies de Chl; base de l'unité?												
	36.00	**Fin du sondage; tubage retiré.** **Liste des boîtes de carottes** #1 1.00-8.50 #4 23.40-30.80 #2 8.50-15.90 #5 30.80-36.00 #3 15.90-23.40												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** L 12+90 W / 17+10S *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 25.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 26.11.97 *DATE TERMINATED*
TUM: 5686150N **ZONE:** 19U *UTM* 522632E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5045834	**LONGUEUR TOTALE:** 32.57 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 3.66 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE *ACID TESTS*

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI *TROPARI TESTS*

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	3.66	**TUBAGE**												
3.66	32.57	***IMPACT MELT* / LATITE** Roche de couleur grise à brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-3.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; localement bréchique avec % variable d'inclusions/fragments de Qz; absence de vésicules et de structures de coulée; on observe des variations très nettes de granulométrie; moyennement fracturée avec débit variant de 10 à 78 cm avec fractures orientées à 51°, 65° et 85° de CA; fortement hématisée; absence de magnétisme. 4.00-8.99 A grain fin 8.99-10.45 A grain moyen 10.45-10.64 *Impact melt* / latite de couleur brune à fragments / inclusions de Qz (ϕ= 3 mm); contact inf. net à 71° de CA. 10.64-13.92 Alternance de sections centimétriques d'*impact melt* / latite à grain fin de couleur grise et d'*impact melt* / latite à grain fin de couleur brune. 13.92-14.52 50-60% de fragments / inclusions (ϕ= 3-5 mm) anguleux à sub-anguleux de Qz baignant dans une matride latitique à grain fin. 14.52-16.88 A grain fin; de couleur brune. 16.88-17.19 A grain grossier; de couleur grise.													

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No: 3
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
		17.19-21.05 A grain fin; de couleur grise. 21.05-25.46 45% de fragments / inclusions (ϕ= 2-5 mm) anguleux à sub-anguleux de Qz; tr de très fine Py disséminée. 25.46-25.90 40% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz. 25.90-27.88 40% de fragments / inclusions (ϕ= 1-8 mm) anguleux à sub-anguleux de Qz. 27.88-28.08 A grain moyen; de couleur brunâtre. 28.08-28.38 Idem à 25.90-27.88 28.38-28.55 40% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz. 28.55-28.95 *Impact melt* / Latite de couleur beige à brunâtre constituée de 25% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz baignant dans une matrice à grain fin. 28.95-32.57 A grain fin à moyen; de couleur grise à brunâtre.												
	32.57	**Fin du sondage; tubage retiré.** **<u>Liste des boîtes de carottes</u>** #1 4.0-11.5 #4 26.1-32.6 #2 11.5-18.8 #3 18.8-26.1												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-03
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** L 23+70 W / 7+25S *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 20.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 21.11.97 *DATE TERMINATED*
TUM: 5687136N **ZONE:** 19U *UTM* 521534E **DATUM:** NAD 27	**ORIENTATION:** N/A **ANGLE:** -90° *BEARING* *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5037675	**LONGUEUR TOTALE:** 33.2 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 2.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique

COMMENTAIRES:
COMMENTS

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-03
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	2.00	**TUBAGE**												
2.00	33.21	**AMPHIBOLITE** Roche de couleur brune foncée; massive; à grain moyen à grossier; composée de 95% d'amphibole de couleur brune (Hbl) hypidioblastique et de 5% Pl hypidiomorphe; la roche est moyennement magnétique; injectée de quelques veines/veinules de Qz±Ca±Hem et de quelques veinules de tachylite de couleur brune à rougeâtre; roche homogène sans variation locale de texture ou de composition; très fracturée avec débit variant de 3 à 40 cm avec fractures orientées à 10°, 20°, 30°, 40° et 45° de CA. 2.28-2.34 Veine de Qz orientée à 25° de CA. 3.05-3.12 Idem; ±Hem 3.19-3.25 Idem 6.15 Veinule (ϕ= 4 mm) de tachylite orientée à sub$^{\perp}$ à CA. 10.01-10.06 Veine de Qz avec 5% de Hbl. 15.41-15.60 Section très broyée. 16.54-16.71 Echantillon-type récupéré de la boîte #2 17.31-17.33 Veine de tachylite orientée à 48° de CA. 21.80-22.02 Nombreuses veinules (ϕ= 3-4 mm) de tachylite orientées à 70° de CA.													

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-03
HOLE No

FEUILLE No: 3
SHEET No

CAROTTE *CORE FOOTAGE* m		**DESCRIPTION**	**ECHANTILLONS** *SAMPLES*				**ANALYSES** *ASSAYS*							
DE *FROM*	**A** *TO*		**NUMERO** *NUMBER*	**DE** *FROM*	**A** *TO*	**LONGUEUR** *LENGTH*	**Au ppb**	**Cu ppm**	**Ni ppm**	**Zn ppm**	**Pd ppb**	**Pt ppb**	**Ti %**	**Ba ppm**
		22.69-23.78 Section très broyée et fracturée.												
		26.39 Veinule de tachylite (ϕ= 3 mm) orientée à 32° de CA.												
		26.59 Veine (ϕ= 16 mm) de tachylite orientée à 37° de CA.												
		27.75-27.82 Veine de tachylite orientée à 45° de CA.												
		28.85-30.32 Section très fracturée et injectée de veinules de tachylite.												
		31.32 Veinule (ϕ= 5 mm) de tachylite orientée à 50° de CA.												
		32.06-32.08 Veine de tachylite orientée à 70° de CA et injectée de veinules (ϕ= 1-2 mm) de Qz à 30° de CA.												
	33.21	**Fin du sondage; tubage retiré.**												
		Liste des boîtes de carottes												
		#1 2.0-9.5 #4 24.3-31.8 #2 9.5-16.9 #5 31.8-33.2 #3 16.9-24.3												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-04
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 27.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 29.11.97 *DATE TERMINATED*
TUM: 5685000N **ZONE:** 19U *UTM* 518625E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5157053	**LONGUEUR TOTALE:** 14.6 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 14.6 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Sondage abandonné à 14.60 m dans le mort-terrain.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH* m	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH* m	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-05
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 16.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 17.11.97 *DATE TERMINATED*
TUM: 5689140N **ZONE:** 19U *UTM* 529150E **DATUM:** NAD 27	**ORIENTATION:** N/A **ANGLE:** -90° *BEARING* *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5156925	**LONGUEUR TOTALE:** 33.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 1.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-05
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	1.00	**TUBAGE**												
1.00	33.00	***IMPACT MELT* / LATITE** Roche de couleur brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-2.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; absence d'inclusions/fragments; hématisation; la roche est homogène sans variation locale de texture ou de composition; moyennement fracturée avec débit variant de 12 à 60 cm avec fractures orientées à 5°, 10°, 18° et 42° de CA; absence de magnétisme; absence de vésicules ou de structures de coulée. 15.00-15.18 Echantillon-type récupéré de la boîte # 2.												
	33.00	**Fin du sondage; tubage retiré.** **Liste des boîtes de carottes** #1 1.0-8.6 #4 23.5-30.9 #2 8.6-16.1 #5 30.9-33.0 #3 16.1-23.5												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-06
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 01.12.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 02.12.97 *DATE TERMINATED*
TUM: 5690495N **ZONE:** 19U *UTM* 518290E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5156746	**LONGUEUR TOTALE:** 33.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 2.43 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-06
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	2.43	**TUBAGE**												
2.43	33.00	***IMPACT MELT* / LATITE** Roche de couleur grise à brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-2.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; absence d'inclusions/fragments; hématisation; la roche est homogène sans variation locale de texture ou de composition; peu fracturée avec débit variant de 10 à 60 cm avec fractures orientées à 19°, 40°, 65° de CA; absence de magnétisme; absence de vésicules ou de structures de coulée. 3.73-3.94 Echantillon-type récupéré de la boîte # 1.												
	33.00	**Fin du sondage; tubage laissé en place pour approfondissement éventuel du trou.** **Liste des boîtes de carottes** #1 2.4-10.0 #4 24.8-32.2 #2 10.0-17.5 #5 32.2-33.0 #3 17.5-24.8												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-07
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 30.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 30.11.97 *DATE TERMINATED*
TUM: 5685000N **ZONE:** 19U *UTM* 518625E **DATUM:** NAD 27	**ORIENTATION:** N360° *BEARING* **ANGLE:** -55° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5157053	**LONGUEUR TOTALE:** 14.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 14.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Sondage abandonné à 14.0 m dans le mort-terrain.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH* m	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH* m	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

ANNEXE II

LIST OF AMADEUS RESOURCES CLAIMS

AMADEUS RESOURCES LTD.

TOTAL NUMBER OF MINING CLAIMS = 561

Expiry Date:28 AUG 1998
Assessment Report Submission Date: 28 JUNE 1998

All claims cover 16 hectares.

Claim Numbers: TOTAL: 15

5170981	5170982	5170983	5170984	5170985
5170986	5170987	5170988	5170989	5170990
5170991	5170992	5170993	5170994	5170995

Expiry Date:NOVEMBER 17, 1998
Assessment Report Submission Date:SEPTEMBER 17 1998

Each claim covers 16 hectares.

Claim Numbers: TOTAL: 6

5149337	5149338	5149339	5149340	5149341
5149342				

Expiry Date:28 AUG 1998
Assessment Report Submission Date: 28 JUNE 1998

All claims cover 16 hectares.

Claim Numbers: TOTAL: 154

5045646	5045647	5045648	5045649	5045650
5045651	5045653	5045654	5045655	5045656
5045657	5045658	5045659	5045660	5045661
5045662	5045665	5045666	5045667	5045672
5045673	5045694	5045695	5045716	5045717
5045718	5045719	5045720	5045721	5045722
5045723	5045724	5045725	5045726	5045727
5045728	5045729	5045730	5045731	5045734
5045735	5045758	5045759	5045760	5045761

5045762	5045766	5045767	5045768	5045769
5045770	5045771	5045772	5045773	5045806
5045807	5045808	5045809	5045810	5045834
5045837	5045838	5045839	5045840	5045841
5045842	5045843	5045844	5045845	5045864
5045865	5045866	5045867	5050340	5050341
5050342	5050380	5050381	5050382	5050383
5050384	5050400	5068191	5068192	5068193
5068195	5068196	5068197	5068198	5068199
5068200	5068206	5068235	5068236	5068237
5068238	5068239	5068240	5068241	5068242
5068243	5068244	5068245	5068246	5068278
5068279	5068280	5068281	5068282	5068284
5068285	5068286	5068287	5068288	5068322
5068324	5068325	5068326	5068327	5068328
5068329	5068331	5068332	5068333	5068334
5068361	5068362	5068363	5068364	5068365
5068366	5068367	5068368	5068370	5068397
5068398	5068399	5068400	5068401	5068402
5068403	5068404	5068405	5068406	5068407
5068408	5068409	5068410	5068414	5068415
5068416	5068417	5068418	5068419	

Expiry Date:21 APRIL 1998
Assessment Report Submission Date: 21 FEB 1998

All claims cover 16 hectares.

CLAIM NUMBERS: TOTAL: 371

5156709	5156710	5156711	5156712	5156713
5156714	5156715	5156716	5156717	5156718
5156719	5156720	5156721	5156722	5156723
5156724	5156725	5156726	5156727	5156728
5156729	5156730	5156731	5156732	5156733
5156734	5156735	5156736	5156737	5156738
5156739	5156740	5156741	5156742	5156743
5156744	5156745	5156746	5156747	5156748
5156749	5156750	5156751	5156752	5156753
5156754	5156755	5156756	5156757	5156758
5156759	5156760	5156761	5156762	5156763
5156764	5156765	5156766	5156767	5156768

5156769	5156770	5156771	5156772	5156773
5156774	5156775	5156776	5156777	5156778
5156779	5156780	5156781	5156782	5156783
5156784	5156785	5156786	5156787	5156788
5156789	5156790	5156791	5156792	5156793
5156794	5156795	5156796	5156797	5156798
5156799	5156800	5156801	5156802	5156803
5156804	5156805	5156806	5156807	5156808
5156809	5156811	5156812	5156813	5156814
5156815	5156816	5156817	5156818	5156819
5156820	5156821	5156822	5156825	5156826
5156828	5156829	5156830	5156834	5156835
5156836	5156837	5156838	5156839	5156840
5156841	5156842	5156843	5156844	5156845
5156846	5156847	5156848	5156849	5156850
5156851	5156852	5156853	5156854	5156855
5156856	5156857	5156858	5156859	5156860
5156861	5156862	5156863	5156864	5156865
5156866	5156867	5156868	5156869	5156870
5156871	5156872	5156873	5156874	5156875
5156876	5156877	5156878	5156879	5156880
5156881	5156882	5156883	5156884	5156885
5156886	5156887	5156888	5156889	5156890
5156891	5156892	5156893	5156894	5156895
5156896	5156897	5156898	5156899	5156900
5156901	5156902	5156903	5156904	5156905
5156906	5156907	5156908	5156909	5156910
5156911	5156912	5156913	5156914	5156915
5156916	5156917	5156918	5156919	5156920
5156921	5156922	5156923	5156924	5156925
5156926	5156927	5156928	5156929	5156930
5156931	5156932	5156933	5156934	5156935
5156936	5156937	5156938	5156939	5156940
5156941	5156942	5156943	5156944	5156945
5156946	5156947	5156948	5156949	5156950
5156951	5156952	5156953	5156954	5156955
5156956	5156957	5156958	5156959	5156960
5156961	5156962	5156963	5156964	5156965
5156966	5156967	5156968	5156969	5156970
5156971	5156972	5156973	5156974	5156975
5156976	5156977	5156978	5156979	5156980
5156981	5156982	5156983	5156984	5156985
5156986	5156987	5156988	5156989	5156990

5156991	5156992	5156993	5156994	5156995
5156996	5156997	5156998	5156999	5157000
5157001	5157002	5157003	5157004	5157005
5157006	5157007	5157008	5157009	5157010
5157011	5157012	5157013	5157014	5157015
5157016	5157017	5157018	5157019	5157020
5157021	5157022	5157023	5157024	5157025
5157026	5157027	5157028	5157029	5157030
5157031	5157032	5157033	5157034	5157035
5157036	5157037	5157038	5157039	5157040
5157041	5157042	5157043	5157044	5157045
5157046	5157047	5157048	5157049	5157050
5157051	5157052	5157053	5157054	5157055
5157056	5157057	5157058	5157059	5157060
5157061	5157062	5157063	5157064	5157065
5157066	5157067	5157068	5157069	5157070
5157071	5157072	5157073	5157074	5157075
5157076	5157077	5157078	5157079	5157080
5157081	5157082	5157083	5157084	5157087
5157088				

Expiry Date: 22 FEB 1999
Assessment Report Submission Date: 22 DEC 1998

All claims cover 16 hectares.

Claim Numbers: TOTAL: 5

5149358	5149359	5149360	5149361	5149362

Expiry Date:
Assessment Report Submission Date: October 30, 1999
Staking Date: Sept. 06-07, 1997
Notice of staking registred: Sept. 10, 1997

Each claim covers 16 hectares. TOTAL CLAIMS: 10.

Claim Number: 10

5193867	5193868	5193869	5193870	5190161
5190162	5190163	5190164	5190165	5190115

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-01
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07
NTS

COORDONNES COLLET: N/A
COORDINATES COLLAR

FORAGE PAR: MAJOR DOMINIK INC.
DRILLING BY

COMMENCE LE: 18.11.97
DATE BEGUN

RANG: N/A **LOT** N/A
RANGE

ELEVATION COLLET: N/A
ELEVATION COLLAR

TYPE DE FORAGE: DDH
TYPE OF DRILLHOLE

TERMINE LE: 19 11.97
DATE TERMINATED

TUM: 5690589N **ZONE:** 19U
UTM 527192E **DATUM:** NAD 27

ORIENTATION: N/A
BEARING

ANGLE: 90°
DIP

DIMENSION DE LA CAROTTE: AQ
CORE SIZE

JOURNAL PAR: R. MOAR, B.Sc., GEOLOGUE
LOGGED BY

CLAIM No: 5156902

LONGUEUR TOTALE: 36 m
TOTAL LENGTH

LONGUEUR DU TUBAGE: 1.0 m
LENGTH OF CASING

ENTREPOSAGE DES CAROTTES: CHAMBLY, QC
CORE STORAGE:

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

TEST ACIDE
ACID TESTS

PROFONDEUR *DEPTH* m	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI
TROPARI TESTS

PROFONDEUR *DEPTH* m	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-01
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	1.00	**MORT-TERRAIN**												
1.00	36.00	***IMPACT MELT* / LATITE** Roche de couleur brune à rougeâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-1.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; présence de rares inclusions/fragments sub-anguleux à sub-arrondis de Qz; la roche est généralement homogène sans variation locale de texture ou de composition; très fracturée avec débit variant de 6 à 33 cm avec fractures orientées à 8°, 50° et 85° de CA; fortement hématisée; absence de magnétisme; absence de vésicules et de structures de coulée. 18.00-18.13 Echantillon-type récupéré de la boîte # 3. 33.13-33.30 Echantillon-type récupéré de la boîte # 5. 30.95-36.00 60-70% fragments rougeâtres sub-anguleux à sub-arrondis (dm= 4-70 mm) essentiellement de Qz, de fragments de roches mafiques fortement hématisées et de microlites de Fp pâle baigant dans une matrice à grain fin fortement hématisée; rares vésicules (dm= 3 mm) remplies de Chl; base de l'unité?												
	36.00	**Fin du sondage; tubage retiré.** **Liste des boîtes de carottes** #1 1.00-8.50 #4 23.40-30.80 #2 8.50-15.90 #5 30.80-36.00 #3 15.90-23.40												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** L 12+90 W / 17+10S *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 25.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 26.11.97 *DATE TERMINATED*
TUM: 5686150N **ZONE:** 19U *UTM* 522632E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5045834	**LONGUEUR TOTALE:** 32.57 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 3.66 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE
ACID TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI
TROPARI TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	3.66	**TUBAGE**												
3.66	32.57	***IMPACT MELT* / LATITE** Roche de couleur grise à brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-3.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; localement bréchique avec % variable d'inclusions/fragments de Qz; absence de vésicules et de structures de coulée; on observe des variations très nettes de granulométrie; moyennement fracturée avec débit variant de 10 à 78 cm avec fractures orientées à 51°, 65° et 85° de CA; fortement hématisée; absence de magnétisme. 4.00-8.99 A grain fin 8.99-10.45 A grain moyen 10.45-10.64 *Impact melt* / latite de couleur brune à fragments / inclusions de Qz (ϕ= 3 mm); contact inf. net à 71° de CA. 10.64-13.92 Alternance de sections centimétriques d'*impact melt* / latite à grain fin de couleur grise et d'*impact melt* / latite à grain fin de couleur brune. 13.92-14.52 50-60% de fragments / inclusions (ϕ= 3-5 mm) anguleux à sub-anguleux de Qz baignant dans une matride latitique à grain fin. 14.52-16.88 A grain fin; de couleur brune. 16.88-17.19 A grain grossier; de couleur grise.													

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-02
HOLE No

FEUILLE No: 3
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
		17.19-21.05 A grain fin; de couleur grise. 21.05-25.46 45% de fragments / inclusions (ϕ= 2-5 mm) anguleux à sub-anguleux de Qz; tr de très fine Py disséminée. 25.46-25.90 40% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz. 25.90-27.88 40% de fragments / inclusions (ϕ= 1-8 mm) anguleux à sub-anguleux de Qz. 27.88-28.08 A grain moyen; de couleur brunâtre. 28.08-28.38 Idem à 25.90-27.88 28.38-28.55 40% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz. 28.55-28.95 *Impact melt* / Latite de couleur beige à brunâtre constituée de 25% de fragments / inclusions (ϕ= 1.5-5 mm) anguleux à sub-anguleux de Qz baignant dans une matrice à grain fin. 28.95-32.57 A grain fin à moyen; de couleur grise à brunâtre.												
	32.57	**Fin du sondage; tubage retiré.** **<u>Liste des boîtes de carottes</u>** #1 4.0-11.5 #4 26.1-32.6 #2 11.5-18.8 #3 18.8-26.1												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-04
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 27.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 29.11.97 *DATE TERMINATED*
TUM: 5685000N **ZONE:** 19U *UTM* 518625E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5157053	**LONGUEUR TOTALE:** 14.6 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 14.6 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Sondage abandonné à 14.60 m dans le mort-terrain.

TEST ACIDE
ACID TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI
TROPARI TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-05
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 16.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 17.11.97 *DATE TERMINATED*
TUM: 5689140N **ZONE:** 19U *UTM* 529150E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5156925	**LONGUEUR TOTALE:** 33.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 1.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE *ACID TESTS*			**TEST TROPARI** *TROPARI TESTS*			
PROFONDEUR *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PROFONDEUR** *DEPTH m*	**LECTURE** *READING*	**LECTURE CORRIGE** *CORRECTED READING*	**PENDAGE** *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-05
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	1.00	**TUBAGE**												
1.00	33.00	***IMPACT MELT* / LATITE** Roche de couleur brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-2.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; absence d'inclusions/fragments; hématisation; la roche est homogène sans variation locale de texture ou de composition; moyennement fracturée avec débit variant de 12 à 60 cm avec fractures orientées à 5°, 10°, 18° et 42° de CA; absence de magnétisme; absence de vésicules ou de structures de coulée. 15.00-15.18 Echantillon-type récupéré de la boîte # 2.												
	33.00	**Fin du sondage; tubage retiré.** **Liste des boîtes de carottes** #1 1.0-8.6 #4 23.5-30.9 #2 8.6-16.1 #5 30.9-33.0 #3 16.1-23.5												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-06
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 01.12.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 02.12.97 *DATE TERMINATED*
TUM: 5690495N **ZONE:** 19U *UTM* 518290E **DATUM:** NAD 27	**ORIENTATION:** N/A *BEARING* **ANGLE:** -90° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5156746	**LONGUEUR TOTALE:** 33.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 2.43 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Aucune minéralisation intersectée dans le sondage.

TEST ACIDE
ACID TESTS

PROFONDEUR *DEPTH* m	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI
TROPARI TESTS

PROFONDEUR *DEPTH* m	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

AMADEUS RESOURCES LTD
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-06
HOLE No

FEUILLE No: 2
SHEET No

CAROTTE *CORE FOOTAGE* m		DESCRIPTION	ECHANTILLONS *SAMPLES*				ANALYSES *ASSAYS*							
DE *FROM*	A *TO*		NUMERO *NUMBER*	DE *FROM*	A *TO*	LONGUEUR *LENGTH*	Au ppb	Cu ppm	Ni ppm	Zn ppm	Pd ppb	Pt ppb	Ti %	Ba ppm
0.00	2.43	**TUBAGE**												
2.43	33.00	***IMPACT MELT* / LATITE** Roche de couleur grise à brunâtre; holocristalline; massive; phanéritique à grain fin à moyen (dm= 0.5-2.0 mm); constituée de 40% de Px hypidiomorphe, 55% de Pl hypidiomorphe et de <5% de Qz xénomorphe; absence d'inclusions/fragments; hématisation; la roche est homogène sans variation locale de texture ou de composition; peu fracturée avec débit variant de 10 à 60 cm avec fractures orientées à 19°, 40°, 65° de CA; absence de magnétisme; absence de vésicules ou de structures de coulée. 3.73-3.94 Echantillon-type récupéré de la boîte # 1.												
	33.00	**Fin du sondage; tubage laissé en place pour approfondissement éventuel du trou.** **Liste des boîtes de carottes** #1 2.4-10.0 #4 24.8-32.2 #2 10.0-17.5 #5 32.2-33.0 #3 17.5-24.8												

AMADEUS RESOURCES LTD.
430, Ste-Hélène, suite 401
Montréal, Qc
H2Y 2K7
Tél: 514.288.4333
Fax: 514.288.3930

JOURNAL DE SONDAGE
DRILL RECORD

PROJET: MANICOUAGAN
PROJECT

TROU No.: AMA-97-07
HOLE No

FEUILLE No; 1
SHEET No

S.N.R.C.: 022N/07 *NTS*	**COORDONNES COLLET:** N/A *COORDINATES COLLAR*	**FORAGE PAR:** MAJOR DOMINIK INC. *DRILLING BY*	**COMMENCE LE:** 30.11.97 *DATE BEGUN*
RANG: N/A **LOT** N/A *RANGE*	**ELEVATION COLLET:** N/A *ELEVATION COLLAR*	**TYPE DE FORAGE:** DDH *TYPE OF DRILLHOLE*	**TERMINE LE:** 30.11.97 *DATE TERMINATED*
TUM: 5685000N **ZONE:** 19U *UTM* 518625E **DATUM:** NAD 27	**ORIENTATION:** N360° *BEARING* **ANGLE:** -55° *DIP*	**DIMENSION DE LA CAROTTE:** AQ *CORE SIZE*	**JOURNAL PAR:** R. MOAR, B.Sc., GEOLOGUE *LOGGED BY*
CLAIM No: 5157053	**LONGUEUR TOTALE:** 14.0 m *TOTAL LENGTH*	**LONGUEUR DU TUBAGE:** 14.0 m *LENGTH OF CASING*	**ENTREPOSAGE DES CAROTTES:** CHAMBLY, QC *CORE STORAGE:*

RAISON(S) DU SONDAGE:
REASON(S) HOLE BEING DRILLED

Structure d'impact météoritique; sondage stratigraphique.

COMMENTAIRES:
COMMENTS

Sondage abandonné à 14.0 m dans le mort-terrain.

TEST ACIDE
ACID TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*

TEST TROPARI
TROPARI TESTS

PROFONDEUR *DEPTH m*	LECTURE *READING*	LECTURE CORRIGE *CORRECTED READING*	PENDAGE *DIP*

98 FEB 20 15 :56