

GM 60535

GEOLOGICAL MAPPING, BELLECHASSE PROPERTY

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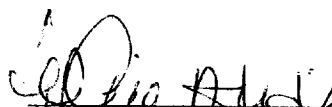
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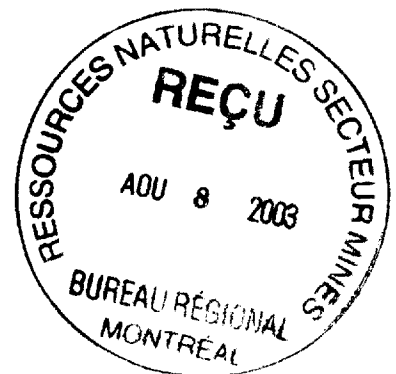
Québec 

**EXPLORATION SUMMARY REPORT
BELLECHASSE PROJECT
2003**

**GEOLOGICAL MAPPING
ON THE
BELLECHASSE PROPERTY
CLAIMS 4166213, 4166214, 4166221, 4166222, 4166223,
4166224, 4166231, 4166232, 4166233, 4166234
BELLECHASSE TOWNSHIP
QUÉBEC**

August 6, 2003
Anjou, Québec


S. Prud'homme, P. Geo.
O.G.Q. #234



MRN-GÉOINFORMATION 2003

GM 60535

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INTRODUCTION

A new geological mapping campaign has been completed on claims 4166213, 4166214, 4166221, 4166222, 4166223, 4166224, 4166231, 4166232, 4166233, 4166234, part of a contiguous block of mining claims held by Golden Hope Mines Limited in Bellechasse Township, Québec.

The work was undertaken as part of a larger, ongoing program currently being directed towards the Bellechasse gold property, and to examine an inventory of existing anomalies shown by earlier work (Wilson et al., 1994).

No significant new mineralization was encountered in the mapping work covered in this report.

Despite the absence of evident surface mineralization, it is recommended that further work be conducted. Because of the poor percentage of overall outcrop (less than 5%), more work is recommended on the merit of the location of the claims immediately southwest (on strike) of the known Bellechasse gold showing. The claims have anomalous airborne magnetic features similar to Bellechasse (Jagodits, 1987), which presents the possibility of unexposed mineralization, potentially of the character of the nearby Bellechasse gold showing. This possibility is underscored by the presence of newly discovered mafic intrusive rocks mapped on the claims during the current program.

Further work recommended includes reconnaissance basal till sampling in the areas of the magnetic anomalies, following examination of the property through high-resolution airborne geophysics.

PROPERTY AND LOCATION

The mining claims are situated near the village of St. Magloire in Bellechasse Township of the Beauce Region of Québec, approximately 100 kilometres southeast of Québec City and 100 kilometres northeast of the mining centre of Thetford Mines.

The claims covers ten individual lots with a surface area of 200 hectares:

BELLECHASSE PROJECT

CLAIM	TOWNSHIP	RANGE	LOT	HECTARES
4166213	Bellechasse	CMSO	13	20
4166214	Bellechasse	CMSO	14	20
4166221	Bellechasse	CMSO	15	20
4166222	Bellechasse	CMSO	16	20
4166223	Bellechasse	CMSO	17	20
4166224	Bellechasse	CMSO	18	20
4166231	Bellechasse	CMSO	19	20
4166232	Bellechasse	CMSO	20	20
4166233	Bellechasse	CMSO	21	20
4166234	Bellechasse	CMSO	22	20

Total:			10 claims	200 hectares
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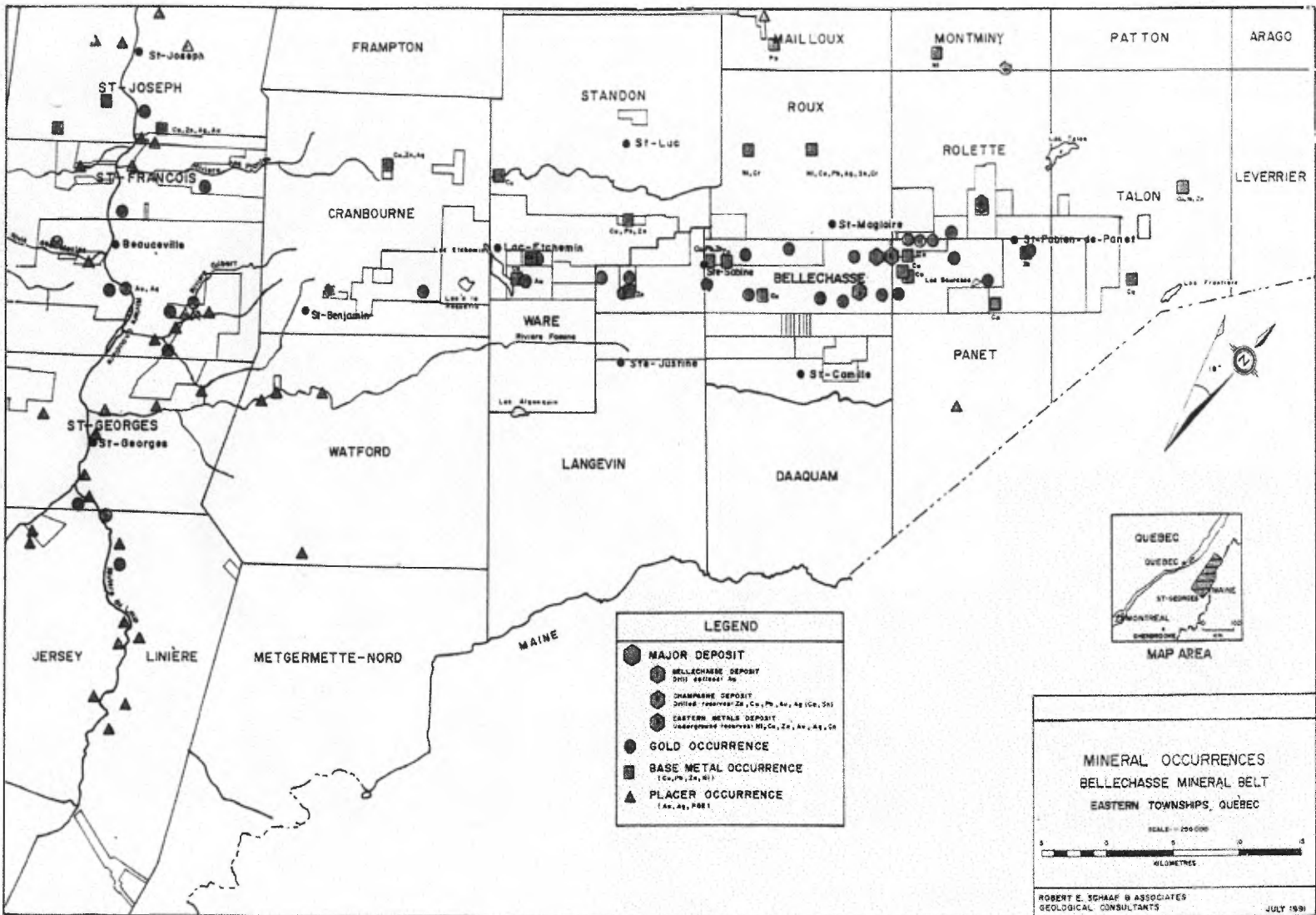
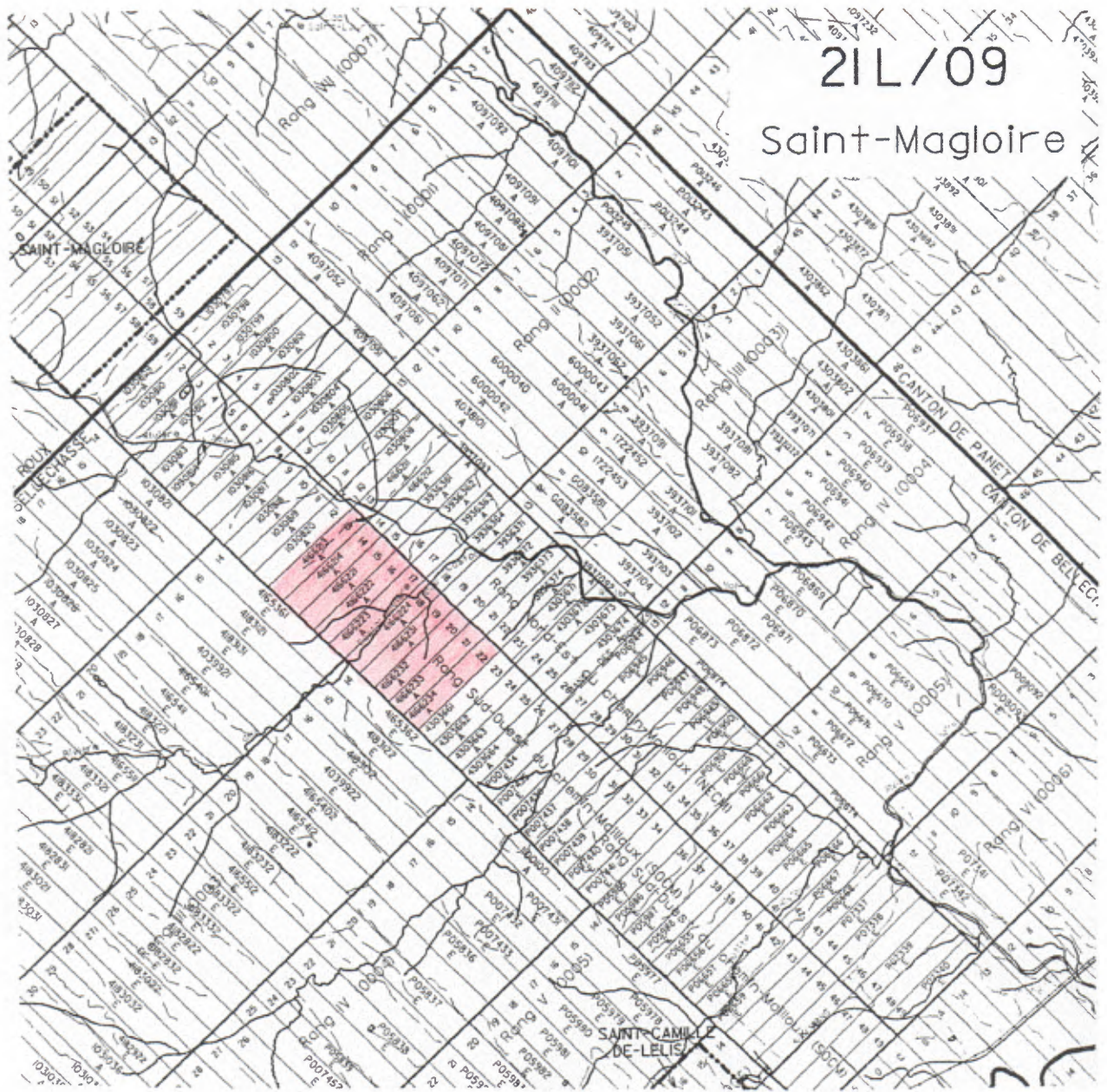


Figure 1. Location, Bellechasse Gold-Base Metal Belt, Québec.



Carte de titres miniers mise à jour le 25 février 2003



Figure 2. Location of claims 4166213, 4166214, 4166221, 4166222, 4166223, 4166224, 4166231, 4166232, 4166233, 4166234, Bellechasse Township, Québec.

SURFACE FEATURES

The area supports a well developed rural and fully integrated woods-industry infrastructure including an excellent network of well maintained all-weather motor-roads.

Located in the northern foothills of the Appalachian Mountains, the topography is characterized by northeast-southwest trending ridges and valleys with a relief to 200 metres and maximum elevations of 600 metres above sea level. Agricultural land, interspersed with relatively young forest, is entirely given to forage crops. Much of the cleared land has reverted to scrub brush or has been seeded as softwood plantations. The upland forests are dominantly hardwood and are commercially sugared and cut for fuel. The valleys support a mixed bush of hardwood and softwood which is commercially harvested for pulp and lumber products in support of regional mills. Clear-cutting practices are commonly employed, greatly facilitating prospecting in freshly cut areas.

Bedrock exposure is sparse and largely restricted to the principal ridges, knolls and some roadcuts. Glacial moraine is the dominant cover on the high ground. Moraine consists of clay, sand and gravel with an extremely high content of small to huge boulders. The valleys contain glacial-fluvial deposits and boulder moraine reworked by recent streams.

Soil covers the surficial deposits. The soils have a well developed profile consisting of a surface humus horizon (A1) followed by a gray leached horizon (A2) a few centimeters thick, followed by an enriched zone (B) often extremely rich in iron oxide. Previous experience has shown soil sampling to be a technical success (Schaaf, 1985c).

DISTRICT GEOLOGY

The stratigraphy and structure of a large area surrounding and including the Bellechasse claims has been mapped by Cousineau (1990). Other definitive work in the region includes that of Beland (1957), Gorman (1954), St-Julien (1987), Gauthier et al. (1989), and Robert E. Schaaf & Associates (all references, section four).

Typical of the northern Appalachian fold belt, the district geology is characterized by northeast trending sedimentary, volcanic and intrusive sequences of lower Paleozoic age, tightly folded during the Taconic Orogeny and thrust faulted during the Acadian Orogeny. Williams (1979), St-Julien and Hubert (1975), St-Julien and Beland (1982), Beland (1982) and others have rationalized the tectono-stratigraphic framework of the district in terms commonly appreciated today (Figures 3 and 4).

The structure and metallogeny of the district are defined by the St-Victor Synclinorium, a major sedimentary-tectonic trough of Middle Ordovician rocks comprising the Magog Group, extending northeasterly across Bellechasse Township. The Synclinorium is approximately 10 kilometres wide in the district and is bounded on its northwestern margin by:

- a) The Serpentinite Belt, a highly disturbed terrane of oceanic Upper Cambrian to Lower Ordovician mélange and sedimentary rocks (Saint Daniel Formation) and ophiolites;
- b) An older Precambrian-Cambrian sequence of continental felsic to mafic extrusives and sedimentary rocks (Caldwell Formation);
- c) And granitic blocks of uncertain affinity.

The Serpentinite Belt represents vestiges of the proto-Atlantic oceanic crust which were obducted onto Cambrian continental rocks (Caldwell Formation) to the northwest. The thrust fault (obduction zone) which marks this contact represents one of the major structural features of the Canadian Appalachians: the Baie Verte – Brompton Line. This southerly dipping thrust fault separates the Humber Zone, rocks of the early Paleozoic continental platform (locally Caldwell Formation) from the Dunnage Zone, rocks of the once mobile oceanic domain (locally the Magog Group and Serpentinite Belt).

To the southeast, the St. Victor Synclinorium is bounded by the Guadeloupe Fault, which marks the contact with Silurian-Devonian sedimentary sequences of the Connecticut Valley – Gaspé Synclinorium extending into Maine. Volcanic rocks, possibly part of the Ascot Formation and time correlatives of the Magog Group, occur sporadically along the boundary zone. The Ascot volcanics are tectonic relicts of an early Paleozoic (Taconic) island-arc edifice, the likely provenance for Middle Ordovician Magog sedimentation.

The Magog Group is comprised of a syn- to post-orogenic flysch sequence deposited in a forearc basin, possibly in consequence of the convergence of the Ascot accretionary terrane at the Cambrian to Lower Ordovician North American continental margin. It is subdivided, in stratigraphically descending order, into the St. Victor, Beauceville, Etchemin, and Frontiere Formations. At least two generations of intrusive rocks, the Mafic Igneous Complex, occur as sills within the Etchemin and Beauceville Formation. The St. Victor Formation is not known in the immediate district; it is present mainly in the region to the southwest beginning in the Beauceville Region.

The Beauceville Formation is characterized by graphitic, phyllitic and sulfidic pelagic black shale containing minor chert. Volcaniclastic and tuffaceous horizons occur irregularly in the shale.

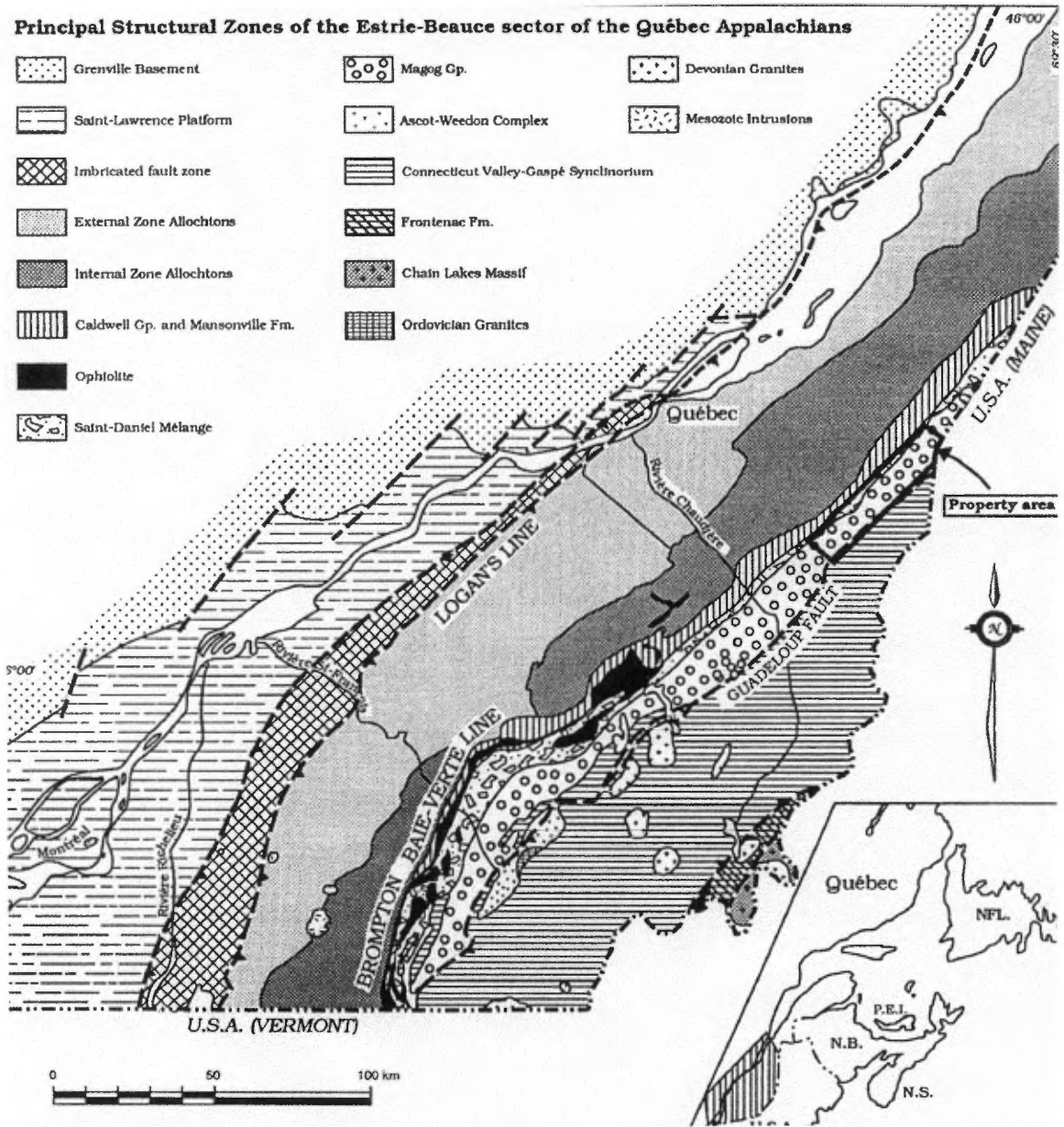


Figure 3. Tectonostratigraphic map of the Northern Appalachians (Williams, 1982).

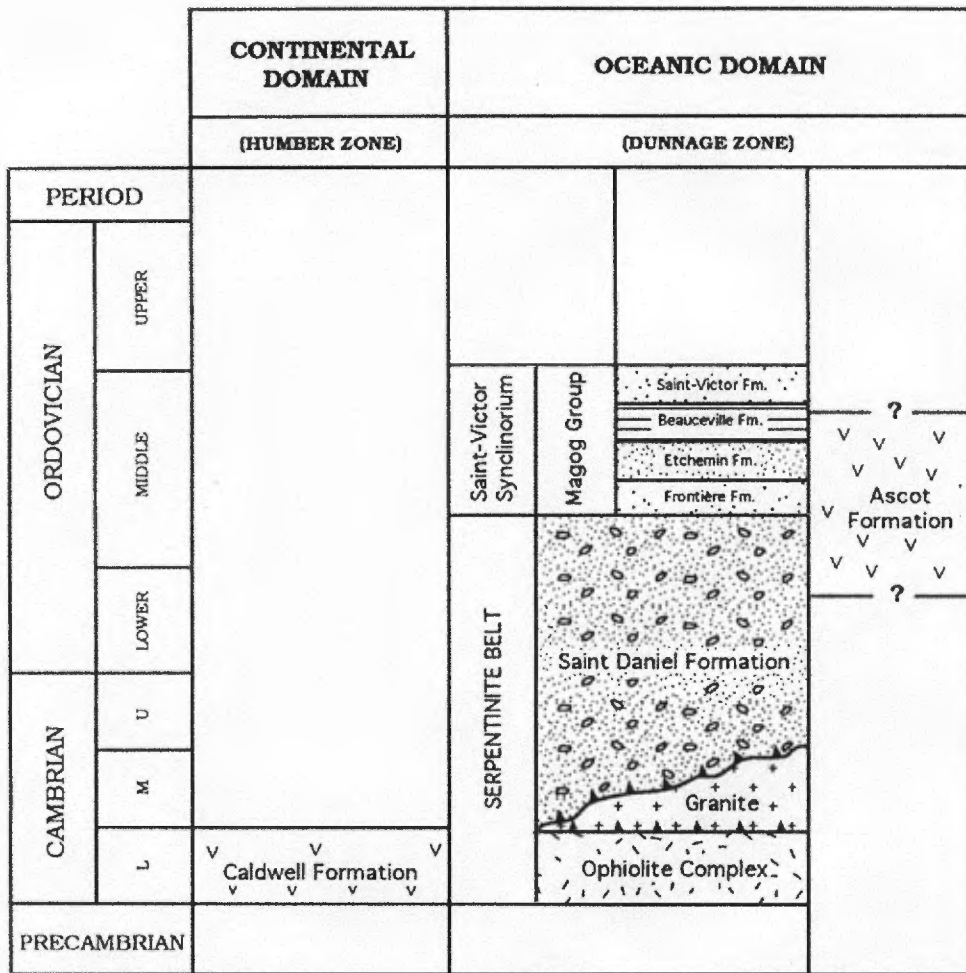


Figure 4. Bellechasse Mineral Belt, Stratigraphic Relationships.

The Etchemin Formation consists of turbiditic sequences of siliceous siltstone, mudstone and shale alternating with units of fine grained greywacke, tuffs and volcanoclastic rock. The basal units of the Etchemin Formation are notable as a lithological and magnetic marker horizon. They consist of weakly magnetic hematitic redbeds interstratified with magnetite-rich green mudstone and siltstone ("lean iron formation" or "LIF" in project terminology).

The Frontiere Formation is composed of coarser grained, turbiditic volcanoclastic rocks, conglomerates, sandstones and greywackes with thin interbeds of mudstone.

The Mafic Igneous Complex consists of a swarm of largely conformable, sill-like masses of gabbro. Individual sills vary from centimeter scale up to 250 metres in thickness. The complex probably has a pre-folding, subvolcanic multiple extrusive-intrusive, submarine origin.

As indicated, the Magog Group may be lateral time equivalents of the Ascot volcanics, the prolific massive sulfide producer belt of the Sherbrooke area. The base of the Beauceville Formation contains considerable graphite and syngenetic iron sulfides defined by a broad zone of multiple electromagnetic conductors, typical of a massive sulfide environment. One gold-bearing polymetallic massive sulfide occurrence, the Champagne Deposit, has been defined locally in the Beauceville Formation.

The St. Victor Synclinorium reflects continuing continental convergence following the collision of the Taconic island-arc (Ascot) with the passive continental margin. The Synclinorium plunges shallowly to the southwest and is characterized by tight to isoclinal folds exhibiting axial plane cleavage developed during the Acadian Orogeny (Cousineau, 1990). The dominant cleavage is steeply dipping and trends northeast-southwest. A weak S2 crenulation cleavage may be related to local linear trends of intense shearing which developed sub-parallel to the regional tectonic fabric during progressive deformation. Numerous doubly plunging antiformal-synformal F1 structures present throughout the area may also be related to changes in the stress-strain regime during progressive deformation. Regional metamorphism is of lower greenschist facies. Most of the rocks of the region are weakly to moderately foliated; phyllite, tending locally to slate, characterize most fine to medium grained sedimentary rocks.

Landsat imagery analysis of the area has revealed a pronounced pattern of east-west and north-south trending lineaments coextensive with possible late brittle faults reflected by offsets of airborne and ground magnetic anomalies and mapped stratigraphic offsets. All evidenced displacements are relatively small.

DISTRICT EXPLORATION HISTORY

The Bellechasse Mineral Belt is defined by the St. Victor Synclinorium and an alignment of notable mineral occurrences including gold-quartz lode showings, gold-bearing polymetallic massive sulfide deposits, and related sub-types of mineralization extending across Ware, Langevin, Bellechasse and Panet townships.

The first recorded discovery of gold in the Bellechasse Mineral Belt was in Ware Township at the site of the Wilfrid Beaudoin Occurrence in the early 1920's. A series of rock pits were put down but no further work is recorded.

Recorded exploration of consequence began in 1951 with the discovery of a deposit of copper-nickel-zinc associated with serpentinite near St. Fabien-de-Panet in Rolette Township.

In 1952, gold was found in Bellechasse Township at what today is known as the Bellechasse or Timmins showing. The occurrence was initially investigated by trenching and diamond drilling by N.A. Timmins (1938) Ltd. and the A.E. Rosen interests during 1952-1953 and subsequently by Black Hawk Mining Ltd. during 1960-1961. In 1976, Privex Mines Ltd. conducted bulk sampling and metallurgical testing.

A deposit of massive sulfide mineralization containing gold, silver, zinc, lead and copper, known as the Champagne Deposit, occurs at the Bellechasse-Panet townships boundary. The deposit was discovered in 1952 and was developed by diamond drilling until about 1957. Some minor work followed in 1960 and 1970.

During 1952-1953, the initial period of interest, and again during 1960-1961, exploration was conducted along the Bellechasse Mineral Belt across the full width of Bellechasse and Panet townships. Numerous additional gold and base metal occurrences were discovered but none was seriously tested by drilling or modern exploration methods.

The early mineral exploration philosophy in the area was based on the perception that high grade concentrations were necessary for an economic gold deposit. Changes in the price of gold beginning in 1972 and recognition of pervasive patterns of lower grade mineralization resulted in new perceptions of the known mineral centers and the possibility of large scale, low grade gold operations. Guided by the new philosophy, extensive review and reconnaissance undertakings were initiated by private interests in 1976 centering on several of the known gold-base metal occurrences along the Bellechasse Mineral Belt. Extensive mineral claims were established in Ware, Bellechasse and Panet townships in 1983 and in 1985, taken over by Golden Hope Mines Limited as the Bellechasse Project. Golden Hope Mines Limited, employing highly efficient modern exploration technology, undertook reassessment and elaboration of the known mineral occurrences and directed a full-scale grass-roots program to the discovery of new occurrences, not readily detectable by the old exploration methods previously employed.

Exploration work on the Bellechasse Project completed by Golden Hope Mines Limited during 1984-1993 included: airborne electromagnetic and vertical gradient magnetic surveys; soils geochemical surveys specific to gold, arsenic, copper, lead, zinc, and locally mercury; lithochemical surveys of all outcrop areas specific to gold, arsenic, copper, lead, and zinc; geological surveys at reconnaissance scales and in mineral zones, at detailed scales; and till sampling surveys in known mineral centers. Diamond drilling, totaling 31,822 feet (9,701 metres) as 58 holes was directed to known mineral centers and an assortment of mineral related anomalies.

The data base generated by this work readily translates to mineral potential: new gold domains were recognized (i.e. the North Zone occurrences) and many partially defined mineral-related anomalies remain to be investigated. Perhaps most importantly, geological controls specific to gold, previously unrecognized in the area, came into sharp focus.

During 1985-1987, J.R. Clark, Thrust Resources Inc. and Profco Resources Ltd. performed geological, geophysical and geochemical surveys in Langevin and Panet townships. Gold was found in Langevin Township at two locations associated with gabbro (LeBel, 1986; Clark and Wares, 1985; Chapman and Floyd, 1987; and Cavey and LeBel, 1986).

In 1986, Noranda Explorations Ltd. and Finneth Exploration Inc. acquired major land positions in Rolette and Talon townships, centered on the Eastern Metals Deposit and other ultramafic occurrences along the Serpentinite Belt where previously unrecognized gold, silver and cobalt associations had been detected (Gauthier, 1988b and Gauthier et al., 1987c). Considerable work was done but there have been no reports of significant results.

A new gold discovery was made by Golden Hope Mines Limited in Panet Township in 1987. The North Zone auriferous quartz-stockwork system was discovered in a previously unexplored geological environment. Visible gold has been seen in drill core (Burzynski, 1988b) with locally significant assay results, as well as in till pits dug along the laterally extensive zone.

Drilling conducted by private interests in early 1990 has extended the North Zone gold mineralization near the initial discovery into Rolette Township (Burzynski, 1991m). Additional drilling approximately ten kilometres southwest in Bellechasse Township also discovered North Zone style mineralization (Burzynski, 1991n), and seems to indicate the zone continues almost unchanged in its stratigraphic location over a strike length of approximately 13 kilometres.

In 1990-1991 Golden Hope Mines Limited and joint-venture partner St. Genevieve Resources Ltd. conducted detailed work on claims in Ware, Bellechasse and Panet townships. New grids were established over most of the claims for the purpose of detailed mapping. Ground geophysical surveys, lithochemical sampling, till surveys, drilling and stripping was conducted in numerous locations on the property. A new gold

discovery, the 88 Zone, was made 500 metres southeast of the previously known Timmins Zone at the Bellechasse showing (Burzynski, 1990c). Also, a new massive sulfide lens, the Champagne West showing, was discovered 600 metres southwest of the known Champagne Deposit (Dupuis and Burzynski, 1991).

Additional trenching, mapping and lithogeochemical sampling was conducted on the Bellechasse showing in 1993 under the auspices of the Entente Auxiliare Canada-Quebec sur le Developpement Minerale, entente #93-3B-204. This work discovered new gold mineralization, and confirmed that the mafic sills hosting the mineralization are repeated by folding and faulting to the northeast of the Timmins Zone.

BELLECHASSE PROJECT

**CLAIMS 4166213, 4166214, 4166221, 4166222, 4166223, 4166224,
4166231, 4166232, 4166233, 4166234**

New Work

The new work involved examination of outcrops and anomalies identified by previous surveys on the property. The ten claims were investigated through detailed prospecting and geological mapping. Samples collected will be sent for analysis which will be the subject of a later report. Major roads, wood roads, rivers and streams were traversed and prospected. As well, the Riviere des Castor and Riviere Boutin weres investigated where they traverse the claims and prospected for exposed surficial deposits and anomalous float.

The work was conducted during the period July 20th – August 3rd, 2003. Mapping and sampling was conducted by J. Burzynski, P.Geo., M.Sc., supervised by S. Prud'homme, P.Geo.

Geological Mapping

The property was mapped using existing access including range roads, highways 281, lot access roads, and the Riviere des Castors which traverses the property. Mapping and localization of outcrops was conducted using 1:15,000 scale government air photos using lot lines, roads and geographical features for local control. Dense foliage and inclement weather hampered the execution of the field work.

Existing data from previous surveys on the property (see reference section) was reviewed and compiled prior to the commencement of work, and specific areas were targeted for detailed reinvestigation. The central area of the claim block is located in low-lying ground occupied by the Riviere des Castors, and appears to be covered by thick alluvium and glacial sediments. Little outcrop was observed, with the exception of several large outcrops in the southern area of the claim block on elevated ground.

Figure 5 shows the relative location of airborne anomalies detected in a general property survey conducted by Golden Hope in 1987. The northern extremity of the claim group (lot 13) hosts a series of weak (open circles) to moderately strong (dark circles) electromagnetic conductors which represent the black graphitic shales of the Beauceville Formation.

The central area of the claim group (lots 16 – 18) hosts two moderately strong vertical gradient magnetics anomalies running NE-SW across the claims. These anomalies coincide with the location of the Riviere des Castors, which was singled out for detailed

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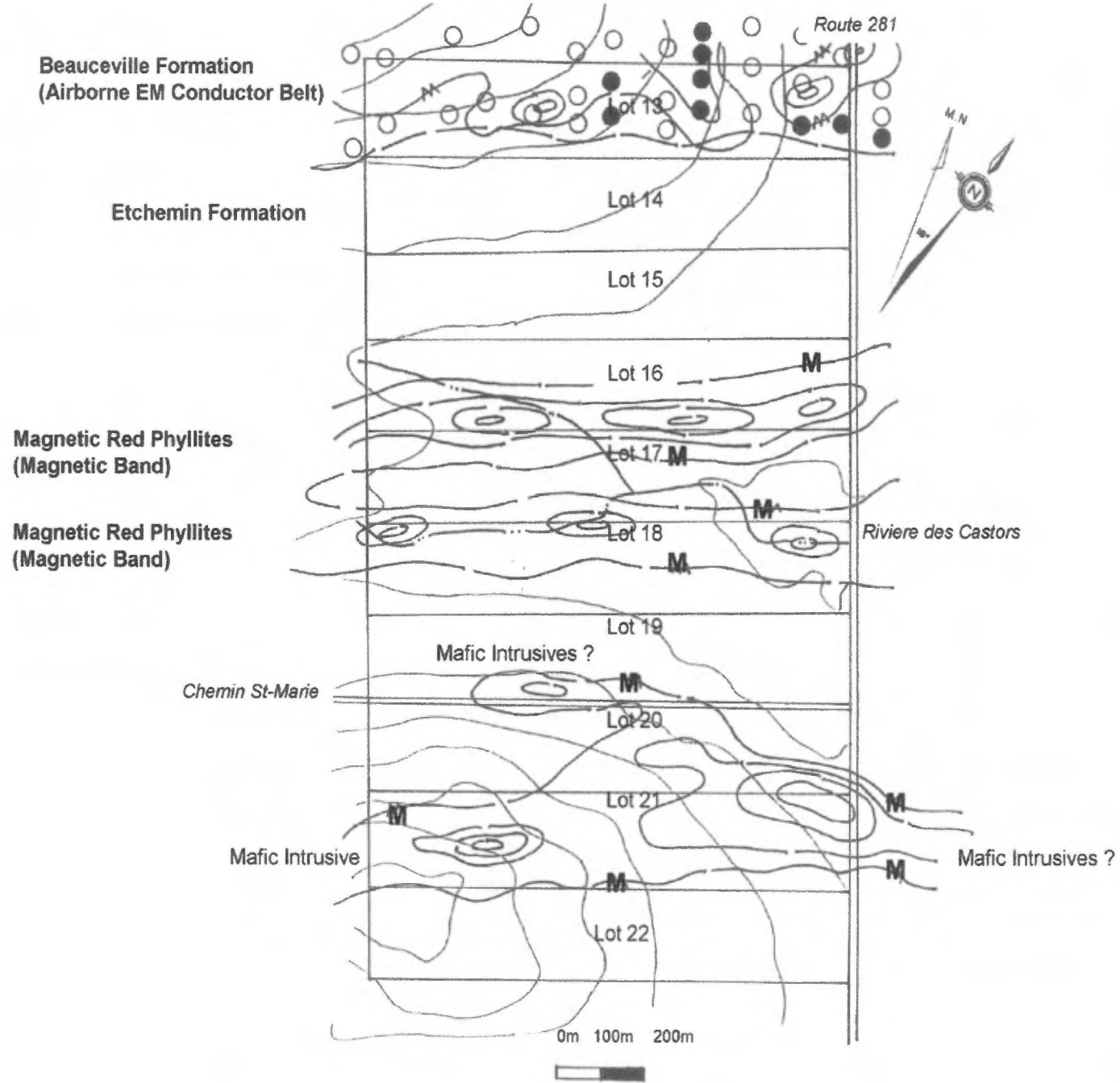


Figure 5. Airborne anomalies on the Claim Block.

prospecting to attempt to locate new outcrops and determine the source of the anomalies. No outcrop was found in the traverses of the river, and although numerous boulders including gabbro float were examined and tested with a hand-held SM-5 magnetometer, no significantly magnetic rocks were uncovered to explain the anomalies. Drill information examined from claims on strike to the NE of the claim block suggests that the anomalies are caused by the presence of magnetic green and mauve siltstones and mudstones located in the basal units of the Etchemin Formation.

The southern-most claims (lots 20-22) are host to a similar NE-trending vertical gradient magnetics anomaly. This area corresponds with elevated topography and the central area, lot 21, hosts significant outcrop. The new mapping uncovered a previously unmapped coarse-grained gabbro unit which corresponds to the central portion of the anomaly. The gabbro is weakly magnetic, and is the likely source of the airborne anomaly.

Stratigraphy, Structure and Mineralization

General

Interpretation of results from the work shows the group of ten claims cover the southern limb of the St. Victor Synclinorium of the Magog Group, and host two of the three Magog Group formations which outcrop locally: the Beauceville Formation and the Etchemin Formation. The basal member of the group, the Frontiere Formation was not encountered, but is presumed to be present just south of the claim group.

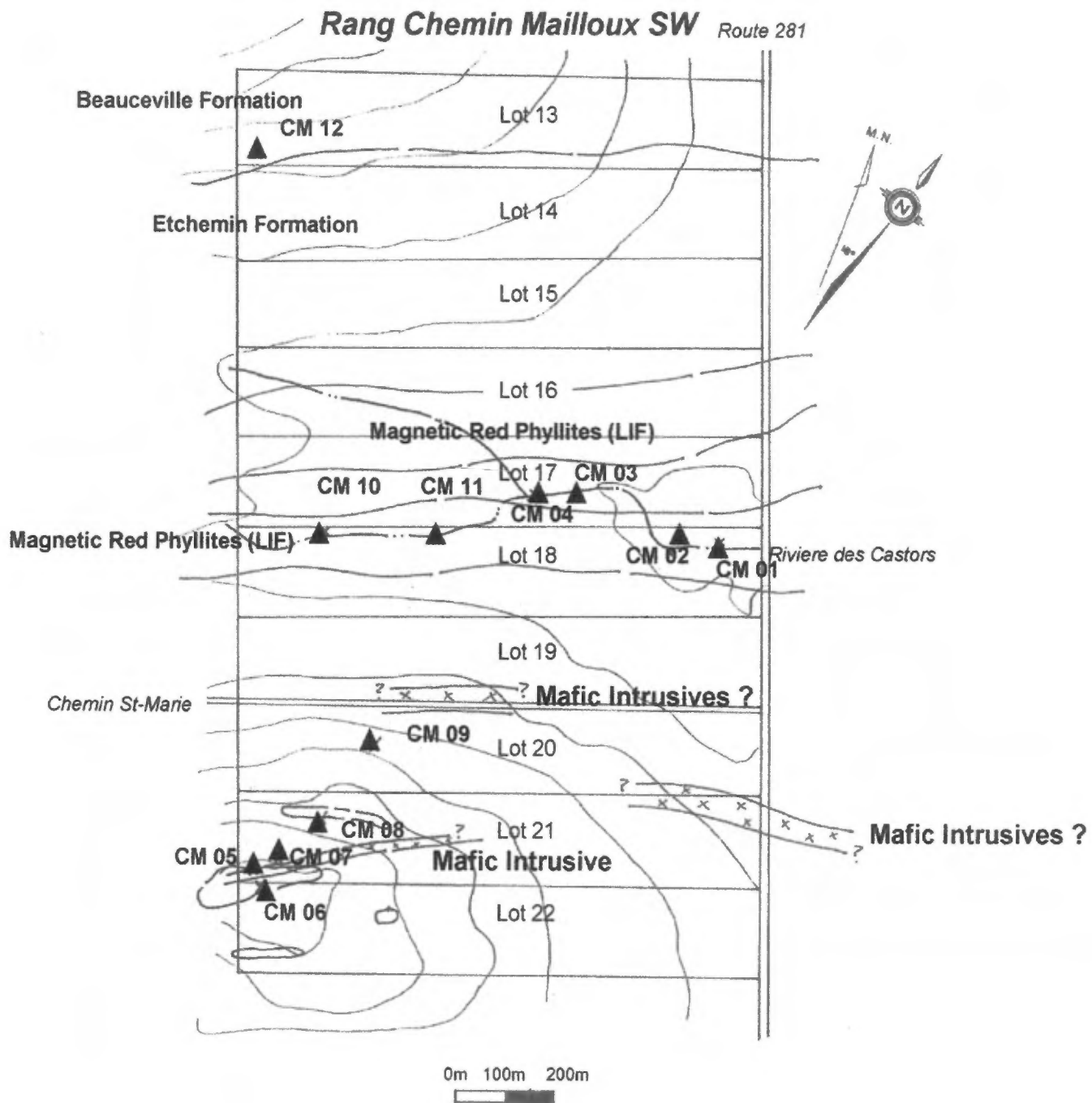
Mapping

Figure 6 shows the location of outcrops and float mapped in the current program. The geological mapping on the claims uncovered only sparse outcrop in the southern-most claims on the block. Outcrops were encountered in lots 21 and 22, descriptions are listed in Appendix B. Sub-crop and boulders were mapped and sampled in lots 20, 18, 17 and 13 (see Appendix B).

The outcrops mapped in lots 21 and 22 consist of predominantly siliceous grey-green siltstones and phyllites of the Etchemin Formation, with a general weak to locally moderate foliation (S1) in the regional trend of 045°/subvertical. Bedding relationships were not observed. More significantly, a weakly magnetic gabbro unit which corresponds to the airborne magnetics feature was uncovered (outcrop CM-05). The gabbro (located in the SW corner of lot 21) is medium to coarse grained, strongly chloritized and contains heavy iron oxide coatings along fractures. No visible sulfides were observed, and the unit had no visible quartz veining. Samples tested with a SM-5 magnetometer returned weakly magnetic readings.

Traverses in the Riviere des Castor did not successfully locate magnetic outcrops or boulders correlatable with the airborne anomalies. Several samples of alluvial material were collected from point bars and sand/gravel deposits along the river and examined

Figure 6. Outcrop locations and geological interpretation.



through panning for heavy minerals. The samples contained minor amounts of "black sand", including approximately 1% to 2% magnetite grains. No visible gold grains or base-metal sulfide grains were observed.

Geological Interpretation

Mapping of outcrops and float material on the claim block, combined with the compilation of existing data allows a general interpretation of the geology of the block (Figure 6). The northern area of the claim block (lot 13) is underlain by the Beauceville Formation, characterized by black phyllitic shales. Loose blocks of grey-black shales were mapped in the SW corner of lot 13. The southern limb of the Beauceville Formation on the claim block is defined by the southern extent of the EM conductors shown in historical airborne surveys. On the basis of mapped outcrop information and the historical airborne information, the remainder of the claim block is underlain by siltstones and mudstones of the Etchemin Formation, with a band of magnetic "red bed" basal marker units traversing lots 16-18. Isoclinal folding appears to repeat the Etchemin Formation sediments owing the location of mapped Etchemin Formation outcrops in lots 21-22. Similar to the context of the Bellechasse gold showing, a mafic unit (the coarse grained gabbro mapped in lot 21) occurs near the base of the Etchemin Formation, which is of further exploration interest. It is presumed that the magnetic basal Etchemin Formation marker horizons repeat south of the claim block, and that the Frontier Formation likely outcrops relatively near but south of these units.

Analytical Results

The objective of the current work program was to attempt to determine the source of the vertical gradient airborne anomalies located in the central and southern portions of the claim block, and to attempt to define new mineralized zones of the character of the nearby Bellechasse gold deposit.

No significant mineralization was encountered in the current program, and as a result no samples were submitted for analysis.

CONCLUSIONS AND RECOMMENDATIONS

No significant new mineralization was encountered in the mapping work covered in this report.

Despite the absence of evident surface mineralization, it is recommended that the claims be retained and that further work be conducted. The sparcity of overall outcrop (less than 5%) and the unexplained disturbances in the airborne magnetic features underlying the claims (Jagodits, 1987) present the possibility of unexposed mineralization, potentially of the character of the nearby Bellechasse gold showing. New mafic rocks mapped in the current program underline the possibility of finding associated mineralization on these claims through further exploration work.

Further work is recommended, including reconnaissance basal till sampling in the areas of the mafic outcrops and coincident magnetic anomalies. Till sampling has proven extremely effective in delineating underlying gold mineralization at the Bellechasse gold showing, in effect leading to the discovery of the 88 gold zone. A reconnaissance till survey is recommended for the areas covered by lots 19 – 22. High resolution magnetics are also suggested, as part of property-wide coverage, to attempt to further define precise zones for follow-up investigation.

Anjou, Québec
August 6th, 2003

A handwritten signature in black ink, appearing to read 'S. Prud'homme', is written over a circular professional seal. The seal is for a geologist in Québec, with the text 'GÉOLOGUE / GEOLOGIST' around the top edge, a fleur-de-lis in the center, and 'S. PRUD'HOMME #234' in the middle. The word 'QUÉBEC' is at the bottom of the seal.

S. Prud'homme, P. Geo.
O.G.Q. #234

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APPENDIX A: GEOLOGICAL LEGEND

LEGEND

LITHOLOGY - STRATIGRAPHY

- 6 MAFIC IGNEOUS COMPLEX
Intrusives (M. Ordovician)
6a Gabbro
6ab Basaltic
6ap Porphyritic
6b Diorite
6bq Quartz-Bearing
- 5 BEAUCEVILLE FORMATION
U.MAGOG Group (M. Ordovician)
5a Mudstone
5b Siltstone/Sandstone
 5c Greywacke
- 4 ETCHEMIN FORMATION
M.MAGOG Group (M. Ordovician)
4a Mudstone
4b Siltstone/Sandstone
 4c Greywacke
 4d Ferruginous Mudstone
(Lean Iron Formation, Red Beds)
 4e Conglomerate
- 3 FRONTIERE FORMATION
L.MAGOG Group (M. Ordovician)
3a Mudstone
3b Siltstone/Sandstone
3c Greywacke
 3e Conglomerate
- 2 SAINT-DANIEL FORMATION
Melange/Olistostrome (Cambrian -
M. Ordovician)
2a Mudstone
2b Siltstone/Sandstone
 2c Greywacke
 2d Ferruginous Mudstone
(Lean Iron Formation, Red Beds)
 2e Sedimentary Melange/Olistostrome
(Interbedded Mudstone, Siltstone,
Greywacke)
2ep Pebbly
2eb Blocky
 2f Ultramafic Volcanics
(Precambrian-Cambrian)
2fs Serpentinite
- 1 CALDWELL FORMATION
(Cambrian)
1a Mudstone
1b Siltstone
1c Sandstone
(Precambrian - Cambrian)
 1d Mafic Volcanics
 1e Ultramafic Volcanics
1es Serpentinite
- 1M BENNETT FORMATION
Metamorphosed Caldwell Rosaire and
Armagh Formations
1ma Mudstone

LEGEND

ABBREVIATIONS

LITHOLOGY

tu Turbiditic
tf Tuffaceous (volcanogenic sediments)

MINERALIZATION

VG Visible Gold
ASP Arsenopyrite
Cp Chalcopyrite
Gn Galena
Mag Magnetite
Py Pyrite
Po Pyrrhotite
Sph Sphalerite
Li Limonite
He Hematite
MnO Manganese Oxides
Sul Sulphides
Zo Zoisite
Ep Epidote
Cn Carbon
Cl Chlorite
Cb Carbonate (Probable Mg-Fe)
Cc Calcite
Cr Rhodocrosite
F Feldspar

VEINING

V Vein
Stgrs Stringers
Stk Stockwork
VS Vein system
Q Quartz
QCb Quartz carbonate
QF Quartz feldspar
QCbF Quartz carbonate feldspar

ALTERATION

Ser Sericitic
Chl Chloritic
Sil Silicious

Sil₁ weak to moderate
Sil₂ strong
Sil₃ hornfelsic or cherty

Grp Graphitic
Carb Carbonatized

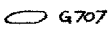

Cal calcareous

METAMORPHISM

Sch Schistose
Gn Gneissic

LEGEND




SYMBOLS

-  G707 Outcrop/Station and Sample Number
- x Boulder
-  Float - Locally Derived

Lithological Contacts

-  Observed, Dip
-  Inferred

Bedding

-  Inclined
-  Vertical
-  With Facing Direction

S₁ Foliation/Cleavage

-  Inclined
-  Vertical



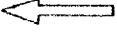




S₂ Foliation/Cleavage

-  Inclined
-  Vertical

Jointing

-  Inclined
-  Vertical

Lineation

-  L₁ (S₀/S₁)
-  L₂ (S₁/S₂)
-  Fold Axis
-  Syncline Axis
-  Anticline Axis
-  Fault/Shear
-  Fault, Movement Direction

APPENDIX B: SAMPLE DESCRIPTIONS

(Note: For sample locations see Figure 6.)

Sample CM-01

**Lot18, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township**

Claim 4166224

Gravel and alluvial material collected along the bank of the Riviere des Castors. Sample was panned and heavies were examined in the Ste-Justine field office. The sample contains approximately 75% coarse pebbles of greatly varying lithologies. All of the pebbles are very well rounded, and likely source from washing out of the till sheet overlying this portion of the claims. The majority of the pebbles are quartzite or schistose/phyllitic in nature, and resemble formations located well to the north of the claim group (i.e. the Caldwell Group). Sieving and panning of the fines produced a concentrate which consisted mainly of fine sand/quartz grains (20%). The remainder of the sample consisted of heavy fines, with approximately 2% magnetic fine black sand (magnetite). No base-metal sulfides or gold grains were observed.

Sample CM-02

**Lot18, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township**

Claim 4166224

Sample CM-02 was collected from a large boulder of float material in the Riviere des Castors. The boulder consists of a very fine-grained dark green gabbro. The gabbro is weakly epidotized, and contains <1% sub-millimetric blebs of interstitial pyrrhotite, typical of the mafic igneous rocks found in the Beauceville Formation, and likely deriving from north of the claim group.

Sample CM-03

**Lot17, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township**

Claim 4166223

Gravel and alluvial material collected along the bank of the Riviere des Castors. Sample contains approximately 60% coarse clasts (>0.5 cm), including approximately 5% milky white quartz pebbles. All fragments are well rounded, and likely derive from the overlying till sheets, almost certainly representing transported material. The remainder of the sample consisted of fine sandy grains which were panned to produce a heavy concentrate. The concentrate is similar to CM-01, with less than 3% black sand material. All of the heavies appear to be magnetite. No base metal sulfides or gold grains were observed.

Sample CM-04
Lot18, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166224

Same as CM-03. Sample contains approx. 3% heavies, no base-metal sulfides or gold grains observed.

Sample CM-05
Lot21, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166233

Sample CM-05 consists of a weakly magnetic gabbro unit which corresponds to the airborne magnetics feature which crosses Lot 21. The gabbro (located in the SW corner of the lot) is medium to coarse grained, strongly chloritized and contains heavy iron oxide coatings along fractures. No visible sulfides were observed, and the unit had no visible quartz veining. Samples tested with a SM-5 magnetometer returned weakly magnetic readings.

Sample CM-06
Lot22, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166234

Sample CM-06 is a very siliceous, very fine grained greenish-grey mudstone. The rock is weakly chloritic, with a thin (2-3mm thick) whitish surface weathering rind typical of the area. Fractures are locally coated with a weak iron-oxide staining, but no visible sulfides were observed, and the sample is non-magnetic. S1 @ 036°/71S. Bedding relationships were not observed. Etchemin Formation.

Sample CM-07
Lot21, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166233

Sample CM-07 was taken from a loose block north of outcrop CM-06. The sample is very siliceous, consisting of a very fine grained greenish-grey mudstone. Small sub-mm specs of whitish carbonate occur locally in the matrix. Fractures are coated with a light-brown iron-oxide stain. No visible sulfides were observed, sample non-magnetic. Etchemin Formation.

Sample CM-08
Lot21, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166233

Sample CM-08 was collected from an outcrop north of CM-07. The outcrop consists of dark grey-green weakly siliceous siltstone (fine grained). S1 planes are coated with weak iron oxide staining. S1@045°/84°N. Bedding relationships were not observed. No visible sulfides, outcrop non-magnetic. Etchemin Formation.

Sample CM-09
Lot20, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166232

CM-09 consists of loose blocks of float which appear to be sub-crop. The blocks are moderately to strongly siliceous, greenish-grey and very fine grained. The blocks are likely fine-grained siliceous mudstone of the Etchemin Formation. No sulfides were observed, sample is non-magnetic.

Sample CM-10
Lot18, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166224

Sample CM-10 consists of gravel and alluvial material collected along the bank of the Riviere des Castors. The sample contains approximately 70% coarse clasts (>0.5 cm), including approximately 3% milky quartz pebbles. The pebbles consist largely of phyllitic and schistose material, are generally well rounded and likely derive from the overlying till sheets. The remainder of the sample consists of fine sandy material which was panned to produce a heavy concentrate. The concentrate contained approximately 2-3% black sand material. Nearly all of the heavies appear to be magnetite. No base metal sulfides or gold grains were observed.

Sample CM-11
Lot18, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166224

Similar to sample CM-10, sample CM-11 consists of gravel and alluvial material collected along the bank of the Riviere des Castors. The sample contains approximately 70-75% coarse phyllite, schist and quartzite clasts (>0.5 cm), including approximately 3% milky quartz pebbles. The pebbles are generally well rounded, and likely derive from the overlying till sheets. The remainder of the sample consists of fine sandy material which was panned to produce a heavy concentrate. The concentrate contained approximately 2-3% black sand material. Nearly all of the heavies appear to be magnetite. No base metal sulfides or gold grains were observed.

Sample CM-12
Lot13, Rang Chemin Mailloux Sud-Ouest
Bellechasse Township
Claim 4166213

Sample CM-12 was collected from loose float in the SW corner of lot 13. The float material consists of weakly graphitic phyllitic siltstone with slight to moderate iron oxide staining along cleavage planes. Traces of pyrite observed in the siltstone matrix. Sample is non-magnetic.


APPENDIX C: CERTIFICATE

CERTIFICAT

Je, soussignée, Sylvie Prud'homme, certifie que:

1. Je suis géologue, domiciliée à Anjou, Québec.
2. Je détiens un diplôme de l'Université de Montréal, délivré en 1979, à titre de Bachelière ès Sciences en géologie.
3. Je suis un membre en règle de l'Ordre des géologues du Québec.
4. Je travaille dans le secteur de l'exploration minérale depuis 1979.
5. J'ai supervisé la préparation du présent rapport ainsi que les travaux d'exploration qui en sont le sujet. Le présent rapport est basé sur les informations contenues dans les rapports et documents fournis par Golden Hope Mines Ltd., sur les travaux exécutés ainsi que sur mes propres observations de terrain lors de ma visite sur le site du 13 mars au 2 avril 2003.
6. Je ne détiens aucun intérêt direct ou indirect dans la propriété couverte dans ce rapport, ni dans les titres de Golden Hope Mines Ltd., ni dans ceux de ses compagnies filiales ou associées.

Anjou, le 6 août 2003


Sylvie Prud'homme, P. Geo.

