Report on mineral exploration activities in Québec

PUBLISHED BY « GÉOLOGIE QUÉBEC »

Director
Alain Simard

Technical supervision
André Beaulé

Page make-up
Charlotte Grenier

Cover page
Diamond Size :4,60 mm X 4,20 mm X 3,54 mm
Weight : 0.685 carat
Photo courtesy of Twin Minning, président Hermann Derbuch

Dépôt légal – Bibliothèque nationale du Québec
ISBN : 2-551-21487-4

HIGHLIGHTS

The 2001 annual report provides an overview of mining exploration activity in each geological province and outlines the mineral potential of Québec's regions. Given the number of important discoveries made throughout the year, the diversification of targeted commodities, and the very favourable perception of mineral exploration companies regarding Québec's mineral potential, the number of exploration projects and the amounts invested remained stable relative to last year. A significant increase in the number of diamond exploration projects in the Near North region was noted, however.

The Abitibi Subprovince remains a prime target for base metal and precious metal exploration. **Maude Lake Exploration** obtained promising drill results on its Comtois property, located west of Lebel-sur-Quévillon. Drillhole COM-01-80 intersected 11.2 m at a grade of 3.0 g/t Au, including a 3.7-m interval at 7.8 g/t Au. On the Croinor property, located 70 km east of Val-d'Or, **South Malartic Exploration** continued stripping and drilling programs, which yielded interesting gold intersections. Drillhole CR-01-40 intersected several zones, including an interval of 1.29 m at a grade of 8.5 g/t Au. This project contains a resource of 3,081,000 metric tonnes at a grade of 3.04 g/t Au. A bulk sampling program on the Fenelon project, located 95 km northwest of Matagami, was completed by **International Taurus Resources** and **Fairstar Explorations**. Approximately 14,000 metric tonnes of ore were extracted and processed, from which 4,213.4 ounces of gold were recovered. **Major General Resources** and **Cameco Gold** continued their drill program on the Despinassy property, located 55 km northeast of Amos. Drill intersections yielded significant gold values, such as 16.75 g/t Au over 0.7 m, within alteration zones that yielded grades of 1.4 g/t Au over 19.5 m. **Cambior** and **Aurizon Mines**, joint owners of the Sleeping Giant mine, located 70 km north of Amos, announced an increase of their mining reserve estimate following an exploration program. Drillholes successfully delineated 218,000 metric tonnes of ore at an average grade of 12.1 g/t Au. In the Desmaraisville area, stripping by **Ressources Nomans** helped outline a new gold-bearing vein system; channel samples from two veins respectively yielded 30 g/t Au and 100 g/t Ag over 1 m, and 6 g/t Au and 3 g/t Ag over 1.2 m. On the Fenton property, south of Chapais, investigations by **Sudbury Contact Mines** confirmed the highly auriferous nature of the deposit. Drillhole 110-01-02 intersected 2.92 m at a grade of 9.02 g/t Au north of the Main Zone. On August 17th, **Agnico-Eagle Mines** inaugurated the Penna shaft at the Laronde mine. An important exploration program is underway at depth on zones 20 North and 20 South and on the El Coco property, adjacent to the Laronde mine. The **Explorers Alliance Corporation** obtained encouraging results on its Bonhomme property in Beschefer Township. Drillhole EBV01-1 intersected 1.0 m at 1.79% Cu, whereas drillhole EBV01-2 yielded 1.83% Cu over 1.5 m. West of Joutel, **Cancor Mines** continued their work on the Gemini project. A new massive sulphide zone, dubbed *Zone 98*, was discovered during the year. Drillhole 98 intersected 5.52 m grading 1.06% Cu, 10.7 g/t Ag, and 0.41 g/t Au. **Southern Africa Minerals Corporation** completed a 2-hole drill program on the Caber North property and, in partnership with **SOQUEM INC.**, a 4-hole program on the Caber property. Drillhole SAF-01-98, on Caber North, intersected 3.4 m grading 3.7% Cu. In the Chibougamau area, **Loubel Exploration** and **Inmet Mining Corporation** completed a drill program on the Lemoine property. Preliminary results include 0.51% Cu over 3 m, and 0.75% Zn over 1 m. **Aurora Platinum Corporation** released drill results throughout the year from the Midrim-Belleterre projects in the Témiscamingue region. The best results obtained from the Midrim deposit are 2.52% Cu, 1.37% Ni, 0.78 g/t Pt, and 2.14 g/t Pd over 13.02 m, and 1.28% Cu, 0.94% Ni, 0.50 g/t Pt, and 1.38 g/t Pd over 12 m. On the Alotta showing, a 21-m section yielded 2.14% Cu, 2.0% Ni, 0.50 g/t Pt, and 1.74 g/t Pd, whereas a drillhole on the Patry showing intersected 1.45 m grading 2.91% Cu, 6.2% Ni, 0.28 g/t Pt, and 0.45 g/t Pd. The company also revealed it had discovered a kimberlite pipe on the property. In September, **Loubel Exploration** announced the first results from its prospecting campaign on the Kelly Lake property. Grab samples collected from several strippings yielded grades reaching 0.5% Cu and 0.5% Ni. These new discoveries, combined with the advanced exploration programs conducted on known deposits, illustrate the attractive mineral potential of the Abitibi and Pontiac subprovinces.

In the James Bay region, numerous exploration programs yielded significant results for gold, base metals, platinum group elements, and diamonds. For instance, **Matamec Explorations** announced drill intersections in iron formation on the Sakami property (Zone 26) of 9.7 g/t Au over 11.8 m, including 28.7 g/t Au over 2.5 m, and 3.98 g/t Au over 22.07 m, including 6.4 g/t Au over 12.67 m and 24.2 g/t Au over 2.59 m. The Sakami fault zone (1.04 g/t Au over 119.5 m on surface) contains Zone 23 (1.87 g/t Au over 9.7 m on surface), Zone 25 (1.7 g/t Au over 20.8 m on surface and 2.51 g/t Au over 54.4 m in drillhole), and Zone 26. A study conducted by the INRS (Institut national de la recherche scientifique) confirmed the economic potential of the Menarik property held by **Ressources Minières Pro-Or**; the property contains an indicated chromite resource of 2.6 Mt and an additional inferred resource of 1.1 Mt, at a combined grade of 8.7% Cr_2O_3. On the La Grande Sud project, work by **Cambior** and **Virginia Gold Mines** led to the discovery of a new auriferous zone, dubbed Zone 30, which is similar to Zone 32 (inferred resource of

4.2 Mt at 2.1 g/t Au, 0.2% Cu). A drillhole in Zone 30 yielded 1.7 g/t Au and 0.18% Cu over 75.4 m. **Sirios Resources** and **SOQUEM INC.** outlined a new type of gold mineralization on the Aquilon property. The best results obtained in channel samples include 2.44 g/t Au over 3.8 m, 1.43 g/t Au over 2.25 m, and 0.54 g/t Au over 6.0 m in a sulphide-rich, silicified basaltic unit. Investigations by **Virginia Gold Mines** on the Eleonore property led to the discovery of new corridors with porphyry-type copper, gold, and silver mineralization in dioritic to tonalitic intrusions. Grab samples yielded up to 14.28% Cu, 1.9 g/t Au, and 75 g/t Ag, and 2.74% Cu, 19.29 g/t Au, and 54 g/t Ag. In diamond exploration, **Majescor Resources** continued its till sampling program and geophysical surveys in the Wemindji area. Their results confirmed the potential for the discovery of kimberlite pipes. In the same area, **Dianor Resources** announced the presence of a clear yellow, octahedral to cubic microdiamond in a lamprophyre dyke on the Yasinski North property. In the Eastmain area, **SOQUEM INC.** and **Eastmain Resources** detected several new highly auriferous veins, including vein V12 with 118.16 g/t Au over 0.6 m, west of the Clearwater deposit (indicated resource of 700,000 tonnes at 10.43 g/t Au (uncut) and inferred resource of 420,000 tonnes at 4.15 g/t Au). In the Monts Otish area, **Ashton Mining of Canada** and **SOQUEM INC.** announced they had intersected in drillhole two kimberlitic bodies spaced one kilometre apart. The first discovery, now called Renard 1, yielded 54 microdiamonds and 5 macrodiamonds in a hypabyssal facies. The second discovery, Renard 2, yielded 116 microdiamonds and 29 macrodiamonds in hypabyssal and diatreme facies. Following this announcement, several exploration groups acquired properties in this area and north of Lac Mistassini, making the region one of the prime target areas for diamond exploration in Québec. Given the new discoveries of gold mineralization, porphyry-type, and massive sulphide mineralization, as well as the confirmed diamond potential of the Near North region, the level of interest should remain fairly high in this area for the year 2002.

In 2001, **Niocan** continued the procedures to obtain an authorization certificate in order to finance the production startup costs of its niobium deposit in the Oka Carbonatite Complex. Near Thetford-Mines, **Ressources Allican** discovered PGE concentrations in chromitites from the Hall deposit (average of 2.33 g/t PGE, with 1.44 g/t Pt+Pd and maximum values of 20 g/t Pt+Pd) and from the Starcore showing (up to 20.7 g/t Pt+Pd). Values between 0.51 g/t and 0.77 g/t Pt+Pd were obtained from bedded chromitites (American Chrome Jr. and Stewart Mine showings) and from pyroxenites (Lac Bisby and Colline Diamond showings). On the Sainte-Marguerite property near Causapscal, **Ressources Appalaches** cut two new quartz and massive sulfide veins in drillholes that gave 32 g/t Au over 0.9 m and 38 g/t Au over 0.2 m. **Scorpio Mining Corp.** defined, through channel sampling, the gold potential of the following veins : Baker vein (average of 14.4 g/t Au over 41.5 m), Marleau vein (average of 4.11 g/t Au over 131 m), Marleau Breccia Zone vein (average of 3.08 g/t Au over 8.08 m), Mersereau vein (average of 8.57 g/t Au over 70 m), and Blue Vein (between 3.70 g/t and 20.77 g/t Au from a bulk sample). In Boisbuisson Township, **Système Géostat International** cut 2.23 % Cu and 22 g/t Ag over 9 m, including 2.6 % Cu and 25 g/t Ag over 3 m, in the Cu-Ag-rich cap rocks of the old Mines Madeleine deposit.

In the Ungava Trough, **Canadian Royalties** and **Ungava Minerals** outlined interesting PGE mineralization in the Expo-Ungava zone and on a new property (Phoenix), from which the company reported assays of 2.70% Ni and 0.78% Cu over 5.37 m, as well as grades of 2.67 g/t PGE (Pt+Pd) and 0.126% Co in drillhole TK-01-04. The mineralization consists of massive sulphides and is located near the base of a Raglan-type ultramafic sill (TK sill). An assay of 6.48 g/t PGE over 1.5 m was obtained below this interval. In the Rae Province (or southeast Churchill), the company **WMC Exploration** completed several thousand kilometres of airborne geophysical surveys, as well as prospecting, geological mapping, and drilling programs for their Quebec-7 project. A few Cu-Ni showings were discovered and drill-tested during the summer and fall, 2001. In the fall of 2000, **WMC** had acquired mineral exploration licences covering nearly 13,000 km^2.

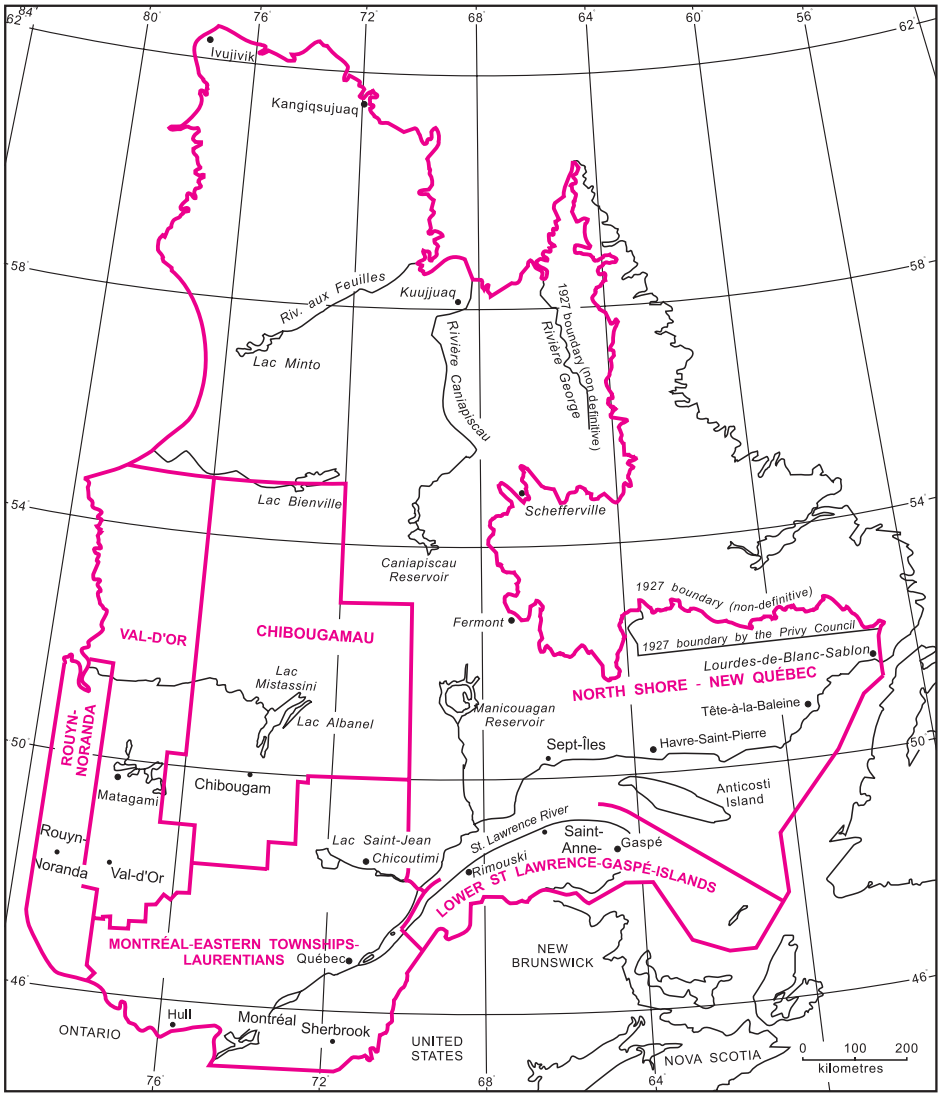
In the Côte-Nord region, **Appalaches Resources** and **Marum Resources** outlined an important EM conductor south of the B-20 property. This property, along with the Baie des Sables property, are located along the northeastern and eastern margins, respectively, of the Rivière-Pentecôte anorthosite. Ni-Cu occurrences as well as a platinum showing (up to 2.5 g/t Pt) are associated with pyroxenite horizons cutting the anorthositic rocks.

In the Far North region of Québec, geological mapping at 1:250,000 scale by Géologie Québec helped detail the geology and assess the mineral potential of the northeastern Superior Province, thus opening new territories to mineral exploration. NTS sheets 34K, 34L, 34O, 35B, and the southern half of sheet 35G were mapped.

The search for new dimension stone deposits was concentrated in three areas. In the Portneuf region (NTS 31P/01), **A. Lacroix et Fils Granite** proceeded with stripping and sampling work in a greyish black, coarse-grained tonalitic and dioritic gneiss. The property is identified as the Lac-Gaulois property. In the Saguenay-Lac-Saint-Jean region (NTS 22E/14), **A. Lacroix et Fils Granite** also began stripping and sampling work in a greyish pink, medium-grained migmatized gneiss, on the Rivière-des-Prairies

property. In both cases, the properties were developed and operations began over the course of 2001. In the Bas-Saint-Laurent region (NTS 21N/07), **Glendyne** conducted an extensive drill program in order to increase reserves in its black slate deposit mined for the production of roof tiling.

In the industrial minerals sector, the Magnola plant operated by **Noranda**, located in Asbestos in the Eastern Townships, increased its magnesium metal output. **McKenzie Bay International**, in partnership with **SOQUEM INC.**, commissioned a bankable feasibility study on the Chibougamau vanadium project. **Raymor Industries** acquired the facilities at the former Beacon mine east of Val-d'Or, with the objective of building a pilot plant to produce lithium metal from spodumene extracted from the LaMotte deposit located near Amos, in the Abitibi region. In conclusion, industrial mineral prospecting activities in southern Québec remained stable in 2001, mainly due to the efforts of the various regional mining exploration funds.



M. Alain Simard, director
Direction de la géologie
5700, 4e Avenue Ouest, suite A-208
Charlesbourg (QC) G1H 6R1
Phone: (418) 627-6274
Fax: (418) 643-2816
E-mail: alain.simard@mrn.gouv.qc.ca

M. Pierre Verpaelst, head of service
Service géologique de Québec
5700, 4e Avenue Ouest, suite A-210
Charlesbourg (QC) G1H 6R1
Phone: (418) 627-6276, extension 5059
Fax: (418) 643-2816
E-mail: pierre.verpaelst@mrn.gouv.qc.ca

M. Robert Marquis, head of service
Service géologique du Nord-Ouest
400, boul. Lamaque, suite 1.2
Val-d'Or (QC) J9P 3L4
Phone: (819) 354-4514, extension 232
Fax: (819) 354-4558
E-mail: robert.marquis@mrn.gouv.qc.ca

Mrs Chantal Dussault, head of service
Service à la clientèle de l'exploration
et du marketing
5700, 4e Avenue Ouest, suite A-208
Charlesbourg (QC) G1H 6R1
Phone: (418) 627-6288 extension 5281
Fax: (418) 643-2816
E-mail: chantal.dussault@mrn.gouv.qc.ca

M. Patrick Rissmann, head of service
Service de la géoinformation
5700, 4e Avenue Ouest, suite A-214
Charlesbourg (QC) G1H 6R1
Phone: (418) 627-6269, extension 5219
Fax: (418) 643-2816
E-mail: patrick.rissmann@mrn.gouv.qc.ca

Mrs Lucie Ste-Croix, head of service
Service des minéraux industriels et
de l'assistance à l'exploration
5700, 4e Avenue Ouest, suite A-206
Charlesbourg (QC) G1H 6R1
Phone: (418) 627-6287, extension 5265
Fax: (418) 643-2816
E-mail: lucie.ste-croix@mrn.gouv.qc.ca

CHIBOUGAMAU
375, 3e Rue, suite 2
Chibougamau (QC) G8P 1N4
E-mail: patrick.houle@mrn.gouv.qc.ca
M. Patrick Houle
Phone: (418) 748-2663
Fax: (418) 748-6061

MONTRÉAL - EASTERN TOWNSHIPS - LAURENTIANS
Complexe FTQ
545, boul. Crémazie Est, suite 1110
Montréal (QC) H2M 2V1
E-mail: serge.perreault@mrn.gouv.qc.ca
M. Serge Perreault
Phone: (514) 873-8814
extension 291
Fax: (514) 873-8983

ROUYN-NORANDA
82, boul. Québec
Rouyn-Noranda (QC) J9X 6R1
E-mail: pierre.doucet@mrn.gouv.qc.ca
M. Pierre Doucet
Phone: (819) 763-3748
extension 300
Fax: (819) 763-3798

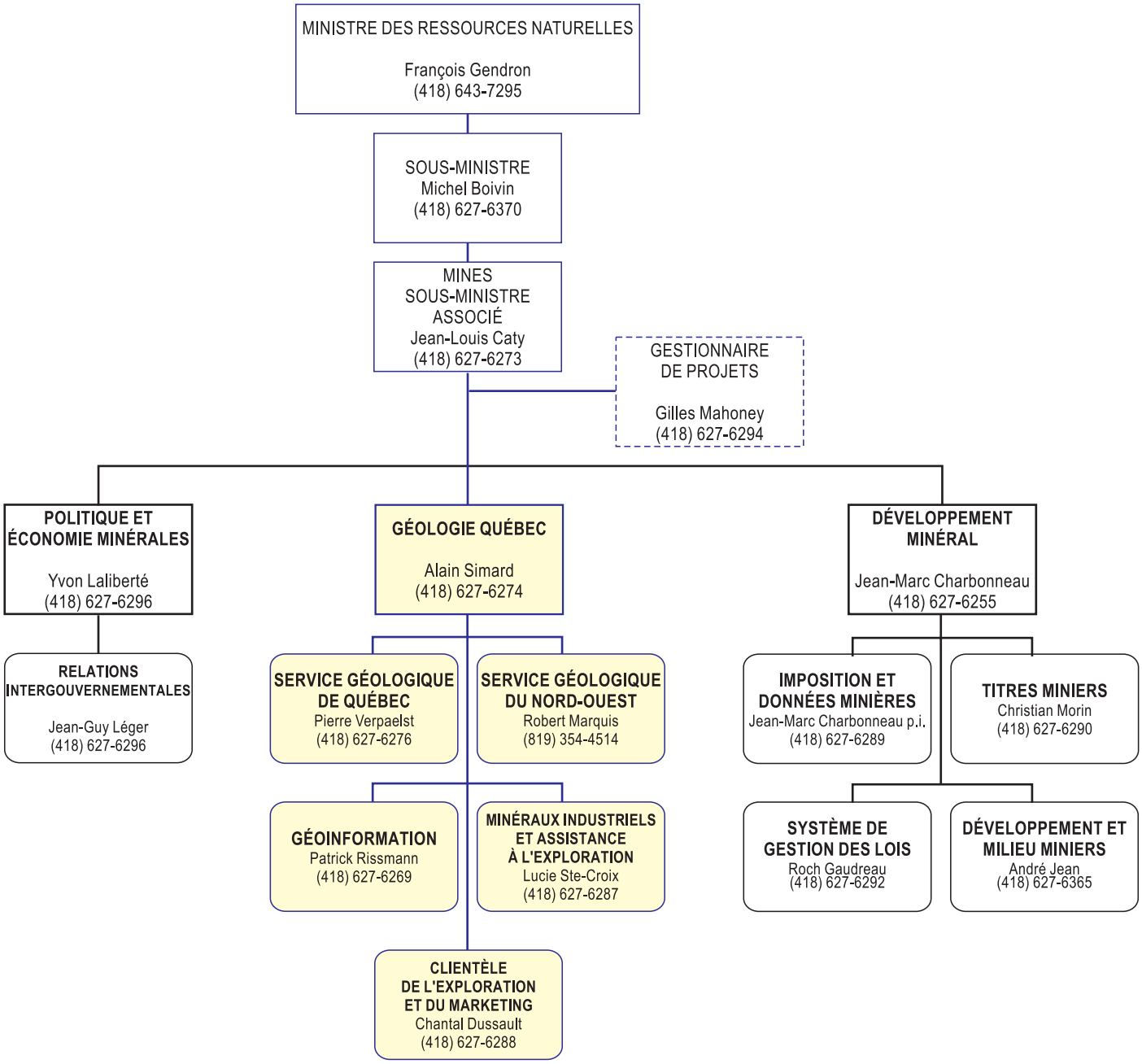
LOWER ST LAWRENCE - GASPÉ - MAGDALEN ISLANDS
124, 1re Avenue Ouest
Sainte-Anne-des-Monts (QC) G0E 2G0
E-mail: bur.mines.ste-anne@mrn.gouv.qc.ca
M. Serge Lachance
Phone: (418) 763-3622
Fax: (418) 763-2958

VAL-D'OR
400, boul. Lamaque, suite 1.02
Val-d'Or (QC) J9P 3L4
E-mail: james.moorhead@mrn.gouv.qc.ca
M. James Moorhead
Phone: (819) 354-4735,
extension 242
Fax: (819) 354-4558

NORTH SHORE - NEW QUÉBEC
456, rue Arnaud, suite 1.04
Sept-Îles (QC) G4R 3B1
E-mail: abdelali.moukhsil@mrn.gouv.qc.ca
M. Abdelali Moukhsil
Phone: (418) 964-8300
Fax: (418) 964-8506

Service outlet Mines-Sherbrooke
Édifice Yvette-Boucher-Rousseau
200, rue Belvédère Nord, suite 1.05
Sherbrooke (QC) J1H 4A9
E-mail: serge.perreault@mrn.gouv.qc.ca
Phone: (819) 820-3190
Fax: (819) 820-3946

Service outlet Mines-Hull
170, rue de l'Hôtel-de-Ville
suite 7.340
Hull (QC) J8X 4C2
E-mail: serge.perreault@mrn.gouv.qc.ca
Phone: (819) 772-3487
Fax: (819) 772-3958



february 14th, 2002

Summary

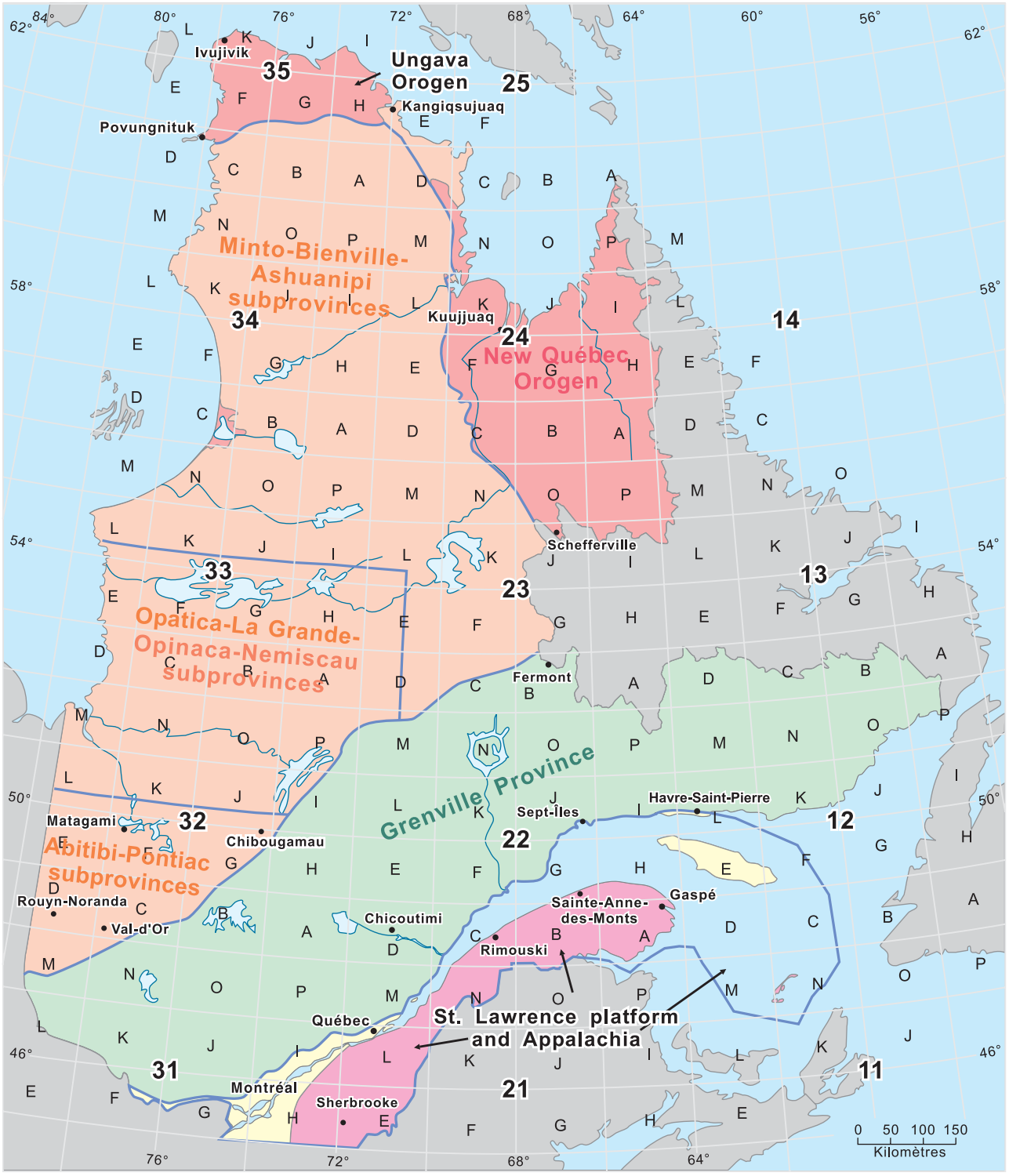


Figure 1. Geological and territorial subdivisions used in this report.

Chapter 1

Base and precious metals

Northern Part of the Superior Province (Minto, Bienville, and Ashuanipi Subprovinces)

Serge Perreault
Roch Gaudreau

The Ungava Peninsula forms a vast landmass covering about 350,000 km^2. Although this region is poorly explored, it nevertheless offers an interesting mineral potential. This chapter deals with the northern part of the Superior Province, which includes the Minto, Bienville, and Ashuanipi subprovinces.

In 2001, the MRN carried out four geological surveys : (1) in the Lac Couture area (NTS 35B) and the southern part of the Lacs Nuvilik map sheet (NTS 35G, Lac Allemand area) by Madore et al. (2001, see DV 2001-08); (2) in the Lac Bienville area (NTS sheet 33P) by Gosselin *et al.* (2001, see DV 2001-08); (3) in the Lac Anuc area (NTS sheet 34O) by Berclaz *et al.* (2001, see DV 2001-08); (4) in the Rivière Innuksuac area (NTS sheets 34K and 34L) by Simard *et al.* (2001, see DV 2001-08). During the year 2001, research teams at Géologie Québec undertook, in addition to these geological surveys, several geological and metallogenic studies (see DV 2001-08). With respect to the Mineral Potential Map Production System (MPMPS), a theoretical model was developed for diamond deposits associated with kimberlites and lamproites, and was applied to the Far North region by Labbé and Lamothe (2001, see DV 2001-08). As a result of the Far North Mining Exploration Program, Géologie Québec plans to have completed, in two years time, mapping at 1:250,000 scale of the entire Minto and Bienville subprovinces.

For the year 2001, a total of nine exploration projects were reported. These projects involved exploration expenditures of about $2.09M. This amount represents a substantial drop compared to the $3.0M spent in 2000. For each commodity or group of commodities, the distribution of exploration expenditures for the year 2001 is as follows : 66% for Ni-Cu-Co-PGE and 33% for Cu-Zn-Au. Four prospector projects were funded under the financial assistance program for prospectors, components A1 and A2.

In 2001, the principal deposit types that attracted the most exploration attention in the northern part of the Superior Province were : magmatic nickel (Ni-Cu ± Co ± PGE) deposits associated with ultramafic and mafic lavas and intrusions, iron formation-hosted gold deposits, and diamond deposits associated with kimberlites.

The most significant exploration projects conducted in 2001 in the Bienville and Minto subprovinces are listed in the following sections. Where possible, the projects are grouped and discussed according to the volcano-sedimentary belt in which they are located.

Ashuanipi Subprovince

The Ashuanipi Subprovince is an Archean gneissic-plutonic assemblage that lies in the eastern part of the Superior Province (Card and Ciesielski, 1986). With the exception of a few sectors, namely the Réservoir Caniapiscau area, where metamorphic conditions reached amphibolite facies, rocks in the Ashuanipi are metamorphosed to the granulite facies.

During the year 2001, prospector **Jean Fortin** (8 and 9; Figure 1A-1) concentrated his efforts in the Lac Courcy area, where the MRN had previously reported the presence of gold showings (Courcy 1 and Courcy 2; Thériault et al., 1998) associated with iron formations and mafic and felsic volcanic rocks of the Soucy and Soulard formations. Grades of 0.11 to 0.23% Cu and 379 ppb Au were reported.

Minto Subprovince

The Minto Subprovince is a gneissic-plutonic assemblage that occupies the entire northern part of the Superior Province. It is essentially composed of plutonic and gneissic rocks (including volcano-sedimentary belts) at the granulite or upper amphibolite facies (Card and Ciesielski, 1986). Volcano-sedimentary belts generally consist of paragneisses and mafic metavolcanic rocks. Banded iron formations, intrusive and effusive ultramafic rocks, felsic volcanic rocks, and rare carbonate horizons are also present.

Venus Belt

The geological setting of mineral occurrences discovered on the Gayot property is similar in many ways to the Kambalda nickel district in Australia (48 Mt at 3.6% Ni and 0.25% Cu). Surface work conducted by **Virginia Gold Mines** and **BHP-Billiton** uncovered four important Ni-Co-Cu-Pd-Pt showings and a few mineralized boulder fields (Gagnon, Gayot, Base Line, and L showings), spread out over a lateral distance of about 10 km. In 2001, **Virginia Gold Mines** and **BHP-Billiton** (3; Figure 1A-1) continued their investigations on the four mineralized zones

discovered in 2000. The best results from channel samples obtained in the 2001 field campaign were : 1.07% Ni, 0.61% Cu, and 0.93 g/t Pt+Pd over 6 m on the MIA showing; 1.13% Ni, 1.07% Cu, and 1.64 g/t Pt+Pd over 1.7 m on the Pantoufle showing; 4.35% Ni, 0.8% Cu, and 0.79 g/t Pt+Pd over 2.5 m, and 0.84% Ni, 0.17% Cu, and 1.02 g/t Pt+Pd over 22 m on the Nancy showing; and 1.79% Ni, 0.36% Cu, and 1.66 g/t Pt+Pd over 3.7 m, and 0.98% Ni, 0.22% Cu, and 1.07 g/t Pt+Pd over 25.85 m on the Gagnon showing. The two partners also reported the discovery of a new showing, Nancy East, where the best results from trenches were : 1.10% Ni, 0.28% Cu, and 1.32 g/t Pt+Pd over 19.9 m. During the winter of 2001, **Virginia Gold Mines** and **BHP-Billiton** conducted a drill program totalling 2,187 m. Drillholes testing the Nancy, Gagnon, and L showings yielded lower assays than those reported in trenches. In the L showing area, grades of 1.16% Ni, 1.93% Cu, and 2.16 g/t Pt+Pd over 0.4 m were reported from a sulphide vein hosted in felsic tuffs underlying an ultramafic flow. A drillhole testing the Pantoufle showing (Gagnon sector) yielded grades of 3.30% Ni, 0.15% Cu, and 3.29 g/t Pt+Pd over 0.5 m, from a sulphide vein also intruding felsic tuffs underlying an ultramafic flow.

Lac Qullinaaraaluk Intrusion

In August 2000, the Ministère des Ressources Naturelles (MRN) announced the discovery of an interesting nickel-copper showing, located 10 km north of Lac Qullinaaraaluk, about 200 km southeast of Inukjuak (NTS sheet 34G/10; 518 675E, 6 393 092N). The Lac Qullinaaraaluk massive sulphide showing is located in the east-central part of an intrusion ranging from mafic to ultramafic in composition. The irregularly-shaped intrusion extends for about 750 m in length, and is about 200 m wide on average. It is dominated by melanocratic gabbro, with a few pyroxenite horizons. The rocks are massive, fine- to medium-grained, and are not deformed. They intrude a suite of strongly deformed diatexites and metatexites and are themselves cut by pegmatite dykes and veins. Preliminary mapping of the showing revealed that massive sulphides outcrop sporadically over a strike length of about 25 m in a zone from 1 to 4 m wide. Disseminated to semi-massive mineralization was also observed throughout the intrusion, especially northeast of the main zone, where the rock is particularly rusty. Seven surface samples yielded grades ranging from 1.71 to 2.60% Ni, 0.08 to 1.80% Cu, and 0.15 to 0.27% Co.

In 2001, **Falconbridge Ltd** and **SOQUEM INC.** (6; Figure 1A-1) conducted a helicopter-borne Mag-EM survey and ground EMH surveys over several mafic intrusions in NTS sheet 34G and investigated their mineral potential for Ni-Cu-PGE mineralization.

In the same area, **Virginia Gold Mines** (5; Figure 1A-1) conducted a helicopter-borne Mag-EM survey and prospected several late, mafic and ultramafic intrusions cutting the Archean gneissic, tonalitic basement and paragneisses in the search for Ni-Cu-PGE mineralization. A few anomalous occurrences yielded low Ni-Cu-PGE grades.

The **Nunavik Mining Exploration Fund** continued its activities in 2001, searching for base and precious metals on two properties.

Outlook

The implementation of the Far North Project by Géologie Québec had an immediate impact on exploration in this region. Data from the lake sediment geochemical survey performed in 1997, combined with data from geological surveys conducted since 1998, have generated several potential exploration targets. In 2002, important exploration programs for nickel, copper, and cobalt are expected in the Venus belt, on the Gayot project and in the Lac Qullinaaraaluk area, as a follow-up on the discovery made by the Ministère des Ressources Naturelles. Diamond exploration should also resume in the region during the year.

References

CARD, K. D. and CIESIELSKI, A. (1986) - Subdivisions of the Superior Province of the Canadian Shield. Geoscience Canada, volume 13, pages 5-13.

LECLAIR, A. and ÉQUIPE GRAND NORD (1999) - Projet Grand-Nord : Cadre géologique régional, faits saillants et perspectives. *Dans* Explorer au Québec : Le défi de la connaissance, Ministère des Ressources naturelles, Québec, DV 99-03, page 9.

SIMARD, A. and collaborators (2001) - L'exploration minérale au Québec, de brillantes perspectives. Séminaire d'information sur la recherche géologique, programme et résumés 2001. Ministère des Ressources naturelles, Québec, DV 2001-08.

THÉRIAULT, R., LAMOTHE, D., and CHOINIÈRE J. (1998) - Nouvelles zones minéralisées dans la partie est des sous-provinces de La Grande et d'Opinaca (SNRC 23). Ministère des Ressources naturelles, Québec, PRO 96-06, 8 pages.

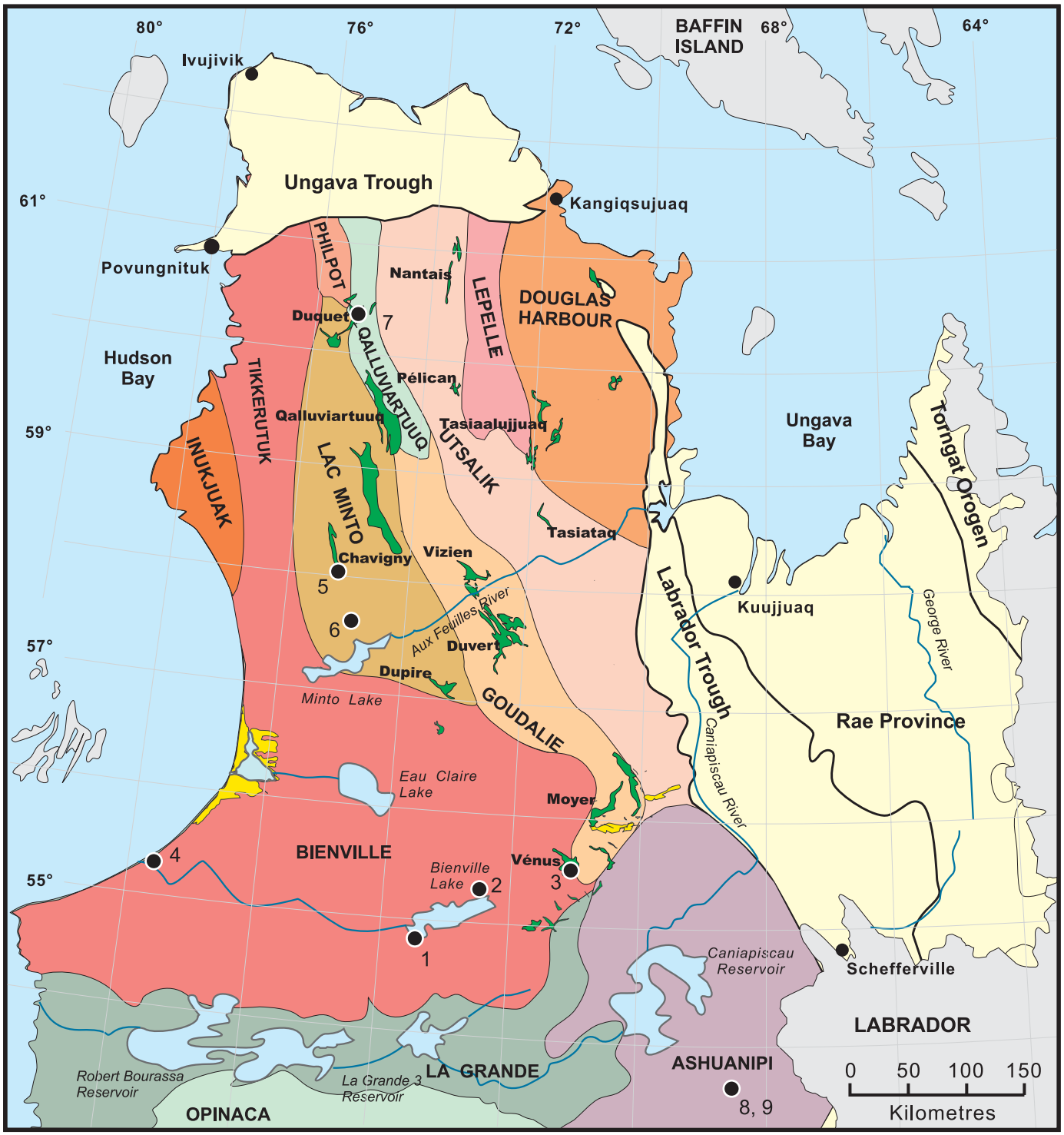


Figure 1A-1. Location of mining exploration projects in the Minto, Bienville and Ashuanipi subprovinces in 2001 and of the different tectonic domains and the major zones of greenstone rocks (in green) of the northern Superior Province. The paleoproterozoic volcano-sedimentary basins are illustrated in yellow and the archean and paleoproterozoic rocks of the Rae Province, the Ungava Trough, the Labrador Trough and the Torngat are in light yellow. *Map modified from Leclair (1999) and from Labbé et al. (2001).*

TABLE - Exploration projects in the northern part ofn the Superior Province in 2001.

N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK(1)
1		1A-1	23L/14	Pascal Lefebvre	Chacal	Au-Cu-Zn-Ag	Pr, G, E
2		1A-1	23M/07	André Lefebvre	Foxtrot	Ni-Cu-Co-EGP	Pr, G, E
3		1A-1	23M/11	Virginia Gold Mines Inc. / BHP Billiton	Gayot	Ni-Cu-Co-EGP	Pr, G, E, GpA, Mag, EM, T, S(18:2187)
4		1A-1	23N/05	Tomy Weetaltuk	5600-5	Ni-Cu-Zn-Pb	Pr
5		1A-1	34G, 34H	Virginia Gold Mines Inc.	Rivière Annie	Ni-Cu-Co	GpA(Mag-EM), Pr, G, E
6		1A-1	34G/10	SOQUEM Inc. / Falconbridge Ltd.	Ninuk	Ni-Cu-Co-EGP	Pr, G, E, GpA (Mag-EM), EM,
7		1A-1	35A, 35B	Virginia Gold Mines Inc. / SOQUEM Inc. / Hope Bay Gold Corporation	Duquet	Au-Cu-Zn-Ag	
8		1A-1	23C/10	Jean Fortin	Courcy A1	Au-Cu-Zn-Ag	Pr
9		1A-1	23C10	Jean Fortin	Courcy A-2	Au-Cu-Zn-Ag	Pr, Mag, E

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

James Bay Region Central Part of the Superior Province (Opatica, Opinaca, Nemiscau, and La Grande Subprovinces)

Patrick Houle

In the James Bay region, exploration expenditures amounted to $6.87M for the year 2001, including $0.75M in financial assistance from the Québec government through its assistance programs for mineral exploration and junior exploration companies. Furthermore, $0.5M was invested by the Québec government to conduct a geological survey of the Lower Eastmain area, as well as a compilation of seven 1:250,000 scale map sheets, taking into account geochronological, metallogenic, and mapping data accumulated since the Near North Program was launched in 1994. The total number of metres drilled reached 16,127. In 2001, 53 exploration projects were reported. Following the discovery of kimberlite indicator minerals in the Wemindji-Caniapiscau and Témiscamie-Corvette structural corridors in 2000, the highlight in 2001 undoubtedly was the discovery of two diamond-bearing kimberlitic bodies in the Monts Otish area by partners Ashton Mining of Canada and SOQUEM INC. This announcement sparked a staking rush, during which over thirty mining companies acquired landholdings in the Upper Eastmain area and north of the Proterozoic Mistassini sedimentary basin.

The James Bay region is divided into three parts, namely the Frotet-Evans area, the Eastmain area, and the La Grande area.

Frotet-Evans Area

Fourteen projects were carried out in the Frotet-Evans area for an aggregate amount of $0.59M, which represents 8.6% of off-minesite exploration expenditures in the James Bay region.

In the western part of the Frotet-Evans belt, work on **Poplar Resources'** Nottaway project (21; Figure 1B-1) resulted in the discovery of diamond indicator minerals. The Nottaway corridor, a northwest-trending shear zone (320º), cuts the Nemiscau, Opatica, and Abitibi subprovinces.

On the Eider property (17; Figure 1B-1), **Raudin Exploration** and **Broadback Resources** intersected in drillhole a strongly altered and brecciated zone (*Internal South Zone*) containing porphyry-type chalcopyrite, pyrite, pyrrhotite, and molybdenum mineralization, hosted in a quartz diorite-monzodiorite intrusion. Further west, their mapping program resulted in the discovery of a new mineral occurrence at the contact between porphyritic diorite and silicified volcanic rocks. Grab samples yielded grades up to 5.4% Cu, 1.2 g/t Au, and 0.4 g/t Pd.

The eastern segment (Frotet-Troilus segment) is considered to have an excellent potential for massive sulphide deposits, based on the presence of the Tortigny, DeMaurès, Moléon, Lessard, Domergue, and Clairy deposits. Furthermore, porphyry-type Cu-Au-Ag mineralization, such as the Troilus mine, which is owned and operated by **Inmet Mining Corporation**, represents an important exploration target. The Troilus mine contains 24.7 million tonnes of proven and probable reserves at a grade of 0.09% Cu, 1.0 g/t Au, and 0.90 g/t Ag. During the year, **Normabec Mining Resources** and **SOQUEM INC.** outlined a large PGE anomaly on the Dompierre project (10; Figure 1B-1). Fieldwork confirmed that this zone is associated with dominantly gabbroic and ultramafic rocks (peridotite and pyroxenite), trending northwest-southeast, with grades reaching 470 ppb Pd+Pt.

Eastmain Area

Ten projects were carried out in the Eastmain area for an aggregate amount of $3.14M, which represents 45.7% of off-minesite exploration expenditures in the James Bay region. Most of these projects were located in granitic rocks and paragneisses bordering the Upper Eastmain greenstone belt and were aimed at the search for diamonds.

In the Middle Eastmain area, work by **SOQUEM INC.** and **Eastmain Resources** on the Eau Claire deposit (24; Figure 1B-1) confirmed the lateral and vertical continuity of eight highly auriferous quartz-tourmaline veins (D, G, H, I, JQ, P, R, S). Consequently, a new mineral resource estimate was released. The geological inventory now stands at 1,482,565 tonnes at an uncut grade of 7.62 g/t Au, an increase of 28% in the gold content compared to the 2000 estimate. Also, several new gold veins were detected in strippings to the west of the deposit, including the V12 vein, which yielded an uncut grade of 118.16 g/t Au in a channel sample 22 m long by 0.6 m wide, on average.

The Upper Eastmain area, known for its gold (the former Eastmain mine) and base metal potential, generated

much interest for diamond exploration. In late 2001, **Ashton Mining of Canada** and **SOQUEM INC.** announced they had drill-intersected two kimberlitic bodies in the Monts Otish area (1; Figure 1B-1). The first discovery, now called Renard 1, yielded 54 microdiamonds (0.1 mm to 0.5 mm in one dimension) and 5 macrodiamonds (> 0.5 mm in one dimension) from a hypabyssal facies rock. The second discovery, called Renard 2 and located one kilometre south of Renard 1, yielded 116 microdiamonds and 29 macrodiamonds from hypabyssal and diatreme facies. Kimberlite indicator minerals, namely pyrope garnet and chromite, were also recovered from concentrates derived from the drill core. An important proportion of chrome-rich, calcium-poor pyrope garnets (G10) was noted. The concentrates also contained a large number of chromites compositionally similar to chromite inclusions found in diamonds.

On the Portage property (2; Figure 1B-1), located about 5 km south of the Ashton/SOQUEM discovery, **BHP Diamonds** and **Majescor Resources** identified indicator mineral trains with an overall mineral chemistry suggesting the presence of rocks from a diamondiferous source.

On the Mistassini project, **Canabrava Diamond** and **Majescor Resources** (4; Figure 1B-1) revealed they had detected numerous kimberlite indicators, chemically and mineralogically distinct from those identified on the Portage property. The diamond potential of the Mistassini area had previously been confirmed by the recovery of four macrodiamonds from the Lac Beaver kimberlite (Otish field) by **Ditem Explorations** in 1998 (3; Figure 1B-1).

Spurred on by the diamond discoveries, numerous companies acquired properties located between the northern ends of Mistassini and Albanel lakes and the northern part of the Monts Otish, making this territory a prime target for diamond exploration in Québec. In addition to its diamond potential, the Upper Eastmain area also contains interesting targets for magmatic PGE deposits, such as the *Crête de Coq* showing with 0.49% Ni, 0.20% Cu, 0.6 g/t Pd, and 0.3 g/t Pt (Clark, 2001).

La Grande Area

Twenty-nine projects were carried out in the La Grande area, for an aggregate amount of $3.14M, which represents 45.7% of off-minesite exploration expenditures in the James Bay region. Exploration projects were concentrated in the western and eastern La Grande areas.

At the western end of the La Grande Subprovince, on the Wemindji property (32; Figure 1B-1), **Majescor Resources** collected additional populations of kimberlite indicator minerals, dominated by ilmenite and G9 and G10 garnets. However, olivine, chromite, and chrome diopside were scarce. Two sampling sites yielded non-magnetic kimberlite fragments, a conclusion confirmed by petrographic analysis. Ground geophysical surveys and drilling are planned for 2002. The Wemindji area, which represents the western segment of the Wemindji-Caniapiscau structural corridor, is considered to be a prime target for diamond exploration.

As a result of work in the same area and within the Wemindji-Caniapiscau corridor, **Dianor Resources** announced the discovery of a clear yellow, octahedral to cubic microdiamond in a lamprophyre dyke on the Yasinski North property (35; Figure 1B-1). The northeast-southwest-trending dyke outcrops over a distance of about 100 m and ranges from 0.75 to 4.0 m in width. Mapping surveys conducted by Géologie Québec since 1996 have resulted in the discovery of numerous metre- to kilometre-scale lamprophyre dykes and dyke swarms in the Yasinski Group.

In the western sector, drilling by **Matamec Explorations** on the Sakami property (32; Figure 1B-1) confirmed the extension at depth and to the southwest of Zone 25 (felsic dyke and silicate-facies iron formation) and Zone 26 (silicate-facies iron formation). Drill intersections yielded grades of 9.7 g/t Au over 11.8 m, including 28.7 g/t Au over 2.5 m (Zone 25); 2.96 g/t Au over 8.25 m (Zone 25); 6.40 g/t Au over 12.67 m, including 24.20 g/t Au over 2.59 m (Zone 25 and 26); and 9.70 g/t Au over 11.80 m, including 28.70 g/t Au over 2.5 m (Zone 26). Zones 23, 25, and 26, as well as new surface gold showings discovered in 2001, namely Péninsule 1, Péninsule 2, JR, Passe, and Île, are all located in the Sakami fault zone (1.04 g/t Au over 119.5 m on surface). This fault marks the boundary between the Opinaca and La Grande subprovinces.

On the La Grande Sud property (45; Figure 1B-1), **Cambior** and **Virginia Gold Mines** uncovered a new gold zone, dubbed Zone 30, which is very similar to Zone 32 (inferred resource : 4.2 Mt at 2.1 g/t Au and 0.2% Cu). A drillhole located 700 m east of Zone 32 intersected 75.4 m at a grade of 1.7 g/t Au and 0.18% Cu in a mineralized halo containing quartz veinlets and disseminated pyrite and chalcopyrite, hosted in the La Grande Sud tonalite.

On the LG 3.5 property (48; Figure 1B-1), **Virginia Gold Mines** continued its investigations of an exhalite horizon (iron formation, chert, and massive sulphides), which has been traced more than 10 km along strike and hosts four mineralized showings. The Ouf showing had previously yielded grades of 11.8% Cu and 96 g/t Ag over 3.7 m; 4.37% Cu and 32.5 g/t Ag over 3.6 m; 5.70% Cu and 41.3 g/t Ag over 2.0 m; and 0.52% Cu, 2.39% Zn+Pb, and 20.4 g/t Ag over 1 m in channel samples. Additional

significant assays were obtained as a result of the latest work. The best results were 5.8% Cu over 6.0 m from a channel sample and 1.5% Cu over 10 m from drillcore.

In the eastern part of the La Grande area, on the Poste Lemoyne Extension property (47; Figure 1B-1), **Virginia Gold Mines** and **TGW Corporation** stripped the Orfée zone over a length of 125 m. Grades ranging from 1.5 g/t Au over 3 m to 12.8 g/t Au over 9 m were obtained from channel samples.

Mapping and stripping performed by **Sirios Resources** and **SOQUEM INC.** in the Sortilèges Dorés area of their Aquilon property (51; Figure 1B-1) helped uncover a new type of gold mineralization. This area is characterized by an electromagnetic anomaly more than 800 m long and oriented north-south. Several gold grades were obtained from a sulphide-rich, silicified basaltic unit : 2.44 g/t Au over 3.8 m, 1.43 g/t Au over 2.25 m, and 0.54 g/t Au over 6.0 m, from channel samples collected over a total distance of 60 m.

Virginia Gold Mines and **Cambior** reported additional gold showings on the Caniapiscau property (53; Figure 1B-1). These showings occur within a perimeter of one kilometre and are associated with pyrrhotite and arsenopyrite layers and veinlets in a silicate-facies iron formation. The best showing, called the Ours showing, yielded up to 5.4 g/t Au over 4.9 m.

Outlook

In 2002, diamond exploration will undoubtedly be at the forefront in the various sectors of the Near North. The synergy created by the exploration programs undertaken in the search for diamonds, combined with the accumulation of recent data, should lead to the recognition of new areas of interest in the James Bay region. Furthermore, the search for extensions to known gold-bearing zones and for porphyry-type Cu-Au-Ag deposits should continue in all three areas.

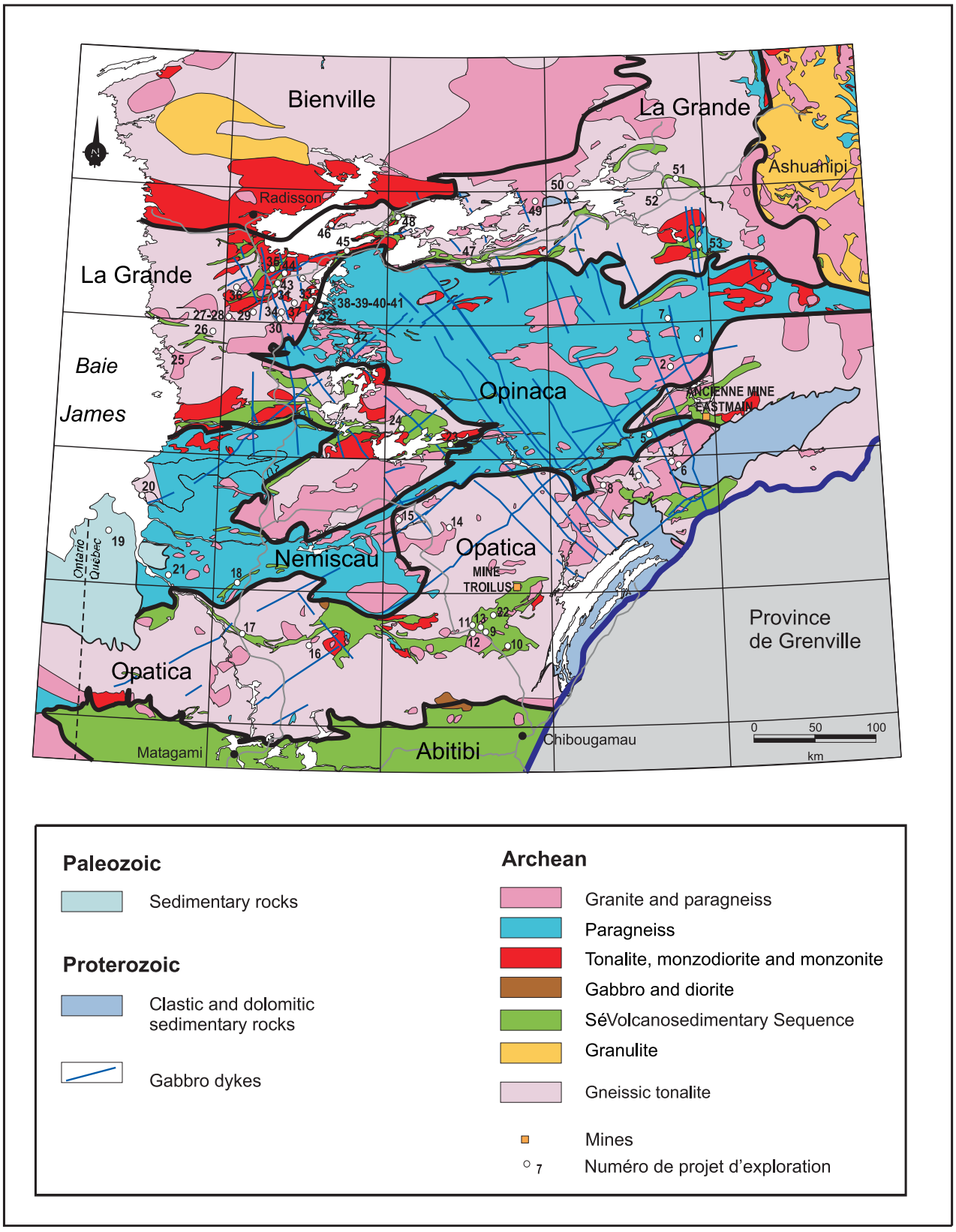


Figure 1B-1. Location of mining exploration projects sites in James Bay area for 2001.

TABLE 1B-1 - Exploration projects in the Bay James area in 2001.						
N°	SNRC	FIG.	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
1	23D, 33A, 33H, 32P	1B-1	Ashton Mining of Canada et SOQUEM Inc.	Otish	Diamond	Gc (t), Mag, S (6:554)
2	33A/07, 33A/08, 33A/09, 33A/10, 33A/15, 33A/16, 33H/01, 33H/04, 33H/13	1B-1	Ressources Majescor et BHP Diamonds	Portage	Diamond	GpA, Gc (t)
3	33A/01, 32P/16	1B-1	Ditem Explorations	Tichegami	Diamond	GpA
4	32P15, 32P10	1B-1	Ressources Majescor et Canabrava Diamond Corp.	Mistassini	Diamond	GpA, Gc (t)
5	33A/07, 33A/10, 33A/15	1B-1	Ressources Melkior	Monts Otish	Diamond	Pr, Gc (t), Gc (ru)
6	32P/16, 33A/01	1B-1	Ressources Strateco	Cardinal	Diamond	Gc (t)
7	33A/07, 33A/10, 33A/15, 33H/01, 33H/02, 23D/12	1B-1	Ressources Sirios et Exploration Dios	33 Carats	Diamond	Gc (t)
8	32P/11	1B-1	Ressources Xemac	Tichegami River	Diamond	Pr, Gc (t)
9	32J/10	1B-1	Landore Resources	Lessard	Cu-Ni-Zn-Au-Ag-Pt-Pd	Pr
10	32J/10	1B-1	Ressources minières Normabec et SOQUEM Inc.	Dompierre (1328)	Pt-Pd	Pr, Gc (ro), E
11	32J/10	1B-1	TGW Corporation	Moblan	Cu-Zn-Au-Ag	G, E, PP
12	32J/10	1B-1	COOP Extramine 2000 et Noranda	Tortigny	Cu-Zn-Au-Ag	ET
13	32J/10	1B-1	SOQUEM Inc.	Moblan (1331)	Li	Pr, Mag, Gc (ro)
14	32O/11, 32O/06	1B-1	Daniel Blacksmith et Émilie Blacksmith	Blacksmith Copper	Cu-Au-Ag-Zn-Pt	Pr, E
15	32O/12	1B-1	Inco Ltd	Spodumene Lake	Li, Ta	Pr, E
16	32K/10, 32K/11	1B-1	Nuinsco Resources et Goldeye Exploration	Lac Rocher West	Cu-Ni-Pt-Pd	Pr
17	32K/12	1B-1	Exploration Raudin et Ressources Broadback	Eider	Cu-Au-Ag-Mo-Pd	G, Mag, S (16:1 700)
18	32N/04	1B-1	Marc Lefebvre	Lac Colomb	Cu-Ni-Au-Ag-Pt	G, E, Gp
19	32M, 32L	1B-1	Dumont Nickel	Hernia	Diamond	Pr, Gc (t)
20	32M/10	1B-1	Peter Bambic	Waskaganish Point	Diamond-Au-ÉGP	Pr, E
21	32M/01, 32M/02	1B-1	Poplar Resources	Nottaway	Diamond	Pr, Gc (ru), Gc (t)
22	32J	1B-1	Mines d'Or Virginia	Pyrox	Pt-Pd	Pr, T
23	33B/03	1B-1	Jean-Raymond Lavallée et Luc Lamarche	Lacs Village	Au	Pr, E
24	33B/04	1B-1	Eastmain Resources et SOQUEM Inc.	Clearwater	Au	Pr,E, Gc(s), T, TM, E, S(6:2139)
25	33D15, 33D16	1B-1	Wemindji Exploration	Moar Bay	Diamond-Au-ÉGP	Pr
26	33D/15, 33D/16, 33E/01, 33E02	1B-1	Ressources Majescor	Wemindji	Diamond	Gpa, Gc(t), T, Mag, S (6:392)
27	33F/04	1B-1	Karen Campbell	West Bull	Diamond	Pr, E
28	33F/04	1B-1	Bruce Mackie	Little Bull	Diamond	Pr, E
29	33F/04	1B-1	Karen Campbell	Long Bull	Diamond	Pr, E
30	33F/03	1B-1	Bruce Mackie	South Bull	Diamond	Pr, E
31	33F/03	1B-1	Paul Adomaitis	Know Bull	Diamond	Pr, E, Gp
32	33F/02	1B-1	Matamec Exploration	Sakami	Au-Diamond	Pr, E, T, S (27:4777)
33	33F/02	1B-1	Mine d'Or Virginia	Apple	Au	Pr, E, PP
34	33F/03	1B-1	Ressources Dianor	MVR	Diamond	Pr, Gc(s)
35	33F/06	1B-1	Ressources Dianor	Pem 1404-Yasinski Nord	Au-Diamond	Pr, G, Gc(s), Gc(ro)
36	33F	1B-1	Patrician Consolidated et Orezone Res.	Wemindji	Diamond	Gc(t)
37	33F/03, 33F/04, 33F/06	1B-1	Globex Mining et Aurogin Resources et Sparton Resources	Wemindji	Diamond	Pr, GpA
38	33F/06	1B-1	Gordon Henricksen	Lake Bull	Diamond	Pr
39	33F/06	1B-1	Robert Campbell	East Bull	Diamond	Pr, E
40	33F/06	1B-1	Gordon Henricksen	Upper Bull	Diamond	Pr, E, Gc(t)
41	33F/06	1B-1	Robert Campbell	Lower Bull	Diamond	Pr
42	33F, 33C	1B-1	Exploration Maude Lake	Fregate	Diamond	Gc(t)
43	33F/06	1B-1	Ressources Searchgold	Yasinski Nord	Au-Ag-Cu-Pt-Pd-U	Pr
44	33F/06	1B-1	Ressources minières Pro-Or	Ménarik	Cr-Pt-Pd	ET
45	33F/07, 33F/09, 33F/10	1B-1	Cambior et Mines d'Or Virginia	La Grande Sud	Au-Cu	S(35:6490)
46	33F/10, 33F/11	1B-1	Oasis Diamond Exploration	QLG	Diamond	Pr, E
47	33G/06	1B-1	TGW Corp. et Mines d'Or Virginia	Poste Lemoyne Ext.	Au	T, E
48	33G/13	1B-1	Mines d'Or Virginia	LG 3,5	Cu-Zn-Pb-Ag	Pr, T, GpA, EM, S(3:75)
49	33G/16	1B-1	Ressources Sirios	Tilly	Cu-Mo-Au-Ag	G, E
50	33I/04	1B-1	Ressources Sirios	Transtaïga	Cu-Au-Diamond	Gc(t)
51	33I/01, 33I/02	1B-1	Ressources Sirios et SOQUEM Inc.	Aquilon	Au	Pr, E, Gc(t), Gc
52	33H/15	1B-1	Marie-Josée Girard et Michel Champagne	Lac des Vœux	Au-Cu	Pr, E
53	23E/12	1B-1	Cambior et Mines d'Or Virginia	Caniapiscau	Au-Cu-zn	Pr, t, Mag, PP

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
▭	MRN subsidized project

Southern Part of the Superior Province (Abitibi and Pontiac Subprovinces)

Pierre Doucet
James Moorhead

The Abitibi and Pontiac subprovinces form the southern part of the Superior Province in Québec. The Abitibi Subprovince is the largest, one of the most studied, and one of the richest Archean greenstone belts in the world. The Pontiac Subprovince is separated from the Abitibi Subprovince by the Cadillac-Larder Lake fault, a structure that extends over more than 100 km in Québec and Ontario, along an east-west axis. Proterozoic sedimentary rocks of the Cobalt Group overlie the southwest Pontiac and, further north, a segment of the Cadillac-Larder Lake fault. The northern boundary of the Abitibi Subprovince consists of faults intruded by late granitoids. To the east, the Abitibi and Pontiac subprovinces are bounded by the Grenville Front. The Abitibi Subprovince is world-renowned for the great number and high grade of its precious metal and polymetallic ore deposits. Mining and exploration have made this territory one of the principal mining regions in Québec for nearly a century.

In 2001, 180 exploration projects were carried out in the Abitibi and Pontiac subprovinces (tables 1C-1 and 1C-2), for a total of $27.9M in exploration expenditures, an increase of $0.1M relative to the $27.8M invested in 2000. In the Abitibi and Pontiac subprovinces, the total number of metres drilled in 2001 reached 248,515. Under the Québec Mineral Exploration Assistance Program, 17 grassroots prospecting projects (A1 component) received over $62,300 in financial assistance, and 37 advanced prospecting projects (A2 component) received nearly $419,500, whereas 5 exploration projects conducted by companies (B component) received a little over $185,000. Seven junior companies shared nearly $1.99M under the Assistance Program for Junior Exploration Companies, and the Louvicourt, Sleeping Giant, Mouska, and Doyon mines received $2M to support their exploration programs (D component).

The Casa Bérardi project (20) is located within the Taïbi Group of sedimentary rocks. A feasibility study commissioned by **Aurizon Mines** indicates that the West mine contains 6,943,000 tonnes of reserves at 6.7 g/t Au, for a total of 1,492,500 ounces of gold (51,113 kg). The project is currently awaiting financing. The Fénelon project (37) by **International Taurus Resources** and **Fairstar Explorations** is located along the extension of the former Detour mine in northeastern Ontario. The deposit is composed of eight high-grade, gold-bearing veins, hosted in a subvertical gabbro intrusion within a sedimentary sequence. A 14,000-tonne bulk sample was collected from an open pit, which upon processing yielded 4,213.2 ounces of gold (144.29 kg).

The Sleeping Giant mine (21), located 70 km west of Lebel-sur-Quévillon, is owned by **Cambior** and **Aurizon Mines**. The lode-type mineralization is characterized by gold grades reaching 11 g/t Au. An exploration program involving 333 drillholes, including 234 during the year 2001, led to the discovery of three lenses (lenses 6, 7, and 8), and helped delineate 218,000 tonnes of proven and probable reserves at a grade of 12.1 g/t Au, along with 140,000 tonnes of inferred resources at 13.4 g/t Au in lens 8.

On the Comtois property (23), **Maude Lake Exploration** conducted a 25-hole exploration program. This work revealed a new auriferous zone on the Cameco option, called the West Zone. Drill intersections included 3.0 g/t Au over 11.2 m, 26.6 g/t Au over 3.0 m, and 14.4 g/t Au over 2.5 m. On the Fenton property (39), **Sudbury Contact Mines** and **TGW Corporation** carried out magnetic and induced polarization surveys, mapping, and 15 drillholes. Drill results included 9.93 g/t Au over 2.9 m and 9.93 g/t Au over 0.79 m. **Cameco Gold** and **Major General Resources** obtained interesting results on their Despinassy project (31). A 5-hole drill program intersected mineralized zones, where the best results are as follows: 26.6 g/t Au over 1.1 m, 17.55 g/t Au over 0.5 m, and 16.75 g/t Au over 0.7 m. This gold-bearing system extends over more than 5 km along strike and reaches 200 m in width.

Measured and indicated resources on the Copper Rand 5000 project headed by **Campbell Resources** stand at 1.9 million tonnes at 1.55% Cu and 3.33 g/t Au. The deepening of shaft no. 4 and ramp development should allow mining operations to resume in the first quarter of 2003. Operations at the Joe Mann mine were suspended by **Campbell Resources** in November 2000. Exploration and development work on the site (58) began in November 2001. Mining operations are expected to resume in the first quarter of 2002. Mineral resources at the Joe Mann mine are estimated at 1.7 million tonnes at 11.18 g/t Au and 0.28% Cu, including 630,000 tonnes of reserves at 9.84 g/t Au and 0.25% Cu.

The Francoeur mine held by **Richmont Mines** (5) ceased operations at the end of November. In February

2001, **McWatters Mining** ceased open pit mining operations at its Sigma-Lamaque complex. Proven and probable reserves stand at 23,351,000 metric tonnes at 2.96 g/t Au, and inferred resources at 11,504,000 metric tonnes at 4.9 g/t Au. Operations are expected to resume pending the success of the company's plan of arrangement. The Beaufor mine, held by **Aurizon Mines** and **Louvem Mines**, temporarily shut down in August 2000. In April 2001, **Aurizon Mines** announced that **Richmont Mines** had acquired Aurizon's interest in the Beaufor mine. Rehabilitation work began in the fall, and production is scheduled to resume in early 2002.

South Malartic Exploration and Huntington Exploration conducted drilling and stripping on the Croinor project (54), in order to define the gold mineralization near surface. The best drill results included 8.5 g/t Au over 1.32 m for drillhole CR-01-40. Grab samples collected from the new strippings yielded high grades, such as 16.00 g/t Au in trench no.2 and 21.98 g/t Au in trench no.3.

Over the course of the winter, **Southern Africa Minerals Corporation** completed two drillholes on the Caber North property (P71) and, in partnership with **SOQUEM INC.**, a four-hole program testing the Caber Periphery property (P72). Drillhole SAF-01-98, on Caber North, intersected 3.4 m grading 3.7% Cu. West of Joutel, **Cancor Mines** completed a drill program on the Gemini project (P32), in order to further delineate zones A and B. Drillhole 99 intersected a 6.38-m interval in Zone B, grading 1.36% Cu, 7.77 g/t Au and 67.2 g/t Ag. The two zones remain open. A new massive sulfide zone, called Zone 98, was also discovered 600 m north of Zone B. Drillhole 98 intersected 5.52 m grading 1.06% Cu, 10.7 g/t Ag, and 0.41 g/t Au.

In order to resume operations at the Langlois mine (P59), which were suspended in November 2000, **Breakwater Resources** conducted a drill program on Zone 97 and completed a feasibility study to bring the orebody back into production. Southeast of Chibougamau, **McKenzie Bay Resources** conducted a drill program (17 boreholes totalling 2 500 m) and continued its feasibility study on the Lac Doré vanadium deposit (P83). According to a report released in the first quarter, the ore deposit contains a measured resource of 32 million tonnes at 0.65% V_2O_5 and an indicated resource of 68 million tonnes at 0.49% V_2O_5. On August 17, **Agnico-Eagle Mines Ltd.** inaugurated the Penna shaft at the Laronde mine and announced it would proceed with an expansion of its processing plant. With a depth of 2,250 m, the Penna shaft is the deepest, single-lift mine shaft in North America. Work continued on zones 20 North and 20 South: delineation drillhole 11021801 in Zone 20 South yielded 8.01% Zn over 8.5 m, whereas drillhole 11021803 intersected 8.5 m grading 7.08% Zn. Delineation drilling in the upper part of Zone 20 North confirmed the presence of gold-rich pockets and large thicknesses of massive sulfides. Hole 11420761 intersected 5 m at 6.53 g/t Au, whereas hole 14320691 intersected 5 m grading 4.04 g/t Au. Drillhole 14020672 yielded 10.13% Zn over 30.6 m, and drillhole 11420761 hit an 18.0-m section at 12.47% Zn. Exploration continues at depth on zones 20 North and 20 South, and a drill program was also undertaken on the El Coco property, adjacent to the Laronde mine. For reference, known mineralization at the mine extends to a depth of over 3,000 m and remains open in all directions.

A large portion of base metal exploration expenditures in the Val-d'Or area is attributable to the efforts of **Aur Resources** to locate new ore lenses around the Louvicourt mine. In 2001, **Aur Resources** conducted six exploration projects centred on the Val-d'Or Formation. During the year 2001, **Aurora Platinum Corporation** was undoubtedly the most active exploration company in the Témiscamingue region. Their best results on the Midrim showing were: 2.52% Cu, 1.37%, Ni, 0.78 g/t Pt, and 2.14 g/t Pd over 13.02 m, and 1.28% Cu, 0.94% Ni, 0.50 g/t Pt, and 1.38 g/t Pd over 12 m. On the Alotta showing, a 21-m section yielded 2.14% Cu, 2.0% Ni, 0.50 g/t Pt, and 1.74 g/t Pd, whereas a drillhole testing the Patry showing intersected 1.45 m grading 2.91% Cu, 6.2% Ni, 0.28 g/t Pt, and 0.45 g/t Pd. The company also revealed it had discovered a new kimberlite pipe on one of its properties.

Outlook

The level of activity observed in the Abitibi and Pontiac subprovinces should remain stable in the coming year. A significant increase in the number of projects for polymetallic deposits was noted relative to last year. Investments will very likely be influenced by metal prices, which have remained fairly low over the past few years. The end of operations at the Francoeur mine, held by **Richmont Mines**, at the end of November marked the gold mining sector in Québec. However, in the Val-d'Or area, the Beaufor mine held by **Richmont Mines** is expected to resume operations soon, and **McWatters Mining** will decide in early 2002 if it will proceed with open pit mining operations at the Sigma-Lamaque complex. In the Chibougamau area, production is expected to resume at the Joe Mann mine, held by **Campbell Resources**. Positive results from the feasibility studies on the Perseverance project and the Lac Doré vanadium project will allow the two projects to reach an important milestone towards eventual production.

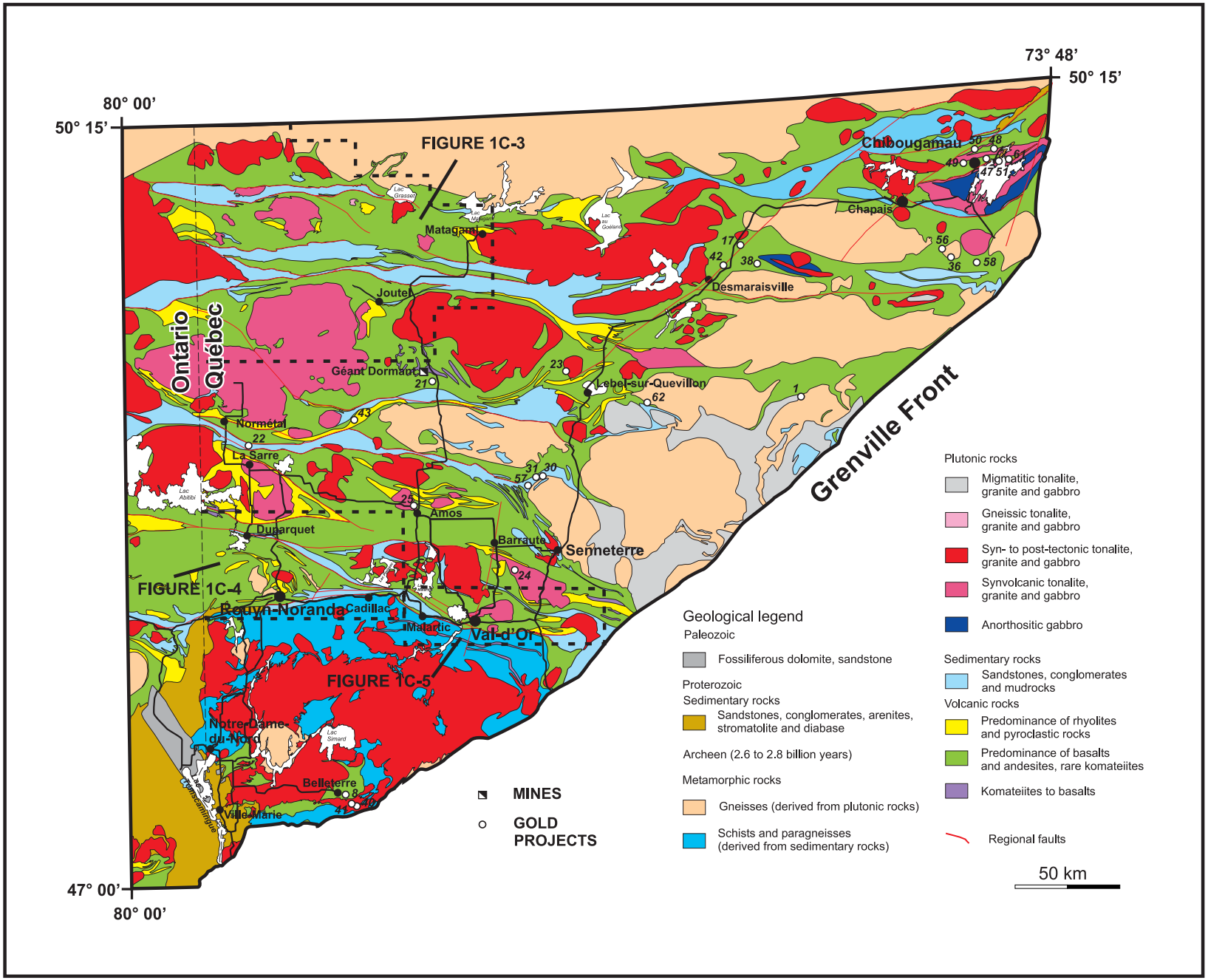


Figure 1C-1. Location of exploration projects and gold operations in the Abitibi and Pontiac subprovinces. (Modified geology from Hoqc & Verpaelst, 1994).

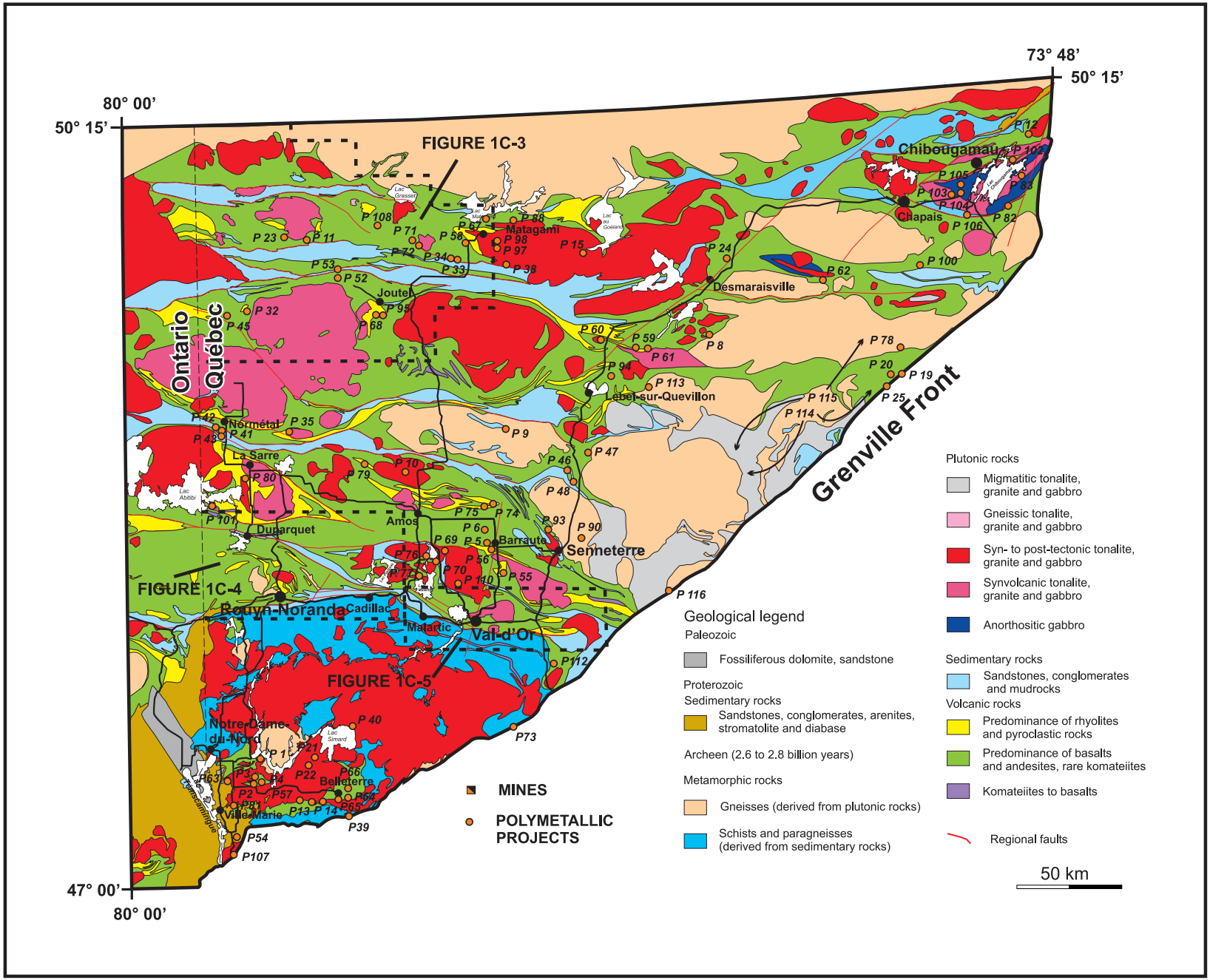


Figure 1C-2. Location of exploration projects and polymetallic operations in the Abitibi and Pontiac subprovinces. (Modified geology from Hoqc & Verpaelst, 1994).

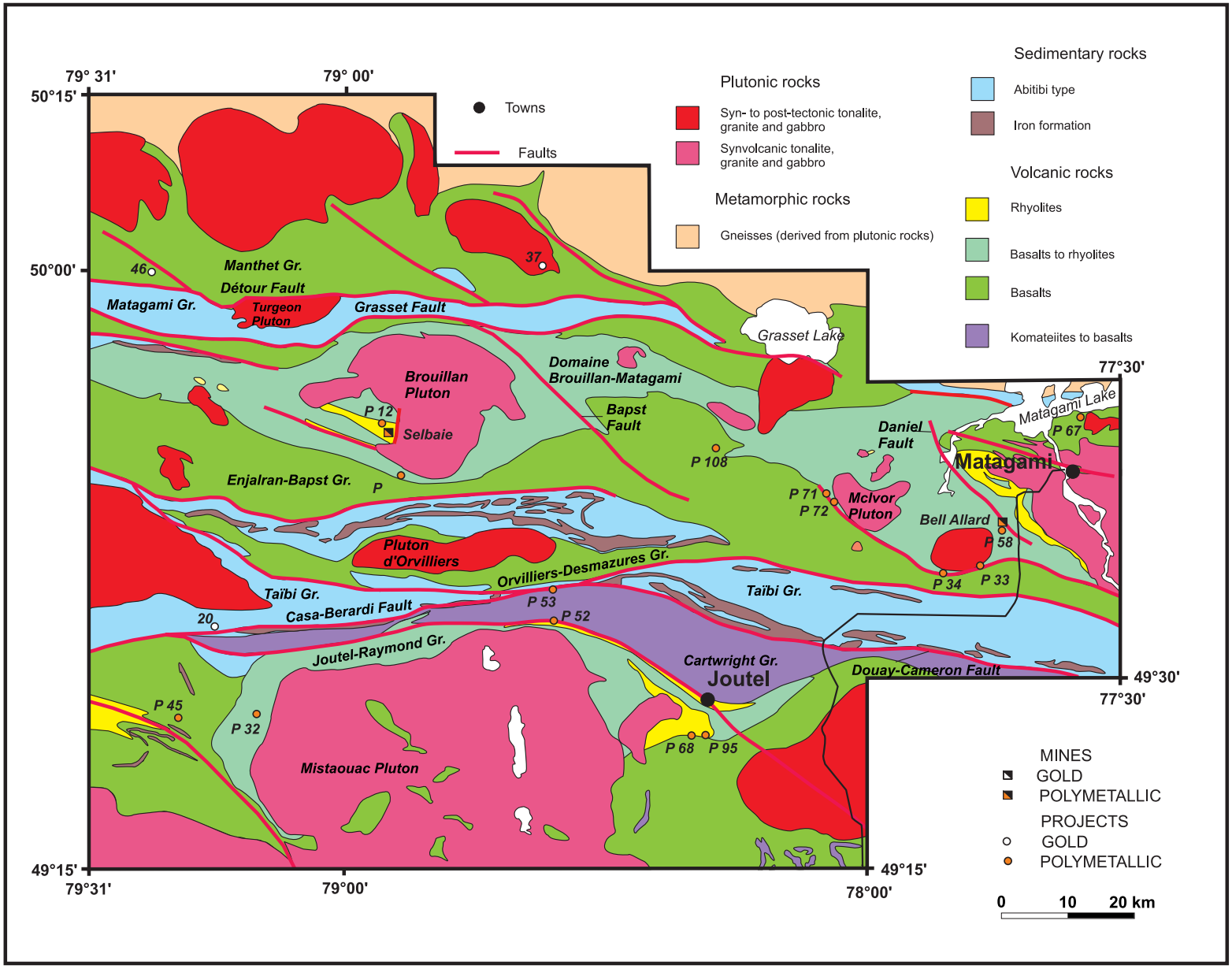


Figure 1C-3. Location of exploration projects and mines in the Fénélon-Matagami-Casa Berardi-Joutel area. (Modified geology from Lacroix *et al.*, 1990).

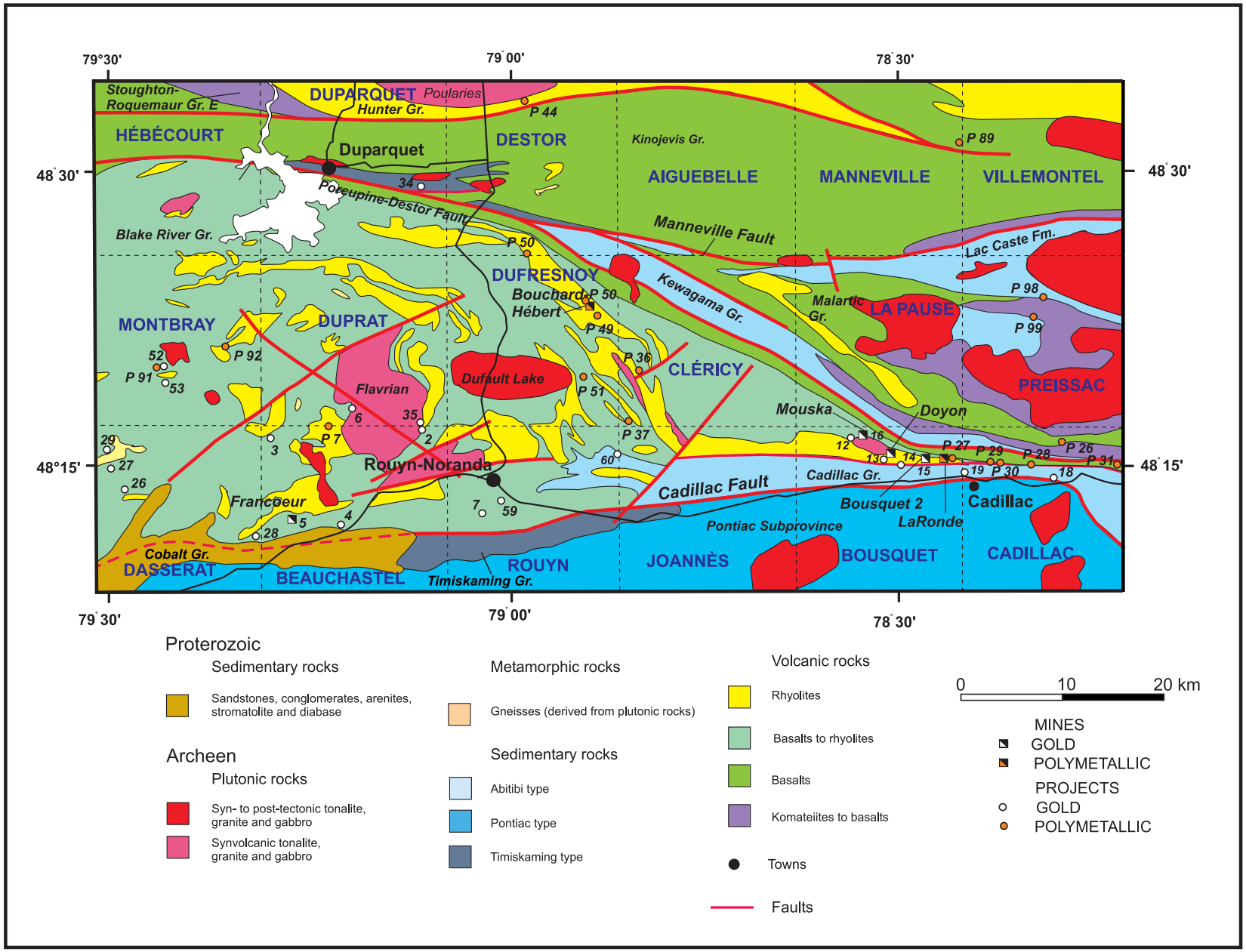


Figure 1C-4. Location of exploration projects and mines in the Rouyn-Noranda -Cadillac area. (Modified geology from Avramtchev and Lebel-Drolet (1981) & Couture (1991)).

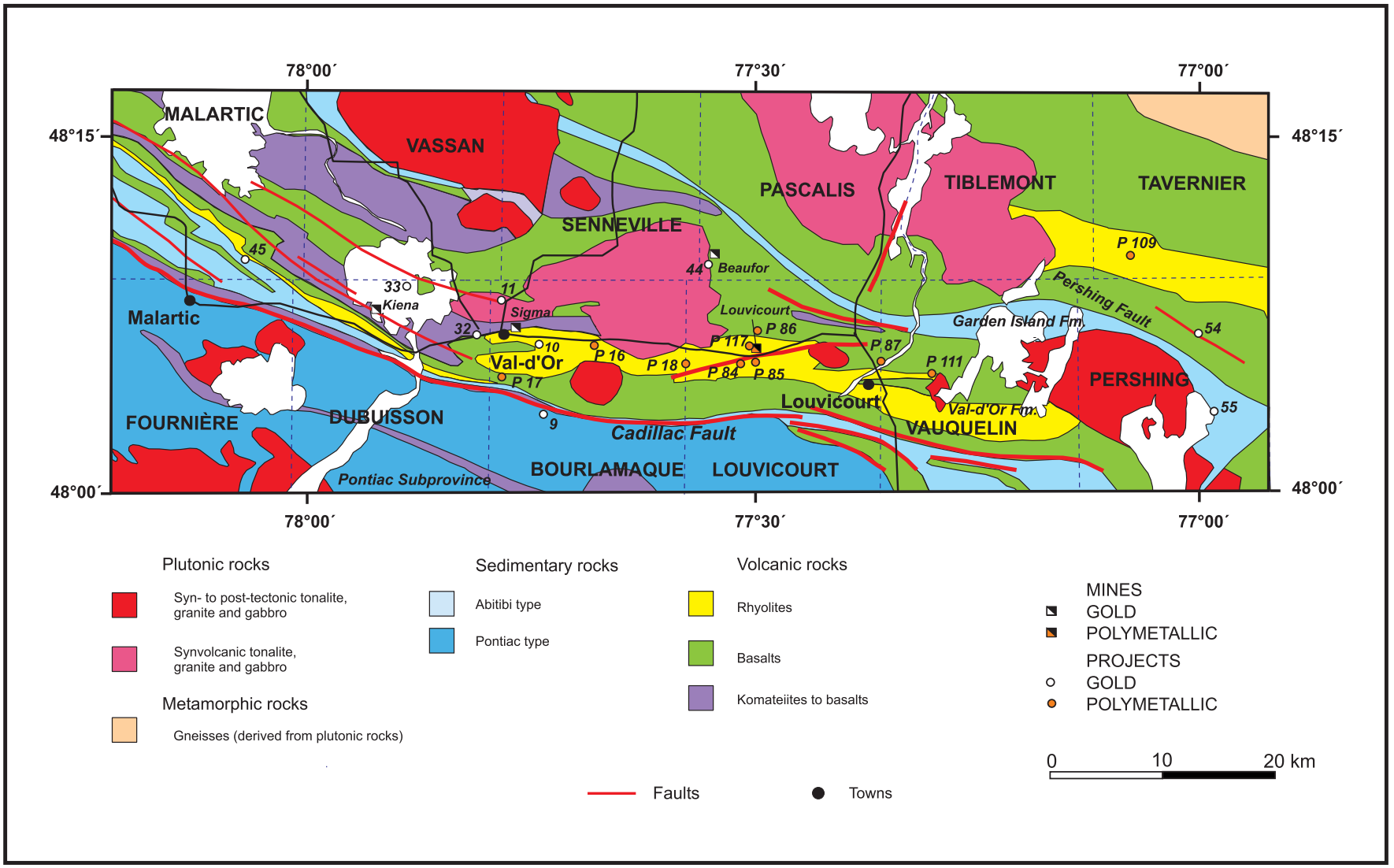


Figure 1C-5. Location of exploration projects and mines in the Malartic-Val-d'Or area. (Modified geology from Avramtchev and Lebel-Drolet (1981) & Couture (1991)).

TABLE 1C-1 - Exploration projects for gold in the Abitibi and Pontiac subprovinces in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
1	Bailly, Barry	1C-1	32G/04	Ressources Xémac Inc.	Lac Barry	Au	S(8:2086)
2	Beauchastel	1C-4	32D/06	Mines Abcourt Inc./ RSW-Béroma	Mine Elder	Au	S(50:1218)
3	Beauchastel	1C-4	32D/06	SOQUEM INC	Lac Arnoux	Au-Cu-Ni-ÉGP	S(4:729), Mag, PP, E
4	Beauchastel	1C-4	32D/03	Globex Mining Entreprises Inc.	Beauchastel Gold (South Bl	Au	S(1:1033)
5	Beauchastel	1C-4	32D/03	Mines Richmont Inc.	Mine Francoeur	Au	S(11:2370)
6	Beauchastel, Duprat	1C-4	32D/06	Exploration Azimut	Flavrian	Au (Cu, Zn)	S(14:1550),Em,Gc(ro),G,T
7	Beauchastel, Rouyn	1C-4	32D/03	SOQUEM INC / Thundermin Resources	Lac Pelletier	Au	PPforage, S(6: 1056), T, ET
8	Blondeau	1C-1	31M/07	Daniel Champagne	Lac Chevrier	Au, Ag, Cu, Diaman	T, E, TBF
9	Bourlamaque	1C-5	32C/04	Geomaque Explorations Ltd.	Bourlamaque	Au	ET
10	Bourlamaque	1C-5	32C/04	Maude Lake Ltée / McWatters Inc.	New Bid	Au	S(6:1255)
11	Bourlamaque, Dubuisson, Senneville	1C-5	32C/04	International BlastenLtd/2629-2482 Québec Inc./ Aur resources	Barry-Souart-Urban	Au, Cu, Zn	ET
12	Bousquet	1C-4	32D/07	Cambior Inc.	Mouska-Authier	Au, Cu	S(5:4462), DPEM, G
13	Bousquet	1C-4	32D/07	Cambior Inc.	Doyon	Au	S(4:4480), DPEM
14	Bousquet	1C-4	32D/07	Cambior Inc.	Westwood-Warrenmac	Au	S(6:5071), DPEM
15	Bousquet	1C-4	32D/07	Barrick Gold	Mine Bousquet 2	Au, Ag, Cu	S(1:950), DPEM
16	Bousquet	1C-4	32D/07	Cambior Inc.	Mine Mouska	Au, Ag	S(x:33000), DPEM
17	Boyvinet	1C-1	32F/09	J. Brunelle / H. de Corta / L. Bourcier / P.Berthelot	Boyvinet-Kinross	Au	T, E
18	Cadillac	1C-4	32D/01	Queenston Mining Inc.	Pandora	Au	Gc
19	Cadillac	1C-4	32D/01	Ress. Min. Radisson Inc.	O'Brien	Au	Ev, ET
20	Casa Berardi	1C-3	32E/06	Mines Aurizon Ltée	Casa Berardi	Au	ET
21	Chaste	1C-1	32F/04	Cambior Inc. / Mines Aurizon Ltée	Mine Géant Dormant	Au, Ag	S(234:50212), ET
22	Chazel,Clermont, Desmeloizes, La Sarre, Royal Roussillion	1C-1	32D/14	Philippe Letourneur	Rivière La Sarre	Au	Pr
23	Comtois, Fraser, Quévillon	1C-1	32F/03	Maude Lake Ltée / Cameco Gold Inc.	Comptois	Au	S(25:6105), T
24	Courville	1C-1	32C/06	Soc. Min. Pershimco Ltée.	Couville - 2001	Au	S(x:400), PP, Pr, G
25	Dalquier	1C-1	32D/09	Jack Stock	Chib-Kayrand	Au	Pr
26	Dasserat	1C-4	32D/03	Ressources Dasserat Inc.	Lusko	Au-Ag	S(3:97)
27	Dasserat	1C-4	32D/04	Ressources Dasserat Inc.	El Coco	Au-Ag (Cu)	S(17:2905)
28	Dasserat	1C-4	32D/03	Ressources Dasserat Inc.	Lac Fortune ouest	Au	S(32:6256)
29	Dasserat	1C-4	32D/06	Yvan Leith / Édouard Poirier	Dasserat	Au, Ag, Cu, Zn	Pr, T, Gc
30	Despinassy	1C-1	32C/11	Cameco Gold Inc.	Despinassy East	Au	Mag, PP
31	Despinassy	1C-1	32C/11	Cameco Gold Inc./ Major General Res./ Cominco Corp	Despinassy	Au	Mag, PP, S(5:2944)
32	Dubuisson	1C-5	32C/04	Ressources Pyrinor Inc.	Dubuisson Bloc-Sud	Au, Cu	T
33	Dubuisson	1C-5	32C/04	Jack Stoch	Kiena West	Au	S(2:300), Mag, E
34	Duparquet	1C-4	32D/06	SOQUEM INC / Géo Nova Exploration.	Pitt Gold	Au (Ag)	S(2:660), ET
35	Duprat	1C-4	32D/06	Mines Abcourt Inc./ RSW-Béroma	Tagami	Au	S(34:828)
36	Fancamp, Hazeur, Gamache	1C-1	32G/05, /08	SOQUEM INC	Philibert	Au	E, Gc(ro)
37	Fénélon	1C-3	32E/15	International Taurus Resources/ Fairstar Exploration	Fenelon Gold	Au	Ev, EF
38	Gand	1C-1	32G/12	SOQUEM INC / Graniz Mondal Inc.	Opawica	Au, Cu	Mag, PP
39	Guercheville	1C-1	32G/11	Mines Sudbury Contact Ltée	Fenton	Au (Zn-Cu)	S(15:3847), PP, Gc(ro), ET

TABLE 1C-1 - Exploration projects for gold in the Abitibi and Pontiac subprovinces in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK(1)
40	Guillet	1C-1	31M/01	Exploration Nid'Or 2000 Inc.	Mine Belleterre	Au, Ag	T, G
41	Guillet	1C-1	31M/07	Pierre Gervais	Belleterre 2001	Au, Ag	Pr, G, Gp
42	Lesueur, Boyvinet, Lespérance, Gand	1C-1	32F/09	SOQUEM INC/Explorations Minières du Nord/Inmet	Lac Shortt	Au,Cu	S(4:804), Gc(ro)
43	Lingeris	1C-1	32D/15	Globex Mining Entreprises Inc.	Tut-Ligneris Gold	Au	G
44	Louvicourt	1C-5	32C/04	Mines Richmont Inc / Soc. Min. Louvem Inc.	Beaufor	Au	
45	Malartic	1C-5	32D/01	SOQUEM INC	Camflo N-O	Au (Ag)	PP, Pr, E
46	Massicotte, Manthet, La Peltrie	1C-3	32E/14, 32L/03	Ress. Min. Radisson Inc.	Lac Gignac	Au, Cu, Zn, Ag	S(8:2879), PP
47	McKenzie	1C-1	32G/16	SOQUEM INC / Ress. Itaminéraque Inc.	Brosman	Au, Cu	Pr, Mag, PP, E, Gc(ro)
48	McKenzie	1C-1	32G/16	SOQUEM INC	Brosman Ext.	Au, Cu	Mag, PP, T, E, Gc(ro)
49	McKenzie	1C-1	32G/16	SOQUEM INC	Mop-II Ext	Au, Cu	Mag, PP
50	McKenzie	1C-1	32G/16	SOQUEM INC	Dufault	Au, Cu	Mag, PP
51	McKenzie, Roy	1C-1	32G/16	SOQUEM INC	Bruneau	Au-Cu	Mag, PP,
52	Montbray	1C-4	32D/06	Agnico-Eagle Ltd.	Montbray A	Au	S(x:5549)
53	Montbray	1C-4	32D/06	Agnico-Eagle Ltd.	Montbray B	Au	S(x:5189)
54	Pershing	1C-5	32C/03	Exploration Malaric Sud / Huntington Exploration	Croinor	Au	S(x:3000), Gc, T
55	Pershing	1C-5	32C/02, /03	Ress. Montigua Inc.	Pershing Gold	Au	Mag, PP, TBF, G, S(13:210
56	Rale, Hazeur	1C-1	32G/08	SOQUEM INC / Ress. Plexmar Inc.	Winchester	Au, Cu	E, Gc(ro)
57	Rochebaucourt	1C-1	32C/11	Philippe Berthelot / Philippe Duquette	Duquette	Au, Ag, Cu	Pr, E, Gc, G
58	Rohault	1C-1	32G/08	Ress. Campbell	Mine Joe Mann	Au, Cu	Galerie d'exploration
59	Rouyn	1C-4	32D/03	Ressources Yorbeau Inc	Astoria	Au	PP, Pr, G
60	Rouyn, Joannès	1C-4	32D/02	Cambior Inc.	Routhier	Au, Cu, Zn	Mag, PP
61	Roy	1C-1	32G/16	SOQUEM INC / Nimsken Corp.	Cummings	Au-Cu	Pr, Mag, PP, E, Gc(ro)
62	Verneuil	1C-1	32F/02	SOQUEM INC / Resources Normabec	Verneuil	Au (Ag)	S(8:1146), T, Pr

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

TABLE 1C-2 - Exploration projects for base metals in the Abitibi and Pontiac subprovinces in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
P1	Baby	1C-2	31M/06	Aurora Platinum/9034-9473 Québec	Angliers	Cu-Ni-Pt-Pd-Co-Au-Ag	GpA,T,G,Gc(h)
P2	Baby	1C-2	31M/06	Aurora Platinum/Hinterland Expl.	Belleterre	Cu-Ni-Pt-Pd-Co-Au-Ag	S(49:5954),PP,Mag,Gc(h)
P3	Baby	1C-2	31M/06	Aurora Platinum	Baby	Cu-Ni-Pt-Pd-Co-Au-Ag	Mag,PP,G,T
P4	Baby	1C-2	31M/06	Aurora Platinum/9034-9473 Québec	Midrim	Cu-Ni-Pt-Pd-Co-Au-Ag	S(78:9310),PP,Mag,T,G
P5	Barraute	1C-2	32C/12	Mines Abcourt	Abcourt-Barvue	Zn-Ag	ET,EF
P6	Barraute	1C-2	32C/12	Corporation Minière Inmet	Barville	Cu-Zn	S(1:200),DPEM
P7	Beauchastel/Duprat	1C-4	32D/03-06	Exploration Azimut/Cambior	Flavrian	Cu-Zn-Au	S(14:1550),EM,G,T,Gc(ro)
P8	Benoit/Le Tac	1C-2	32F/08	SOQUEM INC/Ressources Minières Normabec	Pincourt	Ni-Pt-Pd	Pr,E
P9	Bernetz	1C-2	32C/13	D. Cyr/P. Larivière	Bernetz	Cu-Zn-Ni-Au-Ag	G,Gc(ru)
P10	Berry	1C-2	32D/16	3421856 Canada/T. Coyle	Béarn Extension	Ni-Cu-Pt-Pd-Au	S(1:176)
P11	Beschefer	1C-3	32E/15	Explorers Alliance	Bonhomme	Cu-Zn	S(2:1020),DPEM,Gc(ro)
P12	Bignell	1C-2	32I/04	F. Tremblay/J. Perron	Waconichi Urban-Barry	Ni	G,E
P13	Blondeau	1C-2	31M/07	Exploration Loubel/Tom Exploration	Kelly Lake	Cu-Ni-Pt-Pd-Co-Au-Ag	Mag,Gc(s),Tr
P14	Blondeau	1C-2	31M/07	D. Champagne	Lac Chevrier	Cu-Zn-Au-Ag-Pt-Pd	T,Gp,G
P15	Bourbaux	1C-2	32F/11	J.-P. Cloutier	Propriété Cloutier	Pt-Pd	Gp,G,E
P16	Bourlamaque	1C-5	32C/04	Ressources Aur	Auriac	Cu-Zn-Au	S(2:2558),DPEM,Gc(ro)
P17	Bourlamaque	1C-5	32C/04	Ressources Aur	Airport	Cu-Zn-Au	PP
P18	Bourlamaque/Louvicourt	1C-5	32C/04	Ressources Aur	Dunraine	Cu-Zn-Au	S(2:2260),DPEM,Gc(ro)
P19	Bressani	1C-2	32G/02-03	A. Fournier	Bressani-Tantale	Ta	G,E
P20	Bressani/L'Espinay	1C-2	32G/02-03	B. Frigon/J.-L. Tremblay	Émélie	Pt-Pd-Ta-Au-W	T,G,E
P21	Brodeur	1C-2	31M/10	L. Hallé	Brodeur	Cu-Ni-Pt-Pd-Co	Gp
P22	Brodeur	1C-2	31M/10	J. Gaboury	Laforce	Cu-Ni-Pt-Pd-Co	Gp
P23	Brouillan	1C-3	32E/15	SOQUEM INC/Billiton Canada	B-26 Brouillan	Cu-Zn-Au-Ag	PP
P24	Boyvinet	1C-2	32F/09	H. De Corta/J. Brunelle	Platine - Boyvinet	Pt-Pd-Ni-Cu	Pr,E
P25	Buteux	1C-2	32G/03	L. Desgagné/D. Potvin	L. Desgagné-Buteux	Cu-Pt-Pd-Au-Co	T,G,E
P26	Cadillac	1C-4	32D/01	Groupe minier Ayotte-Martel	Cadillac	Cu-Zn-Au-Ag-Pt-Pd	Mag,TBF,PP,Pr
P27	*Cadillac*	*1C-4*	*32D/08*	*Agnico-Eagle Ltd*	*Mine Laronde*	*Cu-Zn-Au-Ag*	*S(?:?)*
P28	Cadillac	1C-4	32D/08	Agnico-Eagle Ltd	Bruce	Cu-Zn-Au	S(?:1024)
P29	Cadillac	1C-4	32D/08	Agnico-Eagle Ltd	El Coco	Cu-Zn-Au	S(?:1580)
P30	Cadillac	1C-4	32D/08	Agnico-Eagle Ltd	El Coco	Cu-Zn-Au	S(?:6080),DPEM
P31	Cadillac/Malartic	1C-4	32D/08	Agnico-Eagle Ltd	Lac Révillart	Cu-Zn-Au-Ag	S(9:7061)
P32	Casa-Berardi/Laberge	1C-3	32E/06	Mines Cancor/Inco	Gemini	Cu-Zn-Au-Ag	S(23:9878),EM
P33	Cavelier/Galinée	1C-3	32F/12	SOQUEM INC/Ressources Metco	Cavelier-1	Zn-Cu-Au-Ag	Pulse surface
P34	Cavelier/Galinée	1C-3	32F/12	SOQUEM INC/Ressources Metco	du Dôme	Zn-Cu-Au-Ag	Mag,PP
P35	Chazel	1C-2	32D/14	H. LeMouël	Lac Chazel	Cu-Ni-Pt-Pd-Co	S(?:?),E
P36	Cléricy	1C-4	32D/07	Ressources Breakwater	Kino (823)	Cu-Zn-Au-Ag	EM
P37	Cléricy	1C-4	32D/07	Gesmalar	Cléricy Sud-Ouest	Cu-Zn-Au-Ag	Pr,T

TABLE 1C-2 - Exploration projects for base metals in the Abitibi and Pontiac subprovinces in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
P38	Comporté	1C-2	32F/11	SOQUEM INC	Opaoca (1089)	Cu-Zn-Ni-Pt-Pd-Au	Pr
P40	Delbreuil	1C-2	31M/10	Ressources Minérales Mistassini	Lac Simard	Ta-Cs-Li-Be-Nb	ET
P41	Des Méloizes	1C-2	32D/14	L. Lehoux	Normet	Cu-Zn-Au-Ag-Pb	S(1:97),PP,Pr,T
P42	Des Méloizes	1C-2	32D/14	L. Lehoux	Normet II	Cu-Zn-Au-Ag-Pb	G,E
P43	Des Méloizes	1C-2	32D/14	P. Gosselin/F. Turcotte	Gosselin-Des Méloizes	Cu-Zn-Au-Ag-Ni-Pb	T,Gp
P44	Destor/Poularies	1C-4	32D/10	Globex Mining	Lyndhurst	Cu-Zn	S(6:1933),DPEM,E
P45	Dieppe/Collet/Laberge/Casa-Berardi	1C-3	32E/06	Explorers Alliance	Cain	Cu-Zn-Au	Mag,PP
P46	Ducros	1C-2	32C/11	T. Coyle/Carat Exploration	Ducros Sill	Pt-Pd	Pr,E
P47	Ducros	1C-2	32C/11	C. Fortin/D. Fortin	Ducros partie sud	Cu-Ni-Pt-Pd	Mag,TBF,T
P48	Ducros	1C-2	32C/11	N. Fortin/C. Fortin	Platine	Pt-Pd-Au	
P49	Dufresnoy	1C-4	32D/07	Ressources Breakwater	Dufresnoy (708)	Cu-Zn	S(?:2500),DPEM
P50	Dufresnoy/Destor	1C-4	32D/07	Ressources Breakwater	Rivière Dufresnoy (808)	Cu-Zn-Au-Ag	S(5:1048),DPEM,Gc(h)
P51	Dufresnoy/Rouyn	1C-4	32D/03	Ressources Strateco/Cambior	Dufault bloc Nord	Cu-Zn-Pb	S(4:1600), DPEM, Gc(ro)
P52	Estrades	1C-3	32E/10	Corporation Minière Inmet	Newiska	Cu-Zn	S(2:782),DPEM
P53	Estrades/Orvilliers	1C-3	32E/10	Corporation Minière Inmet	Estrades Mine East	Cu-Zn	S(1:810),DPEM
P54	Fabre	1C-2	31M/03	J. Bellehumeur	De la Gare	Ni-Cu-Pt-Pd-vanadium	Gp,E
P55	Fiedmont	1C-2	32C/05	3421856 Canada/9093-6725 Québec	Fiedmont	Ni-Cu-Pt-Pd-Au	Pr,E
P56	Fiedmont	1C-2	32C/05	Mines Abcourt	Vendôme	Cu-Zn-Au-Ag	ET,EF
P57	Gaboury	1C-2	31M/06-07	Hinterland Exploration	Lorraine	Cu-Ni-Pt-Pd-Co-Au-Ag	Mag,PP,T,Pr
P58	*Galinée*	*1C-3*	*32F/12*	*Noranda*	*Mine Bell-Allard*	*Zn-Cu*	*S(39:8379),DPEM*
P59	*Grevet*	*1C-3*	*32F/02*	*Ressources Breakwater*	*Mine Langlois*	*Zn-Cu*	*S(11:3676),PP,EF*
P60	Grevet/Franquet	1C-2	32F/02	M. Proulx	Lanthanides	Cu-Zn-Au-terre rare	Mag,Pr
P61	Grevet/Mountain	1C-2	32F/02	Ressources Breakwater/BP/Noranda Expl.	Grevet	Cu-Zn	S(?:3676),DPEM
P62	Guercheville	1C-2	32G/11	R. Simard	Lac Olivette Nord	Cu-Ni-Zn-Pt-Pd	Pr,E
P63	Guigues/Baby	1C-2	31M/06-11	Hucamp Mines/Sudbury Contact Mines	Timiscaming Diamond	diamants-Ni-Cu-Pt-Pd	Mag,E
P64	Guillet	1C-2	31M/07	P. Gervais	Belleterre 2001	Ni-Cu-Pt-Pd	Gp
P65	Guillet	1C-2	31M/07	Hinterland Exploration	Ponderosa/Tower	Cu-Ni-Pt-Pd-Au-Ag	Pr,E
P66	Guillet	1C-2	31M/07	D. Champagne/A. Gaulin	Mine Belleterre	Cu-Ni-Au-Ag	T,G,E
P67	Isle-Dieu	1C-3	32F/13	J.J. Martel & Associés	Isle-Dieu	Cu-Zn-Au-Ag	G, Pr
P68	Joutel/Poirier	1C-3	32E/08	SOQUEM INC/Ressources Orient	Joutel West	Zn-Cu-Au-Ag	S(2:1200),DPEM
P69	La Come	1C-2	32C/05	F. Valiquette/R. Valiquette	Lac La Corne	Ta-Be	Pr,T
P70	La Come/La Motte	1C-2	32C/05-32D/08	Hinterland Exploration/Kermode Resources	La Corne Tantalum	Ta	Pr
P71	LaGauchetière/Desmazures	1C-3	32E/09	Southern Africa Minerals	Caber	Zn-Cu-Ag	S(2:755),DPEM
P72	LaGauchetière/Desmazures	1C-3	32E/09	Southern Africa Minerals/SOQUEM INC	Caber Périphérie	Zn-Cu-Ag	S(5:1871),DPEM,EM
P73	Lajoie	1C-2	31N/12	Inco	Lajoie	Ni-Cu-Co-Pt-Pd	Mag,EM
P74	La Morandière	1C-2	32C/12	3421856 Canada	La Morandière	Cu-Zn-Ag	E
P75	La Morandière	1C-2	32C/12	P. Coyle/R. Tremblay/G. Robert	Lamorandière RV-1	Cu-Zn-Au-Ag	S(1:?),E
P76	La Motte	1C-2	32D/08	R. Bélanger	La Motte	Ni-Pt-Pd	Mag,PP,T
P77	La Motte	1C-2	32D/08	Globex Mining/Aurogin Resources	La Motte PGE	Ni-Pt-Pd	S(1:101),Pr,E
P78	Langloiserie	1C-2	32G/06	C. Chouinard	Lac Phooey	Ta	Gp
P79	Languedoc/Guyenne/Berry/Dalquier	1C-2	32D/09-15-16	Teck Cominco	Guyenne	Cu-Zn-Au-Ag	Compilation
P80	La Sarre	1C-2	32D/11	T. Coyle/Caract Expl./3421856 Canada	La Sarre Platine	Pt-Pd	Pr,E

TABLE 1C-2 - Exploration projects for base metals in the Abitibi and Pontiac subprovinces in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
P81	Laverlochère/Duhamel	1C-2	31M/07	Tom Exploration	Laverlochère	Cu-Zn-Ni-Pt-Pd	S(?:2500),Pr,Gc(s)
P82	Lemoine/Rinfret/Dollier	1C-2	32G/09-16	Corporation Minière Inmet/Loubel Exploration	Lemoine	Cu-Zn-Au-Ag	S(5:2807),DPEM
P83	Lemoine/Rinfret	1C-2	32G/09-16	McKenzie Bay Resources	Lac Doré	vanadium	S(17:2500),EF,TM
P84	Louvicourt	1C-5	32C/03	Ressources Aur	Chimo	Cu-Zn-Au	Gp
P85	Louvicourt	1C-5	32C/03	Ressources Aur/Novicourt	Louvex	Cu-Zn-Au	Séismique 3D,DPEM
P86	Louvicourt	1C-5	32C/03	Ressources Aur	Bonnefond	Cu-Zn-Au	S(3:3850), Séismique 3D
P87	Louvicourt	1C-5	32C/03	Beaufield Cons. Res./Ressources Aur	Mainstreet	Cu-Zn-Au	Compilation
P88	Lozeau	1C-2	32F/13	D. Bouchard	Lozeau	Cu-Ni-Pt-Pd-Au	Pr
P89	Manneville/Villemontel	1C-4	32D/08	J. Landry	Montelville	Cu-Zn-Au-Ag-Pb	G,E
P90	Martin/Dollard/Boisseau	1C-2	32C/07	M. Fekete	Martin PGE	Pt-Pd-Ni-Cu-Co	Pr,E
P91	Montbray	1C-4	32D/06	Agnico-Eagle Ltd	Montbray E	Cu-Zn-Au-Ag	S(?:2532)
P92	Montbray	1C-4	32D/06	P. Bambic	Montbray	Cu-Zn-Au-Ag	Pr
P93	Montguay	1C-2	32C/06	T. Coyle/M. Roby	Montguay	Cu-Zn-Ag	Gp
P94	Quévillon/Grevet/Duplessis	1C-2	32F/02-03-07	Hudson Bay Exploration and Development	Quévillon	Zn-Cu	S(10:1060), Mag,Gc(ro)
P95	Poirier/Joutel	1C-3	32E/08	Explo-Zinc	Kistabiche-Ez	Cu-Zn	S(3:969)
P96	Pouchot	1C-2	32F/11	Denstone Ventures	Thumbprint	Cu-Ni-Pt-Pd	Mag
P97	Pouchot	1C-2	32F/11	Denstone Ventures/Continental Ridge	Plateau	Ni-Cu-Pt-Pd	Mag,G,E
P98	Preissac	1C-4	32D/08	P. Gosselin/F. Turcotte	Gos-Flo 2001	Cu-Zn-Au-Ag-Ni-Pb	PP,TBF,T
P99	Preissac	1C-4	32D/08	Globex Mining/Aurogin Resources	Preissac PGE	Ni-Pt-Pd	S(3:363),Mag,EM
P100	Rasles	1C-2	32G/10-11	H. Salt	Henry Salt 2001	Zn-Ag	Pr
P101	Roquemaure	1C-2	32D/11	A. Leclerc/D. Mercier	Roquemaure	Cu-Zn-Pb-Ag	T
P102	Roy	1C-2	32G/16	L. Lefebvre/C. Tremblay	Caty	V-Pt	T,G,E
P103	Scott	1C-2	32G/15-16	C. Claveau	David	Cu-Zn-Au-Ag	Pr
P104	Scott	1C-2	32G/15	R. Gagnon	Gustave II	Cu-Zn	Pr
P105	Scott/Barlow	1C-2	32G/15	R. Audet/D. Gosman	Chibastat	Cu-Pt-Pd-Au-Ag	Pr,E
P106	Scott/Hauy	1C-2	32G/10	H. Bouchard	HB	Ni-Pt-Pd	T
P107	Shehyn	1C-2	31M/03	Exploration Nid'Or	Baie Profonde	Cu-Ni-Pt-Pd-Rh-U	Mag,E
P108	Ste-Hélène	1C-3	32E/16	SOQUEM INC/Ressources Sirios	Samson	Cu-Zn-Au-Ag	S(4:1180),Gp
P109	Tavernier	1C-5	32C/03	G. Lachance	Lac Vincent	Cu-Zn-Au-Ag	PP,Mag
P110	Vassan	1C-2	32C/05	A. Gaulin	Alberto-Est 2	Cu-Ni-Pt-Au-Ag	Mag,TBF
P111	Vauquelin	1C-5	32C/03	M. Proulx	Cuivre-Vauquelin	Cu	Pr
P112	Villebon	1C-2	31N/14	Kalahari Resources	Villebon	Cu-Zn-Ni	S(10:2400),EM,Pr
P113	Wilson	1C-2	32F/01-02	S. Bosum	Wilson C	Cu-Zn-Au-Ag	Pr
P114	SNRC 32G-32F-32J-32E-32C-31M	1C-2		Mines d'or Virginia	Abitibi Pt-Pd	Ni-Cu-Pt-Pd	G,Pr
P115	SNRC 32G-32B-32C	1C-2		Northern Abitibi Mining	Regional Diamond	diamants	G,Gc(t),Pr
P116	SNRC 32C/01-32C/02-32C/08	1C-2		Southern Africa Minerals/EX-IN	Grenab	Cu-Zn-Au-Ag	Gc(ro),TBF,Pr,T
P117	Louvicourt	1C-5	32C/03	Ressources Aur	mine Louvicourt	Zn-Cu	S(1:470),Gp
P118	SNRC 32G	1C-2		A. Leclerc/D. Mercier	Diamant	diamants	Pr

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

New Québec and Torngat Orogens, Rae Province (Far North Craton), and Ungava Orogen

Serge Perreault

The New Québec (Labrador Trough) and Ungava (Ungava Trough) orogens, located in northern Québec (figures 1D-1, 1D-2a and b), are Paleoproterozoic orogenic belts assigned to the Churchill Province. Respectively, they lie along the eastern and northern margins of the Archean craton of the Superior Province. The Rae Province (Far North craton; Figure 1D-1), composed of Archean and Paleoproterozoic rocks, lies between the New Québec Orogen to the west and the Torngat Orogen to the east. It is referred to in the literature as the Rae Province (Rae), the Rae Subprovince, or the southeast Churchill Province.

In 2001, exploration expenditures in the Labrador Trough and the Rae Province amounted to $12.3M ($6.86M in 2000) for nine projects. The principal commodities attracting interest were copper, nickel, PGE, zinc, and diamonds (Figure 1D-1).

In the Ungava Trough, **Société minière Raglan** (a wholly-owned subsidiary of **Falconbridge Ltd.**) continued its work on the Raglan minesite. The company reached its output objectives for 2001. Nearly $1M were invested in off-minesite exploration in 2001. Exploration efforts were focused mainly on nickel, copper, and platinum group elements (PGE).

New Québec and Torngat Orogens, Rae Province (Far North Craton), and Ungava Orogen

Magmatic Cu-Ni-Co-PGE and Cr-Ni Deposits

In partnership with **Virginia Gold Mines**, **Osisko Exploration** (2; Figure 1D-1) continued its exploration program near the northern end of the New Québec orogenic belt. The property covers a mafic/ultramafic complex nearly 16 km long. **Osisko** found 10 disseminated to massive sulfide occurrences. Some of these mineralized zones, located at the base of peridotite bodies in the Qarqasiaq and Tasikutaak units, reach 100 m in length. Grab samples yielded up to 6.50% Ni and 0.34% Co. Average grades published by the company range from 3.60 to 6.25% Ni, 0.09 to 0.22% Cu, and 0.18 to 0.33% Co for three massive sulfide zones, and from 0.53 to 1.18% Ni, 0.14 to 0.40% Cu, and 0.03 to 0.07% Co for three disseminated sulfide zones associated with the Qarqasiaq unit. The company also reported assays between 0.36 and 1.11% Ni, between 0.28 and 0.95% Cu, and between 0.08 and 0.18% Co for five massive sulfide zones, and between 0.28 and 0.54% Ni, 0.22 and 0.36% Cu, and between 0.03 and 0.04% Co for disseminated sulfide zones in the Tasikutaak unit. In 2000, four drillholes intersected mineralized zones in two of the four mineralized peridotite and norite lobes of the Kyak layered mafic complex. One drillhole (PB00-03) contained disseminated sulfides over its entire length, with an average grade of 0.48% Ni and 0.18% Cu over 321 m. The drillhole intersected massive peridotite with occasional norite and olivine norite units and contained 1 to 3% disseminated sulfides.

In the southern part of the Labrador Trough, near Retty, Thompson, and Willbob lakes, junior company **Romios Gold Resources Inc.** (8, 9, 10, 11 and 12; Figure 1D-1) acquired five properties in the summer of 2001; the company carried out a field campaign on all five properties. Claims held by Romios are adjacent to properties held by LaFosse Platinum Group, including the Blue Lake deposit (1.36 Mt at 1.50% Cu and 0.67% Ni).

Base and Precious Metals

Over the last three years, **WMC Exploration** (13; Figure 1D-1) has been conducting exploration work to the east of the Labrador Trough, along the western margin of the Rae Province. During the fall of 2000, the company acquired 35 mining exploration licences covering a total area in excess of 13,000 km2. Work carried out during 2001 included a regional aeromagnetic survey, ground geophysics, gravity surveys, ground follow-up of lake sediment anomalies, geology, prospecting, and nearly 4,000 m of drilling. Disseminated and massive, Cu-Ni-sulfide mineralization associated with mafic dykes were found on the Quebec-7 project.

Diamonds

The discovery of diamonds during the fall of 1999 by **Twin Mining Corporation** (15; Figure 1D-1), formerly Twin Gold Corporation, generated unprecedented interest in this part of Québec's Far North. At the time, some 28

mining exploration licences (PEM) were acquired following the first announcement by Twin Mining. In April 2001, Twin Mining reported the recovery of a total of 1,548 macrodiamonds (diamonds more than 0.5 mm in size in one direction) from 342 tonnes of kimberlitic rock derived from bulk samples collected from sites A, C, and NN in the Torngat-1 dyke. The samples were collected from an excavated area 65 m long and up to 7 m deep. Sample A, totalling 90.7 tonnes, yielded 250 diamonds for an aggregate weight of 4.836 carats. In samples C (57.7 tonnes) and NN (193.2 tonnes), respectively, 312 diamonds weighing a total of 2.405 carats and 986 diamonds weighing a total of 5.879 carats were recovered. Of the total of 1,548 macrodiamonds, three measured between 4 and 5 mm, eight between 3 and 4 mm, 125 between 2 and 3 mm and the remainder between 1 and 2 mm. The largest diamonds weighed between 0.199 and 0.685 carats. For this bulk sampling program, the average grade was 0.038 carat/tonne, taking into account only the macrodiamonds (0.053 carat/tonne for sample A, 0.041 carat/tonne for sample C, and 0.03 carat/tonne for sample NN). In order to ensure quality control, 10 tonnes of tails were reprocessed by dense media separation, and 10 macrodiamonds were recovered. A series of 50-kg samples were collected along a 4.5-km section called Torngat North. Caustic fusion analysis of a 24-kg sample indicated the presence of diamonds up to 0.021 carat. The largest diamond measured 1.85 mm by 1.27 mm by 1.07 mm. During 2001, the company collected nine samples weighing 300 kg each for analytical purposes.

Diamond Discoveries International and **Tandem Resources** (16; Figure 1D-1) discovered diamonds in a kimberlite dyke traced over more than 5.6 km on their Pangea Lake property. In 2000, analyses of two samples spaced one kilometre apart revealed the presence of 10 diamonds, including four macrodiamonds. A microdiamond was recovered from a small sample taken from a dyke located about 6 km north of Abloviak Fjord. The company also announced in early 2001, the discovery of 125 rubies in a sample, 5% of which were considered large stones (over 0.50 mm in one direction). The rubies varied from pink to dark red. The company cannot confirm at this stage whether the rubies are associated with a kimberlite dyke system or with other elements. The ruby-bearing sample was collected more than one kilometre to the west of the initial diamond discovery. During the summer of 2001, the company conducted a magnetometer survey and a stream sediment survey, and carried out trenching and bulk sampling. The company reported it had recovered nearly 1,000 rubies to date.

Ungava Trough

Magmatic Cu-Ni-Co-PGE Deposits

Société minière Raglan (Figure 1D-2a and b), a wholly-owned subsidiary of **Falconbridge Ltd.**, reached its production objectives for 2001 at its Raglan nickel-copper mine. The company expects to operate the mine for a period of 25 years at an annual output of 21,000 tonnes of nickel concentrate, 5,000 tonnes of copper concentrate, and 200 tonnes of cobalt concentrate. Operating costs are estimated at about $1.50 per pound of nickel. **Société minière Raglan** extracts ore, in open pit and underground, from several massive sulfide lenses located at the base of ultramafic flows in the Chukotat Group. Reserves contained in the Raglan orebodies (including the Lac Cross, Katinik, and Donaldson deposits) are estimated at 22 Mt at an average grade of 3.12% Ni and 0.87% Cu. The company also recovers platinum, palladium, silver, and gold as by-products. This year, **Falconbridge Ltd.** (18; Figure 1D-2a) continued its minesite exploration work with geophysical surveys and drilling. The company is focusing on the contact between the Povungnituk and Chukotat groups in the eastern part of the Ungava belt.

Canadian Royalties Inc. (19; figure 1D-2a) obtained significant platinum and palladium grades from new assays of drill core derived from a drill program carried out in 1997 by High North Resources and Ungava Minerals Corporation. During the initial program, assays for nickel, copper, and cobalt had been carried out, whereas PGE had not been analyzed. Detailed PGE analyses of drill core from all four drillholes (EX-97-01, 02, 03, and 04) on the Expo-Ungava property yielded the following results: 0.28 g/t Pt, 1.50 g/t Pd, 0.70% Cu, and 0.70% Ni over 39.52 m (interval from 41.55 to 81.07 m) in drillhole EX-97-01; 0.248 g/t Pt, 0.994 g/t Pd, 0.66% Cu, and 0.60% Ni over 46.99 m (interval from 49.75 to 96.74 m) in drillhole #02; 0.373 g/t Pt, 1.517 g/t Pd, 0.67% Cu, and 0.58% Ni over 64.57 m (interval from 47.81 to 112.4 m) in drillhole #03; and 0.235 g/t Pt, 0.946 g/t Pd, 0.69% Cu, and 0.64% Ni over 46.93 m (interval from 65.37 to 112.3 m) in drillhole #04. During the summer of 2001, the company carried out 13 new drillholes which, once added to previous mineral resource estimates, brought

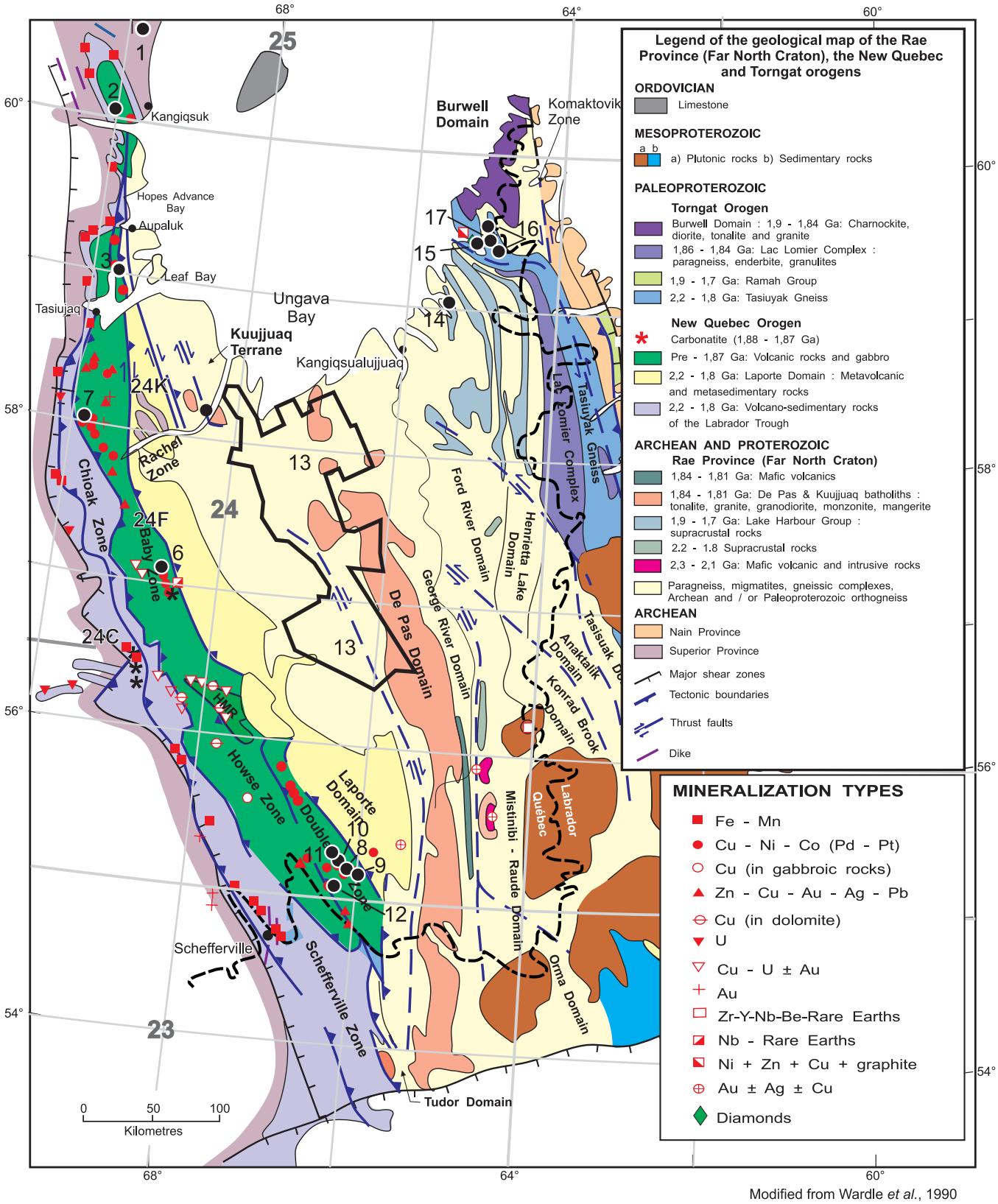
indicated mineral resource calculations to 8.6 Mt (metric) at a grade of 0.61% Ni and 0.84% Cu. The inferred mineral resource estimate stands at 6.9 Mt (metric) at similar or slightly lower grades. The total mineral resource, including indicated and inferred categories, stands at 15.5 Mt at 0.6% Ni and 0.8% Cu.

The mineralization occurs along an east-west trending zone, which is 732 m long by 107 m wide on average. New results from drillhole 67-8 were of the order of 2.53 g/t PGE (Pt+Pd), 0.79% Ni, and 0.74% Cu over a true thickness of 56.39 m. Within this interval, grades of 3.84 g/t PGE, 1.18% Ni, and 1.06% Cu over 24.4 m were reported. An assay of 11.15 g/t PGE was reported for a 2.7 m interval in drillhole 68-72. During the summer of 2001, the company also conducted new assays of historical drillholes on the Mesamax property, located along the extension of the Expo-Ungava property. The company reported grades of 0.50% Ni, 0.75% Cu, 0.68 g/t Pt, 2.29 g/t Pd, and 0.09 g/t Au over 48 m in drillhole MXNW-01-4; 0.42% Ni, 0.72% Cu, 0.87 g/t Pt, 3.13 g/t Pd, and 0.16 g/t Au over 25 m in drillhole MXNW-01-6; and 0.25% Ni, 0.43% Cu, 0.49 g/t Pt, 1.77 g/t Pd, and 0.07 g/t Au over 45.72 m in drillhole MXNW-01-7.

Canadian Royalties Inc. (20; Figure 1D-2a) obtained significant platinum, palladium, nickel, and copper grades from the TK area of its Phoenix property, located 20 km south of the Raglan mining camp and 7 km northeast of Expo-Ungava. The company reported grades of 2.70% Ni, 0.78% Cu, 0.126% Co, and 2.67 g/t PGE (Pt+Pd) over 5.37 m (interval from 127.98 to 133.35 m) in drillhole TK-01-04. The mineralization consisted of massive sulfides located near the base of a Raglan-type ultramafic sill (TK sill). Grades of 6.48 g/t PGE were obtained below this interval, over a thickness of 1.5 m. This mineralization occurs in the footwall, below the massive sulfides.

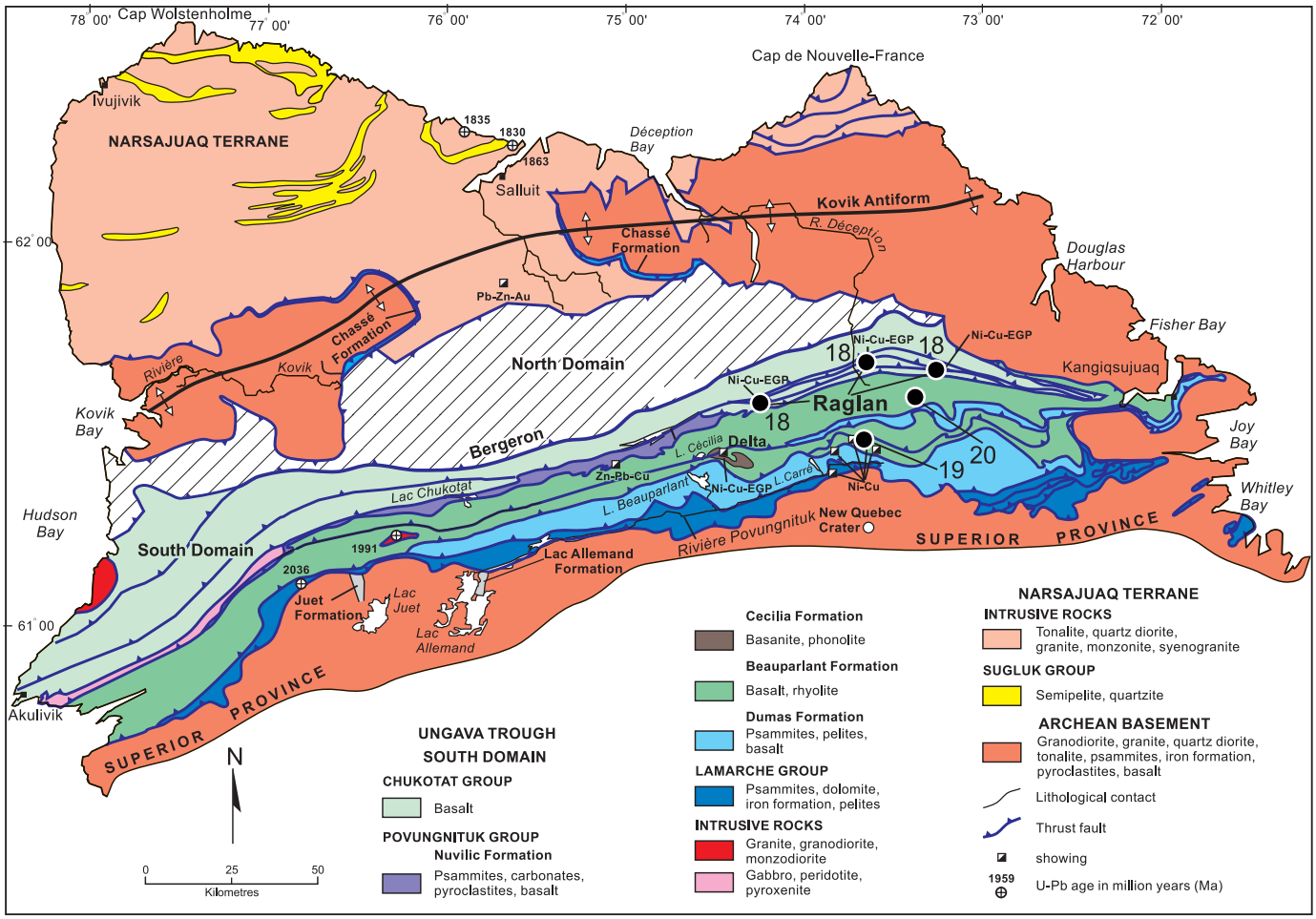
Outlook

In 2002, off-minesite mining exploration expenditures should decrease relative to 2001 in the New Québec orogen, whereas those in the Ungava belt are expected to remain stable. Exploration should remain focused on the search for magmatic Ni-Cu-PGE deposits and diamonds. Along the eastern shore of Ungava Bay, 2002 will be a crucial year for diamond exploration, given the lack of new reports of macrodiamond discoveries in 2001. However, the results from the 2001 field programs have yet to be released.



Modified from Wardle *et al.*, 1990

Figure 1D-1. Location of the 2001 mining exploration projects in the New Quebec and Torngat orogens and in the Rae Province.



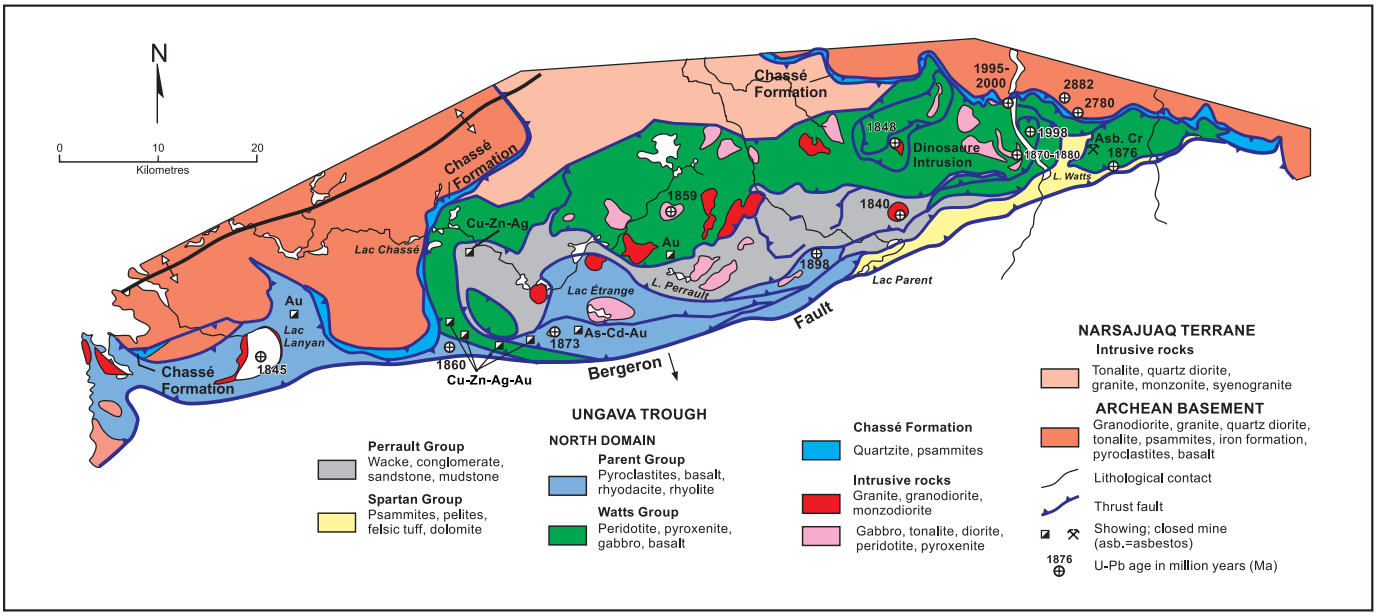


Figure 1D-2 a and b. Location of mining exploration project for the Ungava Trough (a) and its North Domain (b) for the year 2001.

TABLE 1D-1 - Exploration projects in the New Quebec, Ungava and Torngat orogens and in the Rae Province in 2001.							
N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
New Quebec Orogen (Labrador Trough)							
1		1D-1	25C/12	David Okpik	Okpik	Ni-Cu-Zn-Pb	Pr
2		1D-1	25D/01	Osisko Exploration Inc. / Virginia Gold Mines Inc.	Payne Bay	Ni-Cu-Co-ÉGP	G, Pr
3		1D-1	24K/13, 24N/04	Troymin Resources	Hawk Ridge	Ni-Cu-ÉGP	G,Gc(ro)
4		1D-1	24C, 24F, 24K	Virginia Gold Mines Inc. / Placer Dome	Fosse Pd-Pt	ÉGP	Pr, G, E
5		1D-1	24F, 24K	Noranda inc.	Hyperspectral reconnaissance	Zn-Pb-Cu	Int. Sat.
6		1D-1	24F/02, 24F/07	Osisko Exploration Inc. / Coleraines Resources Inc.	Gillet	Ni-Cu-Co-ÉGP	G, Pr, E
7		1D-1	24K04	Osisko Exploration Inc.	Hellancourt	Ni-Cu-Co-ÉGP	G, Pr, E
8		1D-1	23O/01, 23O/08	Romios Gold Resources Inc.	Retty Lake - Anticline Lake	Ni-Cu-Co-ÉGP	Pr, G, E
9		1D-1	23O/01	Romios Gold Resources Inc.	Retty Lake Southeast	Ni-Cu-Co-ÉGP	Pr, G, E
10		1D-1	23O/08	Romios Gold Resources Inc.	Thompson Lake	Ni-Cu-Co-ÉGP	Pr, G, E
11		1D-1	23O/08	Romios Gold Resources Inc.	Gomez Lake	Ni-Cu-Co-ÉGP	Pr, G, E
12		1D-1	23O/01	Romios Gold Resources Inc.	Willbob Lake	Ni-Cu-Co-ÉGP	Pr, G, E
Rae Province and Torngat Orogen							
13		1D-1	24A, 24B, 24G, 24J	WMC Ltd	Quebec - 7	Ni-Cu	G, Pr, GpA, Gp, EM, Mag, S(13:4192)
14		1D-1	24P/03	Ken Jararuse	Jararuse	Cu-Ni-Zn-Pb	Pr
15		1D-1	24P/06, 24P/07, 24P/11	Twin Mining Corporation	Torngat	Diamant	G, Ev
16		1D-1	24P/07, 24P/08, 24P/11	Tandem Resources Ltd. / Diamond Discoveries International	Pangia Lake	Diamant - rubis	Pr, G, Mag, Gc(r), T, Ev
17		1D-1	24P/11, 24P/14	Marum Resources Inc.	Torngat	Diamant	Ev
18		*1D-2a*	*35G/09,*	*Falconbridge Ltd*	*Raglan **	*Ni-Cu-ÉGP*	*G, EM, DPEM, Mag,*
19		1D-2a	35H/11,	Canadian Royalties Inc. / Ungava Minerals	Expo-Ungava	Ni-Cu-ÉGP	G, EM, Mag, Gc(ro)S()
20		1D-2a	35H/11, 35H/12	Canadian Royalties Inc. / Ungava Minerals Corp.	Phoenix	Ni-Cu-ÉGP	G, EM, Mag, Gc(ro)S()

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey

Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

Grenville Province

Serge Perreault

The Grenville Province extends over more than 2 000 km along the north shore of the St. Lawrence River and is from 300 to 600 km wide. It is divided into three major lithotectonic entities: the Parautochthon, the Allochthonous Monocyclic belt and the Allochthonous Polycyclic belt. The Grenville Front, a major complex structure oriented northeast-southwest, separates the Parautochthon from Archean rocks of the Superior Province and Paleoproterozoic rocks of the Otish basin and New Québec Orogen (Figure 1E-1). This year, Géologie Québec mapped at 1:50,000 scale NTS sheet 31O/03 in the Lac Dieppe area and carried out an inventory of industrial mineral occurrences and metallic showings and deposits in the Fermont area (NTS 23B).

In 2001, approximately $4.8M were invested in off-minesite exploration in the Grenville Province, a significant increase relative to exploration expenditures in 2000 ($3.78M). This rise in expenditures is attributed to the advanced state of certain exploration projects and to a large drill program carried out by the Québec Cartier Mining Company. The number of exploration projects is roughly the same as in 2000, i.e. 100 versus 113. The FREM (Fonds régional d'exploration minière de la Côte-Nord) and Géologie Québec funded 11 advanced prospecting projects and 23 grassroots prospecting projects, for a total amount of $240,000. The Fonds d'exploration minérale du Saguenay - Lac-Saint-Jean financially supported 24 grassroots prospecting projects and 13 advanced prospecting projects for a total amount of nearly $250,000. In the western part of the Grenville, the assistance program for individual prospectors funded 28 grassroots and 10 advanced prospecting projects, for a total of $220,000. Under the B component of the financial assistance program, 10 companies received nearly $422,000 in subsidies, including four granite projects.

Magmatic and Epigenetic Ni-Cu (-Co-PGE) Deposits

Virginia Gold Mines and **SOQUEM INC.** continued their investigations in the northeast part of the Lac-Saint-Jean anorthositic Suite in the Chutes-des-Passes area (NTS sheet 22E/15), located 140 km north of Chicoutimi (45; Figure 1E-1). In this area, the suite is composed of anorthosite, leucogabbro, leucotroctolite, olivine gabbro, and pyroxenite horizons, which cut a heterogeneous gneiss sequence. Exploration is focused on magmatic sulfide deposits associated with the base of the intrusive complex or its feeder conduits. An 11-hole diamond drill program totalling 1,193 m was carried out in 2001. Geophysical surveys as well as liberation tests on sulfides of the MHY zone were also conducted.

On the Manicouagan plateau, **Falconbridge Ltd.** (82, 83, 84, 85; Figure 1E-1) continued its exploration program launched in 1999. The company is searching for Ni-Cu-PGE mineralization associated with ultramafic and mafic intrusions cutting metagabbros and paragneisses in the Hart-Jaune Terrane. In the Haut-Plateau-Est project, **Falconbridge Ltd.** (83; Figure 1E-1) conducted a drill program on the Barre-de-fer and PYC showings, which was discovered during a helicopter-borne Mag-EM survey conducted in 1999. Surface samples yielded grades of 1.98% Ni, 1.17% Cu, and 0.22% Co. The 2001 drill program on the Barre-de-fer showing intersected mineralized zones in drillhole DDH151-01, with grades of 1.47% Ni over 3.75 m and 1.58% Ni over 5.8 m, including 2.63% Ni over 2.5 m. In drillhole DDH151-02, located 120 m north of the previous drillhole, a 9.4-m section graded 1.48% Ni, including 2.14% Ni over 2.85 m. The copper-nickel-bearing semi-massive to massive sulfides are associated with olivine gabbronorite and ultramafic units. In November 2001, **Rockwell Ventures Inc.**, a subsidiary of the group **Hunter and Dickinson Inc**., acquired an option to earn an interest of 60% in the Manicouagan projects of Falconbridge Ltd., by investing $10M in exploration before April 2006.

Appalaches Resources (90; Figure 1E-1) continued work on the B-20 property in 2001 and on their new Baie-des-Sables property, in partnership with **Marum Resources** (91; Figure 1E-1). The property features Cu-Ni-Co mineralization associated with pyroxenite horizons, lenses and pods along the northern margin of the Rivière-Pentecôte anorthositic Suite. **Appalaches Resources** and **Marum Resources** discovered PGE, Ni,

and Cu showings 2 km east of the Main Zone on the B-20 property and north of the Vachon showing, where grab samples yielded high PGE grades (up to 2.5 g/t). The results reported by **Appalaches Resources** reached 1.18 g/t PGE (Pt+Pd), 3% Cu, 1% Ni, and 0.27% Co. The PGE-rich zones are associated with EM conductors. The mineralized zone, taking into account the main zone on B-20, the Vachon showing, and the new showings, has a strike length of more than 4 km. **Appalaches Resources** and **Marum Resources** also reported the presence of an important EM anomaly at depth, located to the northwest and along the extension of the showings mentioned above. Geophysical modelling indicates that the body responsible for this anomaly is 300 m long and extends to a depth of 260 m.

Sedimentary Exhalative and Volcanogenic Zn-Ag (-Pb) and Au-Ag Deposits

The Montauban Group, which hosts polymetallic deposits, consists of a pelitic sedimentary sequence associated with mafic and felsic volcanic horizons. **Mirabel Resources** (16; Figure 1E-1) carried out a drill program and stripping along this unit. Preliminary results from their 2001 campaign included: 3.8 g/t Au and 35.9 g/t Ag over 5 m (drillhole ZN01-01), 4.8 g/t Au and 11.3 g/t Ag over 10.5 m (drillhole ZN01-02), and 5.1 g/t Au and 4.5 g/t Ag over 6 m (drillhole ZN01-06). Between 1983 and 1989, the Muscocho deposit produced 2.8 tonnes of gold and 14.4 tonnes of silver from the North, South, and Marcor zones. The company is trying to locate near-surface zinc, silver, and gold mineralization, in order to delineate reserves potentially mineable by open pit methods.

Southern Africa Minerals and **Explorateurs Innovateurs** (5; Figure 1E-1) continued their work on the Grenab project, with ground geophysics, lithogeochemistry, stripping and shallow drilling. Most electromagnetic conductors were explained by the presence of graphite or barren sulfides. However, at Langlade, trenches exposed a copper-bearing horizon associated with paragneisses derived from remnants of Archean volcano-sedimentary belts in the Parautochthon.

Copper-Gold Mineralization

In the Johan-Beetz area, **SOQUEM INC.** (94; Figure 1E-1) continued its drill program testing copper-gold showings on the BJB property. The purpose of this program was to determine the depth extension of chalcopyrite mineralization associated with quartzites and tourmalinite horizons, as well as drill-testing an EM conductor.

Skarn Cu-W and Cu-Ag-Cu-Mo-W Deposits

Noranda Inc. and **SOQUEM INC.** (26; Figure 1E-1) continued their investigations on the Lachabel property with helicopter-borne and ground geophysical surveys, soil and heavy mineral geochemistry, and lithogeochemistry. Showings with disseminated to semi-massive copper mineralization are associated with Cu-Mo-W skarns.

Magmatic Vanadium-Bearing Titanomagnetite and Apatite Deposits

Northeast of Chicoutimi, several Ni-Cu showings and ilmenite, apatite and titanomagnetite occurrences are associated with the Lac-Saint-Jean anorthositic Suite, and more specifically the Saint-Fulgence lobe.

Ressources d'Arianne Inc. (47; Figure 1E-1) continued its work on the Mirepoix property with diamond drilling, stripping, and a magnetometer survey. The company discovered ilmenite and apatite mineralization associated with massive magnetite horizons. Released results showed grades of 4.14% TiO_2 and 2.74% P_2O_5 over 25 m, 6.2% TiO_2 and 3.4% P_2O_5 over 11 m, 8.11% TiO_2 over 29.19 m, and 13.8% TiO_2 over 15.9 m.

Massive Ilmenite Deposits

Anorthositic suites in the Côte-Nord region are known for their ilmenite and titaniferous magnetite ore deposits, in particular, the Havre-Saint-Pierre deposit. Since 1950, **QIT Fer et Titane** has been mining an ilmenite deposit at the Lac Tio open pit mine. This deposit is the second largest ilmenite deposit in the world, with proven reserves of 60 Mt at an average grade of 86.9% combined iron and titanium oxide (34.2% TiO_2, 27.5% FeO and 25.2% Fe_2O_3). In 2001, **QIT Fer et Titane** (95, 96; Figure 1E-1) carried out an important airborne Mag survey, as well as prospecting work on the Big Island showing.

Carbonatite-Hosted Niobium Deposits

The Saint-Honoré carbonatite complex in the Saguenay - Lac-Saint-Jean region hosts the niobium deposit mined by **Mazarin Inc.** and **Cambior** (61; Figure 1E-1). Niobec ore consists of pyrochlore, which is subsequently converted into ferroniobium. Following a profitability study to evaluate a possible mill expansion at the Niobec mine, an initial investment estimated at $7M resulted in a 20% increase in production during the third quarter of

2000. The second phase of expansion will require an additional investment of $3M to increase production gradually by another 20%, in order to meet world niobium demand. The Niobec mine is the only source of niobium in operation in North America and is the third largest producer worldwide. The mine has been in operation since 1976, initially producing a niobium pentoxide concentrate (Nb2O5). Since 1994, following the construction of a converter, the mine began producing ferroniobium. Total output for 2001 amounted to 3,006 tonnes of niobium.

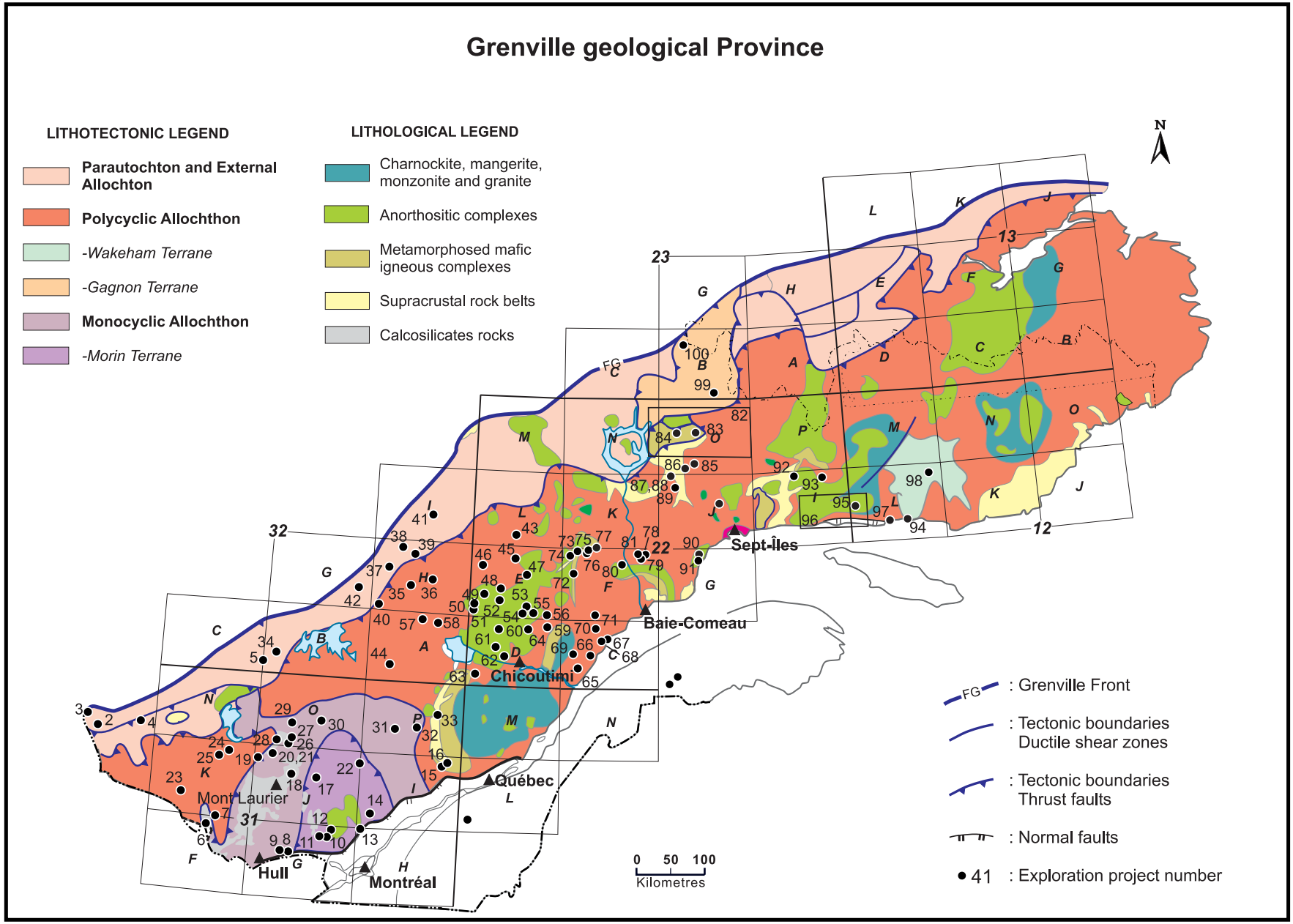
Cambior Inc. (36; Figure 1E-1) carried out prospecting work and collected a sample for metallurgical testing on the Crevier property, in Crevier and Lagorce townships. The Crevier deposit is estimated at 33 Mt at 0.08% Nb_2O_5 and 201 ppm Ta (0.02% Ta). The mineralization occurs in two forms: U-Nb-Ta mineralization associated with uranpyrochlore, and Nb-Ta mineralization associated with a pyrochlore-bearing, pegmatitic nepheline syenite.

Iron Deposits Associated with Superior-Type Iron Formation

The Fermont area is characterized by the presence of numerous iron deposits. These deposits occur in the metamorphosed iron formations of the Gagnon Group, which are the Grenvillian metamorphic equivalents of iron formation in the Labrador Trough. Extracted minerals are hematite and specular hematite. The orebodies have been mined since the 1950s by the **Québec Cartier Mining Company (QCMC)** in Québec and by **IOC** and **Wabush Mines** in Labrador. In 2001, **QCMC** continued exploration on its Lac Hessé property (100; Figure 1E-1) with an extensive diamond drill program. Their objective is to increase the company's iron ore reserves near its Mont Wright facilities.

Outlook

The Grenville Province includes a very wide range of geological settings within an enormous landmass, which offers explorationists an excellent discovery potential for base and precious metals. The level of exploration activity should remain stable in 2002 in the Grenville Province. Investigations will be mainly focused on the search for nickel-copper and platinum group element deposits in the central part of the Grenville, particularly in the Manicouagan area.



Perreault and Ouellet 1999 (from MM 94-01)

FIGURE 1E-1 Location of mining exploration projects in the Grenville Province for 2001.

TABLE 1E-1 - Exploration projects in the Grenville Province in 2001.

N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
1	-	1E-1	22F, 22N, 23C, 31O, 31N	Virginia Gold Mines Inc. / BHP Billiton	Reconnaissance Grenville	Cu-Ni-Co	Pr, G, GpA (Mag-EM)
2	Shehyn	1E-1	31M/03	Daniel Gaudreault, Daniel Champagne	Baie Profonde	Ni-Cu-Co-ÉGP	Pr, G, E
3	La Noue	1E-1	31M/02	Serge Caron	Cerise	Au-Ag-Cu-Zn	Pr
4	Darvau	1E-1	31M/01	Daniel Champagne, Albert Gaulin	Passe Jaways	Ni-Cu-Co-ÉGP	Pr, G, E
5	Baudin, Diaz, Bourgmont, Trevet, Espery, Sérigny, Haig, Foch, Crusson,Vasson, Valmy	1E-1	32B/04, 32C/01,02	Southern Africa Minerals Corporation / Explorateurs Innovateurs de Québec	Grenab	Ni-Cu-Co-ÉGP	Pr, G, Gc(ro), T
6	Pau, Briand, Egan, Huddersfield	1E-1	31F/15	Robert J. Tremblay	Montcerf	Cu-Co-Ag	Pr
7	Huddersfield, Leslie, Litchfield, Pontefract, Normandie, Mansfield	1E-1	31F/15, 31K/12	Jean Philippe	Fort-Coulonge Nord	Au-Ag-Ni-Cu	Pr
8	Grenville, Chatham	1E-1	31G/10	Sylvain Chapleau	Grenchat	Zn-Pb-Cu-Co-Au-	Pr
9	Harrington, Papineau, Grenville	1E-1	31G/10, 31G/15	Maryse Durocher	MD-Ouest	Zn-Pb-Cu-Co-Au-Ag	Pr
10	Wenworth, Harrington, Arundel, Amherst	1E-1	31G/15, 31G/16	Christian Desrosier	Lost River	Cu-Pb-Zn-Ag	Pr
11	Arundel, Harrington	1E-1	31G/15	Susie Léger	SL-Est	Cu-Ni-Zn-Au-Ag	Pr
12	Montcalm	1E-1	31G/16, 31J/13, 31K/08	Maxime Leduc, André Liboiron	Morin-Heights	Cu-Zn-Pb-Au	Pr
13	Kilkenny, Rawdon	1E-1	31H/13, 31I/14	Isabelle Filteau	Kilkenny	Ag-Pb-Zn	Pr
14	Kildare	1E-1	31I/04, 31I/05	Jean-Paul Belisle, Roger Larochelle	Lac Long	Au	Pr, E
15	Montauban	1E-1	31I/16	Jean Bernard	Montauban	Au-Ag-Cu-Zn-Pb	
16	Montauban	1E-1	31I/16	Ressources Mirabel Inc.	Montauban	Au-Ag	Pr, G, T, E, S(17:100)
17							
18	Turgeon	1E-1	31J/11	John Charlton, Mark Fekete	Ste-Véronique PGE	ÉGP	Pr, E, G, Gp
19	Baskatong	1E-1	31J/13	Gérard Robert	Baie Mercier	Ta-Nb-terres	Pr
20	Fontbrune, Major, Harper, Olscamp, Payment	1E-1	31J/13	Phil Boudrias	Réservoir Baskatong Est	Cu-Ni-Co-ÉGP-Zn-Ta	Pr
21	Fontbrune	1E-1	31J/13	Phil Boudrias	Indice Ferme-Neuve	Cu-Ni-Co-ÉGP	Pr, G, E
22	De Maisonneuve, Brassard	1E-1	31J/16, 31I/13	Ted George Campbell	De Maisonneuve	Cu-Ag	Pr, G, E, S
23	Rochefort, Forant, Anjou	1E-1	31K/06	James M. Larivière, Joe C. Larivière	Coulonge Noir	Ni-Cu-ÉGP	Pr
24	Hainaut, Kondiaronk, Champagne, Orléanais, Bourbonnais	1E-1	31K/15, 16	André Gauthier, Martin Gauthier	Vulcain -A1	Cu-Ni-EGP-Au-Ag	Pr

TABLE 1E-1 (continued)

N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
25	Hainaut	1E-1	31K/15	André Gauthier	Vulcain-A2	Ag	Pr
26	Chopin	1E-1	31O/03	Noranda inc. / SOQUEM Inc.	Lachabel	Cu-Ni	Pr, G, E, PP, GpA, Gc(s), Gc(ro), T, S(3:400)
27	Chopin	1E-1	31O/03	Suzanne Melançon	Vastel Ouest	Ni-Cu-Co	Pr
28	-	1E-1	31O/04, 31O/05	Philippe Allard, Richard Dupras St-Cyr	Rachel	Zn-Pb-Cu-Ni	Pr
29	-	1E-1	31O/06	Michel Bélisle,Suzanne Melançon	Diepp -Vastel IV	Cu-W-U-Ta-Nb	Pr
30	-	1E-1	31O/07	Philippe Allard, Richard Dupras St-Cyr	adonis	Cu-Ni-Co-Zn	Pr
31	Payment, Baudin, Borgmont, Vasson	1E-1	31P/06	Jean Viger, David Fournier-Viger	Averill	Au-Cu-W-Zn	Pr
32	Bourgeois	1E-1	31P/07	Normand Noël, Martin Gagné	Triton	Cu-Ni-EGP	Pr
33	Borgia	1E-1	31P/09, 10, 15	Gervais Simard	La Bostonnais II	Ni-Cu-ÉGP	Pr
34	Bongard	1E-1	32B/05	E. Gaucher, T. Bélanger	Grenville 2001	Cu-Ni-Zn-Pb	Pr
35	Desautels	1E-1	32H/06	9083-5596 Québec inc.	Lac Desautels	Cu-Ni	E, G, S
36	Crevier, Lagorce	1E-1	32H/07, 10	Cambior inc.	Crevier	Nb-Ta	G, E, TM
37	-	1E-1	32H/12	Bernard Sénéchal, Michael Dion	SIBÉLIUS IV	Cu-Ni-Au	Pr
38	Harley	1E-1	32H/14	Claude D'Amours	Nestaocano 2001	Cu-Au	Pr
39	De lanaudière	1E-1	32H/14	Gaston Savard, Bernadette Ménard	Rivière ouasiemsca	Au-Cu	Pr
40	Poutrincourt	1E-1	32H/04	Jean-Jacques Boily	JEJABO 2001	Cu-Zn-Au	Pr
41	-	1E-1	32I/07	Rosaire Veilleux	BUNNY	Ni-Cu-ÉGP	Pr
42	Rohault	1E-1	32G/01	Michel Desbiens, Bersmans Lavoie	DESLAV	Cu-Zn-Au	Pr
43	-	1E-1	22L/02, 03	Henri Boily	Péri-Hab	Ni-Cu	Pr
44	-	1E-1	32A/03, 05, 06	Alain Boily	Awashish	Cu-Au	Pr
45	-	1E-1	22E/14, 15	SOQUEM inc. / Virginia Gold Mines Inc.	Chute-des-Passes	Cu-Ni-Co-Ti-P	G, E, S(11;1193), Gp
46	-	1E-1	22E/12	Christian Lefebvre	Lac Dulain	Zn-Cu-Ag	Pr
47	-	1E-1	22E/10	Les ressources d'Arianne inc.	Lac-à-Paul	Ti-P	Pr, G, E, S(23:705)
48	-	1E-1	22E/06	Claude Brassard	Lac des Canots	Cu Ni Ti	Pr
49	Petit	1E-1	22E/05	Lionel Lefebvre	Hibou	Zn-Cu	Pr
50	Hudon	1E-1	22E/04	Léopold Tremblay	Zinc l'Ouest	Zn-Cu-Au	Pr
51	Hudon	1E-1	22E/04	Paul Gagnon	Hudon zinc II	Zn-Cu-Au	Pr
52	St-Onge de Faraud	1E-1	22E/03, 22E/06	Gaétan Tremblay	St-Onge de Faraud	Ni-Cu-Co	Pr
53	-	1E-1	22E/02	Marcel St-Laurent, Paul Gagnon	Maria-Chapdelaine	Ni-Cu-Ti-P	Pr
54	-	1E-1	22E/02	Roger Moar, Martin Heiligmann	Onatchiway	Ni-Cu-ÉGP	Pr

TABLE 1E-1 (continued)

N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
55	-	1E-1	22E/02	Les ressources d'Arianne inc.	Mirepoix	Ti-P	Pr, G, T, E, Mag, S(24:760)
56	-	1E-1	22E/01	Léopold Tremblay	Lac Périgny	P-Ti-V	Pr
57	Ramezay	1E-1	32A/15	Jean-Louis Tremblay	Ramezay	Cu-Ni-ÉGP-Au	Pr
58	Girard	1E-1	32A/15	Bernard Sénéchal, Nathalie Pilote	Sibélius 3	Ni-Cu	Pr
59	-	1E-1	22D/16	Charles Boivin	Lac Laflamme	Mo-W Sn	Pr
60	Bégin	1E-1	22D/14	Gérard Girard	Bégin	Ti-V-P (silice)	Pr
61	Simard	1E-1	22D/11	Mazarin inc. / Cambior inc.	Niobec (BM 663)	Nb	S
62	St-Germain	1E-1	22D/07	Martin Truchon	BONGA	Mo-Cu	Pr
63	Malherbe, St-Hylaire , Crespieul	1E-1	22D/04	Serge Audet, Yves Audet	ÉCO MÉTA COM	Ni-Cu (silice)	Pr
64	degarreau	1E-1	22D/15	Gaétan Tremblay	Vanadium	V	Pr
65	Bergeronnes	1E-1	22C/05	Alain Therrien, Pierre Bouchard	Lac La Peltrie	Cu-Au	Pr
66	Bergeronnes	1E-1	22C/05, 06	Germain et Michael Otis	Longue Faille	Au-Cu-Zn	Pr
67	-	1E-1	22C/10	Nil et mario Trembaly	Rendez-vous	Au-Cu-Zn-Pb	Pr
68	-	1E-1	22C/11	Rosaire Soucy, Jocelyn Tremblay	Ruisseau des cèdres	Cu-Au	Pr
69	-	1E-1	22C/12, 13	E. Desbiens, M. Savard	Lac de la Canne	Au-Cu-Zn	Pr
70	-	1E-1	22C/14	Laurent Thibault, Maryse Villeneuve	Lac Kakoutis	Cu-Zn-Au	Pr
71	Villejoin	1E-1	22F/03	Carl Pépin, Michel Larouche, Michel Gauthier	Indice Gauthier	Cu	Pr, Gc(s)
72	-	1E-1	22F/12, 13	J.-Y. Fournier, S. Savard	Lac Roy	Cu-Ni-Co-Ti-V	Pr
73	-	1E-1	22F/13	Jacques et André Dionnes		Cu-Ni- ÉGP	Pr
74	-	1E-1	22F/13	Pierre Brisson, Carol Soucy	Soubier	Cu-Ni	Pr
75	-	1E-1	22F/14	Jean Lapierre, Richard Pope	La Blache 2001	Cu-Ni	Pr
76	-	1E-1	22F/14	Guy et Yolande Couturier	Remous 2001	Cu, Ni	Pr, EM
77	-	1E-1	22K/03	Michel Castilloux, Alain Gauthier	La Blache 215 N	Cu-Ni	Pr
78	-	1E-1	22F/16	Marcel Bourques, Gilles Bourques	Qu'appelle	Cu-Ni-ÉGP	Pr
79	-	1E-1	22F/16	Mario Bourques	Wellie	Cu-Ni-ÉGP	Pr
80	-	1E-1	22F/15	Michel Vaillancourt	Cinam	Cu-Ni	Pr
81	-	1E-1	22F/15	Exploration Esbec inc. / Fancamp Exploration Ltd.	Manic 3	Cu-Ni-Co	Pr
82	Villeray, Forgues, Fagundez, Le Courtois, Cormier, Belle-Roche, Brien, Jauffret	1E-1	22N/08, 09, 16, 22O/05, 06, 11, 12, 13, 14	Falconbridge Ltd	Haut-Plateau	Ni-Cu-Co-EGP	G, Mag, EM
83	Villeray	1E-1	22O/11	Falconbridge Ltd	Haut-Plateau-Est	Ni-Cu-Co-EGP	G, GpA, Mag,EM, E,
84	Forgues	1E-1	22O/12	Falconbridge Ltd	Forgues	NI-Cu-Co-ÉGP	G, E, T, S(1:98)
85		1E-1	22O/03	Falconbridge Ltd	Amiral	Ni-Cu-Co-ÉGP	Pr, G

TABLE 1E-1 (continued)

N°	TOWNSHIP/SEIGNIORY	FIG.	NTS	COMPANY/PROSPECTOR	PROJECT	SUBSTANCES	WORK[1]
86	-	1E-1	22O/03	Bernard Poirier, Michel Dionne	Toulnoustouc 2001	Ni-Cu-Co	Pr
87	-	1E-1	22J/13, 22O/04	Jean-Marie, Claude et Robert Ouellet	Norac 2	Cu-Pb-Zn	Pr, G, EM, Gc(ru), T
88	-	1E-1	22J/13, 22O/04	Claude et Robert Ouellet	Norac Ouest	Cu-Ni-Pb-Zn	Pr, G, Gc(ru), Gc(s)
89	-	1E-1	22J/14	SOQUEM Inc.	Grand Lac du Nord	Cu-Zn-sillimanite	Pr, G, T, Gp
90	Grenier	1E-1	22G14	Ressources Appalaches	B-20	Ni-Cu-Co	Pr, G, T, GpA(EM)
91	Grenier	1E-1	22G14	Ressources Appalaches / Marum Resources Inc.	Baie-des-Sables	Ni-Cu-Co-ÉGP	Pr, G, GpA(EM)
92	-	1E-1	22I/14	R. Mimeault	Lac 51	Cu-Ni-ÉGP	Pr, EM
93	-	1E-1	22I15, 16	A. Chênevert	Otter-2	Cu-Ni-ÉGP	Pr
94	Baie-Johan-Beetz	1E-1	12L/07	SOQUEM Inc.	Johan Beetz	Cu-Au	Pr, G, S(8:738)
95	Parker, Puyjalon	1E-1	12L/11	QIT Fer et Titane inc.	Big Islands	Fe-Ti	G, Gp
96	Parker, Puyjalon, Vigneault, Margane, Cugnet, Fornel, Rocamadour, Mingan	1E-1	22I, 12L	QIT Fer et Titane inc.	Lac Allard	Fe-Ti	GpA (Mag)
97	Courtemanche	1E-1	12L/06	Gérald Gallant	Nickerson	Cu-Zn-TR	Pr
98	-	1E-1	12L/16	Robert Guillemette, Pierre Desjardins	Arpin II	Cu-Au	Pr
99	Desportes	1E-1	23B/02	Louvicourt Gold Mines Inc.	Sarah Lake	Cu-Ni-ÉGP	G, E, Gc(s), Gc(ro)
100	Normanville	1E-1	23B/14	Compagnie minière Québec Cartier	Lac Hesse	Fe	G, E, Mag, S(36:8393)

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

St. Lawrence Platform and Appalachians

Serge Lachance

Introduction

The St. Lawrence Platform and Appalachians region (Figure 1F-1) lies south of the Canadian Shield. It is mostly underlain by Paleozoic rocks, subdivided into two geological provinces: the St. Lawrence Platform, which unconformably overlies the Grenvillian basement (erosional unconformity), and the Appalachians to the southeast. These two subprovinces are further subdivided in Québec into six major tectono-stratigraphic domains (see Figure 1F-1).

Mineral exploration expenditures in 2001 amounted to $2.75M, including $855,000 in financial assistance from the Ministère des Ressources Naturelles under the Québec Mineral Exploration Assistance Program, and $330,000 under the Assistance Program for Junior Exploration Companies. One hundred projects were reported, and the total number of metres drilled reached 10,855. The reader is referred to Table 1F-1 for a complete list of the 100 projects.

Southwest Sector (Montréal/Chaudière-Appalaches)

Near Montréal, **Niocan** (27) is still in the process of seeking a certificate of authorization from the Ministère de l'Environnement du Québec. The certificate is required to proceed with financing and development of its niobium deposit in the Oka carbonatite complex. Niocan's project also includes the construction of a processing plant to convert pyrochlore concentrate into ferroniobium.

Near Thetford Mines, **Allican Resources** went ahead with its project to eventually put into production a processing plant in which chromite concentrate will be converted into low-carbon ferrochrome. It also continued its assessment of the Reed-Bélanger (18), Hall (19), Coleraine South (20), and Sterret (14) properties for their potential in platinum group elements (PGE) and chromite. These properties are underlain by the Thetford-Mines and Asbestos ophiolites. Important PGE concentrations were detected in unconformable chromitites at the Hall deposit (2.33 g/t PGE, including 1.44 g/t Pt+Pd, and maximum grades of about 20 g/t Pt+Pd) and the Starchrome showing (up to 20.7 g/t Pt+Pd). Interesting grades were also obtained from layered chromitites within a dunite sequence at the American Chrome Jr. showing (0.58 g/t Pt+Pd), from the Stewart mine (0.51 g/t Pt+Pd) and from pyroxenites at Lac Bisby (0.77 g/t Pt+Pd) and Diamond Hill (0.64 g/t Pt+Pd).

Southeast of Québec, **Raudin Exploration** (33) launched an assessment of two mineralized zones (North and South) at the former Eastern Metals mine, discovered in 1949. Measured mineral resources stand at 354,345 short tons at 0.91% Ni for the North Zone and 870,020 short tons at 1.52% Cu and 0.15% Ni for the South Zone. In addition, encouraging Co, Au, Ag, and Cr grades, along with traces of Pt and Pd, were discovered in altered ultramafic rocks. The best grades obtained from ore stockpiles left on surface are: 79 g/t Au, 128.4 g/t Ag, 21.4% Cu, 1.8% Ni, 4.9% Zn, 0.59% Pb, 0.3% Co, 0.13% Cr, 92 ppb Pt, and 182 ppb Pd.

Central Sector (Bas-Saint-Laurent)

On its Sainte-Marguerite gold property near Causapscal, **Appalaches Resources** (60) intersected two new quartz and massive sulfide veins with gold grades of 32 g/t over 0.9 m and 38 g/t over 0.2 m, at respective depths of 64 and 76 m in drillhole F01-12. Gold-bearing veins in the Fraser sector are associated with northeast-southwest-oriented folds (fold nose) plunging shallowly (5o) to the southwest. This structure has been traced westward over 640 m, from the surface to a depth of 70 m.

Northeast Sector (Gaspésie - Îles-de-la-Madeleine)

Scorpio Mining Corp. (99) assessed the gold potential of five mineralized zones on its Lac Arsenault property. Channel samples yielded average grades of 14.4 g/t Au, 470.66 g/t Ag, 14.27% Pb, and 0.36% Zn over 41.5 m along strike for the Baker vein; 4.11 g/t Au and 4.11 g/t Ag over 131 m along strike for the Marleau vein; 3.08 g/t Au over 8.08 m across the Marleau breccia zone (partially exposed); and 8.57 g/t Au, 165.57 g/t Ag, 6.19% Pb, and 0.23% Zn over 70 m along strike for the Mersereau vein. Finally, four bulk samples taken from a new lode called the "Blue Vein" ranged from 3.70 to 20.77 g/t Au, from 14.74 to 98.73 g/t Ag, from 1.01 to 5.76% Pb, and from 0.04 to 12.77% Zn.

Appalaches Resources was very active in north-central Gaspésie, with three drill programs on its Mont de l'Aigle (88), Lesseps (89), and Lesseps-Barger (90) properties. The latter is held in partnership with **SOQUEM Inc.** and **Major Drilling**. These programs were designed to assess the copper-gold potential of quartz-carbonate-sulfide veins, massive hematite zones, and copper-rich skarns. In a similar fashion, **SOQUEM Inc.** and **Noranda** (91) pursued their work in the same area, investigating copper-rich skarns and massive sulfides (mantos) in carbonate rocks on the Vallières property.

In Boisbuisson Township, **Système Géostat International** (76) carried out shallow drilling to test the tonnage and grade of the copper-silver-bearing surface pillar remaining at the former Mines Madeleine, closed since 1982. Grades of 2.23% Cu and 22 g/t Ag were intersected over a thickness of 9 m starting at surface, including 2.6% Cu and 25 g/t Ag over 3 m.

On the adjacent Mines Madeleine Ouest (77) property, work performed by the **FRAPMGÎM** confirmed the presence of copper-bearing red beds in sedimentary rocks adjacent to the volcanic rocks of the Des Pics Unit. Grades reaching 4.8% Cu and 31 g/t Ag were reported (Mines Madeleine Ltée calculated a resource of 400,000 tonnes at 0.25% Cu based on drilling in 1981). In a red sandstone bed about 120 m wide, four redox zones of copper-bearing, green sandstone ranging from 1 to 9 m wide yielded the following results: 0.6% Cu over 7 m in Zone A; 0.7% Cu over 1 m in Zone B; 0.65% Cu over 9 m (including 2.62% Cu over 1 m) in Zone C; and 0.26% Cu over 2.6 m in Zone D. High zinc assays (0.83% Zn over 15 m) as well as interesting copper, lead, and gold grades (1.12% Cu, 3.13% Pb, and 0.72 g/t Au) were also obtained from sandstones and limestones in contact with basaltic units on the property. Furthermore, in the northern basaltic portion, a sandstone replaced by massive sulfides yielded grades of 8.9% Pb and 0.1% Zn over 2.5 m, and 3.9% Pb and 5.4% Zn over 3 m.

Outlook

In 2002, the level of mining exploration activity should be comparable to 2001. Niocan's ferroniobium project should advance from the development phase to financing and the start-up of production. The ferrochrome project headed by Allican Resources should also move forward in its financing phase. The Québec Mineral Exploration Assistance Program will continue to support and help maintain basic exploration activities.

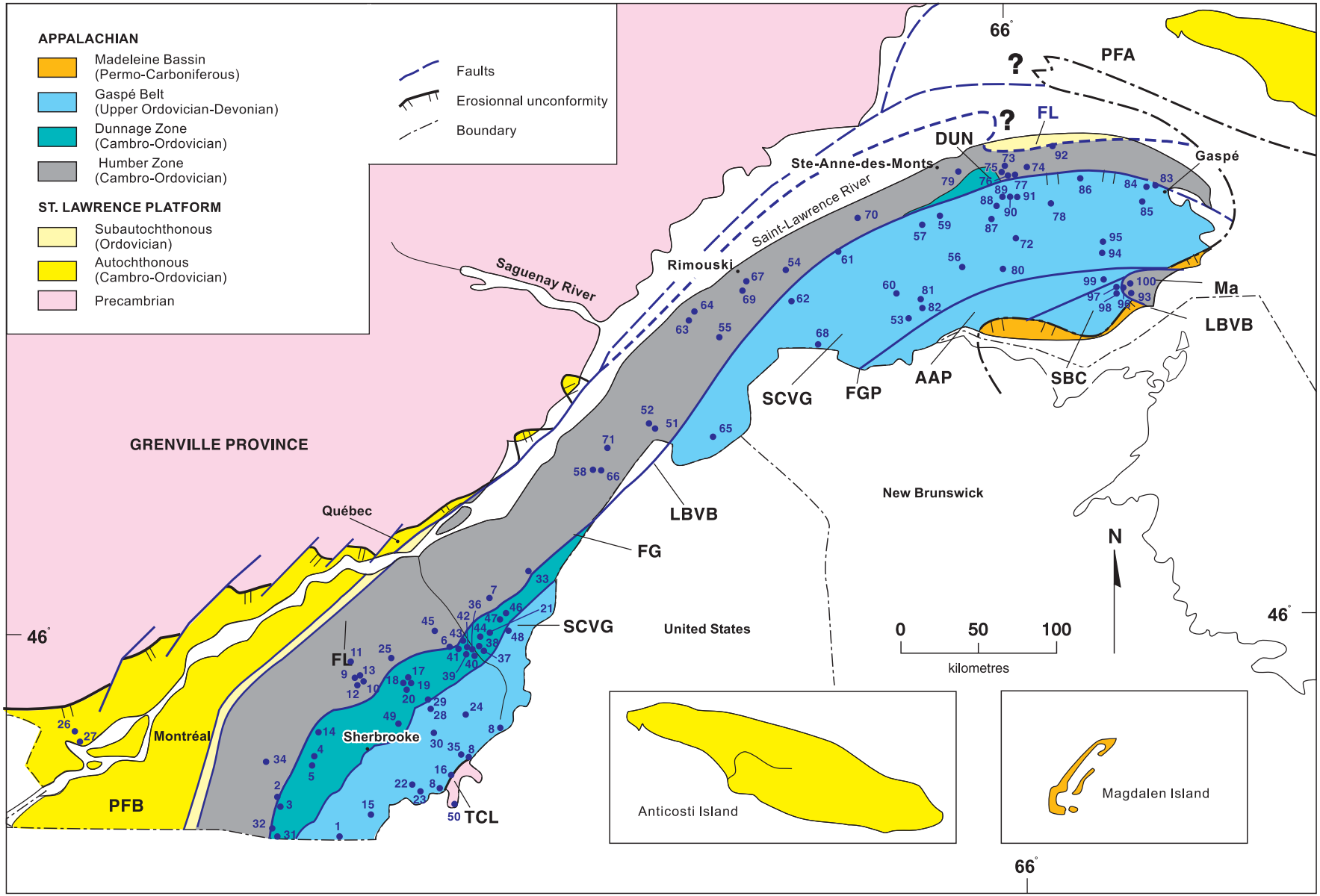


FIGURE 1F-1 - Location of exploration work in 2001, total of 100 projects (no 1 to 100)
Abbreviations : **AAP** : Aroostook-Percé anticlinorium; **DUN** : Dunnage zone; **FGP** : Grand Pabos fault; **FL** : Logan fault; **FG** : Guadeloupe fault; **LBVB** : Baie Verte-Brompton line; **Ma** : Maquereau-Mictaw window; **PFA** : Anticosti platform; **PFB** : St. Lawrence Lowlands platform; **SBC** : Baie des Chaleurs synclinorium; **SCVG** : Connecticut Valley - Gaspé synclinorium; **TCL** : Chain Lakes terrane.

TABLE 1F-1 - Exploration work over the St Lawrence platform and the Appalachia territory in 2001							
N°	TOWNSHIP (SEIGNIORY)	FIG.	NTS	COMPANY/INDIVIDUAL	PROJECT	SUBSTANCE	WORK[1]
SOUTH-WEST REGION (MONTREAL/CHAUDIÈRE - APPALACHIA)							
		1F-1					
1	Barnston		21E/04	R. Beaudette	Lyster	Au-W-Cu-Pb-Zn	Pr, E
2	Bolton		31H/08	P. Vincent	Bolton-Constellar-2001	EGP-Au-Ni-Cu	G, Pr, E, T
3	Bolton		31H/01	FEMECA	Bolton	EGP-Au-Ni-Cu	Pr, E, T, S (3:75)
4	Brompton		31H/09	J. Bernard	Xavier	EGP-Au-Ni-Cu	G, Pr, E,
5	Brompton		31H/09	R. Beaudette	St-Denis 2001	EGP-Au-Ni-Cu	E, S (3:74)
6	Broughton et (St-Joseph)		21L/07	M. Rose Burry et J.-G. Soullière	Labbé	EGP-Au-Ni-Cu	Pr, E
7	Buckland et Standon		21L/10	J. Audet et R. Simoneau	Burkland	EGP-Au-Ni-Cu	Pr, E
8	Chesham, Ditchfield, Spalding et Risborough		21E/06-07-10	FEMECA	Tungstène	W-Au-Cu	G, Pr, E
9	Chester		21E/13, L/04	R. S. Lecuyer	Viger	Cu-Mo-Zn-Co-Ni-V-Mn-Ag-Au	Pr, E, T, Gc(s)
10	Chester		21K/13-L/04	Y. Morissette	Saine-Hélène	Au-Ag-Cu-Pb-Zn	Pr, E
11	Chester		21L/04	J.-L. Raymond	Mont Ray	Cu-Au	Pr, E
12	Chester		21E/13	R. S. Lecuyer	Viger Project South	Co-Ni-Pt-Pd	Pr, E, Gc(S)
13	Chester, Halifax et Irlande		21L/03-04	P. et F. Gaucher	Chester	Cu-Pb-Zn-Au-Ag	Pr, EM, E
14	Cleveland		31H/09	Ressources Allican inc.	Sterret	Cr	G
15	Clifton		21E/05	C. Royer	Rowell	Au-Ag-Cu-Pb-Zn	Pr, E, T
16	Clinton		21E/07	Namex inc.	Clinton	Cu-Zn	G, Pr
17	Coleraine et Adstock		21L/03, E/14	G. Binet et S. Fecteau	Coleraine	EGP-Au-Cu-Zn	G, Pr, E, Mag, EM
18	Coleraine		21L/03	Ressources Allican inc.	**Reed-Bélanger**	Cr	G, S (2:587)
19	Coleraine		21L/03	Ressources Allican inc.	**Hall**	Cr	G, S (4:377)
20	Coleraine		21L/03	Ressources Allican inc.	Coleraine Sud	EGP	G, Pr, E
21	Cranbourne		21L/07	R. Beaudoin	Lafayette	Au-Ag-Ni-EGP	G, Pr, E
22	Ditton		21E/06	C. Royer	Étoile d'or	Au-Cu-Zn-Pb-Bi	Pr, E, S (1:55)
23	Ditton		21E/06	R. Beaudoin	Bella-Victoria	Au-Ag-Cu-Zn-Ni	Pr, EM
24	Dorset		21E/15	R. Charbonneau et L. Boulé	Dorset	Au-EGP-ETR	G, Pr, E
25	Irlande		21L/03	J. Lebeuf et P. Millaire	Mégantic-Talc	Au-EGP-Cu-Ni	Pr, E
26	(Lac-des-deux-Montagnes)		31G/09	CLM Géosciences	St-Hermas	Nb-ETR	G, S (1:106)
27	(Lac-des-deux-Montagnes)		31G/09-08	Niocan inc.	**Niocan**	Nb	G, Pr, E, Études
28	Lambton		21E/14	J.-P. Thomassin et F. Bouchard	Lambton	Au-Cu-Pb-Zn	G, Pr, E, T
29	Lambton		21E/14	R. Simoneau et J. Audet	Lac Lambton	Au-Cu-Zn	Pr, E
30	Lambton, Aylmer, Winslow, Whitton et Marston		21E/06-11-14	J. P. Thomassin et F. Bouchard	Nantes	Au-Cu-Pb-Zn	Pr, E
31	Potton		31H/01	FEMECA	Mont-Hawk	Au-EGP-Cu-Ni	E, Gc(s)
32	Potton		31H/01	M. et D. Bilodeau	Potton	Au-Cu-Zn-Ni-EGP	Pr, E
33	Rolette		21L/09	Exploration Raudin inc.	Eastern Metals	Cu-Ni-Au-Ag-Zn-Pb-Co-Cr-Pt-Pd	G, E
34	Roxton		31H/07-08	D. J. Kouri	Lord Aylmer	Cu-Ag-Ba	S(1:125)
35	Spalding, Marston et Ditchfield		21E/10-11	R. Lapointe et G. Audet-Lapointe	Spalding	Au-Ag-Cu-Zn	Pr, E
36	(Saint-François)		21L/02	FEMECA	Magodor	Au-Cu-Pb-Zn	G, Pr, E
37	(Saint-François)		21L/02	R. Mainville	St-Simon	Au	G, Pr, E
38	(Saint-François)		21L/02	P. Mrakic	St-Gustave 2001	Au-Cu-Pb-Zn	G, E, T
39	(Saint-François)		21L/02	J. Ouellette	Du Moulin 2001	Au-Cu-Pb-Zn	G

TABLE 1F-1 - Exploration work over the St Lawrence platform and the Appalachia territory in 2001							
N°	TOWNSHIP (SEIGNIORY)	FIG.	NTS	COMPANY/INDIVIDUAL	PROJECT	SUBSTANCE	WORK[1]
40	(Saint-François)		21L/02	R. Mainville et FEMECA	Rapides-du-Diable	Au	G, Pr, E, Gc(t)
41	(Saint-François)		21L/02	R. Beaudoin et J. Ouellette	Chûte-du-Bras	Au-EGP-Ag	Pr, E, Mag, EM, S (2:105)
42	(Saint-François)		21L/02	R. Beaudoin	Des Meules	Au-Ag	Pr, E, Gc(t)
43	(Saint-François)		21L/02	R. Grondin et R. Beaudoin	Rivière St-Victor	Au-Ag-EGP	Pr, E, EM Gc(t)
44	(Saint-François) et Cranbourne		21L/02-07	L. Venditelli	Beauce Recce	Au-EGP	G, Pr, E
45	(Saint-Gilles)		21L/06	C. Vachon et Y. Landry	Millénium II	Au-Cu-Pb-Zn	Pr, E, Mag, EM
46	Ware		21L/08	P. Ratté jr. et R. Grondin	Coucou	Au-Cu-Pb-Zn	Pr, E, T
47	Ware et Cranbourne		21L/02-07-09	G. Duguay	Beauceville 2001	Au-Zn-Cu-Pb	Pr, E
48	Watford		21L/08	L. Vaillancourt et J. Lachambre	Rivière-à-la-Raquette	Au-Cu-Zn-Pb	Pr, E, Mag, EM
49	Weedon et Stratford		21E/13-14	Namex inc.	Weedon-Stratford	Cu-Zn	G, Pr
50	Woburn		21E/07	J.-F. Desmeules et M. Lévesque	Lac Arnold	Au-Pt-Pd-Cu-Ag	G, P, E, Mag, EM, Gc
CENTRAL REGION (LOWER ST-LAWRENCE)							
		1F-1					
51	Armand, Escourt et Pohénégamook		21N/06-11	N. Fournier	Erratiques-A-2001	Cu-Au	Pr, E
52	Armand et Pohénégamook		21N/06-11	B. Pineau	Erratiques-B-2001	Cu-Au	Pr, E
53	Assémetquagan		22B/02-03	SOQUEM INC.	Saint-Étienne	Cu-Au	Gc(s)
54	Awantjish, Cabot, Fleuriau		22B/05-12, C/08-09	FEMBSL	Faille Neigette	Cu-Au-Zn-Pb	G, Pr, E
55	Bédard et Chénier		22C/02	FEMBSL	Lac de l'Islet	Cu	G, Pr, E
56	Catalogne et Gravier		22B/07-08-09-10	FEMBSL	Rivière Nouvelle	Zn-Pb	G, Pr, E
57	Cuoq, Le Clerq, Boutet et La Grange		22B/10-11	FEMBSL	Rivière Matane	Cu-Zn-Pb	G, Pr, E, T
58	Ixworth, Chapais et Painchaud		21N/05	J. Guillot	Ruisseau Ferré	Pb	Pr, E
59	Joffre et Faribault		22B/15-10-11	FEMBSL	Shickshock Sud	Cu-Zn	G, Pr, E, T
60	La Vérendrye et Casupscull		22B/06-07	Ressources Appalaches inc.	Sainte-Marguerite	Au-Ag-Sb-Cu-Pb-Zn	S(28:4988)
61	Matane, Langis et (Lac Matapédia)		22B/12	R. Turcotte	Mat	Cu-Ag-Pb	Pr, E, EM
62	(Mitis) et Massé		22B/05	A. Turcotte	O1-O3	Cu-Pb-Zn	Pr, E
63	(Nicolas-Rioux-02-03)		22C/02	J.-M. Hammond	Lac Mi-Chemin	Au-Cu-Zn-Pb	Pr, E
64	(Nicolas-Rioux-03)		22C/07	M. Pigeon	Malobès	As-Ba-Au	Pr, E
65	Packington et Robinson		21N/07	F. Larin	Lac Meruimticook	As-Cu-Ni	Pr, E
66	Painchaud et Chapais		21N/05	R. Tourigny	Lac St-Pierre	Cu-Co-Ni	Pr, E
67	(Rimouski)		22C/08	H. Rioux	HER	Cu-Pb-Zn-Ag	PP, Gc(s)
68	(Rimouski)		22B/04	J.-Y. Lévesque	Lac Plaisance	Au-Ag-Pb-Zn-Cu	Pr, E
69	(Rimouski) et Macpès		22C/08-09	R. Dubé	Lac Linda	Cu-Zn-Pb	Pr, E
70	Saint-Denis et Tessier		22B/14	Ressources Appalaches inc.	Saint-Denis-Tessier	Cu-Ag	G, Pr, E, T, S(6:300)
71	Woodbridge et Painchaud		21N/12-05	J. Lévesque	St-Bruno	Pb-Au-Cu	Pr, E
NORTH-EAST REGION (GASPÉ - MAGDELEN-ISLANDS)							
		1F-1					
72	Baldwin		22B/09	G. Therrien	Barytine-2	Ba-Cu-Ag-Zn-Pb	Pr, E, Mag, TBF, T
73	Boisbuisson		22G/01	A. et M.-L. Leclerc	Ruisseau des Quatre Lacs	Cu-Pb-Zn	Pr, E
74	Boisbuisson		22H/04	L. Leclerc et A.-T. Leblanc	Boisbuisson Cible C-8	Cu-Zn-Pb-Ag	Pr, E
75	Boisbuisson et Christie		22G/01	A. Gauthier	Valmont	Pb-Zn-Au-Ag-Cu	G, Pr, E, T

TABLE 1F-1 - Exploration work over the St Lawrence platform and the Appalachia territory in 2001

N°	TOWNSHIP (SEIGNIORY)	FIG.	NTS	COMPANY/INDIVIDUAL	PROJECT	SUBSTANCE	WORK[1]
76	Boisbuisson		22G/01	Systèmes Géostat International inc.	Mines Madeleine	Cu-Ag	G, E, T, S, (14:224)
77	Boisbuisson et La Potardière		22B/16, G/01	FRAPMGÎM	Mines Madeleine Ouest	Cu-Zn-Ag-Pb-Au	G, Pr, E, T, Compi.
78	Bonnécamps		22A/13	Y. et M. Chouinard	Projet C-S	Cu-Zn-Pb-Ag	Pr, E
79	Cap-Chat		22G/01	A. Henley	Albert IV	Cu-Zn-Pb-Ag	Pr, E
80	Clapperton		22B/08	L. Roberge	Ruisseau Josué	Cu-Zn-Ag	Pr, E
81	Fauvel		22B/02-07	B. Boulanger	Fauvel 2001	Au	Pr, E
82	Fauvel		22B/02	B. Boulanger	Ruisseau Big	Au	G, Pr, E, Gc(s), T
83	Galt		22A/15	G. Cabot et J. Caron	Galt	Zn-Pb	G, Pr, E, Gc(s)
84	Galt et Larocque		22A/15	G. Cabot et J. Caron	Patewaga	Zn-Pb	Pr, E
85	Gaspésie Est		22A/09-10-14-15-16, H/02-03	FRAPMGÎM et Terrenex Acquisition Corp	Pb-Zn-Hydrocarbures (phase II)	Pb-Zn	G, ET, Synth. trav.
86	Holland		22A/14	M. et Y. Chouinard	Lac York Est	Cu-Zn-Pb-Zg	Pr, E, Mag, Gc(L)
87	Lemieux		22B/09-16	G. Therrien et O. Robinson	Le Relais	Cu-Ag-Zn-Pb-Au	Pr, E
88	Lemieux		22B/16	Ressources Appalaches inc.	Mont de l'Aigle	Cu-Au	G, Pr, E, T, S(2:710)
89	Lesseps et Lemieux		22B/16-A/13	Ressources Appalaches inc.	Lesseps	Cu	G, Mag, TBF, T, S(7:1573)
90	Lesseps		22A/13	Ressources Appalaches inc., SOQUEM INC. et Forages Major Int.	Lesseps-Barter	Cu-Pb-Zn-Ag	S(2:930)
91	Lesseps		22A/13, B/16	SOQUEM INC. et NORANDA INC.	Vallières	Cu	G, E, test radiom.
92	(Mont-Louis)		22H/04	R. Robinson et A. Vallée	Dôme 2001	Cu-Pb-Zn-V-ETR	Pr, E
93	Port-Daniel		22A/06-07	A. Liboiron	Port-Daniel	Ni-Co-Pt-Au	G, Pr, E, T
94	Randin		22A/11	J.-B. Beaudin et L. Leblanc	La Tête de la Grand Pabos Nord	Cu-Ag	Pr, E
95	Vondenvelden		22A/11	J.-B. Beaudin et L. Leblanc	Cuivre natif-Nord	Cu-Ag	Pr, E, Gc(s), Mag, TBF, T
96	Weir		22A/06	J.-M. Pronovost	EGP-Nadeau 2001	EGP	G, Pr, E, T
97	Weir		22A/06	J.-M. Pronovost	Serpenphior 2001	Ni-Co-Au	G, Pr, E, T, S(3:50)
98	Weir		22A/06	R. Fulham et S. Lebrasseur	Propriété Ollaire	Au	Pr, E, T
99	Weir et Honorat		22A/06	Scorpio Mining Corporation	Lac Arsenault	Au-Ag-Pb-Zn	G, Pr, E, T, TM
100	Weir, Port-Daniel, Randin et Newport		22A/07	SOQUEM INC.	Ruisseau des Pins	Cu	G, Pr, E, S(5:576)

1- EXPLORATION WORK LEGEND

E	Sampling
EF	Feasibility or market study
EM	Electromagnetic survey
ET	Technical evaluation study
Ev	Bulk sampling
G	Geoogical survey
Gc	Undefined geochemical survey
Gc(h)	Humus geochemical survey
Gc(l)	Lake bottom geochemical survey
Gc(ro)	Rock geochemical survey
Gc(ru)	Stream geochemical survey
Gc(s)	Soil geochemical survey
Gc(t)	Till geochemical survey
Gp	Undefined geophysical survey
GpA	Airborne geophysical survey
Int. Sat.	Satellite image interpretation
Mag	Magnetic survey
DPEM	Drillhole pulse electromagnetic survey
PP	Induced polarization survey
Pr	Prospecting
S(nb:m)	Diamond drilling (number:total metres)
Sci	Reverse circulation drilling
T	Trenching and stripping
TBF	VLF electromagnetic survey
TM	Metallurgical testing
italic	Underground exploration work
bold	Advanced-stage project
	MRN subsidized project

Chapter 2

Construction materials, industrial minerals and peat moss

Construction materials, industrial minerals and peat moss

Yves Bellemare
Henri-Louis Jacob
Pierre Buteau

This chapter deals with mining activities carried out in Québec over the course of 2001, in the construction material, industrial mineral, and peat industries.

Construction Materials

This section provides a description of exploration work carried out in the search for architectural stone, crushed stone (including decorative aggregate), rip-rap, and crafting stone. Furthermore, for architectural stone, crafting stone, and decorative aggregate, this section includes a list of quarries in operation and a description of new extraction projects. However, the description of work focused on the search for sand and gravel is excluded.

PRODUCTION

A total of 60 active quarries producing architectural stone were inventoried, including quartzite, dolomitic marble and calcitic marble (decorative aggregate), steatite (for sculptures and refractory plates), and slate (roof tiling). With 11 quarries, the Rivière-à-Pierre area (NTS 31I/16 and 31P/01) remains the most important mining camp for dimension stone extraction. Two other regions were also fairly active, namely the immediate vicinity of Saint-Nazaire (NTS 22D/12), with six quarries, and Saint-Alexis-des-Monts - Saint-Didace (NTS 31I/06), with four quarries.

During the year, two new quarries began production operations. In Lapeyrère Township, north of the municipality of Rivière-à-Pierre, **A. Lacroix et Fils** began exploration and development work, in order to open a working face (17; Figure II, Appendix). Positive results led to the start-up of operations to extract a coarse-grained, greyish black, tonalitic to granodioritic gneiss. In the Chute-des-Passes area, after obtaining a mining lease (BEX 377), **A. Lacroix et Fils** began operations in Lidice Township (37; Figure II, Appendix), where the company is mining a medium-grained, greyish pink, migmatitic gneiss. Given the scale of the work performed in 2001 in Lapeyrère and Lidice townships, the company did not pursue development of its Rivière-aux-Rats property in La Trappe Township (Gaudreau et al., 2001, p.77, site 26).

GEOGRAPHIC DISTRIBUTION OF EXPLORATION TITLES

Nearly 200 active titles (PRS) are held in the Saint-Marc-du-Lac-Long area (NTS 21N/06, 21N/07 and 21N/10, Figure 2.1). These titles were acquired in the search for slate destined for the roof tiling business. The vast majority of the remaining exploration projects are located in the Grenville Province, particularly in the Saguenay - Lac-Saint-Jean region and in the Rivière-à-Pierre area.

Over the years, the Saguenay - Lac-Saint-Jean region has been and continues to be a prime target area in the search for construction materials, especially dimension stone. Over 350 active titles are held in NTS sheets 22D, 22E, 32A and 32H. Investigations are mainly focused on marketing green granite varieties of the charnockitic suite and rocks of the Lac-Saint-Jean anorthositic Suite.

More than 170 active CDC are held in the Rivière-à-Pierre area. This work is focused on the search for dimension stone in the Rivière-à-Pierre plutonic suite (NTS 31I/16, 31P/01 and 31P/08).

In 2001, an increase in the number of titles issued for dimension stone purposes was reported in two other regions. East of Sept-Îles (NTS 22J/01, 22J/03 and 22J/07), more than 50 active CDC cover an area favourable for the discovery of gneiss, green granite, and black granite deposits. The discovery of migmatitic and folded gneiss in areas to the east and north of Baie-Comeau (NTS 22F/08, 22F/12 and 22F/14) also led to the acquisition of over 30 titles.

NEW MINERAL EXPLORATION REPORTS

Eleven new reports describing prospecting and development work carried out in recent years by various land owners were released. Results of exploration in projects 4 and 5 (Table 2.1) led to the delineation of new reserves in the Notre-Dame-du-Lac-Long deposit by **Glendyne**.

EXPLORATION

Figure 2.2 shows the location of exploration projects brought to our attention in 2001 in these areas. Details of work carried out are listed in Table 2.2.

During the year, **A. Lacroix et Fils** began an important exploration and development program in the Rivière-à-Pierre area and north of Saint-Ludger-de-Milot. This work led to the development of two projects on the Lac-Gaulois and Rivière-des-Prairies properties. Over the last few years,

the company has been seeking new types of stone to diversify its range of products. It oriented part of its efforts in the search for varieties of gneiss. On the Lac-Gaulois project (site 20), in Lapeyrère Township, sampling in two locations confirmed the potential of coarse-grained, greyish black, tonalitic and granodioritic gneisses. These rocks are part of the gneissic units of the Bostonnais Complex (Hébert and Nadeau, 1995). After obtaining a temporary mining licence (BNEP 494), the company applied for a mining lease (BEX 378). The Rivière-des-Prairies project (site 27), located in Lidice Township, constitutes the first attempt to operate a quarry in this area. The company acquired a temporary mining licence (BNEP 522) and launched stripping and sampling work on a medium-grained, greyish pink, migmatitic gneiss. Encouraging results in hand, the company applied for a mining lease (BEX 377).

Granite Péribonka performed development work on the Granite Bleu property (site 32), north of Lac Saint-Jean. This work was focused on a granoclastic to porphyroclastic, grey anorthosite with shimmering highlights ranging from yellow to blue. The company is still searching for a mineable location and will continue work in 2002. In Falardeau Township (site 38), **Granicor** holds a property in the Lac Gâchis area. The company's interest in the area is based on work by Henri Boily (Gaudreau *et al.*, 1999, p.71, site 25). The rocks are similar to those on the Granite Bleu property, with green, shimmering highlights. Preliminary work was carried out to improve the quality of gravel roads. An extensive sampling program failed to locate a potential sector. The presence of mm-scale, white veinlets inhibits the production of commercial-size blocks. Additional work is planned for 2002.

2329-1677 Québec (Granitslab) began stripping and sampling work in a black granite (diabase?) in Gendron Township (site 14). In the fall, blocks extracted from the working face could not be shipped to its Stanstead facility for polishing tests. In 2002, the company intends to continue exploration on the property and launch new programs on three other properties in Québec.

During 2000, **Michel Bouchard** carried out various mining exploration activities on a property in the Saint-Henri-de-Taillon area (site 35). This work helped delineate two potential sectors. The rock is a black, porphyroclastic anorthosite, similar to the Noir Taillon variety. In 2001, **Ressources d'Arianne**, project manager, performed mechanical stripping and extracted blocks from a working face. Given the high market demand for this variety of dimension stone, three similar projects were also underway. **Granite Péribonka** continued exploration work launched in 2000 on its Jogues property (site 33) (Gaudreau *et al.*, 2001, p.77, site 35). **Maurice Tremblay** explored the area north of the property held by Ressources d'Arianne. Field work and polishing tests were conclusive. **France Tremblay** sampled a similar anorthosite and a grey, granoclastic anorthosite in the Saint-Ambroise area (site 40). Despite the presence of mm-scale, white veinlets altering the rock's uniformity, results were encouraging. In the last two cases, additional work is planned for 2002.

In the Côte-Nord region, the number of exploration projects reported in 2001 exceeded the number of projects for the last four years combined. This fact clearly illustrates the renewed interest of the region's prospectors for the search for potential dimension stone occurrences. In the last few years, **Maurice Morissette and collaborators** have been prospecting in the Lac Walker area (Gaudreau et al., 2001, p.77, site 41). This locality (site 54) consists of greenish, foliated mangerite. Outcrops are massive and very weakly fractured. In 2001, five holes were drilled to define the colour of the rock. In 2002, the property should be the focus of development work pending a mining title acquisition agreement. **Dany Lévesque** sampled three commercial-size blocks on his Rocamadour property (site 55). The rock is a coarse-grained, greenish grey, porphyritic mangerite. The project is expected to go into production in 2002, pending a partnership agreement. **Michel Vaillancourt** (site 45) and **Michel Savard** (site 48) respectively sampled a pinkish grey, migmatitic gneiss and a black amphibolite. In both cases, their properties will be the object of additional exploration in 2002.

Since 1998, **Glendyne** has carried out important prospecting work, geological surveys, and drilling in Botsford Township. Their purpose was to delineate new mineable reserves of fine-grained slate for the production of roof tiling. This year's campaign was successful in identifying another unit of commercial quality slate. In 2002, additional work will be required to delineate this new unit. If the results are positive, mining operations to extract this deposit would probably require the development of a new quarry.

In the Gaspésie region, a few exploration projects were carried out for dimension stone and decorative stone. Limestones of the West Point Formation were targeted in the central part of the peninsula (sites 53 and 60). Limestone and sandstone units in the Bas-Saint-Laurent and Gaspésie regions offer an interesting potential and warrant more sustained exploration (Bellemare and Jacob, 2001).

REFERENCES

BELLEMARE, Y., JACOB, H. L., 2001 - *Aperçu du potentiel de pierre architecturale dans les régions du*

Bas-Saint-Laurent et de la Gaspésie. Ministère des Ressources naturelles, Québec; PRO 2001-10, 7 p.

GAUDREAU, R., DUSSAULT, C., DOUCET, P., MORIN, R., PERREAULT, S., LACHANCE, S., BELLEMARE, Y., JACOB, H. L., BUTEAU, P., MARCOUX, P., 1999 - *Rapport sur les activités d'exploration minière au Québec 1998*. Ministère des Ressources naturelles, Québec; DV 99-01, 95 p.

GAUDREAU, R., MORIN, R., DUSSAULT, C., DOUCET, P., PERREAULT, S., LACHANCE, S., BELLEMARE, Y., JACOB, H. L., BUTEAU, P., MARCOUX, P., CHOINIÈRE, J., 2000 - *Rapport sur les activités d'exploration minière au Québec 1999*. Ministère des Ressources naturelles, Québec; DV 2000-01, 106 p.

GAUDREAU, R., HOULE, P., DOUCET, P., STE-CROIX, L., PERREAULT, S., LACHANCE, S., BELLEMARE, Y., BUTEAU, P., JACOB, H. L., MARCOUX, P., CHOINIÈRE, J., 2001 - *Rapport sur les activités d'exploration minière au Québec 2000*. Ministère des Ressources naturelles, Québec; DV 2001-01, 107 p.

HÉBERT, C., NADEAU, L., 1995 - *Géologie de la région de Talbot (Portneuf)*. Ministère des Ressources naturelles, Québec; ET 95-01, 16 p.

Industrial minerals

PRODUCTION

In 2001, the industrial minerals sector counted 26 mines or quarries in operation. Industrial minerals produced in Québec include asbestos (3 mines), high-purity limestone and dolomite (7 quarries), titanium minerals, graphite flakes, ground mica, specular hematite, talc and steatite (one mine or quarry each). Table III and Figure II provide a brief description of each industrial mineral operation.

Preliminary data indicate that in 2001, the total value of industrial mineral shipments reached $710.1M, compared to $733.7M in 2000. Shipments of most commodities suffered minor drops largely attributed to the slumping North American economy. The only commodities that recorded slight increases were salt, silica, and raw ilmenite sold as flux. Silica shipments climbed from 522,000 t to 534,000 t, in spite of a shutdown at the silica carbide plant operated by Saint-Gobain in Shawinigan and the arrival of a new producer in Labrador.

In 2001, the **Coop Chaux du Bas-Saint-Laurent** opened a quarry near the village of La Rédemption. Limestone from the Sayabec Formation is mined for the production of agricultural lime to meet the needs of farmers in the Bas-Saint-Laurent and Gaspésie regions.

The year 2001 was marked by the final and definitive decision by **Orléans Resources Inc.** to abandon its wollastonite project and by the shutdown of the Luzenac talc mine in Saint-Pierre-de-Broughton.

Development of the wollastonite mine in Saint-Onge Township in the Lac-Saint-Jean region was jeopardized by financial and technical problems, which forced **Orléans Resources Inc.** to suspend operations several times. The last suspension, in July 2000, proved to be the last. Unable to find a partner to invest in the project, **Orléans Resources Inc.** proceeded with the dismantlement and sale of its installations and the complete rehabilitation of the minesite.

The closure of the talc mine in Saint-Pierre-de-Broughton, announced by Luzenac in April 2001, was brought on by the discovery by the company of traces of chrysotile in the ore. The mine supplied the Luzenac plant in Broughton Station, where the ore was simply ground. Talc products were used in asphalt products, joint cement, and insecticide powders. The plant and the quarry had been in

Luzenac of its project to produce refined talc for the paper industry.

EXPLORATION

A total of 34 exploration projects focusing on a dozen commodities (rocks or minerals) were reported in 2001 (Figure 2.2 and Table 2.3).

Over half the projects consisted of grassroots prospecting and sampling work, which was carried out, for the most part, under the Mineral Exploration Assistance Program or through the various regional mining funds.

The strong demand for high-purity silica sparked about a dozen projects, ranging from prospecting and sampling work to bulk sampling for industrial tests. Potential sources of silica under study include quartzites of the Grenville Supergroup (projects 74, 75, 77, 84 and 85), quartzites of the Wishart Formation in the Fermont area (projects 69 and 70), silexites in the Saint-Siméon area (project 76), sandstones in the Val-Brillant Formation (projects 61 and 62), and quartz veins (projects 79 and 88).

In 2001, **Ressources d'Arianne Inc.** continued exploration work to assess the mining potential of the Mirepoix and Lac-à-Paul properties in the Lac-Saint-Jean region (projects 71 and 72). The two properties, located in the

Lac-Saint-Jean anorthositic Suite, contain significant apatite and titanium mineralizations hosted in oxide-bearing anorthositic gabbro and massive oxide horizons.

The highlight of 2001 was the start-up by **Mazarin Mining Corp.** of its project aimed at the development of the Lac Knife graphite deposit (project 68). The ore deposit, delineated by drilling in 1989, contains reserves estimated at 8.5 million tonnes at an average grade of 16.7% graphitic carbon. After signing a letter of intent with **Graftech** and its parent company **UCAR International Inc.**, an important manufacturer of graphite products, **Mazarin Mining Corp.** extracted 2,500 tonnes of ore to be concentrated at the MRN pilot plant. Concentrates will be shipped to **Graftech** facilities in Cleveland for trial runs to produce flexible graphite on a commercial basis.

Graymont (Qc) Inc. continued environmental and technical assessment studies required to launch, in 2003, the operation of a new quarry to supply its lime plant in Saint-Adolphe-de-Dudswell. Project 80 covers an area of 44 hectares located near the Rang des Canadiens and is situated four kilometres northeast of the current plant. Drilling conducted in 1999 delineated a large deposit of pure, reef limestone in the Siluro-Devonian Lake Aylmer Formation.

Peat

In 2001, 22 peat producers were active in Québec, harvesting peat from about 40 locations, mainly concentrated in the Bas-Saint-Laurent, Côte-Nord, and Saguenay - Lac-Saint-Jean regions. Overall shipments in 2000 reached 10.3 million 170-dm^3 bags, for a total value of $49.5M. Preliminary data for 2001 lead us to expect a drop of nearly 5% in shipments, to 9.8 million 170-dm3 bags, for a total value of about $48.1M. Québec still ranks second among peat-producing Canadian provinces. For reference, peat shipments in New Brunswick reached 13.1 million 170-dm^3 bags in 2000, and preliminary data for 2001 indicate that shipments should once again exceed the 13 million 170-dm3 bag threshold.

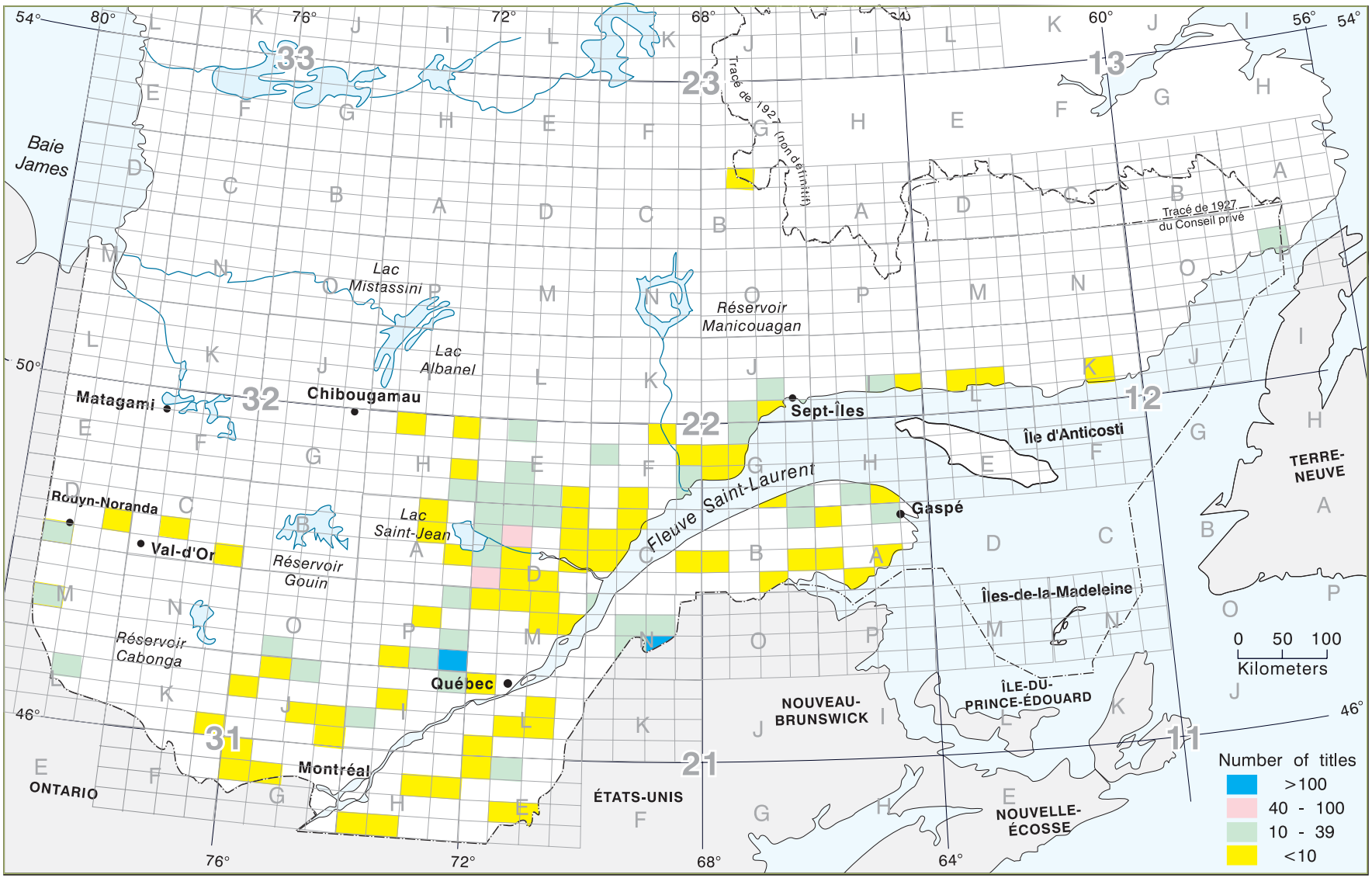


Figure 2.1. Active title distribution (PRS and CDC) for building material, as of November 20, 2001.

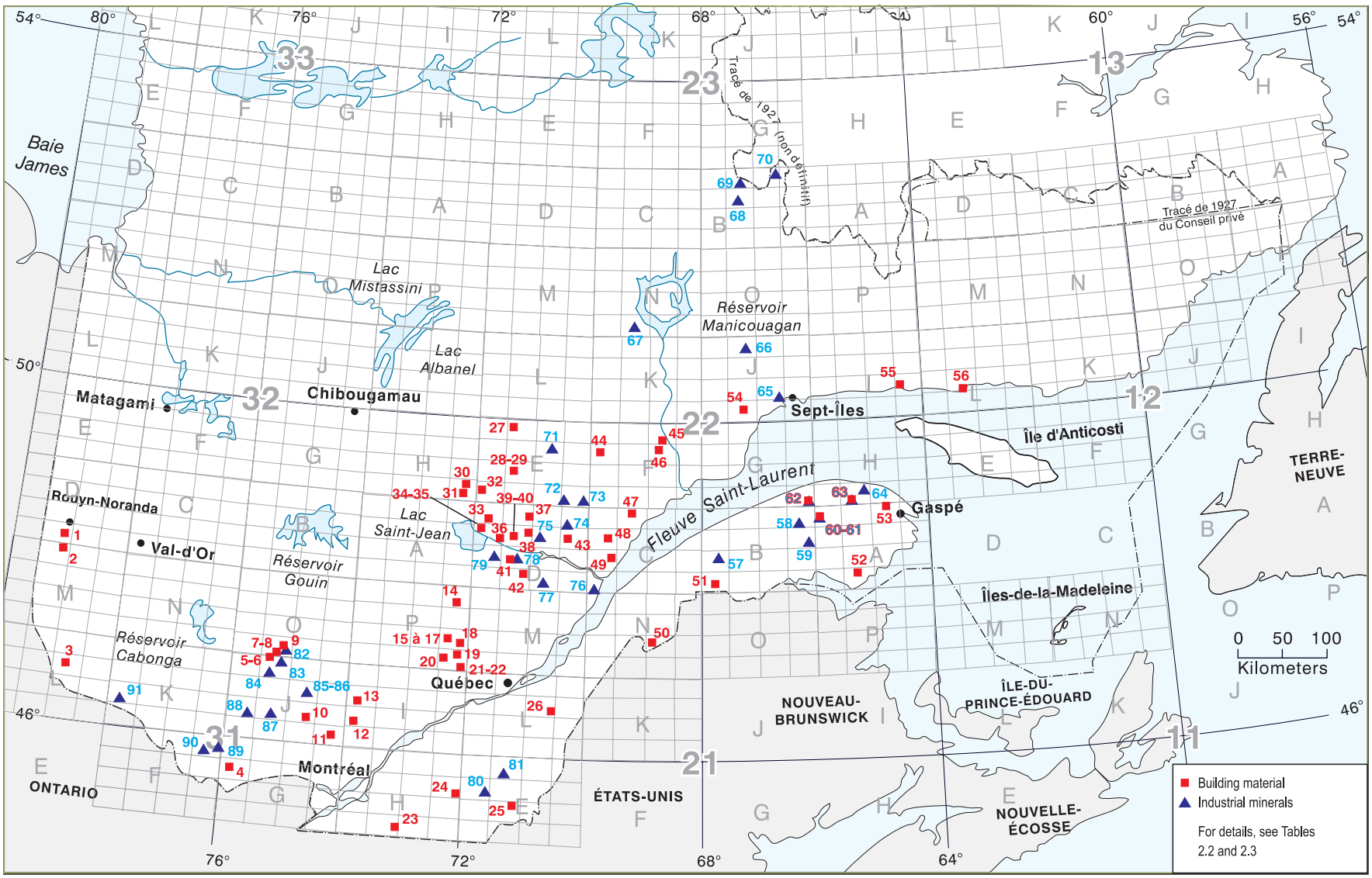


Figure 2.2. Location of exploration projects in Québec in 2001. Building material and industrial minerals.

TABLE 2.1 List of new assessment work reports for building material in 2001						
PROJECT	**NTS**	**MINING TITLE**	**HOLDER**	**GM NUMBER**	*	**DETAILS**
1	21E14, 21L03, 21L04	CLD 6000071, CLDP015642	Michel Bilodeau	GM 58386	N. C.	Stéatite, blocs pour sculpture, prospection et échantillonnage
2	21N07	PRS 3225 à 3227	Glendyne	GM 58708	40 (1999)	Ardoise, cartographie
3	21N07	PRS 4298, 4299	Glendyne	GM 58730	N. C.	Ardoise, cartographie
4	21N07	PRS 3888, 3889	Glendyne	GM 58333	39 (1998)	Ardoise, sondages
5	21N07	PRS 3968	Glendyne	GM 58230	40 (1999)	Ardoise, évaluation des réserves
6	22E06	PRS 4226 à 4229	Sylvie Garant	GM 58268	21 (1999)	Anorthosite brune et grise, décapage
7	22F11, 22F14	Nil	Nil	GM 58396	N. C.	Gneiss oeillé, mangérite, prospection et échantillonnage
8	31F, 31G, 31J, 31K, 31M	Nil	Nil	GM 58413	10, 12 et 13 (2000)	Marbre et anorthosite, prospection et échantillonnage
9	31I16	PRS 3102	2329-1677 QUEBEC INC	GM 58269	12 (1998)	Roche de la suite charnockitique (verte et brune), décapage
10	31J12	PRS 4530	Gérard Houle	GM 58465	4 (1998)	Marbre rose orangé, tranchées, sondages et échantillonnage
11	32D07	Nil	Nil	GM 58421	N. C.	Agrégats, prospection

* In reference to project number quoted in Gaudreau et al., 2001, p. 76-78 (2000), in Gaudreau et al., 2000, p. 77-78 (1999) or in Gaudreau et al., 1999, p. 71-72 (1998) (N. C. : unquoted)

TABLE 2.2 Exploration work in Quebec for building material in 2001 (see figure 2.2)						
SITE	NTS	MINING TITLE	HOLDER	USE *	TYPE OF WORK **	DETAILS
1	32D03	PRS 5508	Hélène Sallafranque	PD	S, E, GC, EF	Projet Hélène Sallafranque, diabase
2	31M14	BEX 342	Warren Jason	GD	E	Monzodiorite noir grisâtre
3	31L10	BEX 355	Les Pierres du Nord	GD	EF	Projet Aventurine, quartzite verte
4	31G12	CDC 1009871-1009872	Sonia Pomerleau, Claude Vachon	PA	E	Projet Wakefield, marbre à diopside
5	31J14	Aucun	André Liboiron	PD	Pr, E	Projet De Pau 2, monzonite oeillée, gris rosé
6	31J14, 31O03	Aucun	André Liboiron	PD	Pr, E	Projet De Pau 1, monzonite prophyroïde, gris rosé à brunâtre
7	31O03	PRS 5117	Michel Bélisle	PD	Pr, T, GC, EF	Granite rose de type Guénette
8	31O03	CDC 1004362 à 1004367	Michel Bélisle	GD	Pr, S	Projet Sobiex, marbre dolomitique blanc verdâtre
9	31O03	CDC 1018786 à 1018788	Jean-Marie Pronovost	PD	Pr, E, GC	Projet Chopin 2001, monzonite quartzifère, porphyroïde, rouge brunâtre
10	31J07	BEX 337	Les Pierres Mitchell	PA	Pr, E	Paragneiss quartzofeldspathique
11	31J01	PRS 5311	Jean Marleau	PD	E, GC	Projet Doncaster 2001, anorthosite gris brunâtre à verdâtre chatoyante
12	31I05	BEX 255	A. Lacroix et Fils	PD	Pr	Projet Orion, anorthosite granoclastique chatoyante
13	31I12	BEX 247	Granidor	PD	T, E, GC	Projet Lac Tessier, mangérite foliée
14	31P16	CDC 1020178 à 1020197	2329-1677 Québec	PD	E, GC, S	Projet Gendron, granit noir (diabase ?)
15	31P08	CDC 1019356 à 1019364	Granit Yoguy	PD	E, GC	Projet Vert Rustique, tonalite gris verdâtre
16	31P08	CDC 1033679	Granit Yoguy	PD	Pr	Farsundite porphyroïde, brun foncé
17	31P08	CDC 1016517 à 1016522	Granit Yoguy	PD	Pr	Gneiss
18	31P08	CDC 1016559 à 1016580	A. Lacroix et Fils	PD	E, GC	Projet Lac Lasalle, granit
19	31P01	CDC 1029959 à 1029962	A. Lacroix et Fils	PD	Pr	Projet Rivière Miguick, granit
20	31P01	BNEP 494	A. Lacroix et Fils	PD	Pr, T, E, GC	Projet Lac Gaulois, gneiss tonalitique et granodioritique noir grisâtre, à grain grossier, demande du BEX 378
21	31P01	BM 723	A. Lacroix et Fils	PD	S, T	Farsundite, importants travaux pour repérer et accéder à de nouvelles réserves
22	31P01	BEX 349	A. Lacroix et Fils	PD	T	Projet Vert Forêt, mangérite quartzifère gris verdâtre
23	31H03	Aucun	Graymont	PD	E, GC	Calcaire marbrier blanc
24	31H09	Aucun	Jean Longpré	PA	EF	Projet New Rockland, ardoise
25	21E06	Aucun	Claude Vachon, Michel Bilodeau	PD	Pr, E	Projet Vert Mégantic, syénite alcaline gris verdâtre
26	21L10	CDC 1043366 à 1043369	Michel Bilodeau	PA	E, GC	Projet Buckland, schiste à actinolite
27	22E14	BNEP 522	A. Lacroix et Fils	PD	Pr, T, E, GC	Projet Rivière des Prairies, gneiss migmatisé, rose grisâtre, à grain moyen, demande du BEX 377
28	22E06	PRS 4227, 4229	9021-4180 Québec	PD	T, E, GC	Projet Granit brun, monzogabbro brun
29	22E06	CDC 1025583 à 1025591	Jean-Marie Larouche	PD	T, E	Projet Brun des passes, monzogabbro brun
30	32H01	CDC 1004770 à 1004802	A. Lacroix et Fils	PD	T, E, GC	Projet Rivière-aux-Rats, monzogabbro brun orangé et syénogranite orange rougeâtre
31	32H01	PRS 4424-4425, 4720	France Tremblay	PD	S	Projet Vert Melançon, farsundite verte
32	22E04	PRS 5063 à 5070	Granite Péribonka	PD	T, E, GC	Projet Granite bleu, anorthosite à reflet bleuté
33	22D13	PRS 4456 à 4467, 5037 à 5039	Granite Péribonka	PD	E, GC, EF	Projet Jogues, anorthosite noire, à grain grossier
34	22D12	Aucun	Maurice Tremblay	PD	Pr, T, E, GC	Projet Noir nordique, anorthosite noire de type Noir Taillon

TABLE 2.2 Exploration work in Quebec for building material in 2001 (see figure 2.2)

SITE	NTS	MINING TITLE	HOLDER	USE *	TYPE OF WORK **	DETAILS
35	22D12	Aucun	Ressources d'Arianne	PD	T, E, GC	Projet Granit noir Taillon, anorthosite noire de type Noir Taillon
36	22D12	BEX 148	A. Lacroix et Fils	PD	Pr, T	Leucogabbronorite noire
37	22D14	CDC 1004643 à 1004658	André Rinfret	PD	Pr	Projet William, anorthosite à reflet bleuté
38	22D11	PRS 4343	Granicor	PD	T, E, GC, S	Projet Falardeau, anorthosite à reflet bleuté
39	22D11	CDC 1007601	Granite Aurélien Tremblay	PD	T, E, GC	Mangérite quartzifère, porphyroïde, gris verdâtre, à grain grossier
40	22D11	Aucun	France Tremblay	PD	Pr, GC, S	Projet NDL - Bégin, anorthosite noire et gris blanchâtre
41	22D06	Aucun	Roland Dallaire	PD	Pr	Projet Roda, diabase
42	22D03	BEX 343	Firstake Capital	PA	E, EF	Blocs de dolomie à stromatolite
43	22D09	CDC1037883-1037884	France Tremblay	PD	Pr, T	Projet Granite Feuille d'automne, syénite rouge
44	22F12	CDC 1011534 à 1011545	Eric Hurtubise	PD	Pr, E, GC	Trois secteurs, mangérite verte, à grain moyen
45	22F15	CDC 1031592-1031593	Michel Vaillancourt	PD	Pr, E, GC	Projet Manic III, gneiss migmatisé, gris rosé
46	22F10	Aucun	Jean Lapierre, Richard Pope	PD	Pr, E, GC	Projet Outardes 4, mangérite porphyroïde verte
47	22C14	CDC 1005705, 1026191	Eric Hurtubise	PD	Pr, E, GC	Gneiss granitique rubanée
48	22C12	Aucun	Michel Savard	PD	Pr, E, GC	Projet Simac, amphibolite noire
49	22C05	CDC 1031837 à 1031839	Eric Hurtubise	PD	Pr, E, GC	Mangérite vert pâle et rose blanchâtre
50	21N07	PRS 3888-3889	Glendyne	PD	G, GC, E, S	Projet Botsford sud, ardoise noire
51	22B04	Aucun	Jean-Yves Lévesque	PD	Pr	Projet Lac Plaisance, ardoise, calcaire et dolomie
52	22A03	CDC 1036817-1036819	Gestion Jular	PD	Pr, S	Projet Saint-Jogues, calcaire fossilifère gris
53	22A15	PRS 5553, CDC 1005103-1005104	Jacques Dufresne, Carrières Dubé et Fils	PC, PD	T, E	Projet Serpentine, calcilutite grise de la Formation de West Point, demande du BEX 354
54	22J03	CDC 1009857 à 1009862	Maurice Morissette, Carmen Pelletier, France Tremblay	PD	Pr, S, E	Projet Mangérite du Lac Walker
55	22I08	CDC 1024942-1024943	Dany Lévesque	PD	T, E, GC	Projet Rocamadour, mangérite porphyroïde, verte, à grain grossier
56	12L03	PRS 4686 et 5309	Jean Marleau	PD	E, GC	Projet Dolobloc, dolomie
60	22A13	PRS 5074	Jean-Marc Marin, Jean-Yves Lavoie	PD	S	Projet Calcaire Lachance, calcaire marbrier gris blanchâtre rosé.
62	22B16	PRS 5075	Jean-Marc Marin, Jean-Yves Lavoie	PC, PD	Pr, T, E	Projet Calsil, calcaire
63	22H03	CDC 1006393 à 1006402	Jean-Yves Lavoie, Jean-Marc Marin, Lafarge Canada inc.	PD	Pr	Projet Calcaire Lefrançois

* GD : decorative aggregates; PA : decorative stone; PB : building stone; PC : crushed stone; PD : dimension stone.

** Pr : prospecting ; G : geological survey ; GC : rock geochemical survey or test ; E : sampling; S : drilling ; T : trenching or stripping.

MRN subsidized project .

TABLE 2.3 Exploration work for industrial minerals in Québec in 2001 (see figure 2.2)					
SITE	TOWNSHIP OR SEIGNIORY	RESPONSIBLE	PROJECT	SUBSTANCE	WORK *
57	Awantjish	9086-3267 Québec inc	Calcaire Rédemption 2000	calcaire	G,T
58	Richard	Tom Exploration inc	Tuszo	perlite & argile	E, TM
59	Baldwin	Gervais Therrien	Barytine-2	barytine	Pr,E,Gp
60	Lesseps	J. Y. Lavoie & J. M. Marin	Calcaire Lachance	calcaire	Pr, TR, E. S
61	Lesseps	J. Y. Lavoie & J. M. Marin	Marsic	silice	Pr, TR, E. S
62	Lesseps	Poly-vein Expl. inc	Calsil	calcaire & silice	Pr. E. D
63	Lefrançois	J. Y. Lavoie & J. M. Marin	Calcaire Lefrançois	calcaire	EM
64	Denoue	Poly-vein Expl. Inc	Alumine	schiste argileux	S.
65	Arnaud	Soquem	Sept-Iles	apatite, ilménite	ET, TM
66	22J/14	Soquem	Grand Lac du Nord	sillimanite	G,E,T
67	22N/03 1548	Phil Boudrias	Lac Guéret	graphite	Pr,E,Gp
68	Esmanville	Mazarin inc	Lac Knife	graphite	Ev,TM
69	Lislois	Sitec inc	Mine des Chinois	silice	G,Ev
70	Lislois	Paul Blackburn	Lac Daviault	silice	Pr, T,Ev
71	SNRC 22E/10-15	Les Ressources d'Arianne inc.	Lac à Paul	apatite, ilménite	T,E,G,Gp,S
72	SNRC 22E/01-02	Les Ressources d'Arianne inc.	Mirepoix	apatite, ilménite	T,E,G,Gp,S
73	SNRC 22E/01	Léopold Tremblay	Lac Périgny	apatite, ilménite	T, E, Gp
74	SNRC 22D/16	Gilles Bouchard	Lac Poulin de Courval	silice	Pr, E
75	Gagné	Ghislain Poirier	Monts Valin	silice	Pr, T. E
76	Callières	Florent Bédard	Montagne Ronde	silice	Pr, T, S
77	Boilleau	Les Ressources d'Arianne inc.	Boilleau	silice	G.T,E
78	Kénogami	Lucien Girouard	Kenogami	feldspath	T, E
79	Labarre	A. Liboiron	Hébertville	silice	Pr, T, E
80	Dudswell	Graymont (Qc) inc.	Carrière #6	calcaire	ET,EE
81	Leman	Michel Bélisle	Sillimanite	sillimanite	Pr, E
82	Décarie	Michel Bélisle	Dyke Tapani	mica	Pr, E
83	Chopin	Michel Bélisle	Marbre dolomitique	dolomie	E
84	Viel	Jean-Marie Pronovost	Siliviel 2001	silice	G,E
85	Viel et Olier	Jean-Jacques Hébert	Viel-Olier	silice	Pr, E
86	Rivard	Jean Marleau	Kornérupine	minéraux de collection	Pr, E
87	Wabassee	Claude Morin	Mine Claude Morin	graphite	Pr, E
88	Low	Les Mines Burmor International	Mine Gendron	silice	Ev, S
89	Clapham & Leslie	Bernard Charron	Otter Lake	grenat	Pr, E, TM, G
90	Edwards	Denis Cyr	Sillim 2001	sillimanite	G,E
*	E : sampling ; EE: environnemental study ; EF : feasibility study ; EM : market study ; ET : technical evaluation study and compilation ; Gc : soil, rock or stream geochemical survey ; Gp : geophysical survey ; Pr : prospecting ; S : diamond drilling ; T : trenching and stripping; TM : metallurgical testing.				
	MRN subsidized project.				

Chapter 3

Financial Assistance for mining exploration

FINANCIAL ASSISTANCE PROGRAMS FOR EXPLORATION

Jean Choinière

This chapter describes all mineral exploration programs that, over the course of the year 2001, received financial assistance from the Ministère des Ressources Naturelles (MRN). Subsidized projects are shown in figures 3.1 (prospector projects) and 3.2 (company projects). Descriptions of these projects are provided in chapters 1 and 2 of this report.

The MRN allocated a budget of $12.9 M to support mineral exploration activities in Québec during the 2001-2002 fiscal year. This amount is divided between the Québec Mineral Exploration Assistance Program (MEAP) and the Assistance Program for Junior Exploration Companies (APJC).

Québec Mineral Exploration Assistance Program - 2001-2002

- **Grassroots and advanced prospecting work**: The financial assistance granted to individual prospectors may reach $5,000 for grassroots prospecting work, and $15,000 for advanced prospecting activities. A total of 119 projects were subsidized for an amount of $0.86 M.

- **Regional exploration funds**: There are five regional exploration funds. Their respective territories are shown in Figure 3.1. These regional funds support individual prospectors performing work within their territory, in addition to exploration programs conducted by the funds themselves. The MRN granted $1.25 M to these funds, for 148 prospector projects ($0.77 M) and in-house projects ($0.48 M).

- **Native exploration funds**: The MRN has favoured the creation of native mining funds in order to encourage native communities in the Near North and Far North regions to participate in developing the mineral potential of these vast areas. An amount of $350,000 was allocated to two native funds: the Nunavik mining exploration fund, and the Nistassinan Innu mining fund. Their respective territories are shown in Figure 3.1.

- **Exploration companies**[1]: Financial assistance representing 50% of exploration expenditures incurred by a company, to a maximum of $50,000 per project, may be granted. This amount may reach $75,000 if the project is located in the Near or Far North regions. A total of $2 M was allocated for the completion of 39 projects.

- **Advanced exploration**[1]: This measure is designed to stimulate the renewal of mining reserves. The financial assistance corresponds to 50% of expenses incurred by the company, to a maximum of $1 M for programs costing at least $250,000. A total of $3.43 M was awarded to support six projects.

Assistance Program for Junior Exploration Companies[1] - 2001-2002

- The APJC, implemented in 2000-2001, was continued in 2001-2002. This is a temporary measure specifically designed for junior companies with their head office in Québec, and who perform most of their exploration work in Québec. To be eligible, a company must have incurred a minimum of $500,000 in exploration expenditures in Québec since 1997, and have access to a working capital of less than $500,000. Financial assistance for these companies corresponds to 80% of the cost of exploration programs plus a maximum contribution of $150,000 to the company's working capital. An amount of $5 M was awarded to 16 junior companies in support of 24 exploration projects.

---

[1]. In accordance with the strategy of the Government of Québec to develop resource-based regions, the projects subsidized under these measures are all located in areas designated as "resource-based regions".

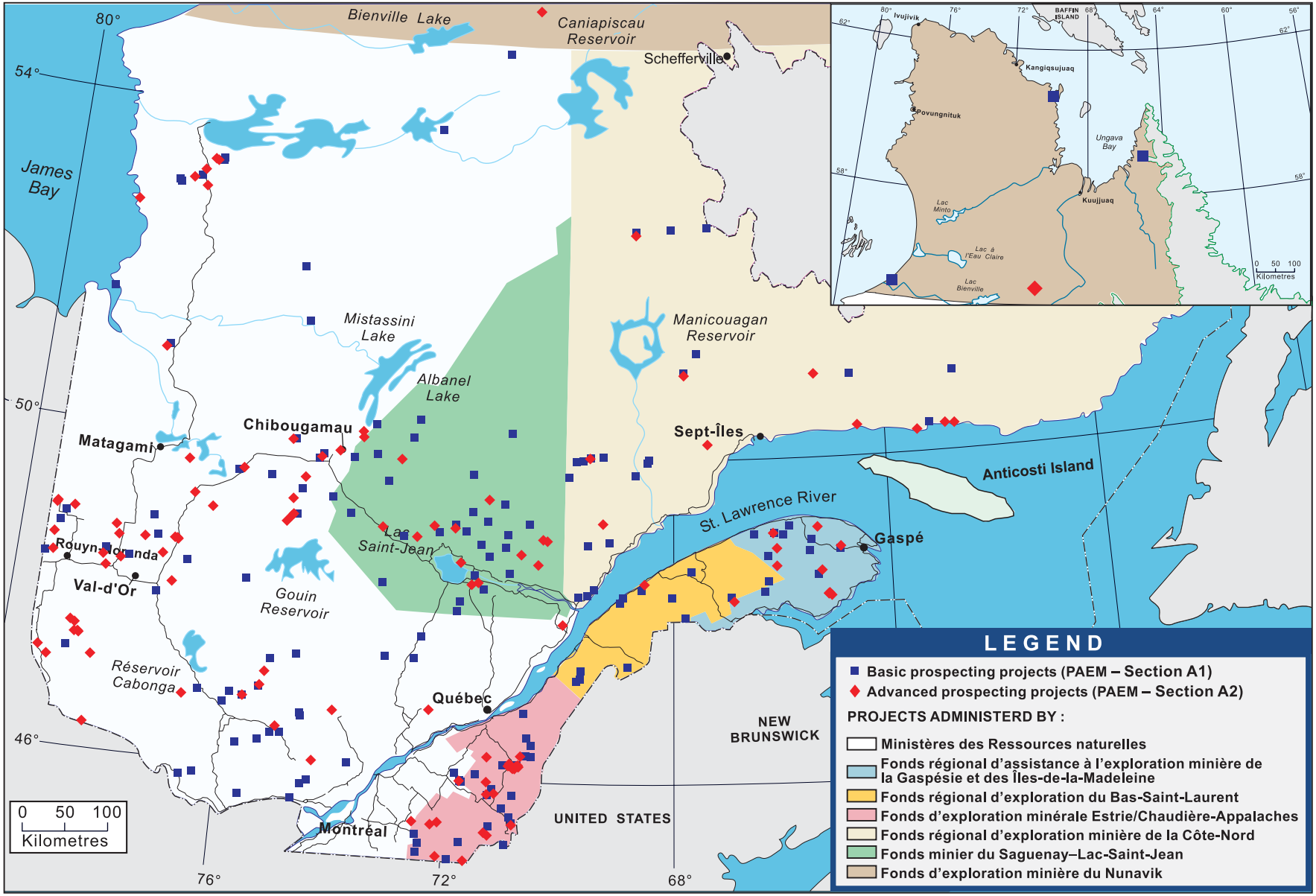


Figure 3.1. Location of basic (Section A1) and advanced (Section A2) prospecting projects subsidized by the MRN in 2001.

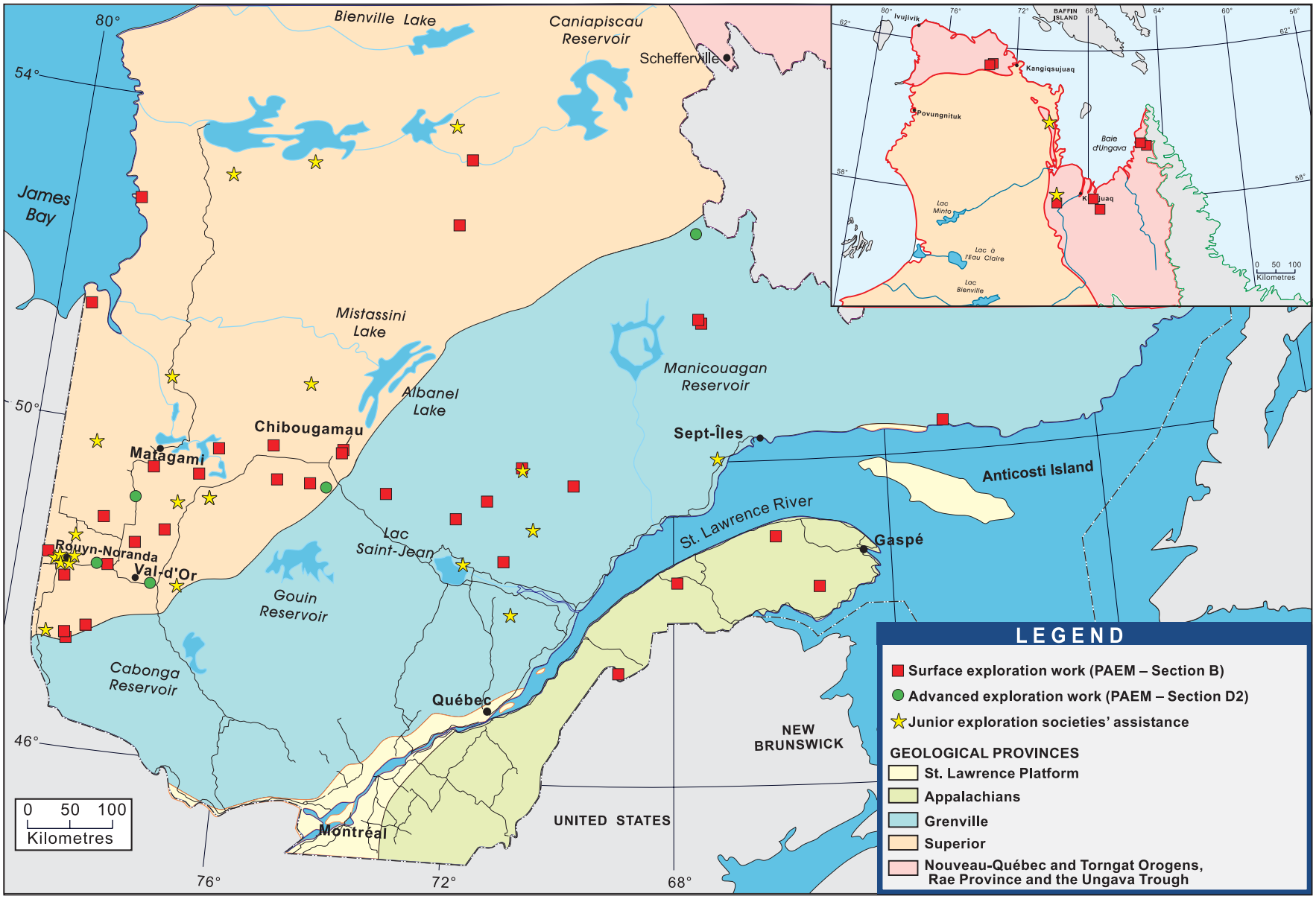


Figure 3.2. Location of MRN subsidized company exploration projects in 2001.

Appendix

Localization of producing mines, architectural stone quarries and peat bogs in Québec

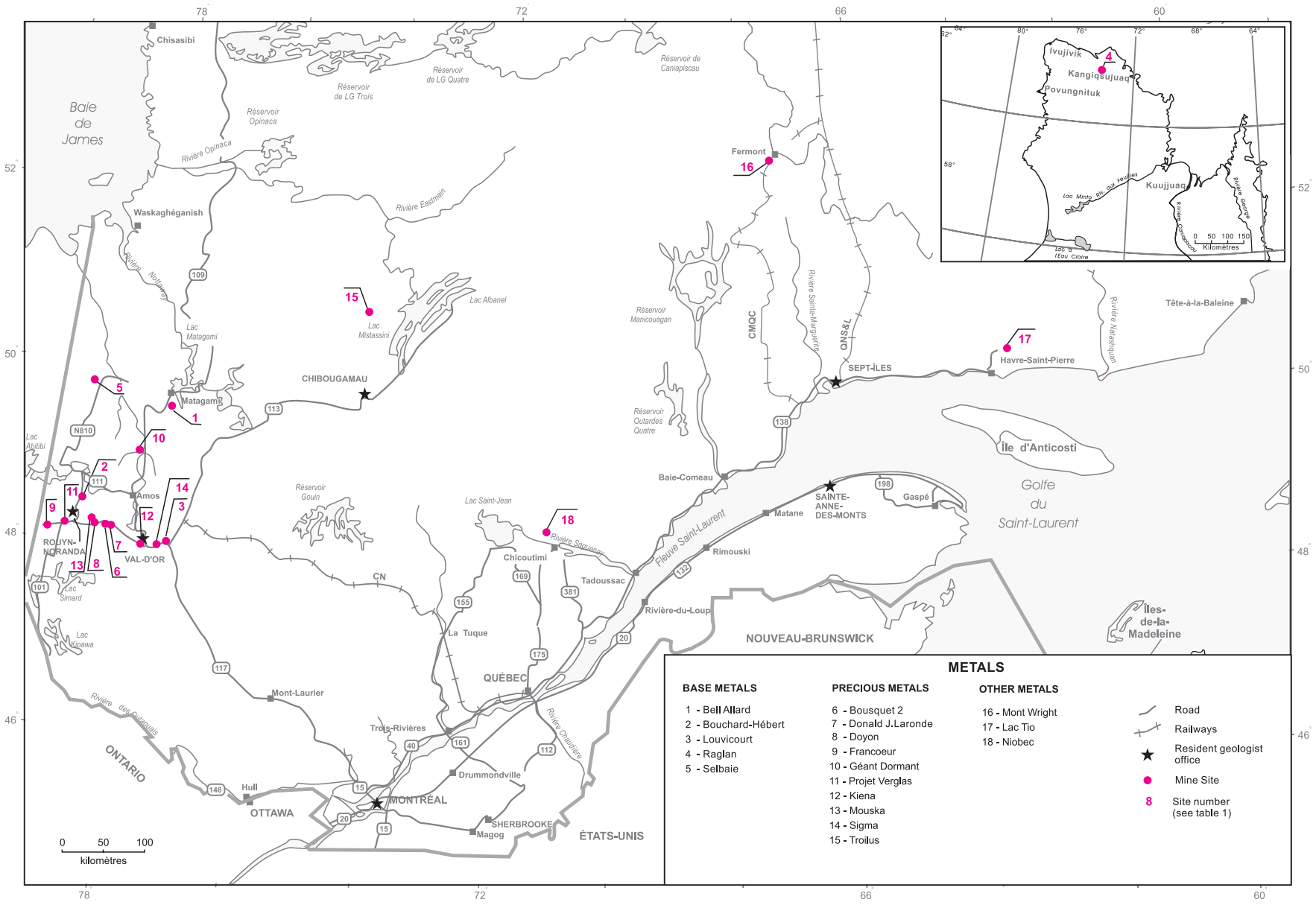


Figure I. Active mines in Québec for 2001 (metallic substances).

Appendix I

Tableau I - Production of metallic substances in Québec (see figure I).

Base metals : Cu and Zn (Ag et Au)

Site	Mine	Company	Summary description of the deposit	Ore process in 2001	Metal production in 2001	Ore processing in 2001	Proven mineral reserves (at January 1st 2002)	Probable mineral reserves (at January 1st 2002)	Employees in 2001	Cumulative production	Number of years of production
1	Bell-Allard	Noranda	VMS-type	744 400 t 12,97 % Zn 1,40 % Cu 41,35 g/t Ag 0,72 g/t Au 0,11 % Pb	88 842,70 t Zn 9 049,66 t Cu 13 321,47 kg Ag 250,23 kg Au	Matagami Mine	*1 852 809 t 12,56 % Zn 1,23 % Cu 38,48 g/t Ag 0,60 g/t Au 0,12 % Pb	*317 155 t 19,59 % Zn 0,98 % Cu 40,37 g/t Ag 0,33 g/t Au 0,13 % Pb	251	1 259 784 t 12,49 % Zn 1,30 % Cu 38,12 g/t Ag 0,67 g/t Au	2000-20.. (2)
2	Bouchard-Hébert	Breakwater Resources	Massive sulfides (PY-SP-CP) subvertical lenses in rhyolites and pyroclastics	1 021 797 t 0,99 % Cu 4,54 % Zn 1,49 g/t Au 45,63 g/t Ag	807,35 kg Au 15 471 kg Ag 6 930 t Cu 41 150 t Zn	Bouchard-Hébert Mine	*2 775 600 t 0,56 % Cu 5,51 % Zn 1,05 g/t Au 39,46 g/t Ag	*326 700 t 0,28 % Cu 5,49 % Zn 1,05 g/t Au 25,62 g/t Ag	149	6 389 982 t 1,6 g/t Au 47,5 g/t Ag 0,91 % Cu 4,49 % Zn	1995-20.. (7)
3	Louvicourt	Aur Resources	VMS-type associated with Val d'Or Formation, dominated by lapilli ash tuffs and exhalative chert	1 570 820 t 3,40 % Cu 1,38 % Zn 25,20 g/t Ag 0,91 g/t Au	49 954 t Cu 15 204 t Zn 21 988 kg Ag 935,65 kg Au	Louvicourt Mine	*3 968 749 t 3,09 % Cu 1,91 % Zn 27,78 g/t Ag 0,86 g/t Au	*101 971 t 3,18 % Cu 1,88 % Zn 36,03 g/t Ag 0,55 g/t Au	295	11 120 456 t 3,60 % Cu 1,50 % Zn 26,08 g/t Ag 0,96 g/t Au	1995-20.. (7)
4	Raglan	Falconbridge	Magmatic massive sulfides lenses at the base of ultramafic flows	960 787 t à 2,98 % Ni 0,91 % Cu 0,06 % Co 3,0 g/t Ag 0,2 g/t Au	25 172 t Ni 7 048 t Cu 459 t Co 1 556 kg Ag 156 kg Au	Raglan Sudbury Nikkelverk	19,5 Mt 2,91 % Ni 0,79 % Cu	19,54 Mt à 2,91 % Ni 0,79 % Cu	470	Na	1998-20.. (3)

Base metals : Cu and Zn (Ag et Au)

Site	Mine	Company	Summary description of the deposit	Ore process in 2001	Metal production in 2001	Ore processing in 2001	Proven mineral reserves (at January 1st 2002)	Probable mineral reserves (at January 1st 2002)	Employees in 2001	Cumulative production	Number of years of production
5	Selbaie	Billiton Metals of Canada	Disseminated SP-PY-CP associated with network veins in a rhyodacite breccia and dacitic welded tuff	2 597 167 t 0,45 g/t Au 32,6 g/t Ag 0,51 % Cu 1,45 % Zn	928 kg Au 64 168 kg Ag 11 793,5 t Cu 41 300,8 t Zn	Selbaie Mine	*8 400 000 t 0,23 g/t Au 24 g/t Ag 0,30 % Cu 1,29 % Zn	Na	213	47 426 849 t 0,62 g/t Au 41,53 g/t Ag 0,98 % Cu 1,97 % Zn	1981-20.. (21)

Precious metals: Au and Ag

Site	Mine	Company	Summary description of the deposit	Ore process in 2000	Metal production in 2000	Ore processing in 2000	Proven mineral reserves (at January 1st 2002)	Probable mineral reserves (at January 1st 2002)	Employees in 2000	Cumulative production	Number of years of production
6	Bousquet 2	Barrick Gold Corporation	Massive and semi-massive pyrite lenses in andalusite-bearing schists	880 158 t 5,9 g/t Au 4,6 g/t Ag 0,23 % Cu	4 741 kg Au 3 665 kg Ag 1 587 t Cu	Usine East Malartic	*561 700 t 6,2 g/t Au 4,1 g/t Ag 0,17 % Cu	*129 500 t 4,6 g/t Au 6,0 g/t Ag 0,06 % Cu	290	7 375 258 t 8,45 g/t Au 0,61 % Cu	1990-20.. (12)
8	Doyon	Cambior	Veinlets and disseminated pyrite in sericite schists, in intermediate felsic volcanics and in Mooshla pluton.	1 090 509 t 5,51 g/t Au 2,36 g/t Ag	6 106 kg Au 2 942 kg Ag	Doyon Mine	3 730 000 t 4,8 g/t Au	4 266 000 t 5,5 g/t Au	430	24 563 617 t 5,93 g/t Au	1980-20.. (22)
9	Francoeur	Richmont Mines	Carbonate, albite, quartz and sericite lenses associated with the Francoeur-Wasa shear zone.	139 309 t 6,25 g/t Au 0,56 g/t Ag	869,21 kg Au 79,38 kg Ag	Usine Camflo	0	0	57	1 683 929 t 6,26 g/t Au	1988-20.. (14)

Tableau I - Production of metallic substances in Québec (see figure I).

Precious metals : Au and Ag

Site	Mine	Company	Summary description of the deposit	Ore process in 2001	Metal production in 2001	Ore processing in 2001	Proven mineral reserves (at	Probable mineral reserves (at January	Employees in 2001	Cumulative production	Number of years of
10	Géant Dormant	Cambior and Aurizon Mines	Gold-bearing quartz and sulfides veins at contact between dacitic intrusions and lava flows	214 067 t 9,6 g/t Au 11,8 g/t Ag	1 986,2 kg Au 2 444,6 kg Ag	Géant Dormant Mine	**125 000 t 10,7 g/t Au	**291 000 t à 12,3 g/t Au	191	1 945 655 t 9,87 g/t Au	1989-20.. (12)
11	Projet Verglas	Noranda	Crown pillar of the old Quemont Mine; VMS-type lenses (PY-SP-CP-PO) in the upper part of a rhyolitic breccia, under a massive rhyolite flow.	86 894 t 4,42 g/t Au 46,3 g/t Ag 0,33 % Cu 9,26 % Zn	265 kg Au 1 710 kg Ag 191,5 t Cu 6 940 t Zn	Fonderie Horne	150 628 t 5,07 g/t Au 45,3 g/t Ag 1,64 % Cu 5,76 % Zn	Na	30	86 894 t 4,42 g/t Au 46,3 g/t Ag 0,33 % Cu 9,26 % Zn	2000-20.. (1)
12	Kiena	McWatters Mines	Auriferous breccia and quartz veins localized between two komatiite flows	742 811 3,59 g/t Au	2531,22 kg Au 376,49 kg Ag	Kiena Mine	*596 000 t 3,29 g/t Au	*616 000 t 3,72 g/t Au	148	10 300 100 t 4,84 g/t Au	1981-20.. (21)
13	Mouska	Cambior	Quartz veins in the Mooshla diorite close to the northern sheared contact.	93 245 t 14,49 g/t Au 2,07 g/t Ag	1 270,2 kg Au 193 kg Ag	Doyon Mine	*144 000 t 18,22 g/t Au	*35 000 t 13,5 g/t Au	140	1 158 065 t 10,93 g/t Au 1,68 g/t Ag	1991-20.. (11)
14	Sigma	McWatters Mines	Subhorizontal auriferous tourmaline-bearing quartz-pyrite veins in shear zones	103 692 t 2,53 g/t Au 0,7 g/t Ag	187 kg Au 77 kg Ag	Sigma Mine	*9 599 855 t 2,60 g/t Au	*5 479 351 t 2,64 g/t Au	150	25 214 706 t 5,46 g/t Au	1938-20.. (64)
15	Troilus	Inmet Mining Corporation	Au-Cu porphyry in diorite	5 900 000 t 0,139 % Cu 1,116 g/t Au	7 836 t Cu 4 609,1 kg Au 5 749,7 kg Ag	Troilus Mine	8 700 000 t 0,09 % Cu 1,0 g/t Au	16 000 000 t 0,09 % Cu 1,0 g/t Au	295	23 794 993 t 0,12 % Cu 1,19 g/t Au	
											1997-20.. (5)

Table I - Iron, ilmenite and niobium productions in Québec (see figure I). (continued)

	Mine	Company	Summary description of the deposit	Total production in 2001	Total shipment in 2001	Shipment of iron pellets and concentrate in 2001	Reserves (at January 1st 2002)	Employees in 2001	Cumulative production	
17	Lac Tio	QIT	Massive hemo-ilmenite in anorthosite associated with the Havre-Saint-Pierre intrusive suite.	Na	Na	Na	Na	300	Na	1976-20.. (22)
18	Niobec	Les Services T.M.G.	Pyrochlore in the St-Honoré carbonatite	1,103 Mt at 0,71 % Nb_2O_5	2766 t of niobium	_	11,303 Mt at 0,73 % Nb_2O_5	_	Na	1950-20.. (49)
										1976-20.. (25)

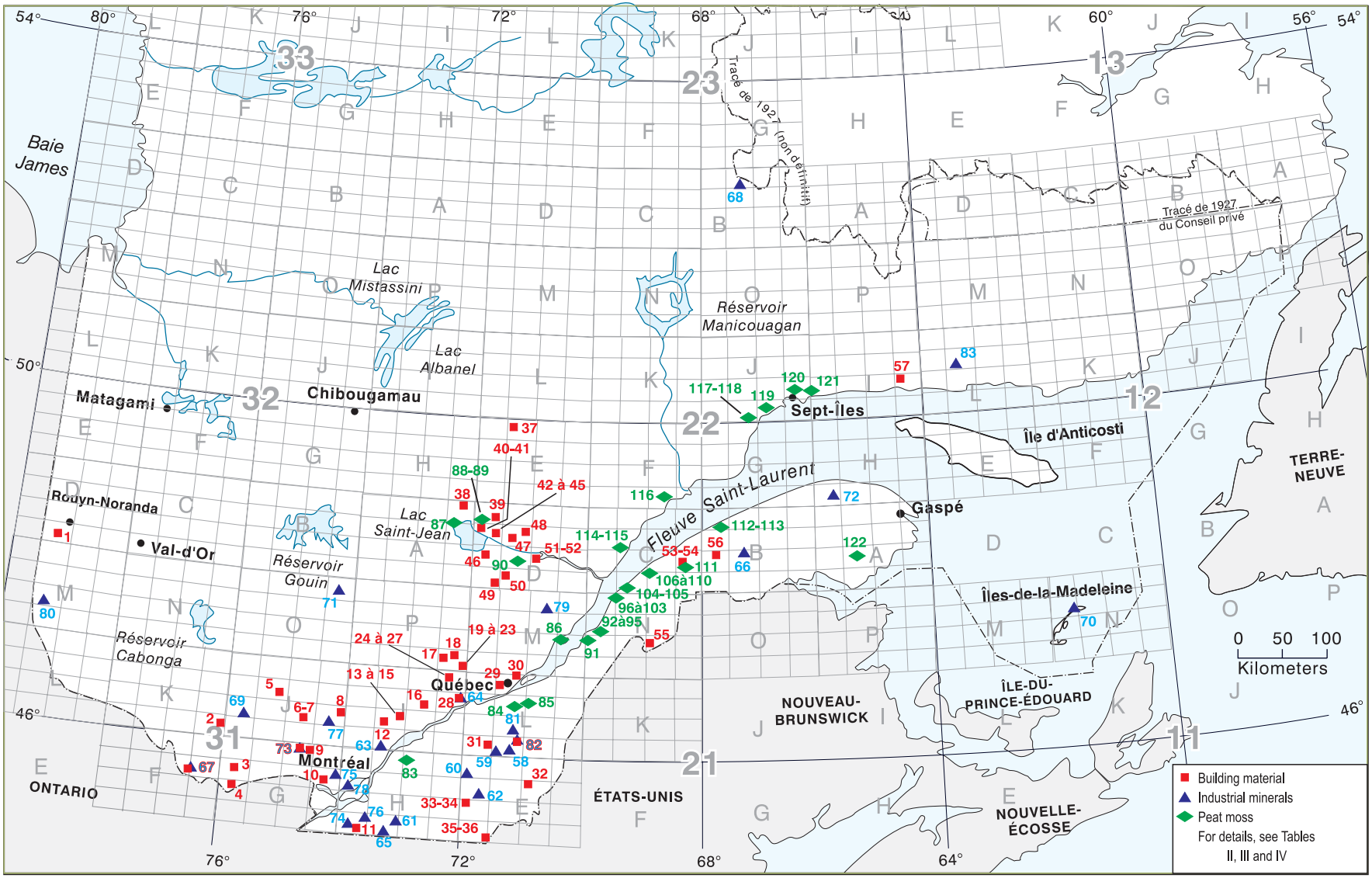


Figure II. Mining activities in Québec in 2001. Building material, industrial minerals and peat moss.

TABLE II – Architectural stone quarries exploited in Quebec in 2001 (see figure II)						
SITE	LOCATION	COMPANY	ROCK TYPE / PRODUCTS*	COMMERCIAL NAME	TOWNSHIP / NTS / ADMINISTRATIVE REGION	TITLE
1	Beaudry	Les Pierres du Nord	Schiste à biotite du Groupe de Pontiac / 3	–	Montbeillard / 32D03 / 08	BEX 086
2	Blue Sea	Carrière Tremblay et Fils	Marbre dolomitique à diopside / 6	–	Wright / 31K01 / 07	Aucun
3	Wilson's Corner	Sablières de la Gatineau	Pegmatite granitique variant de rose orangé à gris blanchâtre / 6	–	Wakefield / 31G12 / 07	Aucun
4	Hull	Rideau Natural Stone Company	Calcarénite gris moyen / 3	–	Hull / 31G05 / 07	Aucun
5	Guénette	Rock of Ages du Canada	Monzogranite rose rougeâtre, à grain variant de fin à moyen / 1, 2	Rose Laurentien	Campbell / 31J11/ 15	CM 079
6	Labelle	Robert Durand	Paragneiss quartzofeldspathique / 3	–	Joly / 31J07 / 15	BEX 076
7	Labelle	Les Pierres Mitchell	Paragneiss quartzofeldspathique / 3	–	Joly / 31J07 / 15	BEX 330
8	Saint-Donat-de-Montcalm	Carrières F. L.	Gneiss granitique, rose brunâtre,à grain fin / 3	–	Lussier / 31J08 / 14	BEX 140
9	Rockway Valley	Sablières de la Gatineau	Marbre dolomitique / 6	–	Ponsonby / 31G15 / 07	Aucun
10	Saint-Canut	Les Pierres Saint-Canut	Grès beige crème / 3	Grès de Saint-Canut	Seigneurie Lac-des-Deux Montagnes 3 / 31G09 / 15	Aucun
11	Havelock	Les Carrières Ducharme	Grès gris et beige / 3	Grès d'Hemmingford	Havelock / 31H04 / 16	Aucun
12	Saint-Didace	A. Lacroix et Fils	Mangérite quartzifère, porphyroïde,brun rougeâtre, à grain grossier / 1	Rouge Nordix	Hunter (Lanaudière) / 31I06 / 14	Aucun
13	Saint-Alexis-des-Monts	A. Lacroix et Fils	Mangérite quartzifère, brune, grain grossier / 1, 2	Brun Automne	Hunterstown / 31I06 / 04	Aucun
14	Saint-Alexis-des-Monts	Firstake Capital	Mangérite quartzifère,brune, à grain grossier / 3, 4	Brun Diamant	Hunterstown / 31I06 / 04	BEX 174
15	Saint-Alexis-des-Monts	Groupe Polycor	Mangérite quartzifère, brune, à grain grossier / 1, 2	Newton	Hunterstown / 31I06 / 04	Aucun
16	Shawinigan	Les Entreprise Élie Grenier	Gneiss oeillé / 3	–	Shawinigan / 31I10 / 04	Aucun
17	Rivière-à-Pierre	A. Lacroix et Fils	Gneiss tonalitique et granodioritique, noir grisâtre, à grain grossier / 1	Atlantic Mist	Lapeyrère / 31P01 / 03	BNEP 494, BEX 378
18	Rivière-à-Pierre	A. Lacroix et Fils	Mangérite quartzifère, porphyroïde, gris noirâtre, à grain grossier / 1	Bleu Atlantique	Bois / 31P01 / 03	BEX 178
19	Rivière-à-Pierre	Granicor	Mangérite quartzifère, porphyroïde, gris noirâtre, à grain grossier / 1	Nara Brown	Bois / 31P01 / 03	BEX 231
20	Rivière-à-Pierre	Groupe Polycor	Farsundite porphyroïde, gris brunâtre, à grain grossier / 1, 4	Calédonia	Bois / 31P01 / 03	BEX 033
21	Rivière-à-Pierre	Groupe Polycor	Farsundite porphyroïde, gris brunâtre, à grain grossier / 1, 4	Calédonia	Bois / 31P01 / 03	Aucun

TABLE II – Architectural stone quarries exploited in Quebec in 2001 (see figure II)

SITE	LOCATION	COMPANY	ROCK TYPE / PRODUCTS*	COMMERCIAL NAME	TOWNSHIP / NTS / ADMINISTRATIVE REGION	TITLE
22	Rivière-à-Pierre	A. Lacroix et Fils	Farsundite porphyroïde, variant de gris brunâtre à verdâtre, à grain grossier / 1	Deer Brown, Vert Atlantique, Deer Brown D.D.	Bois / 31P01 / 03	BM 723, BM 746
23	Rivière-à-Pierre	Granicor	Mangérite et jotunite quartzifère, porphyroïde, variant de gris à noir verdâtre, à grain grossier / 1	Vert Prairie, Dark Steel	Bois / 31P01 / 03	BEX 165
24	Rivière-à-Pierre	Groupe Polycor	Farsundite porphyroïde, gris rosé, à grain grossier / 1	Grand Calédonia	Colbert / 31I16 / 03	BEX 114
25	Rivière-à-Pierre	Granicor	Farsundite porphyroïde, gris rosé, à grain grossier / 1	New New	Bois / 31I16 / 03	Aucun
26	Rivière-à-Pierre	Groupe Polycor	Mangérite quartzifère, porphyroïde, gris verdâtre / 1	Vert Boréal	Chavigny / 31I16 / 03	BEX 333
27	Rousseau-Mills	Groupe Polycor	Farsundite porphyroïde, gris rosé, à grain variant de fin à moyen / 1	Rose Cendré	Montauban/ 31I16/ 03	Aucun
28	Saint-Marc-des-Carrières	Groupe Cogeneuf	Calcaire gris / 1	Calcaire Saint-Marc	Seigneurie La Chevrotière / 31I09 / 03	Aucun
29	Sainte-Foy	Agrégats Ste-Foy	Gneiss gris, migmatisé, à grain moyen / 3	–	Seigneurie Gaudarville / 21L14 / 03	Aucun
30	Château-Richer	Carrière Laplante	Calcaire gris brunâtre / 3	–	Seigneurie Côte-de-Beaupré / 21L14 / 03	Aucun
31	Saint-Ferdinand	Carrière Saint-Ferdinand	Grès verdâtre à grain moyen / 3	–	Halifax / 21L04 / 17	Aucun
32	Saint-Sébastien	Groupe Polycor	Granite gris à grain moyen / 1, 4	Gris Saint-Sébastien	Whitton / 21E10 / 05	Aucun
33	Bromptonville	Carrière Ardoise 55	Ardoise noir grisâtre / 3	–	Brompton / 21E05 / 05	Aucun
34	Bromptonville	Carrière Ardobec	Ardoise noir grisâtre / 3	–	Brompton / 21E05 / 05	Aucun
35	Stanstead	Groupe Polycor	Granite gris, à grain moyen / 1, 2	Gris de Stanstead	Stanstead / 31H01 / 05	Aucun
36	Stanstead	Rock of Ages du Canada	Granite gris, à grain moyen / 1, 2	Gris de Stanstead	Stanstead / 31H01 / 05	Aucun
37	Chute-des-Passes	A. Lacroix et Fils	Gneiss migmatisé, rose grisâtre, à grain moyen / 1	New Rainbow	Lidice / 22E14 / 02	BEX 377
38	Mistassini	Les Calcites du Nord	Marbre calcitique / 6	–	Pelletier / 32A16 / 02	Aucun
39	Chute-du-Diable	Granicor	Anorthosite noire, à grain grossier / 1, 2	Noir Péribonka	Garnier / 22D13 / 02	Aucun
40	Saint-Henri-de-Taillon	Groupe Polycor	Anorthosite noire, à grain grossier / 1, 2	Noir Taillon	Taillon / 22D12 / 02	Aucun
41	Saint-Henri-de-Taillon	Granite Aurélien Tremblay	Anorthosite noire, à grain grossier / 1, 2	Noir Taillon	Taillon / 22D12 / 02	
42	Saint-Nazaire	Granicor	Leucogabbronorite à biotite, noire, à grain variant de moyen à grossier / 1, 2	Noir Cambrien	Taché / 22D12 / 02	BEX 332
43	Saint-Nazaire	A. Lacroix et Fils	Leucogabbronorite à olivine, noir grisâtre, à grain grossier / 1	Noir Atlantique, Vert Nordix	Taché / 22D12 / 02	BEX 148

TABLE II – Architectural stone quarries exploited in Quebec in 2001 (see figure II)

SITE	LOCATION	COMPANY	ROCK TYPE / PRODUCTS*	COMMERCIAL NAME	TOWNSHIP / NTS / ADMINISTRATIVE	TITLE
44	Saint-Nazaire	A. Lacroix et Fils	Leucogabbronorite à olivine, noir verdâtre, à grain grossier / 1, 2	Vert Nordix, Noir Atlantique	Taché / 22D12 / 02	Aucun
45	Saint-Nazaire	Groupe Polycor	Leucogabbronorite à biotite, noire à grain variant de moyen à grossier / 1, 2	Noir Cambrien	Taché / 22D12 / 02	BM 705 (3 carrières)
46	Métabetchouan	Groupe Polycor	Farsundite porphyroïde, rose orangé, à grain grossier / 1	Betchouan	Caron / 22D05 / 02	Aucun
47	Bégin	A. Lacroix et Fils	Mangérite quartzifère, porphyroïde, rose grisâtre, à grain grossier / 1	Rose Atlantique	Bégin / 22D11 / 02	Aucun
48	Saint-Honoré	Les Pierres Naturelles Tremblay	Calcilutite gris noirâtre / 3	–	Falardeau / 22D11 / 02	Aucun
49	Mont-Apica	Groupe Polycor	Jotunite quartzifère, verte, à grain grossier / 1, 2	Vert Laurentide	Lac Saint-Jean-2 / 22D04 / 03	BEX 210
50	Parc des Laurentides	Granite Aurélien Tremblay	Mangérite quartzifère, porphyroïde, gris brunâtre, à grain grossier / 1	Harmonie d'automne	– / 22D03 / 03	BEX 225
51	La Baie	Groupe Polycor	Farsundite porphyroïde, brun orangé, à grain grossier / 1	Polychrome	Bagot / 22D07 / 02	Aucun
52	La Baie	Granicor	Farsundite porphyroïde brun orangé,à grain grossier / 1	Polychrome	Bagot / 22D07 / 02	Aucun
53	Mont-Lebel	Les Matériaux BGB	Siltstone gris verdâtre, à grain fin / 3	–	Macpès / 22C08 / 01	Aucun
54	Mont-Lebel	Les Pierres Naturelles du Québec	Siltstone gris verdâtre, à grain fin / 3	–	Macpès / 22C08 / 01	Aucun
55	Saint-Marc-du-Lac-Long	Carrière Glendyne	Ardoise noire / 3, 5	La Canadienne, Glendyne Slate, North Country Black	Bostford / 21N07 / 01	Aucun
56	Saint-Cléophas	Carrière Bernier	Siltstone gris bleuté, à grain fin / 3	–	Awantjish / 22B05 / 01	Aucun
57	Magpie	Groupe Polycor	Syénite à hypersthène, variant de brun à rose brunâtre, à grain moyen / 1	Magpie	Fornel / 22I08 / 09	BEX 091
67	Portage-du-Fort	Dolomex	Marbre dolomitique, blanc / 6	–	Litchfield / 31F10 / 07	Aucun
73	Saint-Rémi-d'Amherst	Société minière Gerdin	Quartzite / 6	–	Amherst / 31G15 / 15	BEX 107
82	East Broughton	Les Pierres Stéatite	Stéatite / 7	–	Broughton / 21L03 / 12	Aucun

*** 1 – Dimension stone; 2- Tombstone; 3- Building stone, paving stone; 4- Curbstones; 5- Roofing tiles: 6-Decorative aggregates; 7- blocks for sculpture, refractory plates.**

TABLE III - Industrial mineral quarries in production in Québec in 2001 (see figure II).					
SITE	QUARRY	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP/NTS ADMINISTRATIVE REGION
Amiante (chrysotile)					
58	Bell	LAB Chrysotile	Réseau de veines (stockwerk) dans des ultramafites serpentinisées	Fibres	Thetford / 21L03/ 12
59	Black Lake	LAB Chrysotile	Réseau de veines (stockwerk) dans des ultramafites serpentinisées	Fibres	Ireland / 21L03 / 12
60	Jeffrey	JM Asbestos	Réseau de veines (stockwerk) dans des ultramafites serpentinisées	Fibres	Shipton / 21E13 / 12
Calcaire de haute pureté					
61	Bedford	Graybec Calc	Calcaire de la Formation de Corey	Chaux vive, produits de calcaire broyé pour usage industriel, pierre concassée	Stanbridge / 31H03 / 16
62	Domlin	Graybec Calc	Calcaire du Groupe du Lac Aylmer	Chaux vive, produits de calcaire broyé pour usage industriel, pierre concassée	Dudswell / 21E12 / 12
63	Jolichaux	Graybec Calc	Calcaire de la Formation de Deschambault	Chaux vive, produits de calcaire broyé pour usage industriel, pierre concassée	Lavaltrie / 31I03 / 14
64	Calco	Graymont Portneuf	Calcaire de la Formation de Deschambault	Pierre concassée, produits de calcaire broyé pour usage industriel	Seigneurie de Grondines / 31I09 / 03
65	Saint-Armand Ouest	Compléments industriels	Marbre de Strites Pond	Calcaire pulvérisé pour charges minérales	Seigneurie de Saint-Armand / 31H03 / 16
66	La Rédemption	Coop Chaux du Bas-Saint-Laurent	Calcaire de la Formation de Sayabec	Chaux agricole	Awandjish / 22B / 05
Dolomie et marbre dolomitique de haute pureté					
67	Portage-du-Fort	Dolomex	Marbre dolomitique pur	Produits granulés (agriculture, horticulture); poudres. Charges minérales	Litchfield / 31F10 / 07
Fer					
68	Mont-Wright	La Compagnie minière Québec Cartier	Hématite (spéculaire) dans les formations de fer métamorphisées du Groupe de Gagnon	Concentré et boulettes de fer pour acier et métallurgie ; produits de sablage au jet	Normanville / 23B14 et 23B11 / 09

TABLE III - Industrial mineral quarries in production in Québec in 2001 (see figure II).					
SITE	QUARRY	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP/NTS ADMINISTRATIVE REGION
Graphite					
69	Stratmin	Stratmin Graphite (division Lac-des-Îles)	Graphite en paillettes disséminées dans des calcaires cristallins (±quartzite)	Paillettes pour réfractaires, acier, moules de fonderie, lubrifiant, garniture de freins	Bouthillier / 31J05 / 15
Halite					
70	Seleine	La Société canadienne de sel (division Mine Seleine)	Dôme de sel	Sel déglaçant	Îles-de-la-Madeleine / 11N12 / 11
Micas					
71	Letondal	Les Produits Mica Suzorite	Intrusion alcaline lenticulaire contenant 80-85 % phlogopite (variété suzorite)	Mica broyé pour charges minérales (ciment à joint, plastique) et boues de forage	Suzor / 31O16 / 04
Silice					
72	Canton Larivière	Béton Provincial	Grès de Kamouraska	Fondant siliceux	Larivière / 22H03 / 11
73	Saint-Rémi d'Amherst	Société minière Gerdin	Quartzite	Sable de silice pour cimenterie	Amherst / 31G15 / 15
74	Ormstown	La Cie Bon Sable (division Ormstown)	Sable naturel	Sable lavé pour sablage au jet, fonderie, mélange pour colle à céramique	Beauharnois-2 / 31H04 / 16
75	Saint-Canut	Unimin Canada (division Saint-Canut)	Grès de Postdam	Sable pour verre, sablage au jet, filtre, céramique	Lac-des-Deux-Montagnes - 3 / 31G09 / 15
76	Sainte-Clotilde	Les Sables Silco	Grès de Postdam	Pierre concassée riche en silice pour cimenterie et ferro-silicium	Beauharnois-1 / 31H04 / 16
77	Saint-Donat	Unimin Canada (division Saint-Donat)	Quartzite	Sable pour le carbure de silicium	Lussier / 31J08 / 14

TABLE III - Industrial mineral quarries in production in Québec in 2001 (see figure II).					
SITE	**QUARRY**	**COMPANY**	**SUMMARY DESCRIPTION OF DEPOSIT**	**PRODUCTS**	**TOWNSHIP/NTS ADMINISTRATIVE REGION**
78	Saint-Joseph-du-Lac	La Cie Bon Sable	Sable naturel	Sable lavé pour la maçonnerie et le sablage au jet	Lac-des-Deux-Montagnes -1 / 31H12 / 15
79	Petit lac Mabaie	Sitec inc.	Quartzite	Quartz en morceaux pour le silicium métal et sable de silice pour le carbure de silicium	Charlevoix / 21M15 / 03
80	Saint-Bruno-de-Guigues	Temisca Silice	Grès d'âge Ordovicien	Sables pour filtration, fonderie, fracturation hydraulique	Guigues / 31M05 / 08
Talc et stéatite					
81	Saint-Pierre-de-Broughton	Luzenac	Schiste à talc-carbonate	Produits de talc moulu, non purifiés	Leeds / 21L06 / 12
82	Fraser	Les Pierres Stéatite inc.	Stéatite	Blocs pour sculpture, plaques réfractaires	Broughton / 21L03 / 12
Titane					
83	Lac Tio	QIT - Fer et Titane	Hémo-ilménite massive dans l'anorthosite du Complexe d'Havre-Saint-Pierre	Scories de titane (Sorel slag) pour la production de pigments et de fer de refonte, ilménite concassée (Sorel flux)	Parker / 12L09 et 12L11 / 09

TABLE IV - Peat bogs in exploitation in Québec in 2001 (see figure II).

SITE	PEAT BOG (DEPOSIT)	COMPANY	PRODUCTS	TOWNSHIP/NTS ADMINISTRATIVE REGION
83	Saint-Bonaventure	Fafard et Frères (division Saint-Bonaventure)	Tourbe de sphaignes, terreaux, composts, biofiltres	Upton / 31H15 / 04
84	Saint-Henri-de-Lévis	Premier Horticulture (division Saint-Henri)	Tourbe de sphaignes	Seigneurie Lauzon / 21L11 / 12
85	Saint-Charles	Les tourbes M. L. (division Saint-Charles)	Tourbe de sphaignes Terreaux	Seigneurie Lauzon et fief de La Martinière (Beauchamp) / 21L10 / 12
86	Îsle-aux-Coudres	Tourbière Pearl	Tourbe de sphaignes	Seigneurie Îsle-aux-Coudres / 21M08 / 03
87	Sainte-Marguerite	Fafard et Frères (division Sainte-Marguerite)	Tourbe de sol	Racine / 32A16 / 02
88	L'Ascension Ouest	Tourbières Lambert (division L'Ascension)	Tourbe de sphaignes	Garnier / 22D13 / 02
89	Saint-Ludger-de-Milot SW	Fafard et Frères (division Sainte-Marguerite)	Tourbe de sphaignes	Milot / 22D13 / 02
90	La Baie	Tourbières Lambert (division L'Ascension)	Blocs de tourbe de sphaignes	Bagot / 22D7 / 02
91	Rivière-Ouelle (division Rivière-Ouelle)	Tourbières Lambert	Tourbe de sphaignes, terreaux, mousse florale	Seigneurie Rivière-Ouelle 21N05 / 01
92	Saint-Alexandre	Tourbière Saint-André	Tourbe de sphaignes	Seigneuries Islets-du-Portage et Lachenaie / 21N12 / 01
93	Saint-Alexandre	Tourbière Saint-Alexandre	Tourbe de sphaignes	Seigneuries Islets-du-Portage et Lachenaie / 21N12 / 02
94	Saint-Alexandre	Tourbière Mouska	Tourbe de sphaignes	Seigneuries Islets-du-Portage et Lachenaie / 21N12 / 03
95	Notre-Dame-du-Portage	Premier Horticulture (division Tardif)	Tourbe de sphaignes	Seigneurie Terrebois / 21N12 / 01
96	Rivière-du-Loup	Premier Horticulture (division Premier)	Tourbe de sphaignes terreaux, composts,endomycorrhyzes, biofiltres	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
97	Rivière-du-Loup	Premier Horticulture (division Verbois)	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
98	Rivière-du-Loup	Premier Horticulture (division Saint-Laurent)	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
99	Rivière-du-Loup	Tourbière Michaud ltée	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
100	Rivière-du-Loup	Les tourbes M. L. (division Rivière-du-Loup)	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
101	Rivière-du-Loup	Tourbière Berger inc.	Tourbe de sphaignes, terreaux	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
102	Rivière-du-Loup	Tourbière Henri Théberge et associés	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
103	Rivière-du-Loup	Tourbière Omer Bélanger	Tourbe de sphaignes	Seigneuries Rivière-du-Loup et Cacouna / 21N13-14 / 01
104	Isle-Verte, EST	Tourbière Réal Michaud et fils	Tourbe de sphaignes	Seigneurie Isle-Verte / 22C03 / 01
105	Isle-Verte, SW	Tourbière Ouellet et fils	Tourbe de sphaignes	Seigneurie de Villeray / 21N14 / 01
106	Saint-Eugène-de-Ladrière	La tourbière Yvon Bélanger	Tourbe de sphaignes	Seigneurie Nicolas-Rioux 03 / 22C07 / 01
107	Saint-Fabien-sur-Mer	La tourbière Rio-Val	Tourbe de sphaignes	Seigneurie Nicolas-Rioux 03 / 22C07 / 01
108	Saint-Fabien-sur-Mer	Tourbière de la Mer	Tourbe de sphaignes	Seigneurie Nicolas-Rioux 03 / 22C07 / 01
109	Saint-Fabien	Tourbière du Port-Pic	Tourbe de sphaignes	Seigneurie Nicolas-Rioux 03 / 22C07 / 01
110	Saint-Fabien	Tourbière Berger inc. (division Saint-Fabien)	Tourbe de sphaignes	Seigneurie Nicolas-Rioux 03 / 22C07 / 01
111	Lac Malobès	Exportations Daniel Sage inc	Blocs de tourbe de sphaignes	Seigneurie Nicolas-Rioux / 22C7 / 01
112	Rivière-Blanche	Premier Horticulture (division Saint-Ulric)	Tourbe de sphaignes	Matane / 22B13 / 01
113	Saint-Ulric	Les tourbes M. L. (division Saint-Ulric)	Tourbe de sphaignes	Matane / 22B13 / 01

TABLE IV - Peat bogs in exploitation in Québec in 2001 (see figure II).				
SITE	PEAT BOG (DEPOSIT)	COMPANY	PRODUCTS	TOWNSHIP/NTS ADMINISTRATIVE REGION
114	Les Escoumins	Tourbières Lambert (division Anse-aux-Basques)	Tourbe de sphaignes	Bergeronnes / 22C06 / 09
115	La Petite Romaine	Tourbières Lambert (division Saint-Paul-du-Nord)	Tourbe de sphaignes	Iberville / 22C06 / 09
116	Pointe-Lebel	Premier Horticulture (division Sogevex)	Tourbe de sphaignes	Manicouagan / 22F01 / 09
117	Port-Cartier Ouest	9006-1474 Québec inc. (Les Tourbières Torland)	Tourbe de sphaignes Blocs de tourbe de sphaignes	Babel / 22J02 / 09
118	Port-Cartier Ouest	Exportations Daniel Sage inc.	Blocs de tourbe de sphaignes	Babel / 22J2 / 09
119	Port-Cartier Est	Tourbières Blocs Dorés	Blocs de tourbe de sphaignes	Leneuf / 22J02 / 09
120	Ville de Sept-Îles (division tourbières Sept-Îles)	Les tourbes M. L.	Blocs de tourbe de sphaignes	Letellier / 22I05 / 09
121	Rivière-Moisie	Premier Horticulture (division Sept-Îles)	Tourbe de sphaignes	Moisie / 22I5/ 09
122	Saint-Jogues	Shigawake Organics Ltd	Tourbe de sphaignes	Hope / 22A3 / 11