

# Report on mineral exploration activities in Québec 2004

## DISCLAIMER

The data compiled in this report come from a several of sources, including questionnaires addressed to prospectors, to directors of regional exploration funds, and to representatives of mining and exploration companies, as well as from their press releases. The accuracy and reliability of this information depend solely on these sources. The authors disclaim all responsibility for reproducing any errors originating from these sources but are nonetheless responsible for mistakes introduced while writing the report, despite the editing of the document by an external editor and a final review of the contents by Ministry personnel.

## ACKNOWLEDGEMENTS

The authors would like to thank the following people who have contributed to this report:

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PUBLISHED BY "GÉOLOGIE QUÉBEC"

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Front photographs: Main Image: Shaft construction at the Lapa project (Agnico-Eagle Mines Ltd)

Image on the left: Shaft collar under construction at the Casa Berardi mine project (Aurizon Mines Ltd)

Image in the center: Diamond drilling in Ungava (Canadian Royalties Inc.)

Image on the right: Shaft collar under construction at the Lapa project (Agnico-Eagle Mines Ltd)

Back Cover Photographs: Image on the left: Shaft construction at the Lapa project (Agnico-Eagle Mines Ltd)

Image in the center: Côte-Nord (Abdelali Moukhsil)

Image on the right: Shaft collar under construction at the Lapa project (Agnico-Eagle Mines Ltd)

## Highlights

This annual report for 2004 provides an overview of mineral exploration projects in the geological provinces and major assemblages of Québec and outlines the mineral potential of Québec's landmass. In 2004, exploration and deposit appraisal expenditures are estimated at \$204M. This is a 52% increase relative to 2003. This hike reflects higher expenditures for precious metals (+61% to reach \$109M), base metals (+46% to reach \$61M) and diamond (+48% to \$27M).

For the year 2004, the "Eleonore" gold discovery by **Virginia Gold Mines Inc.** in Québec's Near North near the Opinaca reservoir, was certainly the most important event in exploration in Québec. Other promising finds include the base metal discovery on the "Lac Montbray" property west of Rouyn-Noranda, by **Noranda Inc.** and **Alexis Minerals Corporation**, and the intersection of a massive sulphide lens, dubbed "Renaissance", by **Noranda Inc.** in the Matagami area.

In Québec's Far North, **Canadian Royalties Inc.** pursued its exploration efforts on the Expo-Ungava property, located 15 km south of the Raglan mine. At the Mesamax deposit, indicated resources were increased to 1.84 Mt at 1.9% Ni, 2.3% Cu, and 5.2 g/t Pt+Pd. Near the Mesamax deposit, **Canadian Royalties Inc.** also discovered another high-grade Ni-Cu-Pt-Pd showing near surface (2.25% Ni, 5.70% Cu, and 10.01 g/t Pt+Pd over 56.6 m; drillhole MXNW-04-110). **Knight Resources Ltd.** and **Anglo American Exploration (Canada) Ltd** reported several interesting intercepts, including 24.5 m grading 1.71% Ni, 0.8% Cu, and 1.33 g/t Pt+Pd. **Goldbrook Ventures Inc.** also reported the discovery of high-grade Ni-Cu-Pt-Pd showings on its Bélanger property. One drillhole yielded average grades of 1.35% Ni, 0.61% Cu, and 2.88 g/t Pt+Pd over a 49.35-m interval.

In the search for precious and base metals, northwestern Québec remains a prime target area. Several gold projects, some of which have reached an advanced stage, were underway this past year. In September 2004, **Aurizon Mines Ltd** began preparation work to sink a shaft on the Casa Berardi project. West of Rouyn-Noranda, on the Lac Montbray property, partners **Noranda Inc.** and **Alexis Minerals Corporation** reported an impressive intercept of 5.16 m grading 5.61% Cu, 1.70% Zn, 0.34 g/t Au, and 17.6 g/t Ag, at a vertical depth of 110 m. In the Cadillac area, mining operations resumed at the Mouska gold mine (**Cambior Inc.**) in early October, following the completion of a shaft-deepening program. Accessing new ore zones has added three years to the mine life. On the Noralex property, located 10 km northwest of the Doyon and Mouska mines, **Alexis Minerals Corporation** and **Noranda Inc.** intersected gold-bearing veins grading 3.19 g/t over 15 m in drillhole. **Agnico-Eagle Mines Ltd** launched a \$30M program on the Lapa property near Rouyn-Noranda, which includes shaft sinking, underground development, drilling and metallurgical

testing. Reserves and resources are estimated at 4.9 Mt at a grade of 8.23 g/t Au. At the Kiena mine complex, **Wesdome Gold Mines Inc.** is conducting a drilling and drift development program. Drillholes intersected gold grades, including 3.03 g/t Au over 9 m along the extension of zone S-50. Near Malartic, **Richmont Mines Inc.** drove an exploration ramp on its East Amphi property. An underground exploration campaign involving 9,000 m of drilling is planned, and a decision concerning the start-up of commercial production at the East Amphi deposit will be taken in the summer 2005. In the Val-d'Or area, **Agnico-Eagle Mines Ltd** began work to rehabilitate mining infrastructure on the Goldex property. Some \$10M will be invested to increase the level of confidence in the probable reserve estimate, which currently stands at 21.77 Mt at a grade of 2.4 g/t Au. **Century Mining Corp.** completed, in 2004, the acquisition of the Sigma-Lamaque mining complex from **McWatters Mining Inc.** Operations were suspended at the mine in October 2003. A drill program was launched in October 2004, in order to increase the level of confidence in the gold resource estimate at the open pit mine. East of Val-d'Or, a drillhole by **Alexis Minerals Corporation** testing the Hogg showing on the Cadillac Group project intersected a skarn-type mineralized zone grading 21.2 g/t Au and 0.56% Cu over 3.8 m. In the Matagami area, **Noranda Inc.** intersected in drillhole 6.9 m of massive and semi-massive sulphides at 465 m depth. The new showing is called "Renaissance". It is located just 7 km southeast of the company's existing infrastructure. In the central part of the Urban-Barry belt, located 120 km east of Lebel-sur-Quévillon, **Noront Resources Ltd** completed a drill campaign on the Windfall Lake property. Several drillholes intersected pyrite-rich zones with significant gold grades such as 8.55 g/t Au over 13.4 m. As of October 1, 2004, **Campbell Resources Inc.** had completed nearly 9,000 m of definition drilling at the Copper Rand mine, in Chibougamau. Ore extraction began in November and commercial production is slated to begin in January 2005.

The James Bay region continues to attract interest for its diamond potential. The Monts Otish area was certainly the most active. Thus, **Ashton Mining of Canada Inc.** and **SOQUEM INC.** performed drilling and bulk sampling, to extract a total of 639 tonnes of kimberlitic material from the Renard 2, 3, 4, and 65 bodies on the Foxtrot property. To date, 28 diamonds larger than 0.5 carat have been recovered, including 5 stones exceeding 1.0 carat in size. In February 2004, processing of a 3.87-tonne sample of erratic boulders from the Lynx property, adjacent to Foxtrot, yielded an estimated diamond content of 120 carats per 100 tonnes. **Majescor Resources Inc.** confirmed the discovery, on its Portage property, of several kimberlite blocks up to 50 cm in size. A total of 32 diamonds larger than 0.075 mm were recovered from a 136.65-kg sample of kimberlitic float. In the Near North region, near the Opinaca reservoir, **Virginia Gold Mines Inc.** defined, on surface and in drillhole, a high-grade gold system, which extends for roughly 300 m along strike to a depth of more than 225 m. The project is called "Eleonore", and the gold system comprises two main zones: *Roberto* (18.85 g/t Au

over 16 m; drillhole ELE-04-02) and *Roberto East* (4.05 g/t Au over 17 m; drillhole ELE-04-37). This new high-grade gold setting attracted much attention, which translated into claim acquisitions in the area. In the La Grande greenstone belt, **Virginia Gold Mines Inc.** and its partner **Noranda Inc.** announced the discovery of volcanogenic massive sulphide lenses on the Coulon property, namely in the *DOM* area (9.94% Zn, 2.12% Pb, 0.73% Cu, and 96.38 g/t Ag over 19.5 m; drillhole CN04-17) and the *DOM NORD* area (12.65% Zn, 1.54% Pb, 1.36% Cu, 125.31 g/t Ag, and 0.3 g/t Au over 4.7 m; drillhole CN04-23).

In the Far North region, **Virginia Gold Mines Inc.** and **BHP-Billiton** completed a \$1M drill program on the Gayot project. With uranium prices on the rise, **Strathmore Minerals Corp.** acquired the mining rights of the Dieter Lake property, located about 110 km northwest of the Caniapiscau reservoir, where geological resources are estimated between 10 and 15 million metric tonnes at a grade of 0.25%  $U_3O_8$  or 50 million metric tonnes at a grade of 0.10%  $U_3O_8$ .

In the eastern Grenville Province in the Côte-Nord region, **Quinto Technology Inc.** conducted extensive exploration work, which led to the discovery of a Ni-Cu showing at Lac Paradis, near the Daniel-Johnson dam. This showing yielded significant nickel (up to 5.26%) and copper (up to 2.2%) grades. **9083-5596 Québec Inc.** continued its drill program launched in 2002 on the Lac Desautels project, located some 70 km northwest of Girardville, in the Lac Saint-Jean region. The company has completed nearly 8,000 m of drilling to date, in order to delineate a high-tonnage low-grade nickel-copper deposit. In the Gaspésie region, **Appalaches Resources Inc.** is drill-testing deep-seated geophysical anomalies outlined during a recent geophysical survey on its Mont-de-l' Aigle property in Lemieux Township.

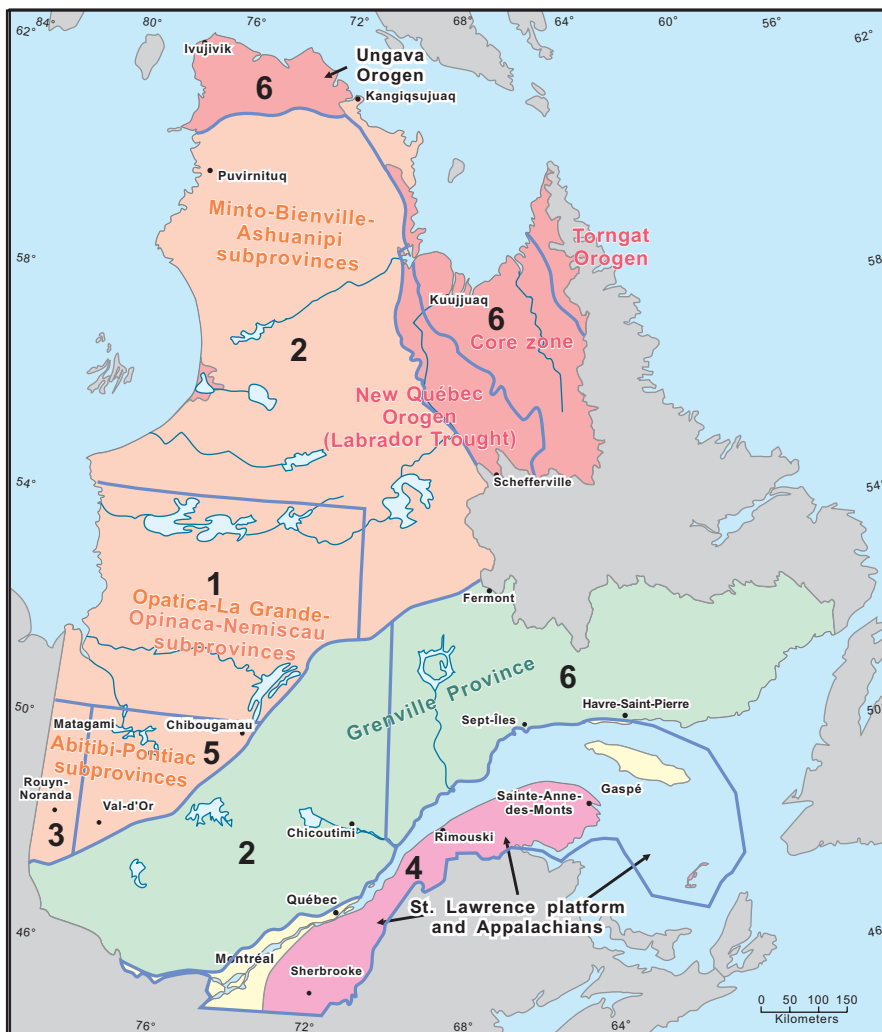
Architectural stone is fast becoming a coveted commodity in Québec. Québec's bedrock contains magnificent varieties of stone that adorn buildings and various architectural works throughout the world. Québec granite will namely be used to

rebuild certain buildings destroyed during the September 11, 2001 attacks in New York City. Several companies are involved in this field. In 2004, **NAMCA Inc.** successfully completed development work at two deposits; a pinkish violet limestone breccia deposit in Maria and a whitish grey calcilutite deposit in Saint-Armand. **Granijem Inc.** launched the production of a mangerite-type stone reputed for its green colour, near the town of Magpie in the Côte-Nord region. To support the architectural stone industry in Québec, the **Ministère des Ressources naturelles, de la Faune et des Parcs (MRNFP)** has inserted in its website a page devoted to the exploration and extraction of these commodities.

In the field of industrial minerals, **Junex Inc.** drilled two new brine wells in Bécancour. With the start-up of production at the two wells, the company will be able to increase its daily output capacity of natural brine. In the Côte-Nord region, **Quinto Technology Inc.** and **SOQUEM INC.** continued their exploration program launched in 2002 to define the graphite potential at Lac Guéret, near the Daniel-Johnson dam. In the Labrieville area, north of Forestville, **Quinto Technology Inc.** launched an exploration program on the Lac Brûlé hemo-ilmenite deposit. Analytical results indicate an interesting titanium dioxide content, at about 35%  $TiO_2$ .

In the field of construction materials, the **MRNFP** discovered a potential cement stone deposit in the Percé area. A preliminary assessment of the limestones reveals CaO grades of about 48-50%, which would meet industry requirements. Access to several hundred million tonnes of reserves is easily feasible.

With metal prices on the rise, the year 2005 promises to be an exciting one for the exploration industry in Québec. We believe that northwestern Québec, the Monts Otish area and the Ungava Trough will remain the busiest in terms of exploration. The search for gold, diamond, copper, zinc, and nickel will attract investments in Québec, which remains largely underexplored.



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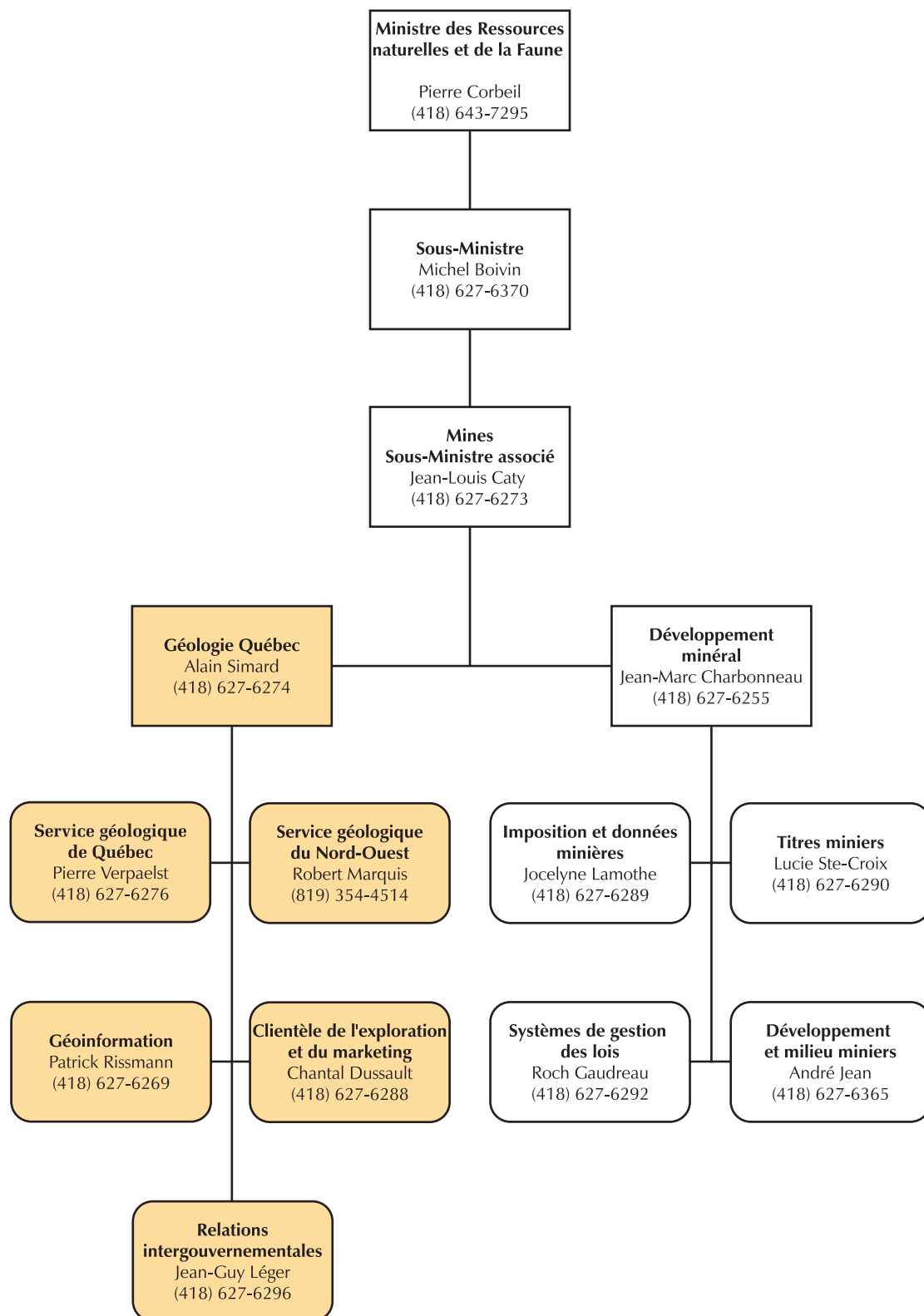
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**Figure 1.** Geological subdivisions and people to contact.



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