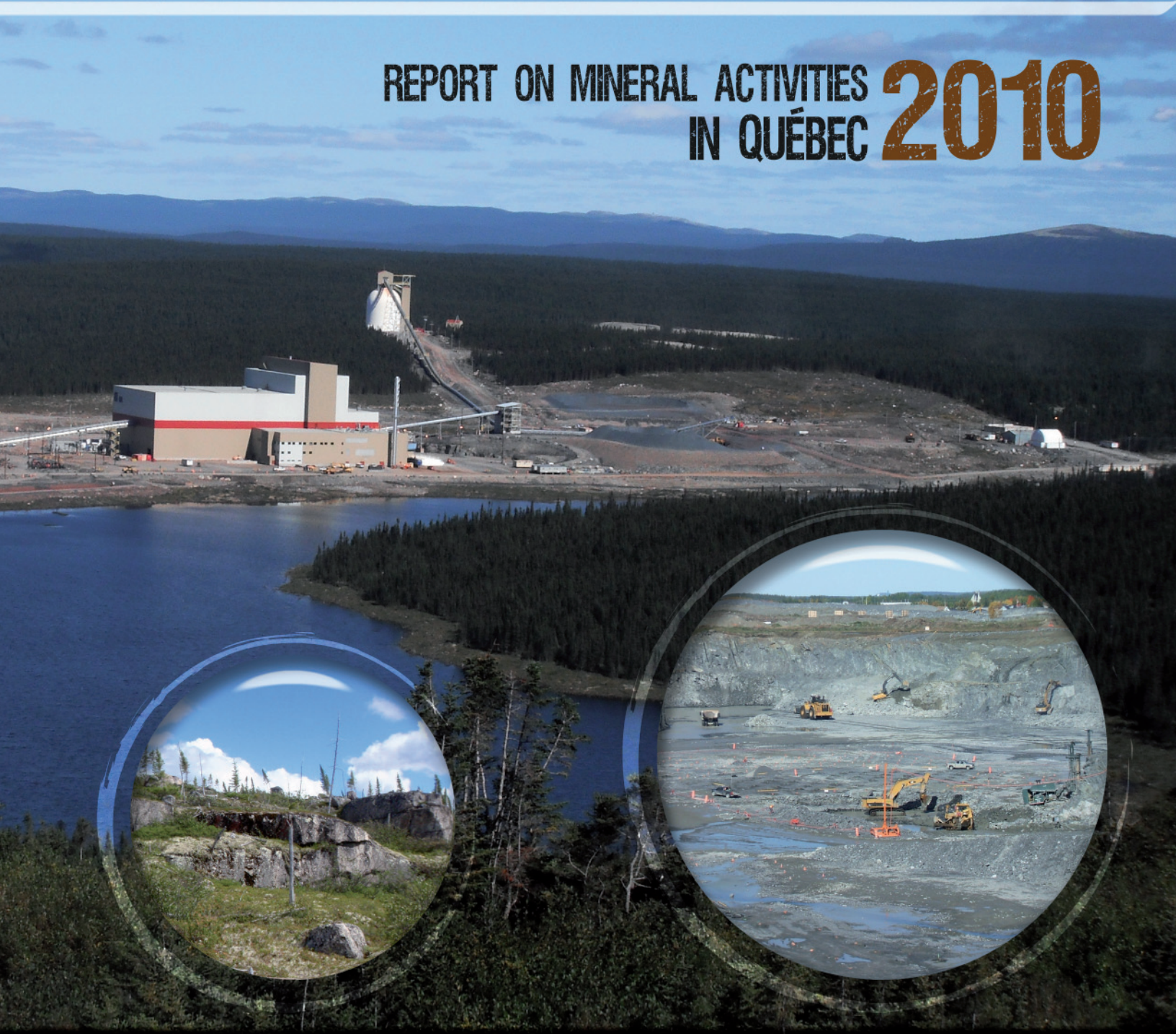
REPORT ON MINERAL ACTIVITIES IN QUÉBEC 2010



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Québec

Report on mineral activities in Québec

2010

Disclaimer

The data compiled in this report comes from several sources, including questionnaires addressed to prospectors, to directors of regional First Nations and Inuit 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.

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1- Lac Bloom mine site. *Photo courtesy of Consolidated Thompson Iron Mines Limited.*

2- 2010 summer field work, Northern Québec. *Photo: MRNF.*

3- 2010 summer field work, Northern Québec. *Photo: MRNF.*

4- Excavation of the Canadian Malartic open pit, Osisko Mining Corporation. *Photo: MRNF.*

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CHAPTER 1 - SUMMARY AND HIGHLIGHTS

1.1 - Strategic and Political Issues

MINERAL STRATEGY ACTION PLAN

Élise Matte

On June 29, 2009, the Deputy Minister for Natural Resources and Wildlife launched Québec's very first mineral strategy. This strategy is built around three main policy directions:

- Create wealth for Québec and prepare the future of Québec's mineral sector;
- Ensure environment-friendly mineral development;
- Foster integrated, community-related mineral development.

With this strategy, the government wants to make the mining sector one of the driving forces of sustainable development.

Much progress has been made in 2010. Measures laid out in the strategy are integrated in a detailed action plan and are implemented. A few examples include the numerous projects related to geoscience knowledge acquisition, the tabling of bill 79, and efforts to optimize training and education opportunities.

The Mineral Strategy, built around the three pillars of sustainable development, namely takes into account principles of economic effectiveness, involvement and commitment, and environmental protection.

PLAN NORD

Élise Matte

In 2010, in the midst of the Plan Nord preparation process, several working groups were created to provide their input on the various economic sectors involved in Northern Québec.

A working group on mines was created to take part in this governmental planning process. The group is composed of individuals recognized for their expertise in various fields of the mining sector. These people come from the business world, from Québec's regions, from various native communities, from a number of Regional conferences of elected officials (*Conférences régionales des élus* - CRÉ) and from environmental groups.

Their ideas and propositions were submitted to the members of the Partners' Discussion Table, headed by the Minister of Natural Resources and Wildlife, Mrs. Nathalie Normandeau, to help in the preparation of the Plan Nord document.

LEGISLATIVE AND BUDGETARY AMENDMENTS

Dorra Djemal

Bill 79 to amend the Mining Act went through a number of milestones during the year 2010. Briefs and comments were submitted by individuals and various groups interested in the amendments proposed by government to the mining regime in Québec. Extensive public consultations were held on the bill. It is currently being studied one section at a time by the Committee on Agriculture, Fisheries, Energy and Natural Resources at the National Assembly in Québec.

Within the scope of its 2010-2011 budget, the government of Québec announced a major revision of the mining duties regime. This revised regime is better suited to the new reality of the mining sector and its primary objective is to collect fair compensation for the use of our mineral resources, without impeding the competitiveness of mining companies.

Please consult the section entitled "Québec's Mining Regime and Land Access" for more details concerning these amendments.

1.2 - Economic Setting

Martin Labrecque

Much like the economy in general, the mining sector experiences periods of growth and periods of slowdown. In the early part of the last decade, the mining sector went through a period of contraction, but this trend reversed from 2003 onward.

This last period of growth was however affected by the financial crisis in 2008, which initially led to a significant reduction in the market capitalization of most mining companies around the world.

Then, in turn, the economic slowdown that followed led to a reduction of shipments from mining companies. According to PricewaterhouseCoopers (PwC)[1], revenues for the 40 largest mining companies in the world sustained a 15% drop in 2009 relative to the previous year.

Financing issues, combined with lower revenues were such that, across the world, many mines were shut down, development projects were halted, and overall mineral exploration spending dropped in 2009.

And yet, the mining sector rebounded more easily than most other industrial sectors, particularly in Québec. At the end of the year 2009, most of the major mining companies

1- PricewaterhouseCoopers, *Mine - Back to the boom*, 44 p., May 2010.

around the world had recovered, even exceeded, their market capitalization levels of 2007, and shipments were once again on an upward trend.

Prices for most commodities, which had declined with the economic crisis, increased overall through 2009 and 2010, to return to levels similar to pre-2008 prices. Thus, the exceptional strength of gold prices, the rising prices for base metals (Cu, Ni and Zn) and iron ore, as well as the search for more exotic commodities (U, Li, rare earths) enabled the mining industry in Québec and around the world to resume its progression in 2010.

Despite uncertainties that remain concerning the strength of the economic recovery, the ever-growing demand in the long term, namely from Brazil, Russia, India and especially China, is such that the mining sector should continue to grow.

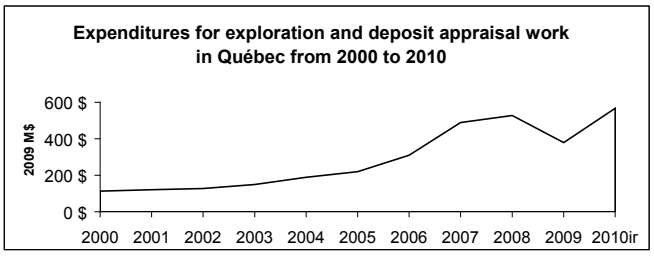
1.3 - Mineral Exploration

James Moorhead, Patrick Houle, Pierre Doucet, Martin Labrecque

Over the past six years, Québec has benefited from a favourable investment climate for mineral exploration. As of December 31, 2010, 228,564 active exploration titles were recorded throughout Québec, covering a total surface area of 10.3 million hectares, or 6.2% of the total surface area of Québec. Based on data from the *Institut de la statistique du Québec*, exploration and deposit appraisal expenditures in Québec have remained above the $200M mark in each of the last six years.

In 2009, based on preliminary data, exploration and deposit appraisal activities and expenditures decreased considerably ($379M) relative to the previous year, a year in which records had been set in terms of exploration spending ($526M). Nevertheless, despite this drop attributable to the global economic crisis, 2009 was still a good year in terms of exploration expenditures, remaining above the average observed since the start of the decade in 2000. For 2010, revised intentions reported by companies for exploration and deposit appraisal spending are once again on an upswing and could reach $576M.

FIGURE 1.1



Source: *Institut de la statistique du Québec*. Data for 2010 represents revised intentions reported by mining companies.

IRON

About 30 km south of Radisson, **Augyva Mining Resources** and its partner **Canadian Century Iron Ore Corporation** released resource estimates for deposits 1 to 6 at the Duncan Lake project, with measured resources of 5.7 Mt grading 23.29% Fe, indicated resources of 25.6 Mt at 23.48% Fe, and inferred resources of 821.1 Mt at 24.56% Fe.

Near Matagami on the Iron-T property held by **Apella Resources**, inferred resources were estimated at 11.63 Mt grading 0.4% V_2O_5, 37.88% Fe_2O_3 and 6.33% TiO_2, and three mineralized zones (T1, T2, T3) were discovered.

In the Côte-Nord region, **Nevado Resources** identified several new iron-titanium-vanadium occurrences on the La Blache project. A channel sample collected on the Hervieux East Extension occurrence yielded grades of 62.8% Fe_2O_3 and 19.6% TiO_2 over 12.0 m.

Champion Minerals completed a resource estimate for the Fire Lake North deposit on the Fermont Iron project. The deposit contains 388 Mt of inferred resources grading 29% total Fe. Metallurgical testing was carried out and the company is preparing three sites to extract a bulk sample.

COPPER AND ZINC

In the Chibougamau area on the Scott Lake property, **Cogitore Resources** discovered a new massive sulphide lens, dubbed the CFO Lens, where drill hole SL-93-106W intersected 26.7 m grading 2.1% Cu, 5.2% Zn, 0.3 g/t Au and 24.9 g/t Ag. Moreover, recent drill results enabled the company to prepare a new inferred resource estimate of 3.6 Mt grading 1.1% Cu, 5.2% Zn, 0.3 g/t Au and 36 g/t Ag for the West Lens, Stringer Zone and 800 Lens.

In Nunavik, **Aurizon Mines** and **Azimut Exploration** reported the discovery of a new zone with copper-gold-silver-tungsten mineralization on the Rex South property.

About 80 km northeast of Schefferville, **Western Troy Capital Resources** announced several copper values reaching 5.74% Cu from grab samples on the Deborah Lake project.

NICKEL, COPPER, COBALT, AND PLATINUM GROUP ELEMENTS (PGE)

About 80 km southeast of the Raglan mine, **Goldbrook Ventures** and **Jilin Jien Nickel Industry** discovered a new mineralized system in the Echo Ultramafic Complex (drill hole ECH10-004: 1.41% Ni, 1.03% Cu, 8.33 g/t PGE+Au over 6.89 m). Moreover, the joint venture estimated indicated resources at 5.64 Mt grading 0.60% Ni, 0.66% Cu, 0.03% Co, 0.07 g/t Au, 0.32 g/t Pt and 1.31 g/t Pd in the Bravo, Getty, Mystery, Pad, Timtu, and Sylvie deposits, and inferred resources at 1.77 Mt grading 0.56% Ni, 0.55% Cu, 0.03% Co, 0.06 g/t Au, 0.29 g/t Pt and 1.27 g/t Pd in the Bravo, Getty, and Mystery deposits.

West of Amos on the Dumont property, **Royal Nickel** prepared a new estimate of nickel resources in a mafic-ultramafic sill. Based on a cut-off grade of 0.20% Ni, measured and indicated resources total 1,159 Mt at a grade of 0.27% Ni, with inferred resources of 581 Mt at a grade of 0.25% Ni.

GOLD

In gold mines in operation or in construction, deposit appraisal and exploration work led to the discovery of new zones, and the definition of known zones or their extensions, generally at depth.

Metanor Resources finalized a new resource estimate at the Barry mine, including the Main, West, 43 and 45 zones, resulting in an expansion of indicated resources to 7.70 Mt grading 1.25 g/t Au and inferred resources to 10.41 Mt grading 1.41 g/t Au.

At the Lamaque mine (**Century Mining**), an underground development and exploration program was launched in January 2010 and is expected to continue over three years. The first reported gold intersections are from the Bedard Dyke (10.06 g/t Au over 1.92 m, drill hole 2610-7).

At the Kiena mining complex (**Wesdome Gold Mines**), drill holes intersected the extension of the S50 Zone, from which the bulk of the mine's historical production is derived. Drill hole U4928 intersected 12.31 g/t Au over 12.8 m.

At the Goldex mine (**Agnico-Eagle Mines**), around the main GEZ Zone, drilling and/or development work is underway on subsidiary zones E, M, and D. Drill hole 84-051 yielded a grade of 2.04 g/t Au over 160.5 m in the D Zone.

Richmont Mines, at the Beaufor mine, completed shallow drill holes that intersected the extensions of the W, 350, and 367 zones, all located to the south of the mine. Best results include 5.30 m grading 29.69 g/t Au (drill hole 80-44 in the W Zone).

North American Palladium is deepening the production shaft at the Sleeping Giant mine by 200 metres. Drill holes intersected the extensions of several zones, including the 30 West, 3, and 785N zones (16 g/t Au over 2.2 m).

In the Principal Area at the Casa Berardi mine (**Aurizon Mines**), in-pit measured and indicated resources totalling 5.35 Mt at 4.02 g/t Au and inferred resources of 1.37 Mt at 2.96 g/t Au were calculated. In addition, underground measured and indicated resources were estimated at 0.72 Mt grading 6.99 g/t Au.

Several deposit appraisal projects were the focus of new resource estimates and advanced exploration work:

For the Norlartic-Kierens and Marban deposits, **NioGold** and **Aurizon Mines** announced a new resource estimate, detailing near-surface resources (0-200 m) as well as deeper zones (>200 m). Drill holes also intersected a mineralized interval (4.52 g/t Au over 3.6 m) in the Norbenite shear zone, between the Kierens gold deposit and the H Zone.

At the Croinor deposit, **Blue Note Mining** and **First Gold Exploration** completed a pre-feasibility study, which established proven and probable reserves at 689,829 t grading 8.35 g/t Au.

Adventure Gold defined 220,000 t of inferred resources grading 3.14 g/t Au in the Lapaska Central Zone on the Lapaska property.

At the Simkar project, **Eloro Resources** and **Megastar Development** intersected in drill hole a potentially new gold-bearing zone (9.4 g/t Au over 5.9 m) underneath the B Zone of the former Louvicourt Goldfields mine (2008 inferred resource estimate of 188,750 t at 10.23 g/t Au) .

On the Barnat project, adjacent to the Canadian Malartic mining development project, **Osisko Mining Corporation** completed a detailed drilling program which led to a measured and indicated resource estimate totalling 29.0 Mt at a grade of 2.09 g/t Au.

At the Comtois project, **Maudore Minerals** estimated inferred resources at 4.87 Mt grading 3.2 g/t Au near surface (<150 m), and 3.25 Mt at a grade of 6.8 g/t Au below 150 m depth.

Société d'exploration minière Vior estimated, for the Douay West deposit, combined measured and indicated resources totalling 313,000 t at a grade of 7.75 g/t Au, and inferred resources of 267,000 t at a grade of 8.53 g/t Au.

Tawsho Mining calculated, for the Chevrier deposit, an inferred resource estimate of 4.6 Mt grading 1.99 g/t Au, from the surface to 250 m depth.

At the Vezza deposit, **North American Palladium** and **Agnico-Eagle Mines** established measured and indicated resources totalling 1.51 Mt at 5.9 g/t Au and inferred resources of 0.75 Mt at 5 g/t Au.

At the Flordin deposit, **North American Palladium** announced a resource estimate totalling 0.68 Mt at 4.25 g/t Au in measured and indicated resources, plus 1.45 Mt at 3.63 g/t Au in inferred resources.

Northern Star Mining continued drilling from exploration drifts on the Midway project, until the cessation of work in June of 2010. One drill hole intersected a mineralized gabbro grading 11.43 g/t Au over 9.23 m in drill hole MU 225W-2, in the Briar Zone.

At the McKenzie-Break project held by **Northern Star Mining** and **Britannica Resources**, drill holes intersected the

Murray Zone. Best results include 11.15 m grading 5.05 g/t Au in drill hole 10-171. Drilling and excavation work on the exploration decline were interrupted in June of 2010.

Aurizon Mines continued work on its Joanna property. A new resource estimate was released during the summer: the Hosco deposit contains measured and indicated resources of 40.55 Mt at 1.33 g/t Au and inferred resources of 23.17 Mt at 1.19 g/t Au.

Among the numerous gold exploration projects in Québec currently in the exploration drilling stage, the following projects obtained significant results:

Alexandria Minerals intersected in drill hole mineralized horizons over significant widths (2.01 g/t Au over 78.77 m) in close proximity to the east of gold zones in the former Akasaba mine (Au-Cu).

On the Malartic CHL property, adjacent to the Barnat project, **Osisko Mining Corporation** and **Golden Valley Mines** drill-tested the Jeffrey Zone (0.86 g/t Au over 91.2 m).

East of Lebel-sur-Quévillon, **Eagle Hill Exploration** confirmed the continuity of Zone 27 and discovered a new mineralized structure (17.36 g/t Au over 12.0 m, drill hole EAG-10-240) at the Windfall Lake project.

URANIUM

About 275 km north of Chibougamau, in the Otish sedimentary basin, **Strateco Resources** discovered a new lens, MT-36, about 1.5 km south of the three known lenses on the Matoush project. Drill hole MT-10-011 encountered a section grading 0.48% U_3O_8 over 4.2 m. At the northeast tip of the Otish sedimentary basin, **Abitex Resources** reported indicated resources of 391,000 t grading 0.45% U_3O_8 and inferred resources of 749,000 t grading 0.56% U_3O_8 for all zones combined in the "L" deposit on the Lavoie property.

LITHIUM

About 280 km north of Matagami (km 384 on the James Bay Road), **Lithium One** released an estimate of 11.75 Mt indicated resources grading 1.30% Li_2O and 10.47 Mt inferred resources grading 1.20% Li_2O on the James Bay Lithium project. On the Lac Pivert/Rose project, **First Gold Exploration** intersected in drill hole several new spodumene-bearing pegmatite dykes, namely in drill hole LR-10-110, which yielded grades of 2.15% Li_2O, 1,594 g/t Rb, 150 ppm Ta_2O_5, 147 ppm BeO, and 75 ppm Ga over 12.6 m. At the Rose deposit, indicated resources are estimated at 11.4 Mt grading 1.34% Li_2O and 377 ppm BeO, and inferred resources at 2.17 Mt grading 1.27% Li_2O and 311 ppm BeO, with values for Ta_2O_5, Rb, Cs, and Ga.

About 28 km east of the Cree community of Nemaska, **Nemaska Exploration** estimated measured and indicated resources at 9.8 Mt grading 1.63% Li_2O and 449 ppm BeO, and inferred resources at 15.4 Mt grading 1.57% Li_2O and 420 ppm BeO on the Whabouchi property.

RARE EARTH ELEMENTS (REE)

On the Strange Lake property near Rivière George in the Labrador Trough, **Quest Rare Minerals** estimated, in the B-Zone, inferred resources in rare earth elements (REE) totalling 114.8 Mt at 1.00% REE_2O_3, 1.97% ZrO_2, 0.20% Nb_2O_5, 0.05% HfO_2, and 0.08% BeO. **Midland Exploration** and its partner **Japan Oil, Gas and Metals National Corporation** discovered new REE-enriched zones on the Ytterby 2 and Ytterby 3 properties, respectively located 65 km and 100 km south of the B-Zone held by **Quest Rare Minerals**.

In Témiscamingue, **Matamec Explorations** completed a new resource calculation on its Zeus REE project. Indicated resources stand at 2.51 Mt grading 0.63% REE_2O_3 and 0.88% ZrO_2, whereas inferred resources are estimated at 4.73 Mt grading 0.66% REE_2O_3 and 0.97% ZrO_2.

INDUSTRIAL MINERALS

Exploration Orbite VSPA obtained a permit from the MRNF to extract a maximum of 500 tonnes of aluminous argillite from its Grande-Vallée site in Gaspésie. This volume will essentially be used to perform metallurgical tests at its pilot plant in Cap-Chat, in the first quarter of 2011.

1.4 - Deposit Appraisal and Mine Development

Katrie Bergeron, Martin Bernatchez, Denis Blackburn, Martin Dumas, Germain Girard, Denis Raymond

The year 2010 was marked by multiple announcements concerning the launch of several new mining projects.

IRON

In September, Indian mining company **Tata Steel** announced a $300M investment to restart mining operations in iron ore mines of the Schefferville area, shut down in 1982 by the **Iron Ore Company of Canada**. This project is carried out in partnership with a Canadian mining company, **New Millennium Capital**. The high-grade direct-shipping ore extracted in Schefferville will be used to supply Tata Steel's plants in Europe.

South of Chibougamau, **Blackrock Metals** commenced a feasibility study, as well as an environmental and social impact study on the **Blackrock** iron-vanadium-titanium project.

COPPER AND ZINC

South of Matagami, in the **Bracemac** and **McLeod** zones discovered in 2007, **Donner Metals** and **Xstrata Zinc Canada**

began ramp development work in preparation for mining operations set to begin in 2013. Indicated resources are currently estimated at 3.62 Mt grading 11.52% Zn, 1.6% Cu, 31.55 g/t Ag, and 0.49 g/t Au. In addition, the joint venture calculated, for the **McLeod Deep** Zone, inferred resources of 2.47 Mt at 9.21% Zn, 1.22% Cu, 39.81 g/t Ag, and 1.12 g/t Au.

In the Lebel-sur-Quévillon area, **Breakwater Resources** continued development of two ramps at the Langlois mine, one from the surface to the top of Zone 4 and an internal ramp to reach Zone 3.

About 275 km northeast of Chibougamau, **Western Troy Capital Resources** commenced a feasibility study as well as an environmental and social impact study for an open pit mining project on the **MacLeod Lake** copper-molybdenum-silver deposit.

NICKEL, COPPER, COBALT, AND PLATINUM GROUP ELEMENTS (PGE)

In northernmost Québec, about 20 km south of the Raglan mine, **Jien Canada Mining** in partnership with **Canadian Royalties** began construction of infrastructure needed to commence mining operations at the Expo and Mesamax deposits on the **Nunavik Nickel** property. Construction work was interrupted in August of 2008, due to financing problems. The start-up of mining operations on site is planned for 2012.

GOLD

Richmont Mines carried out development work at the former **Francoeur** mine in order to restart production at this gold mine. Production is expected to resume in the summer of 2011.

Osisko Mining Corporation carried out significant preparation and development work to finalize its open pit mining project at **Canadian Malartic**. Mining operations are slated to reach commercial production in the spring of 2011.

Northern Star Mining continued development of an exploration decline and drifts at the **Malartic-Midway** project, until the cessation of work in June of 2010.

On the **McKenzie-Break** project, **Northern Star Mining** and **Britannica Resources** excavated an exploration decline in the Murray Zone to 80 metres depth and completed exploration drill holes. This work was suspended in June of 2010.

URANIUM

Strateco Resources continued work to develop its **Matoush** uranium project, located on lands subject to the JBNQA. The scoping study was updated. This project was also the object of an environmental and social impact assessment study, and public hearings held by the COMEX and COFEX were held in May and November of 2010. Certain groups spoke up against the project, among which the Mistissini Cree community and the Cree Grand Council.

LITHIUM

In Abitibi, west of Barraute at the site of the former Québec Lithium mine, **Canada Lithium** established measured and indicated resources at 46.67 Mt grading 1.19% Li_2O and inferred resources at 57.58 Mt at a grade of 1.18% Li_2O. Metallurgical testing has been completed and a feasibility study was released in early December 2010.

DIAMOND

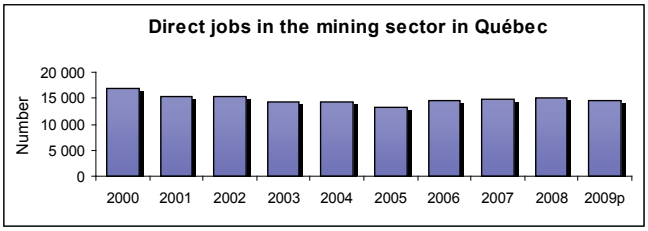
About 360 km north of Chibougamau, **Stornoway Diamond** launched a feasibility study as well as an environmental and social impact study on the **Renard** diamond project, which should be completed in the fall of 2011.

1.5 - Mining

Martin Labrecque, Katrie Bergeron, Martin Bernatchez, Denis Blackburn, Martin Dumas, Germain Girard, Denis Raymond

Based on preliminary data, the total value of mining product shipments (metallic and non-metallic) in 2009 reached $6.2B. This is practically identical to levels observed in 2008, despite the global economic slowdown that began in 2008, which had a major impact on the mining sector in Canada and across the world. Thus, it seems the mining sector in Québec came through this economic crisis with less difficulty than that of the other provinces in Canada. Provisional data for 2010 indicate a total value of shipments similar to levels observed in 2008 and 2009.

FIGURE 1.2

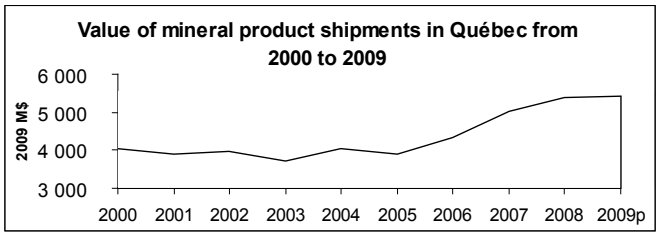


Source: *Institut de la statistique du Québec*. Data for 2009 are preliminary.

In 2009, still based on preliminary data, mining operations in Québec (metallic and non-metallic) created a total of 10,272 direct jobs distributed in all of Québec's regions, but mostly in Abitibi-Témiscamingue, Côte-Nord, and Nord-du-Québec. Overall, when primary processing activities and diamond drilling companies are included, the mining sector in Québec accounted for 13,745 direct jobs, *i.e.* 8% less than in 2008.

Note also that, due to the sheer scope of activities and investments involved, the mining sector contributes to the creation of several thousand indirect jobs distributed across Québec.

FIGURE 1.3



Source: *Institut de la statistique du Québec*. Data for 2009 are preliminary.

In 2010, the strong economic recovery globally, and the high demand for natural resources in particular, enabled mining companies in Québec to operate at full capacity.

IRON

During the first half of the year, **Consolidated Thompson Iron Mines** completed development of its mining complex at **Bloom Lake.** In July, the company shipped its first iron ore concentrate shipment to the Chinese market. Subsequently, it continued commissioning and ramping-up work, moving toward commercial production. The company is currently considering increasing the production rate at the Bloom Lake mine from 8 to 16 Mmt/yr of iron concentrate over a period of two to three years.

Over the course of 2010, **ArcelorMittal Mines Canada** conducted a series of studies looking at a significant increase of its production capacity of iron ore concentrate and pellets at its facilities in **Mont-Wright** and **Port-Cartier**. The final decision for this project should be announced in the first half of 2011.

GOLD

North American Palladium is deepening its production shaft by 200 metres at the **Sleeping Giant** gold mine.

INDUSTRIAL MINERALS

Construction work on the mill expansion at the **Niobec** mine was completed in the third quarter of 2010. These new facilities will enable the company to increase its processing capacity by 24%. Mining operations are currently expected to continue until 2024.

Graymont built a construction wood waste chipper plant to supply its vertical kiln at its facilities in **Marbleton**. At its quarry in **Bedford**, the company obtained a major supply contract to produce 350,000 tonnes of crushed stone needed for the construction of a highway interchange.

Investors from Québec and Europe banded together to restart operations at the **Glendyne** slate quarry in Saint-Marc-du-Lac-Long, thus enabling 250 workers to recover their jobs.

PEAT

In 2010, forecasted peat production volumes are reportedly more than 20% higher than 2009 levels, based on preliminary data.

TABLE 1.1 - Average price of some metals (US $).

Annual average	Gold1	Silver2	Platinum3	Zinc4	Nickel5	Copper6	Iron7
	per ounce	per ounce	per ounce	per pound	per pound	per ton	per ton
2000	279,11	4,95	544,03	0,51	3,92	0,82	25,57
2001	271,04	4,37	529,04	0,40	2,70	0,72	23,87
2002	309,73	4,60	539,13	0,36	3,07	0,71	26,04
2003	363,38	4,89	691,31	0,41	4,37	0,81	32,30
2004	409,72	6,67	845,31	0,48	6,27	1,30	37,92
2005	444,74	7,32	896,87	0,63	6,69	1,67	44,50
2006	603,46	11,55	1142,31	1,49	11,00	3,05	53,88
2007	695,39	13,38	1303,05	1,47	16,88	3,23	59,64
2008	871,96	14,99	1573,53	0,85	9,57	3,15	70,43
2009	972,35	14,67	1203,49	0,75	6,78	2,30	70,00
2010	1224,67	20,16	1610,12	0,98	9,85	3,41	110,00
Monthly average for 2010							
January	1117,96	17,79	1562,70	1,11	8,37	3,35	60,00
February	1095,41	15,87	1520,35	0,98	8,61	3,11	60,00
March	1113,34	17,11	1599,40	1,03	10,19	3,39	60,00
April	1148,69	18,10	1715,55	1,07	11,77	3,52	120,00
May	1205,43	18,42	1622,58	0,90	10,04	3,11	120,00
June	1232,92	18,45	1553,20	0,79	8,79	2,95	120,00
July	1192,97	17,96	1525,60	0,84	8,85	3,06	140,00
August	1215,81	18,36	1541,10	0,93	9,70	3,30	140,00
September	1271,10	20,55	1591,80	0,98	10,27	3,50	140,00
October	1342,02	23,39	1688,70	1,07	10,80	3,76	120,00
November	1369,89	26,54	1692,80	1,00	10,00	3,65	120,00
December	1390,55	29,35	1707,70	1,05	10,85	4,20	120,00

Sources:
1: London metal exchange (LME) according to Kitco (ounces troy). Average prices at noon.
2: London metal exchange (LME) according to Kitco (ounces troy). Average prices at noon.
3: London metal exchange (LME) according to Kitco (ounces troy). Average prices at noon.
4: London metal exchange (LME) according to AME and Kitco. Reference price.
5: London metal exchange (LME) according to AME and Kitco. Reference price.
6: London metal exchange (LME) according to AME and Kitco. Reference price.
7: From 2000 to 2009: Estimated price by the USGS according to reported prices from american producers.
2010: AME. (Negotiated price 62 % Fe)
* One ounce troy (gold, silver, platinum) = 31,1034 grams.

CHAPTER 2 - MINING REGIME AND LAND ACCESS

Dorra Djemal, Roch Gaudreau, Jocelyne Lamothe

2.1 - Basic principles

The mining regime in Québec is based on the following principles:

- Access to the mineral resource is open on the largest possible expanse of land (in the domain of the State), so as to allow detection of metal and mineral-rich deposits hidden in Québec's subsoil.
- Applicants are treated on an equal basis for mining title acquisition. The first to submit a compliant application obtains the exclusive right to search for all mineral substances in the domain of the State on the designated land parcel (claim).
- In the event of a discovery of mineable mineral substances, the claim holder has a reasonable assurance of obtaining the right to mine the discovered resource (lease). The lease application must comply with conditions stipulated in the Mining Act and applicable regulations.

The Mining Act is designed to promote prospecting, exploration, and mining of mineral substances, while taking into consideration other possible land uses.

2.2 - Mining titles

Mining rights, granted as mining titles, are real and immovable rights that may be the object of transactions. However, mining rights and land rights are unrelated. As such, a mining right constitutes a distinct property from surface rights.

There are two types of mining titles for mineral substances in the domain of the State, other than petroleum, natural gas and brine; titles that authorize the search for mineral substances, "Exploration rights", and titles that authorize the mining of mineral substances, "Extraction rights".

EXPLORATION RIGHT

The claim gives the holder the exclusive right to explore for all mineral substances in the domain of the State within the confines of the claim. Map designation via GESTIM Plus is the main mode of acquisition. Claims are valid for a term of two years and may be renewed.

EXTRACTION RIGHTS

There are two types of extraction rights in Québec. Depending on the type of substance to be extracted, a mining lease or a lease to mine surface mineral substances may be issued.

The mining lease

A mining lease is required to mine any mineral substance other than surface mineral substances. Its surface area may not exceed 100 hectares. The initial term of a lease is 20 years, and it may be renewed every 10 years for up to three terms.

To obtain a mining lease, the applicant must:

Submit a report from an engineer or a geologist describing the nature, extent and probable value of the ore deposit;

- Pay the annual rent;
- Submit a survey plan;
- Obtain authorization from the surface landowner, if any;
- Submit a rehabilitation plan and a financial guarantee;
- Obtain a forest management permit, if warranted;
- Obtain a certificate of authorization from the *Ministère du Développement durable, de l'Environnement et des Parcs*;
- Obtain authorization from the Minister of Natural Resources and Wildlife for the location of a processing plant and a tailings pond.

To renew a mining lease, the lease holder must have complied with measures of the Mining Act and applicable regulations during the term of the lease and must namely demonstrate that mining operations have taken place on the land parcel subject to the mining lease during at least two of the last ten years of the term of the lease.

Leases and authorization to mine surface mineral substances

1. The exclusive lease is issued for consolidated surface mineral substances, also for unconsolidated deposits when a guaranteed supply is required for an industrial activity or for the State to build public roads or other works. This authorization gives the lessee the exclusive right to mine, which comes with the environmental liability for the site.
2. The non-exclusive lease is issued for unconsolidated deposits (sand, gravel, and common clay) to be used for construction purposes.
3. The authorization to mine without a lease is issued for a one-time occurrence, when time constraints are a key issue.

2.3 - Active mining titles

As at December 31, 2010, the number of active mining titles across Québec was 230,929, for a total surface area of 10,358,362 hectares, which represents an increase relative to 2009, of 14.15% in the number of active mining titles and of 16.19% in the total surface area covered by such titles (Figure 2.1).

The number of exploration titles has increased relative to 2009, in most administrative regions of Québec and most notably in Estrie (303.2%), Centre-du-Québec (284.2%), Chaudière-Appalaches (241%), and Montérégie (142.9%) (Table 2.1).

The number of extraction titles in Québec as at December 31, 2010 was 3,435, including mining leases and leases to mine surface mineral substances (Table 2.2).

2.4 - The "GESTIM Plus" mining title management system

In Québec, mining title management is computerized and easily accessible on the Internet via the "GESTIM Plus" geomatics application. This system provides instant access to up-to-date data in the Register of real and immovable mining rights in Québec, and namely makes it possible to:

- Reduce the cost of acquiring and monitoring mining titles for mineral exploration stakeholders;
- Consult and download data from the public registry of mining titles by selecting the desired parameters;
- View mining title maps and download them free of charge in PDF format;
- Generate mining title maps tailored to your needs;
- File a map designation application or a claim renewal application;
- Pay the required fees electronically in a totally secure environment.

The web address of the GESTIM Plus system is:

http://gestim.mines.gouv.qc.ca

NEW DEVELOPMENTS IN 2010

The Mines Sector is resolutely taking to the web by expanding its services offered through GESTIM Plus. Since April 1, 2010, the only accepted means to submit a notice of map designation is through the GESTIM Plus system. Accepted modes of payment when a notice of map designation is filed include credit cards or the client's MRNF account for Privilege members of GESTIM Plus. Since the time of receipt of notices of map designation is used to establish the order in which the Registrar will process the notices, the order of receipt is based on the time of the GESTIM Plus server.

http://www.mrnf.gouv.qc.ca/english/mines/rights/rights-exploration-directives.jsp

2.5 - Mineral exploration in urbanized areas

On August 12, 2010, the MRNF issued a directive concerning claims situated within the limits of urban territories. This directive is designed to provide specific guidelines for exploration work performed within the limits of urban territories, so as to minimize land use conflicts between claim holders and municipalities. This directive was amended on September 23, 2010.

Conditions and obligations imposed by this directive to the holder of a claim located in an urbanized area are:

- The claim holder must inform the municipality in writing of the issuance of the claim within 60 days following its issuance.
- The claim holder must inform the municipality in writing of any work the claim holder intends to perform on land located within the limits of an urban territory, at least 48 hours before said work begins.
- The claim holder shall provide the MRNF, upon request, with a copy of notices sent to the municipality.
- Failure to comply with these conditions may result in the suspension or revocation of the claim.

The limits of urban territories, as defined in the Register of real and immovable mining rights of Québec, are those that apply to this directive. These limits may be consulted via the GESTIM Plus web application.

http://gestim.mines.gouv.qc.ca

Once an application for a claim located in an urbanized area is received, the MRNF consults the affected municipality to allow the latter to voice its concerns. Specific conditions requested by municipalities are then forwarded to the claim holder and published in the GESTIM Plus web application, as stipulated in the directive.

The claim holder must comply with the conditions and obligations imposed by the directive. Pending failure to comply, the Minister may suspend or revoke the claim.

http://www.mrnf.gouv.qc.ca/english/mines/rights/rights-exploration-directives-claims.jsp

2.6 - Relations with Aboriginal communities

Over the last few decades, the Supreme Court of Canada has rendered many decisions about Aboriginal rights that emphasize the importance of balancing the interests of Aboriginal peoples and society in general. This search for balance aims to satisfy the fundamental objective of section 35 of the Constitutional Act of 1982, which recognizes and affirms the "aboriginal and treaty rights of the aboriginal peoples of Canada". In their pursuit of conciliation, the courts have insisted that governments respect the concept of the honour of the Crown in its relations with Aboriginal peoples and any obligations that may ensue.

One of the obligations that come with the honour of the Crown, which was described by the Supreme Court in the *Haïda* and *Taku River* decisions of 2004, stipulates that the Crown has an obligation to consult Aboriginal communities and to accommodate them if possible when contemplating an action that could have a prejudicial effect on any rights such communities may claim and to which they may be entitled.

In accordance with decisions rendered by the Supreme Court of Canada, the MRNF has complied with its obligation to consult and accommodate Aboriginal communities since 2006, particularly before issuing any mining title, such as a mining lease, an exclusive lease to mine surface mineral substances, a non-exclusive lease to mine surface mineral substances, and an authorization to mine without a lease. The Mines Sector is also involved in consultations for all major exploration work, including excavations that require displacing more than 10,000 m^3 of unconsolidated deposits, bedrock stripping, removing or displacing more than 500 metric tonnes of mineral substances for geological or geochemical sampling purposes, sinking access ramps, shafts or any other type of excavation, dewatering mine shafts, or pumping mine workings and pits.

In other matters, Aboriginal communities are expressing a greater desire to participate in development projects taking place on lands to which they claim rights and interests. As outlined in Québec's Mineral Strategy, the government is committed to promoting dialogue between mining companies and Aboriginal communities in the hopes that it will lead to agreements on the impacts and benefits of mining and mineral activities, thus gaining wider social acceptance for mining projects.

2.7 - Land protection

In order to take into account other possible land uses, the Minister may, pursuant to section 304 of the Mining Act, reserve to the State or withdraw from staking, from map designation, from mineral exploration or from mining any land containing mineral substances in the domain of the State, required for any purpose deemed to be in the public interest, namely to perform work such as:

- Mining, industrial, port, airport, or communications facilities;
- Development and use of waterpower, power transmission lines, storage tanks or underground reservoirs;
- Creation of parks or ecological reserves;
- Classification as an outstanding forest ecosystem;
- Designation of a biological refuge.

The Minister may also, by order, delimit territories for non-exclusive purposes of recreation, tourism, or vegetation and wildlife conservation.

In addition, the Minister may, by order, subject to conditions he may set on lands reserved to the State, determine that certain specific mineral substances may, in accordance with the Mining Act, be the object of mineral exploration or mining.

The ministerial order comes into effect the day of its publication in the *Gazette officielle du Québec* or at any other later date that is stipulated.

Prior to an order, the Minister may temporarily suspend, for a period of 18 months, the right to stake and map-designate lands within the boundaries indicated on maps kept at the Registrar's office. This suspension comes into effect after a notice has been submitted to the Registrar's office, on the date indicated on the notice.

2.8 - Restrictions on mineral exploration

As at December 31, 2010, lands subject to restrictions on exploration covered 34.9 M hectares, corresponding to 20.9% of Québec's landmass. Lands subject to major restrictions, with a ban on mineral exploration, covered a total of 15.2 M hectares or 9.1% of Québec's surface area (Figure 2.1). Lands subject to temporary suspensions covered 8.7 M hectares or 5.2% of Québec's landmass. Lands subject to minor restrictions, where exploration is allowed under certain conditions, covered a surface area of 11.0 M hectares or 6.6% of Québec. In comparison, the total surface area covered by mining titles is 8.9 M hectares, for 5.5% of Québec's landmass (Figure 3.1). Lands recognized as Protected Areas according to the International Union for Conservation of Nature cover 8.1% of Québec's territory and are included in the 20% of lands subject to restrictions on exploration.

2.9 - Delegation of sand and gravel management to MRCs

In the fall of 2008, the Cabinet authorized the Minister of Municipal Affairs and Regions and the Minister of Natural Resources and Wildlife to execute an agreement with the

Fédération québécoise des municipalités (FQM) and the *Union des municipalités du Québec* (UMQ). This agreement is namely designed to delegate to regional county municipalities (*municipalités régionales de comté* - MRC) the management of sand and gravel mining on lands in the domain of the State. In June 2009, the Cabinet adopted a decree on the decentralization of sand and gravel management.

More than 2,700 leases and authorizations to mine sand and gravel are managed annually in Québec. Royalties and rental fees paid across Québec are on the order of $3.2M per year. The bulk of this sum comes from the Nord-du-Québec, Saguenay–Lac-Saint-Jean, Côte-Nord, and Abitibi-Témiscamingue regions.

The powers and responsibilities vested to MRCs with regard to sand and gravel are:

- Granting, renewal, revocation and registration in the Register of real and immovable mining rights, of authorizations to mine and leases to mine sand and gravel;
- Issuance of certificates of authorization pursuant to section 22 of the Environment Quality Act;
- Inspection and monitoring of mining operations for these substances;
- Collection of rental fees and royalties;
- Rehabilitation of sand and gravel pits.

In 2010, MRCs in the Saguenay–Lac-Saint-Jean, Laurentides, Lanaudière, and Bas-Saint-Laurent regions took over the management of sand and gravel extraction operations. This will also be the case for MRCs in the Capitale-Nationale and Mauricie regions, starting on April 1, 2011 (Figure 2.3).

This delegation represents, for the year 2010, the transfer of 601 leases and authorizations, for rental revenues totalling $118,596 and $398,573 in royalty payments (Tables 2.3).

Many other administrative regions have expressed an interest in this project to delegate management. New agreements with other MRCs should be executed over the course of 2011.

2.10 - Bill 79 to amend the Mining Act

Québec's Mineral Strategy proposed actions to prepare the future of the mineral sector. To implement many of these initiatives, legislative amendments are required. To this end, the Minister for Natural Resources and Wildlife introduced, on December 2, 2009, in the National Assembly, Bill No. 79 to amend the Mining Act.

A parliamentary committee examined Bill 79 in early 2010, namely the Committee on Agriculture, Fisheries, Energy and Natural Resources. Parliamentary debates and extensive public consultations were held to discuss the bill during 2010 before the committee. Bill 79 remains under study by the committee.

Amendments proposed under Bill 79 aim to:

STIMULATE EXPLORATION WORK ON CLAIMS

- Limit the duration of work credits to ten years;
- Eliminate the possibility of making a payment instead of performing work, except during the first term of the claim;
- Reduce the surface area over which work credits may be used to renew other claims;
- Eliminate the possibility of using credits from exploration work performed on a mining lease or a mining concession to renew a claim;
- Index and increase work requirements needed to renew a claim (regulatory amendment).
- Guarantee mine site rehabilitation

Mineral exploration

- Increase from 70 to 100% the financial coverage to guarantee rehabilitation work;
- Extend the scope of the financial guarantee to cover more than just tailings accumulation areas;
- Introduce a penal sanction when financial guarantee instalments are not paid.

Mineral extraction

- Increase from 70 to 100% the financial coverage to guarantee rehabilitation work;
- Extend the scope of the financial guarantee to cover more than just tailings accumulation areas;
- Review the instalment schedule to accelerate payment of the financial guarantee;
- Provide a 3-year transition period for active mines, followed by complete payment over 5 years;
- Introduce a penal sanction when financial guarantee instalments are not paid according to schedule;
- Protect rehabilitation and reclamation work performed on accumulation areas;

- Lower the threshold for environmental impact studies from 7,000 to 3,000 metric tonnes;
- Make it mandatory to submit a rehabilitation plan for BAPE hearings and consultations with the community;
- Tighten requirements to obtain a certificate of release once work has been performed as stipulated in the rehabilitation plan.

RECONCILE LAND USES

- Make it possible to take into account other land uses, for example regional planning, to withdraw or reserve to the State;
- Add public interest as a reason to refuse the issuance or renewal of a lease to mine surface mineral substances;
- Make it possible to refuse the issuance of a lease to mine sand and gravel when there are incompatible land uses;
- Refuse an application for a lease to mine surface mineral substances on lands where certain developments are already present;
- Make it mandatory to hold consultations with the community for all mining projects (except for surface mineral substances, but including peat);
- Protect eskers that carry groundwater;
- Surrender surface mineral substances on private lands to landowners;
- Make it mandatory for the claim holder to inform the landowner or lessee that a claim has been issued on his/her private property;
- Make it mandatory to declare the search for uranium upon application for a claim, and make it mandatory to declare a discovery (with regulatory protection measures);
- Make it mandatory for the claim holder to obtain the landowner's written authorization before accessing his/her private property to perform mineral exploration work;
- Make it mandatory for the prospector to obtain the landowner's written authorization before accessing his/her private property;
- Make it possible to restrict or ban mining activity on lands included within an urbanized territory.

ENRICH QUÉBEC'S GEOLOGICAL KNOWLEDGE HERITAGE

Make it mandatory for mining companies to submit to the MRNF all exploration work performed in accordance with exploration credits claimed under the Mining Duties Act.

2.11 - Mining taxation

Mining taxation in Québec is distinct from that in other provinces and territories, namely with regard to tax incentives designed to stimulate mineral exploration as well as development of new mines. The main tax incentives available to the mining sector concern:

Québec's flow-through share regime, which allows individual investors to claim deductions reaching up to 150% of their investment cost; http://www.mrn.gouv.qc.ca/english/mines/fiscal/fiscal-incentives-shares.jsp

The refundable tax credit for resources, introduced in 2001, that grants companies a refund reaching up to 38.75% of eligible exploration expenditures incurred in Québec; http://www.mrn.gouv.qc.ca/english/mines/fiscal/fiscal-incentives-resources.jsp

The credit on duties refundable for losses, a unique measure in Canada, introduced in 1985, which allows mining operators to receive a refund for the tax value of certain exploration, deposit appraisal and mine development investments prior to production. This credit gives rise to a refund equivalent to 12% prior to March 31, 2010, 14% after March 30, 2010 and prior to January 1, 2011, 15% in 2011, and 16% starting on January 1, 2012. http://www.mrn.gouv.qc.ca/english/mines/fiscal/fiscal-regime-losses.jsp

2.12 - Bill to amend the Mining Duties Act

The last major revision of the mining duties regime in Québec dates back to the reform undertaken on May 12, 1994. But over the last 15 years, the context in which the mineral industry has evolved has undergone significant change. Also, periodic evaluations have shown that the current regime is not successful in meeting all the objectives set by the government, namely concerning the regime's financial yield for the State.

In this context, Québec's Mineral Strategy, announced on June 29, 2009, called for a careful examination of the mining duties regime, to ensure Québec receives its fair share of returns on the mining of its mineral resources, while taking into account the competitiveness of companies and maximization of benefits.

Since that time, the mining duties regime has been studied in detail and the government has proposed a major revision of the regime, to adapt the latter to the new reality of the mining

sector. The Budget Speech on March 30, 2010 details all the amendments brought to the mining duties regime.

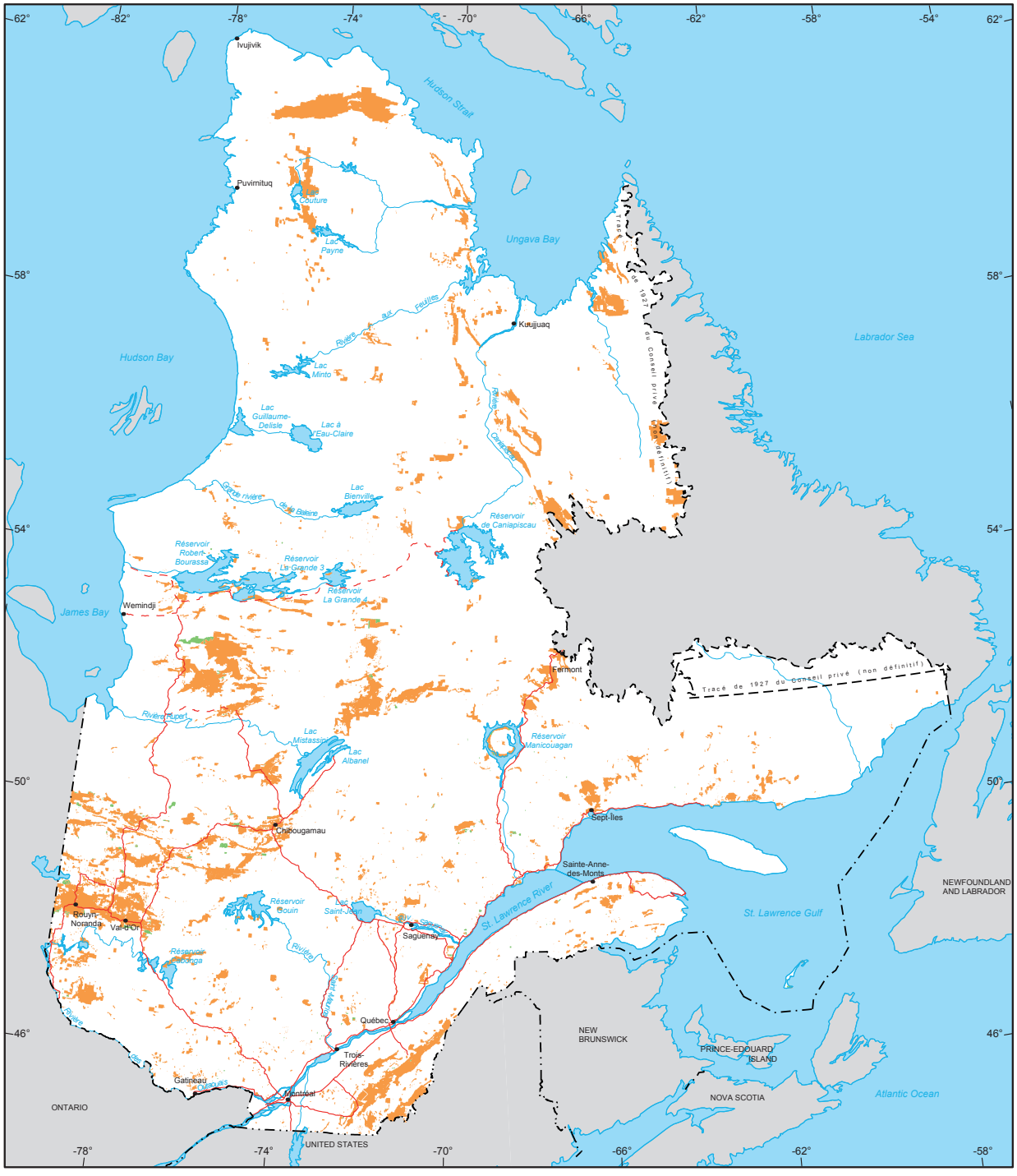
(http://www.budget.finances.gouv.qc.ca/Budget/2010-2011/en/documents/AdditionalInfo.pdf)

The revised regime is characterized by:

- A "mine-by-mine" approach: this concept will apply to fiscal years beginning after March 30, 2010 for mine operators, and stipulates that losses relating to one mine may not be used to reduce profits at another mine;
- The concept of eligible operator;
- A gradually increasing mining duties rate;
- A new rate for the credit on duties refundable for losses;
- Changes and additions to the following allowances:
    - additional allowance for a mine located in Northern Québec;
    - depreciation allowance;
    - exploration allowance;
    - allowance for mineral deposit appraisal and mine development before production;
    - allowance for mineral deposit appraisal and mine development after production;
    - processing allowance;
- New rules for work financed by flow-through shares by which certain expenses are excluded;
- Rules applicable in the case of gemstones;
- Provisions regarding environmental trusts are maintained.

(see also http://www.mrn.gouv.qc.ca/english/mines/fiscal/fiscal-regime.jsp)

The MRNF, the *Ministère des Finances* and *Revenu Québec* are working closely together, so that a bill to amend the Mining Duties Act may be tabled in the spring of 2011.



Active Titles

Number: 230 929
Area: 10 358 362 ha

Titles on demand

Number: 4 974
Area: 233 273 ha

Metadata

Coordinate System
Lambert Conformal Conic with two standard parallels (46° and 60°)

1/10 000 000
0 200 km

Sources

Mining data, MRNF, 2010
Cartographic Reference, MRNF, 2010
(BDAT 1M, BDGA 5M)

Realisation

Ministère des Ressources naturelles et de la Faune
Direction des titres miniers et des systèmes
Notice: This document has no legal value.

FIGURE 2.1. Mining titles in Québec.

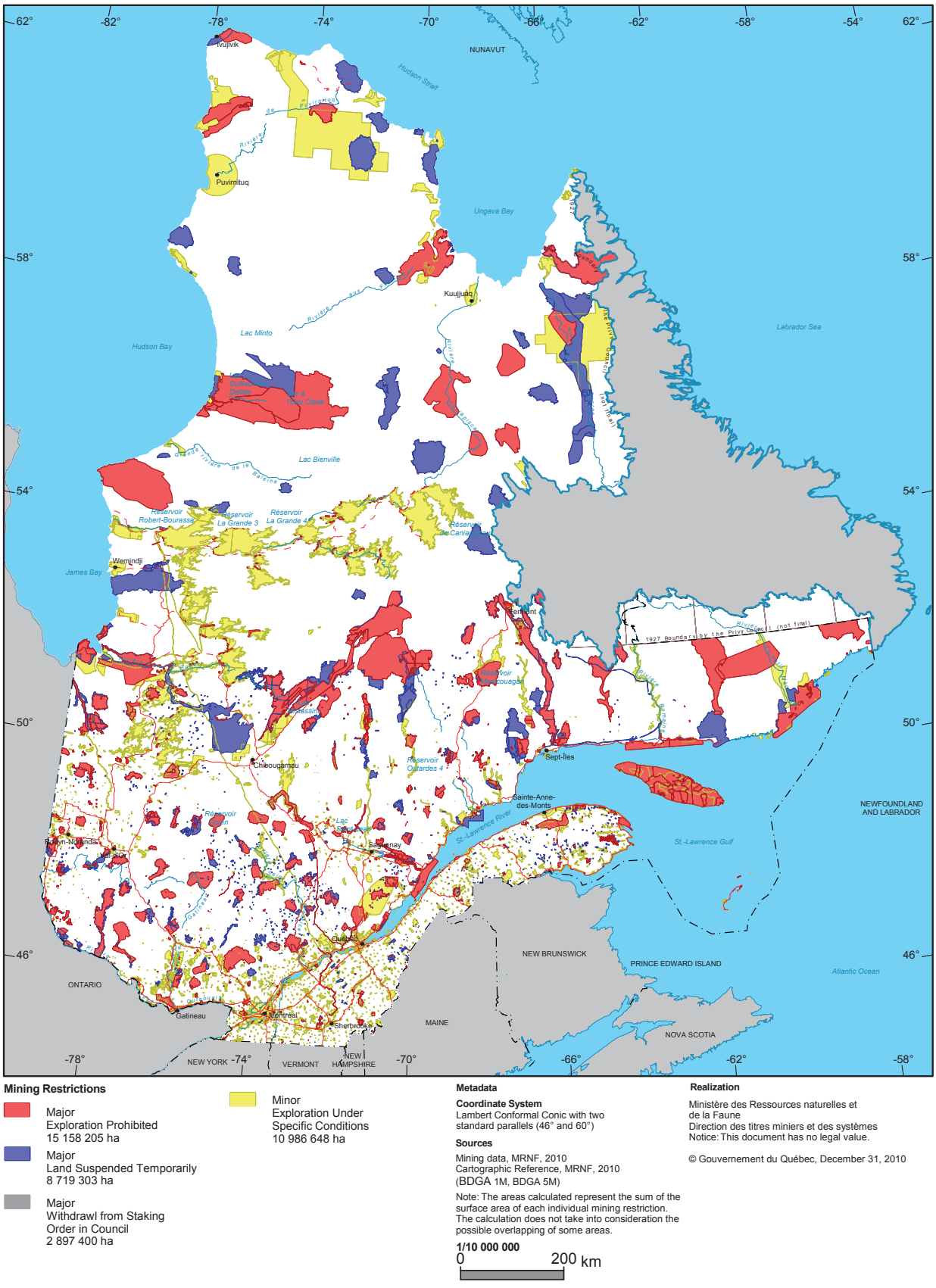


FIGURE 2.2. Restriction on mineral exploration in Québec.

Administrative regions delegated with the management of sand and gravel on lands in the domain of the State

Delegate regions as at December 31, 2010

01- Bas-Saint-Laurent
02- Saguenay–Lac-Saint-Jean
14- Lanaudière
15- Laurentides

Taking over on April 1, 2011

03- Capitale-Nationale
04- Mauricie

Metadata

Coordinate System
Lambert Conformal Conic with two standard parallels (46° and 60°)

1/10 000 000
0 200 km

Sources

Cartographic Reference, MRNF, 2011
(BDAT 1M, BDGA 5M)

Realisation

Ministère des Ressources naturelles et de la Faune
Direction des titres miniers et des systèmes
Note: This document has no legal value.

FIGURE 2.3. Delegation of sand and gravel mining management.

Table 2.1 - Distribution of mining exploration titles per administrative region in Québec.

Administrative Region		Number of titles (CL, CDC, CLD, PRF)		Change in %	Area (ha)		Change in %
		2009	2010		2009	2010	
1	Bas-Saint-Laurent	813	1 224	50,6	41 438	61 486	48,4
2	Saguenay–Lac-Saint-Jean	7 529	6 627	(12,0)	396 792	349 355	(12,0)
3	Capitale-Nationale	1 503	1 508	0,3	82 361	82 008	(0,4)
4	Mauricie	2 099	1 844	(12,1)	115 436	99 759	(13,6)
5	Estrie	1 652	6 661	303,2	94 586	389 446	311,7
6	Montréal	-	-	-	-	-	-
7	Outaouais	1 360	2 668	96,2	78 531	152 981	94,8
8	Abitibi-Témiscamingue	29 084	34 143	17,4	1 062 535	1 325 174	24,7
9	Côte-Nord	17 012	20 890	22,8	858 021	1 059 546	23,5
10	Nord-du-Québec	134 880	139 442	3,4	5 800 602	6 094 318	5,1
11	Gaspésie–Îles-de-la-Madeleine	3 484	3 564	2,3	160 472	167 583	4,4
12	Chaudière-Appalaches	1 841	6 277	241,0	85 776	333 223	288,5
13	Laval	-	-	-	-	-	-
14	Lanaudière	287	436	51,9	16 095	24 806	54,1
15	Laurentides	1 782	1 901	6,7	98 131	106 384	8,4
16	Montérégie	147	357	142,9	8 497	20 522	141,5
17	Centre-du-Québec	266	1 022	284,2	15 678	60 429	285,4
	Total	202 295	228 564	13,0	8 914 951	10 327 020	15,8

Active titles as of 31 décembre 2010

Surface area in UTM NAD 83

Table 2.2 - Distribution of mining extraction titles per administrative region in Québec.

Administrative region		Number of titles (BEX, CM, BM, ASB, BEF, BEP)	Area(ha)	Number of titles (BNE)
1	Bas-Saint-Laurent	11	613	77
2	Saguenay–Lac-Saint-Jean	46	11 519	321
3	Capitale-Nationale	38	1 883	70
4	Mauricie	15	730	161
5	Estrie	5	256	15
6	Montréal	-	-	-
7	Outaouais	8	246	120
8	Abitibi-Témiscamingue	191	17 065	675
9	Côte-Nord	212	31 000	526
10	Nord-du-Québec	117	11 019	469
11	Gaspésie–Îles-de-la-Madeleine	48	4 415	27
12	Chaudière-Appalaches	14	678	20
13	Laval	-	-	-
14	Lanaudière	11	305	85
15	Laurentides	24	2 082	126
16	Montérégie	2	16	-
17	Centre-du-Québec	-	-	1
	Total	742	81 827	2 693

Active titles as of december 31 2010.

Table 2.3 - Distribution of rights and revenues for sand and gravel management per administrative region in 2009-2010.

TABLE 2.3a - Management of sand and gravel mining by the MRNF
Distribution of extraction rights and revenues per administrative region in 2009-2010

Administrative region	Sand and gravel			
	Number of leases	Number of authorizations	Royalties	Lease income
Capitale-Nationale	95	6	538 972 $	22 515 $
Mauricie	273	3	23 552 $	55 831 $
Estrie	13	0	3 563 $	1 195 $
Outaouais	122	0	35 915 $	26 768 $
Abitibi-Témiscamingue	626	8	1 309 901 $	128 214 $
Côte-Nord	400	6	443 770 $	138 195 $
Nord-du-Québec	456	10	163 523 $	82 747 $
Gaspésie–Îles-de-la-Madeleine	35	8	28 083 $	9 227 $
Chaudière-Appalaches	16	3	1 407 $	3 442 $
Montérégie	0	0	0 $	0 $
TOTAL:	2 036	44	2 548 686 $	468 134 $

TABLE 2.3b - Delegation of sand and gravel mining management
Distribution of extraction rights and revenues per administrative region in 2009-2010

Administrative region	Sand and gravel			
	Number of leases	Number of authorizations	Royalties	Lease income
Saguenay–Lac Saint-Jean	334	4	268 716 $	68 593 $
Bas-Saint-Laurent	76	0	74 196 $	13 388 $
Lanaudière	80	0	26 953 $	16 491 $
Laurentides	106	1	28 708 $	20 124 $
TOTAL:	596	5	398 573 $	118 596 $

CHAPTER 3 - GEOSCIENCE WORK

Sylvain Lacroix, Patrice Roy, Charles Maurice and Jean-Yves Labbé

The mandate of the *Direction générale de Géologie Québec* is to acquire, process and disseminate geoscience knowledge on the mineral resources of Québec, in order to assess and promote the mineral potential of Québec's regions in a sustainable development perspective. With the creation of the Mining Heritage Fund following the announcement of the Mineral Strategy, the *Bureau de l'exploration géologique du Québec* (BEGQ) had a budget of about $12M to conduct geoscience knowledge acquisition and processing activities in 2010-2011 (Table 3.1). An amount of $300,000 was also transferred to the BEGQ in 2010-2011 by the *Ministère du Développement durable, de l'Environnement et des Parcs* (MDDEP), to perform Quaternary deposit mapping in areas targeted under the Groundwater Knowledge Acquisition Program for all of municipalized Québec.

The year 2010-2011 is characterized by a marked increase in the rate of geoscience knowledge acquisition across Québec. The surface area covered by new inventories, mostly funded through the Mining Heritage Fund, should reach nearly 200,000 km^2. The eighteen geoscience knowledge acquisition and processing projects already completed or to be completed by the end of the year 2010-2011 are illustrated on two maps, one showing geological and Quaternary deposit inventories (Figure 3.1), and the other showing geochemical and geophysical inventories, in addition to a mineral potential assessment project (Figure 3.2).

3.1 - Geological inventories

The six geological inventories included in the 2010-2011 geoscience programming are part of a larger multidisciplinary geoscience knowledge acquisition program designed to stimulate exploration in Northern Québec.

The Churchill–Lac Raude project (No. 1), located east of Schefferville, represents the eastward continuation of a survey at 1/50,000 scale carried out in the summer of 2009. Together, these two surveys provide a geologic section of areas located east of the New Québec Orogen. This project is conducted within the scope of a multidisciplinary geoscience program undertaken in cooperation with the Geological Survey of Newfoundland and Labrador and the Geological Survey of Canada.

The Baie-James region continues to be the focus of intense geoscience activities, with two new surveys carried out near Réservoir La Grande 3. The Lac Kinglet project (No. 2) in the Far North extended our mapping coverage at a scale of 1/250,000 to the south of Archean terrains covered during the Far North Program. The Baie-James–Réservoir La Grande 3 project (No. 3), in its second year, also extended our mapping coverage, at 1/50,000 scale in this case, of the La Grande Subprovince to the north of the Opinaca Subprovince.

The geological inventory in the Lac du Milieu area (No. 4) consists in a new mapping project, at a scale of 1/50,000, of paragneiss, quartzite, and amphibolite units surrounding Réservoir Manicouagan in the Grenville Province.

Finally, two geological inventories were done in the Matagami (No. 5) and Chapais (No. 6) areas, to better define and understand the geology of the two mining camps and surrounding areas. These two projects are complemented by various studies aimed at defining the geometry, in three dimensions, of prospective units for base metals, in cooperation with the *Université du Québec en Abitibi-Témiscamingue* and *École Polytechnique de Montréal*, among others.

3.2 - Quaternary inventories

The Octave project (No. 7) consists in a sonic core drilling sampling campaign, the purpose of which is to gain a better understanding of the stratigraphy of Quaternary deposits and basement rocks, in an area with high mineral potential but with a thick cover of Quaternary deposits. The area targeted in 2010 is located in the heart of the Abitibi Subprovince, about 60 km north of Amos and 80 km west of Lebel-sur-Quévillon, *i.e.* directly along the westward extension of similar projects conducted in 2006 and 2007, under the Copper Plan.

Three Quaternary deposit mapping projects at a scale of 1/50,000 took place in three different regions: Saguenay–Lac-Saint-Jean, Centre-du-Québec, and Yamaska-Richelieu (Nos. 8, 9 and 10). Surveys in the Saguenay–Lac-Saint-Jean and Centre-du-Québec regions, also aimed at establishing the stratigraphy and distribution in three dimensions of mapped surficial geological formations, were in their second and last year of fieldwork. The Yamaska-Richelieu project is in its first year of fieldwork and should thus continue next year. Note that these projects are undertaken to support the MDDEP's Groundwater Knowledge Acquisition Program in Southern Québec, pursuant to a multi-year agreement signed in the summer of 2009 with the MDDEP.

3.3 - Geochemical inventories

Initiatives to update the lake-bottom sediment geochemistry database for Québec, launched in 2007, continued in 2010-2011 with two new surveys and two reanalysis projects.

Project No. 11 consisted in a new survey covering the Grenville Province along a north/south transect centred on the municipality of Saguenay. This survey completes the lake-bottom sediment geochemistry coverage of the Grenville Province, north of latitude 47°22'30''.

Projects Nos. 12 and 13 were both carried out in cooperation with the *Corporation de promotion du développement minéral de la Côte-Nord* (CPDM). Project No. 12 consisted in two lake-bottom sediment surveys covering areas located north of Havre-Saint-Pierre and west of Réservoir Manicouagan. Project No. 13 consisted in a geochemical reanalysis of samples from the Fermont survey, initially collected in 1987.

Project No. 14 is an extensive geochemical reanalysis campaign of lake-bottom sediment samples collected from 1973 to 1978 by the *Société de développement de la Baie-James* (SDBJ) in the Baie-James region, the results of which were made public at Québec Exploration 2010.

3.4 - Geophysical inventories

The Baie-James region was once again, in 2010-2011, the focus of extensive airborne geophysical surveys namely designed to provide, once completed, aeromagnetic coverage similar to what is currently available in the Abitibi Subprovince. A magnetic and gamma-ray spectrometry survey (project No. 15) covered the south part of the Opinaca Subprovince, as a follow-up to the geophysical survey completed last year, which had covered the area located directly to the north. A vast aeromagnetic survey (project No. 16) was designed to extend, much further to the south and west, the geophysical coverage already completed since 2007 in the vicinity of the Éléonore (gold), Renard (diamond), and Coulon (zinc) deposits.

In addition, the Geological Survey of Canada conducted in early 2010, an aeromagnetic survey (project No. 17) to the west of Kuujjuaq, within the scope of the GEM project (Geomapping for Energy and Minerals). This survey, carried out at the request of Géologie Québec, is designed to assist upcoming fieldwork for geological surveys at a scale of 1/250,000, planned for the summer of 2011 in this area.

3.5 - Publications

In 2010, the MRNF published 97 original documents, including 18 geological maps, 9 English translations, and 3 reports published directly in English, all available in the SIGÉOM public database. In addition to geological maps, these documents include geoscience surveys, studies, geological compilations, and promotional or public outreach documents published by the MRNF or its partners.

The location of NTS sheets covered by these new surveys is shown in Figure 3.3. Geological maps (10) and accompanying reports (3), geological compilations (2) of the Matagami and Rivière Bigniba areas, map sheets covered by regional geophysical surveys (10) and by secondary environment geochemistry surveys or reanalyses (available in SIGÉOM à la carte) are shown in Figure 3.3. Promotional documents (3), public outreach posters (5), studies and syntheses (45), and small-scale compilations (2) are not shown on the map but are available in SIGÉOM examine.

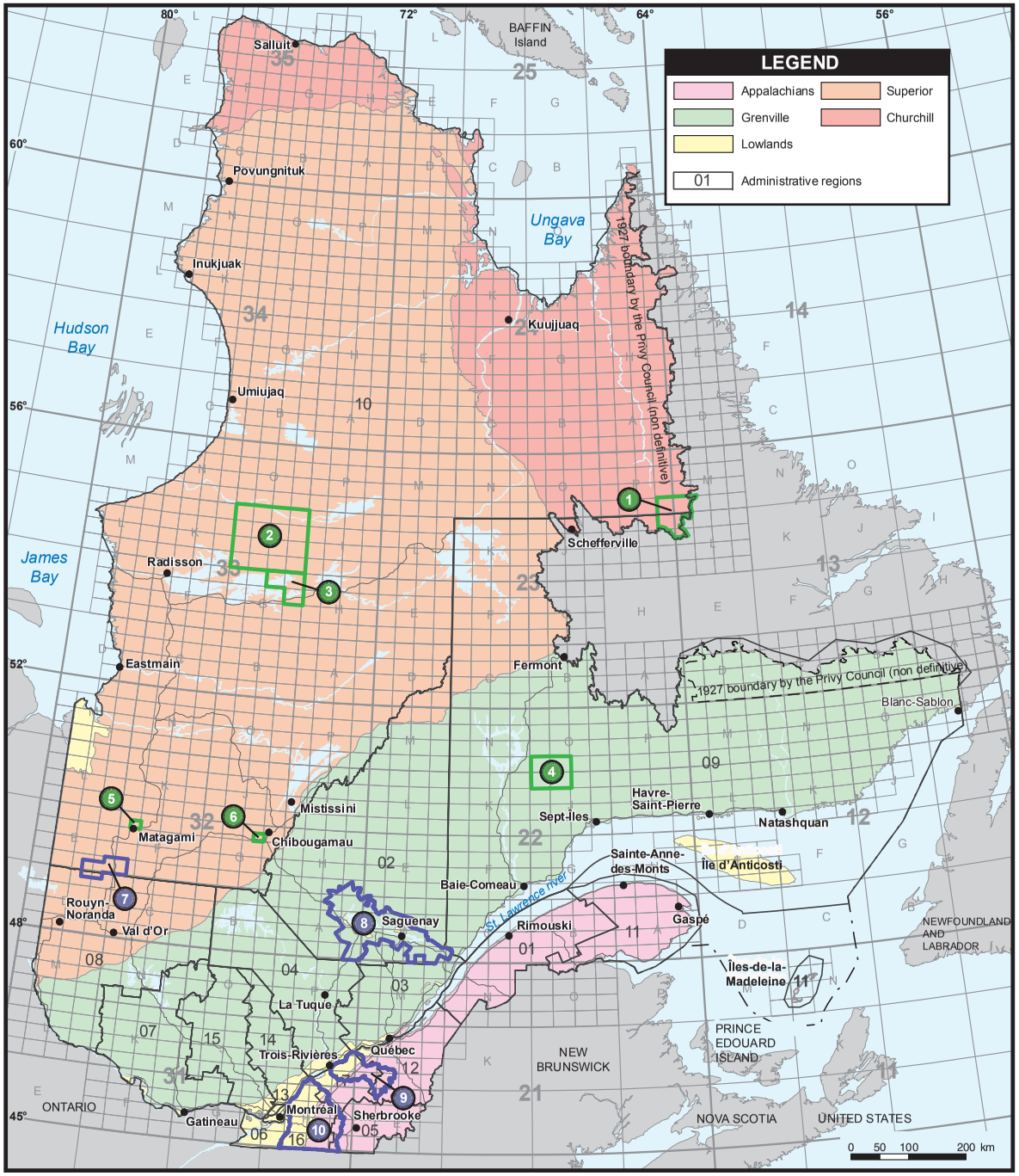
Finally, 691 assessment work reports were filed and are available in the SIGÉOM database. The location of NTS sheets covered by these work reports is shown in Figure 3.3.

3.6 - Exploration targets

Acquisition and processing of new geoscience data carried out in 2010 led to the definition of 91 new exploration targets that were unveiled during Québec Exploration 2010 (PRO 2010-06). Most of these targets are located in the Nord-du-Québec region and are for various commodities, namely gold, copper, uranium, and rare metals. A few targets were also identified in Abitibi-Témiscamingue for kimberlites and in the Côte-Nord region, mainly for industrial minerals and architectural stone. In addition, updating and reprocessing of the secondary environment geochemistry database for all of Québec, recently upgraded with new analyses for some 27,000 historical lake-bottom sediment samples from the Baie-James region, led to the identification of nearly 3,000 additional targets. The location of all of these targets may be viewed on both GESTIM and the MRNF website:

http://www.mrnf.gouv.qc.ca/mines/publications/publications-promotion.jsp

http://www.mrnf.gouv.qc.ca/mines/publications/publications-cartes.jsp



2010-2011 Geoscience Work

GEOLOGICAL INVENTORIES

1. Churchill - Lac Raude project
2. Grand-Nord - Lac Kinglet project
3. Baie-James - Réservoir La Grande 3 project
4. Grenville - Lac du Milieu project
5. Matagami project
6. Chapais project

QUATERNARY INVENTORIES

7. Octave project (rock and quaternary)
8. Saguenay–Lac-St-Jean project (MDDEP-MRNF)
9. Centre-du-Québec project (MDDEP-MRNF)
10. Yamaska-Richelieu project (MDDEP-MRNF)

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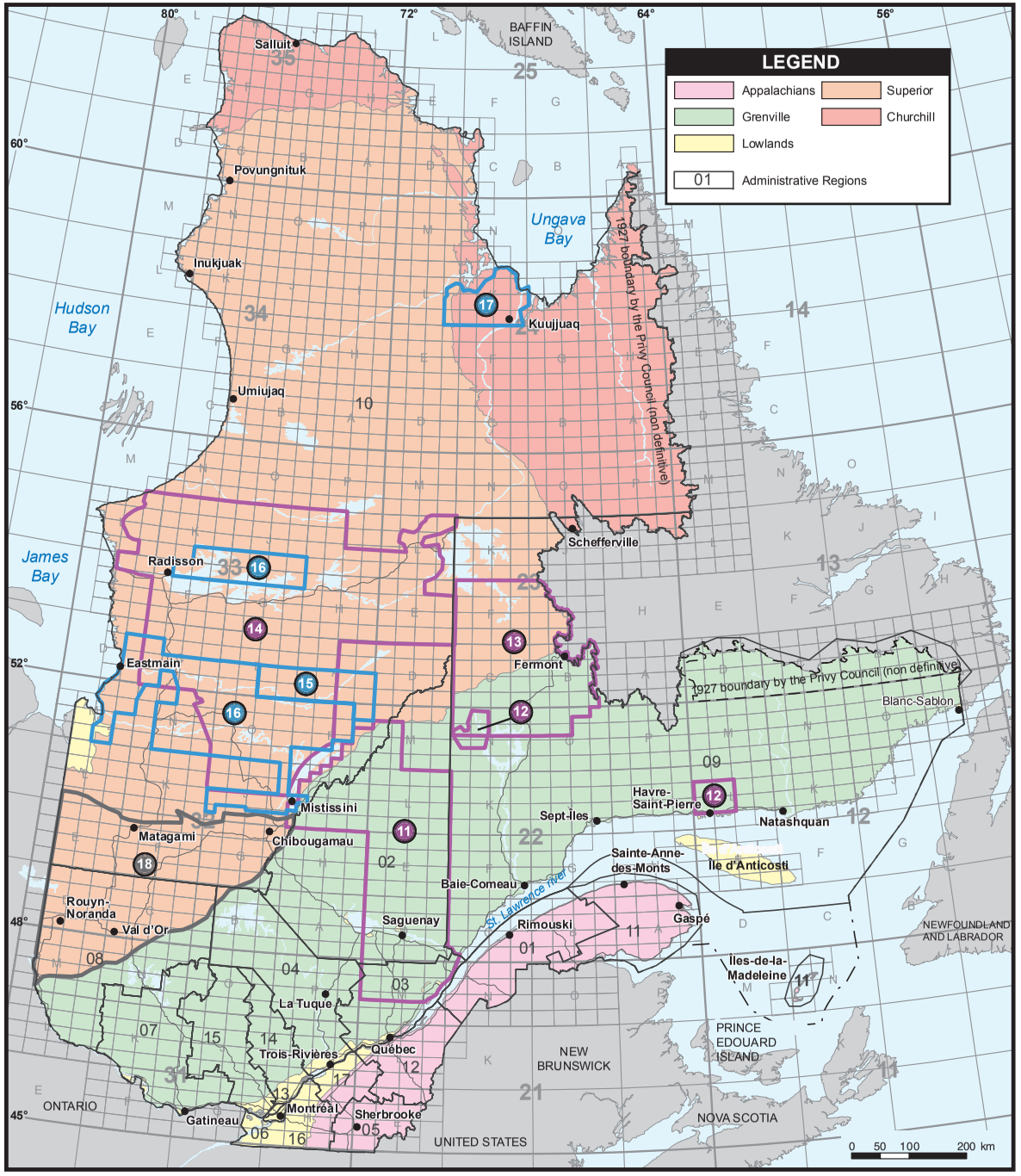
Direction générale de géologie Québec
Note: This document has no legal value.

Ressources naturelles et Faune
Québec

Figure 3.1. Geological and quaternary inventories.



2010-2011 Geoscience Work

GEOCHEMICAL INVENTORIES

- 11 Saguenay–Lac-St-Jean lake-bottom sediiment survey
- 12 Côte-Nord lake-bottom sediment survey
- 13 Côte-Nord chemical reanalysis of lake-bottom sediment samples
- 14 Baie-James chemical reanalysis of lake-bottom sediment samples

GEOPHYSICAL INVENTORIES

- 15 Baie-James - magnetic and gamma-ray spectrometry survey
- 16 Baie-James - aeromagnetic survey
- 17 Kuujjuaq - aeromagnetic survey

MINERAL POTENTIAL ASSESMENT

- 18 Assesment of the Potential for Volcanogenic Massive Sulphide Deposits (VMS) in Abitibi

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Québec

Figure 3.2. Geochemical and geophysical inventories.

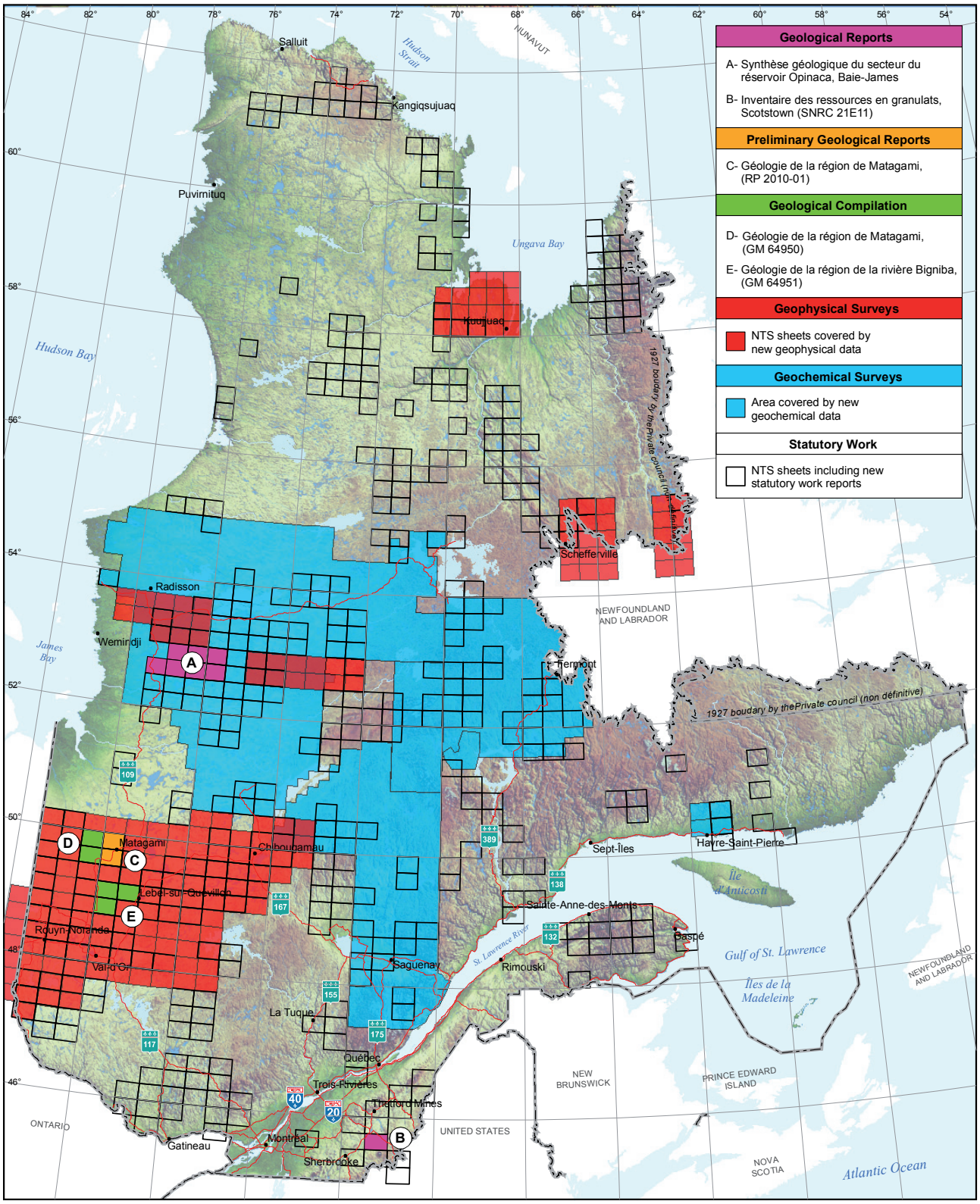

Figure 3.3. New geoscientific publications in 2010.

TABLE 3.1 - Distribution of the geoscientific surveys expenditures done by the Ministère des Ressources naturelles et de la Faune within Québec's administrative areas.

Administrative region		Expenditures in 2008-2009 (in 000 $)	Expenditures in 2009-2010 (in 000 $)	Expenditures in 2010-2011 (in 000 $)p
1	Bas-Saint-Laurent	770.0	28.8	0.0
2	Saguenay–Lac-Saint-Jean	472.9	0.0	846.8
3	Capitale-Nationale	610.6	314.3	239.8
4	Mauricie	242.7	201.2	1.0
5	Estrie	0.0	58.7	12.1
6	Montréal	0.0	0.0	0.0
7	Outaouais	54.8	58.3	0.0
8	Abitibi-Témiscamingue	1 499.3	941.5	681.8
9	Côte-Nord	825.0	1 722.7	1 623.4
10	Nord-du-Québec	5 391.8	4 168.1	8 206.8
11	Gaspésie–Îles-de-la-Madeleine	121.2	47.5	0.0
12	Chaudière-Appalaches	0.0	0.0	40.1
13	Laval	0.0	0.0	0.0
14	Lanaudière	3.6	0.0	0.0
15	Laurentides	9.4	0.0	0.0
16	Montérégie	0.0	65.3	273.8
17	Centre-du-Québec	0.0	46.5	31.5
	Total	**10 001.3**	**7 652.8**	**11 957.1**

p: preliminary data

CHAPTER 4 - MINERAL EXPLORATION

4.1 - Introduction

Martin Labrecque and James Moorhead

This chapter brings together, mainly in the form of tables and figures, information on targeted commodities, exploration expenditures, and the location and description of exploration and deposit appraisal projects carried out in Québec in 2010. Work carried out by exploration companies in the search for metals and industrial minerals is reported in this chapter. This information was compiled from reports available on the Internet (press releases, public reports, etc.) or is taken from forms filled out and submitted by the companies themselves.

TARGETED COMMODITIES

Based on 2009 data compiled by the Institut de la statistique du Québec (ISQ), nearly 270 mining companies reported exploration or deposit appraisal work in Québec as project operator, which represents $130M for major companies, $246M for junior companies, and $3M for public corporations. The head offices of junior companies active in Québec are distributed as follows: 41% are located in Québec, 33% in British Columbia, 22% are located in Ontario, and 4% are based elsewhere in Canada or abroad.

In 2009, exploration and deposit appraisal work was largely focused on precious metals (table 4.1), mainly gold ($231M, 61%), base metals ($59M, 16%), uranium ($48M, 13%), ferrous metals ($15M, 4%), and diamond ($10M, 3%). During the last bull cycle, exploration work for uranium and ferrous metals experienced spectacular growth. Exploration spending for uranium went from $1.4M in 2004 to $48M in 2009, whereas exploration expenditures for ferrous metals increased from $0.3M to $15M over the same time span. Exploration for certain commodities that are not produced in Québec at this time has also been reported, particularly for rare earth elements (REE) and lithium. These commodities have many uses, namely in high-technology products and rechargeable batteries, and this combined with growing demand and concerns about supply, explain this surge of interest.

EXPLORATION AND DEPOSIT APPRAISAL EXPENDITURES

In 2009, exploration and deposit appraisal expenditures totalled $379.3M (table 4.2). These were largely concentrated in three administrative regions of Québec: Abitibi-Témiscamingue ($166.4M, 43.9%), Nord-du-Québec ($184.8M, 48.7%), and Côte-Nord ($13.5M, 3.6%). Compared to 2008, due to the global economic crisis, exploration and deposit appraisal activities and spending in 2009 decreased across Québec.

In 2010, revised spending intentions for exploration and deposit appraisal activities are on the rise, reaching $576M, driven by recovering demand for mining products and higher prices. As at December 31, 2010, the number of active mining titles stood at 228,564, which represents a 13% increase relative to December 31, 2009.

JOBS IN THE MINERAL EXPLORATION SECTOR

Data on the number of workers involved in the mineral exploration sector are not compiled within the scope of the ISQ's mining statistics program. Nevertheless, based on information provided by companies on their exploration expenditures, the Ministère des Ressources naturelles et de la Faune (MRNF) estimates that off-minesite exploration and deposit appraisal activities create more than 2,000 direct jobs and more than 1,500 indirect jobs across Québec.[1]

4.2 - Nord-du-Québec (region 10)

Patrick Houle, James Moorhead and Suzanne Côté

This section provides an overview of exploration work conducted in the Nord-du-Québec region. Table 4.3 lists and briefly describes, for 2010, exploration and deposit appraisal projects in the Churchill and Superior geological provinces, the latter including the northern part of the Abitibi Subprovince. Figures 4.1, 4.2 and 4.3 show the location of these projects.

As at December 31, 2010, there were 139,442 active explorationg titles recorded in the Nord-du-Québec region, up 3.4% compared to 134,880 active exploration titles as at December 31, 2009 (Table 2.1). A total of 204 exploration projects were reported in 2010 in the region compared to 140 projects in 2009. This significant increase is largely due to the higher number of projects for precious and base metals in the Abitibi Subprovince.

In 2010, in the Nord-du-Québec region, four metal mines were in operation, namely two gold mines (Casa Berardi (Au-Ag), **Aurizon Mines**; Sleeping Giant (Au-Ag), **North American Palladium**) and two polymetallic mines (Perseverance (Zn-Cu-Ag-Au), **Xstrata Canada**; Raglan (Cu-Ni-Co-PGE), **Xstrata Canada**). During the year, a few advanced exploration projects began deposit appraisal work, including the Bracemac-McLeod project (Zn-Cu-Ag-Au) by **Xstata Canada**, the Éléonore project (Au) by **Les Mines Opinaca (Goldcorp)** and the Nunavik Nickel project (Cu-Ni-Co-PGE) by **Jien Canada Mining**, not to mention development work at the former Langlois mine (Zn-Cu-Ag-Au) by **Breakwater Resources**.

1- Source: Figures estimated using the Québec Input-Output Model developed by the *Institut de la statistique du Québec*, October 2010.

SUPERIOR PROVINCE

In the Nord-du-Québec administrative region, the Superior Province extends across the entire Baie-James region and in the southeast part of Nunavik. It encompasses six geological subprovinces, which are, from north to south: the Minto, La Grande, Opinaca, Nemiscau, Opatica, and Abitibi subprovinces. Comprising volcano-plutonic and sedimentary assemblages, theses subprovinces are transected by a series of E-W to WNW-ESE and NE-SW-trending shear zones. Volcanic assemblages are metamorphosed to the greenschist facies in the centre, grading to the upper amphibolite facies near their margins. These assemblages are intruded by a number of granitic intrusions assigned to various plutonic suites (Moukhsil *et al.*, 2003). In contrast, the metamorphic grade in sedimentary assemblages ranges from the amphibolite to the granulite facies.

South of the Baie-James region, in the Abitibi Subprovince, the Chapais-Chibougamau and Matagami mining camps continued to attract explorationists in the search for base and precious metals, in addition to iron, vanadium, and titanium. In the Lebel-sur-Quévillon–Desmaraisville area, exploration projects were largely focused on the search for gold. Finally, in the Near North and Far North regions, fieldwork led to the discovery of several significant gold, base metal, uranium, lithium, and rare metal occurrences. In the Baie-James region, reanalysis of lake-bottom sediments, recent mapping in the LG-4 area, and interpretation of new airborne geophysical surveys by Géologie Québec all resulted in the identification of new exploration targets (ref.: PRO 2010-04 and PRO 2010-06).

CHURCHILL PROVINCE

The Churchill Province lies in the northeast part of Nunavik. It mainly consists of Paleoproterozoic rocks of the New Québec (Labrador Trough), Torngat, and Ungava (Cape Smith Belt) orogens and their respective hinterland (Core Zone, largely composed of Archean rocks [James *et al.*, 1996; Wardle *et al*., 2002]).

The main commodities of interest in the New Québec Orogen, the Torngat Orogen, and the Core Zone are uranium, iron, copper, gold, diamond, and rare earth elements. The Cape Smith Belt (Ungava Orogen or Trough) once again attracted much attention from exploration companies searching for nickel, copper, cobalt, and platinum group elements (PGE).

New Québec Orogen

Also referred to as the Labrador Trough in Québec, or simply "the Trough", the New Québec Orogen, with rocks dated from 2.17 to 1.79 Ga, forms a fold and thrust belt along the margin of the Superior Province. The Trough is composed of rocks comprising two volcano-sedimentary cycles and a third cycle of metasedimentary rocks (Clark and Wares, 2006).

Torngat Orogen and Core Zone

The Paleoproterozoic Torngat Orogen is bounded to the east by Archean rocks of the Nain Province and to the west by Archean and Paleoproterozoic rocks of the Core Zone. This orogen is divided into lithotectonic domains and complexes separated by ductile shear zones.

Located in the southeast part of the Churchill geological Province, the Core Zone (formerly known as the Rae Province) lies between the Labrador Trough hinterland and the Torngat Orogen foreland. It is largely composed of Archean gneisses with bands of Paleoproterozoic supracrustal rocks. These rocks were subsequently deformed and metamorphosed during the Paleoproterozoic. The Core Zone is divided into a series of lithotectonic domains separated by wide deformation zones (Wardle *et al.*, 2002).

Ungava Orogen

The Ungava Orogen (Ungava Trough or Cape Smith Belt) consists of a Paleoproterozoic volcano-sedimentary belt that stretches some 370 km along an ENE-WSW axis. The area may be divided into four main tectonic units: a) the autochthonous Archean basement of the Superior Province; b) the allochthonous accretionary belt or Ungava Trough; c) the Paleoproterozoic Narsajuaq Terrane; and d) the parautochthonous Archean basement (Lamothe, 1994).

EXPLORATION OUTLOOK

Within the Nord-du-Québec region, the Abitibi Subprovince between the 49th and 50th parallels is renowned for its Chapais-Chibougamau and Matagami mining camps, richly endowed in precious metal (Au-Ag) and polymetallic (Cu-Zn-Au-Ag and Cu-Au) ore deposits. However, outside of these mining camps, very little exploration work has been carried out. For instance, the potential for precious metals associated with major and subsidiary shear zones injected with felsic porphyry dykes remains virtually untested.

In the Baie-James region, recent mapping by the MRNF in the Opinaca and La Grande subprovinces, combined with the new airborne geophysical coverage, have defined new gold, polymetallic, diamond, and uranium targets.

In 2010, exploration work in the search for lithium (Li) and rare earth elements (REE) increased, especially in the central part of the Baie-James region, the Labrador Trough, and the core zone. In fact in the Baie-James region, three projects were the focus of an initial resource estimate, where Li mineralization occurs in granitic pegmatites associated with peraluminous monzogranitic complexes near volcano-sedimentary belts: the James Bay Lithium project by **Lithium One**, the Whabouchi project by **Nemaska Exploration**, and the Lac Pivert/Rose project by **First Gold Exploration** Near Rivière George in the Labrador Trough, the discovery of new zones enriched in rare earth elements by joint venture partners **Midland Exploration**

and **Japan Oil, Gas and Metals Corporation,** combined with the announcement of an inferred resource estimate for the B-Zone on the Strange Lake project by **Quest Rare Minerals**, outlined the strong potential of this new prospective area in the search for rare earth elements.

4.3 - Abitibi-Témiscamingue (region 08)

Pierre Doucet, James Moorhead, Denis Lesage and Suzanne Côté

The Abitibi-Témiscamingue administrative region is located in western Québec and comprises three major geological assemblages, which are, from north to south: the Abitibi and Pontiac subprovinces (Superior Province) and the Grenville Province.

The Abitibi and Pontiac subprovinces form the south part of the Superior Province in Québec. The Abitibi Subprovince is the largest, one of the most studied, and among the richest Archean greenstone belts in the world. It comprises numerous granitoid intrusions and volcanic and sedimentary belts broadly trending E-W (Figure 4.4), ranging in age from 2.75 to 2.67 Ga. The Abitibi Belt is transected by several E-W or NW-SE-trending, generally reverse faults, as well as sinistral NE-trending and dextral SE-trending faults.

The Pontiac Subprovince is separated from the Abitibi Subprovince by the Cadillac Tectonic Zone, a structure that hosts many gold deposits. The Pontiac Subprovince comprises granitoid intrusions and orthogneisses in its central part, along with detrital sedimentary rocks and paragneisses with a few volcanic sequences. The latter form ultramafic, mafic, and felsic assemblages in the southwest part of the Pontiac. A few thin bands of mafic to ultramafic volcanic rocks are also present along its northern edge.

The Grenville Province is separated from the Pontiac and Abitibi subprovinces by the Grenville Front, a NE-trending tectonic zone characterized by a steep metamorphic gradient toward the SE. The Grenville is composed of Archean and Proterozoic orthogneisses, intrusive rocks, metasedimentary rocks and migmatites.

The Abitibi Subprovince is renowned for the great number and high grade of its precious metal (Au-Ag) and polymetallic (Cu-Zn-Au-Ag and Cu-Au) ore deposits. A few metallic deposits, architectural stone quarries, and industrial mineral deposits (lime, quartz, kyanite, mica, garnet) were also mined in the Pontiac Subprovince. Mining and exploration have made this territory one of the most important mining regions in Québec for close to a century.

Table 4.4 provides a description of exploration and deposit appraisal projects in the Abitibi and Pontiac subprovinces and in the western Grenville Province. Figures 4.4, 4.5, and 4.6 show project locations.

In 2010, eight metal mines were in operation in the Abitibi-Témiscamingue region, namely seven gold mines: Kiena [Au-Ag] **Wesdome Gold Mines**, Lac Herbin [Au-Ag] **Alexis Minerals**, Beaufor [Au-Ag] **Richmont Mines**, Mouska [Au-Cu-Ag] **IAMGOLD-Québec**, Goldex [Au-Ag] **Agnico-Eagle Mines**, Lapa [Au-Ag] **Agnico-Eagle Mines**, and Barry [Au-Ag] **Metanor Resources**, and one polymetallic mine (LaRonde [Au-Zn-Cu-Ag-Pb] **Agnico-Eagle Mines**). Several major exploration projects took place within these mines or in close proximity.

As at December 31, 2010, there were 34,143 active exploration titles in Abitibi-Témiscamingue, which represents a 17.4% increase relative to 2009 (Table 2.2). In 2010, the number of exploration projects stood at 186, compared to 117 in 2009. Most of the projects were focused on gold occurrences located along major tectonic breaks such as the Destor-Porcupine Fault and the Cadillac Fault. Exploration for rare earth metals increased in the Kipawa area, Témiscamingue, during the year. Work on known lithium deposits and showings in the Preissac-La Corne area continued all through 2010, in parallel with advanced development work on the Québec Lithium deposit by Canada Lithium Corp.

4.4 - Administrative regions of Québec except Abitibi-Témiscamingue (08) and Nord-du-Québec (10)

Suzie Nantel, Steve Ouellet, Louis Madore, Pierre Doucet and Denis Lesage

This section of the report deals with all of the administrative regions of Québec except Abitibi-Témiscamingue (08) and Nord-du-Québec (10). Most of these regions are underlain by three geological provinces: Grenville, Appalachians, and the St. Lawrence Platform (Figure 4.7).

The Outaouais (07), Laurentides (15), Mauricie (04), Saguenay–Lac-Saint-Jean (02), and Côte-Nord (09) regions, as well as parts of the Lanaudière (14) and Capitale-Nationale (03) regions are primarily located within the Grenville Province (Figure 4.7). The latter is mainly composed of Archean and Proterozoic orthogneisses, intrusive rocks, metasedimentary rocks, and migmatites, that were affected by a series of magmatic and tectonic events, starting with the Labradorian orogeny (1710-1600 Ma) and ending with the Grenvillian orogeny (1090-980 Ma). The Grenville is a good place to search for copper, nickel, platinum, palladium, zinc, uranium, iron, titanium oxide, niobium, tantalum, and rare earth elements (REE) and well as for industrial minerals (apatite, graphite, mica, quartz) and architectural stone.

The Estrie (05), Bas-Saint-Laurent (01), and Gaspésie–Îles-de-la-Madeleine (11) regions, as well as parts of the Montérégie

(16), Chaudière-Appalaches (12), and Centre-du-Québec (17) regions are for the most part located within the Appalachian geological Province (Figure 4.7). The latter is composed of Phanerozoic sedimentary, volcanic, and intrusive rocks that were emplaced and deformed during the Taconian (460-440 Ma), Acadian (410-380 Ma), and Alleghanian (320-220 Ma) orogenies, although the effects of the latter are mostly restricted to the east-central and southeastern United States. Exploration companies are attracted to the Appalachian geological Province for its potential for copper, zinc, silver, gold, chromium, as well as aluminous clay and hydrocarbon. Mining companies develop its industrial minerals (chrysotile, talc, quartz, halite, clay), construction materials, aggregates, architectural stone resources, as well as natural gas, brine, and peat.

Finally, the Montréal (06) and Laval (13) administrative regions, as well as parts of the Centre-du-Québec (17), Lanaudière (14), Mauricie (04), and Capitale-Nationale (03) regions are located within the St. Lawrence Platform geological Province (Figure 5.6). This province is composed of undeformed limestone and sandstone that were deposited during the Cambrian (544-500 Ma) and Ordovician (500-440 Ma). It is mainly characterized by its resources in industrial stone and building stone (limestone, dolomite, sandstone), and for its natural gas potential.

Activities carried out by exploration companies in the search for metals, industrial minerals and industrial stone are reported in this section (Table 4.5, Figure 4.7). In 2010, most administrative regions were the site of exploration work for these types of resources. Oil & gas exploration, which is quite active in the St. Lawrence Platform and Appalachian geological provinces, is not discussed in this report.

ADMINISTRATIVE REGIONS IN THE GRENVILLE AND SUPERIOR PROVINCES: OUTAOUAIS (07), LAURENTIDES (15), MAURICIE (04), CAPITALE-NATIONALE (03), SAGUENAY–LAC-SAINT-JEAN (02), AND CÔTE-NORD (09)

In 2010, five mineral exploration companies were active in the Outaouais region. They did exploration work for copper, zinc or REE (Table 4.5). The most significant investments were made by **Cartier Resources** and **Midland Exploration** Exploration company **Stelmine Canada** announced it was abandoning its Gatineau Block 1 property following its 2010 work program but it is maintaining its Gatineau Block 2 property (Table 4.5). The highest number of claims registered in 2010 was in the north part of the region, by **Cartier Resources** in the search for copper, which largely explains the 96.2% increase in the number of claims registered in the Outaouais region compared to 2009 (Table 2.1). Many new claims were also registered in the MRC des Collines-de-l'Outaouais, a prospective area for REE occurrences.

In the Laurentides region, copper-nickel exploration continued in 2010 and a new property was explored for REE (Table 4.5). Many companies involved in the search for uranium and IOCG-type (*Iron oxyde-Copper-Gold*) occurrences abandoned, in whole or in part, their claims, while other companies registered new claims in the search for the following commodities: REE in the north part of the MRC Antoine-Labelle; peat to the east and northwest of Sainte-Anne-du-Lac; and graphite to the north and south of the mining lease for the graphite mine in Saint-Aimé-du-Lac-des-Îles. The number of claims registered in 2010 increased by 6.7% relative to 2009 (Table 2.1).

In Lanaudière, near Joliette, **Graymont (QC)** completed four drill holes in limestone units of the Deschambault Formation. However, this drilling also identified significant thickness of overburden in this area.

In Mauricie, exploration work for gold and base metals continued at the former Montauban mine. REE exploration work also took place near Lac Baude, about 25 kilometres north of La Mauricie National Park.

In the Capitale-Nationale region, the dominant mining-related activity involves development work for architectural stone in the MRC de Portneuf. In an area near Petit Lac Malbaie (Charlevoix), mechanical stripping by **Silicium Québec** led to the discovery of a quartzite lens. Otherwise, very little mineral exploration work was carried out in this region in 2010.

In the Saguenay–Lac-Saint-Jean region, many exploration projects are underway for industrial and strategic minerals. Among others, exploration work was carried out for phosphorus north of Réservoir Pipmuacan, whereas north of Lac Saint-Jean, exploration work focused on a tantalum-niobium deposit. An exploration project for REE and niobium continued in the Saint-Honoré area, and a historic iron-titanium deposit located in the Saint-Charles area, along the north shore of the Saguenay, was reassessed for its REE and vanadium potential. Finally, exploration work was carried out on a gold showing discovered in 2009 and located about 30 kilometres southeast of Chibougamau.

In the Côte-Nord region, exploration in 2010 was largely focused on iron ore in the Fermont area and on uranium to the north and northeast of Havre-Saint-Pierre. Investigations for REE also continued in areas northwest of Sept-Îles and east of Natashquan.

ADMINISTRATIVE REGIONS IN THE APPALACHIAN PROVINCE: ESTRIE (05), CENTRE-DU-QUÉBEC (17), CHAUDIÈRE-APPALACHES (12), BAS-SAINT-LAURENT (01), AND GASPÉSIE–ÎLES-DE-LA-MADELEINE (11)

In Estrie, the total number of claims went from 1652 to 6661 over the course of one year, corresponding to a 303.2% increase (Table 2.1). Most of these new claims were granted to **Bowmore Exploration** and **Fancamp Exploration,** as well as

Uragold Bay Resources and **Bertrand Brassard.** The last two did not report work in 2010. However, **Bowmore** is focussing on the search for low-grade high-tonnage sediment-hosted gold deposits amenable to open pit mining, The company conducted a airborne geophysical suvey covering 2410 km on it's property. Whereas **Fancamp** covered 13 800 km with an electromagnetic geophysical survey (UTEM) on it's Québec Appalachian group property, which holds several properties in various geological settings. The company is targeting volcanogenic massive sulphide deposits (copper-zinc-gold), skarn deposits (copper-molybdenum), and SEDEX-type (zinc) deposits, as well as syngenetic gold and nickel-copper-platinum group elements. **Western Troy Capital Resources** on the other hand announced it was putting an end to its drilling program launched in 2010 and was not planning further exploration work. Finally, **Centre de Granit Beebe** extracted granite blocks in the Stanstead area, to determine the quality of the stone.

In the Chaudière-Appalaches and Centre-du-Québec regions, the number of mining titles also jumped from 1841 to 6277 (Table 2.1), indicating a new burst of mineral exploration activity similar to what is observed in the Estrie region. Exploration work, mainly for gold, was focused mostly in sedimentary rocks in the Appalachians, along the Baie Verte-Brompton Line. Gold paleoplacers were also targeted by exploration work.

In the Bas-Saint-Laurent region, there was exploration for new sites for the production of slate.

In Gaspésie, base and precious metals were targeted in the Lemieux Dome area and near the former Gaspé smelter in Murdochville. A lithium exploration project was recently launched. Finally, exploration work is underway on a red argillite deposit located 15 kilometres south of Grande-Vallée. The objective is to increase resources for this potential open pit mining project, to supply the alumina pilot plant in Cap-Chat.

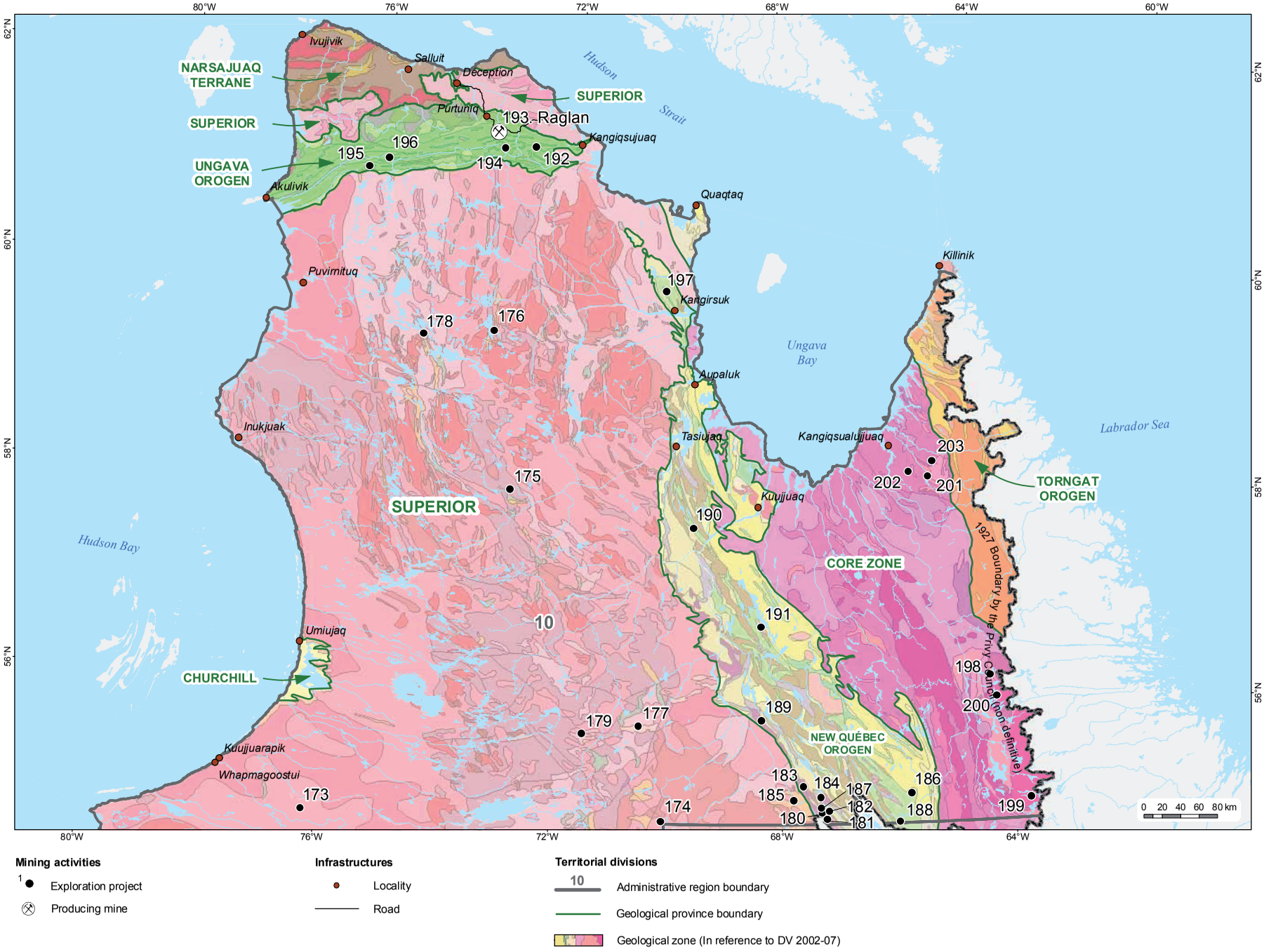

FIGURE 4.1. Exploration projects in the Nord-du-Québec, Nunavik territory, in 2010.

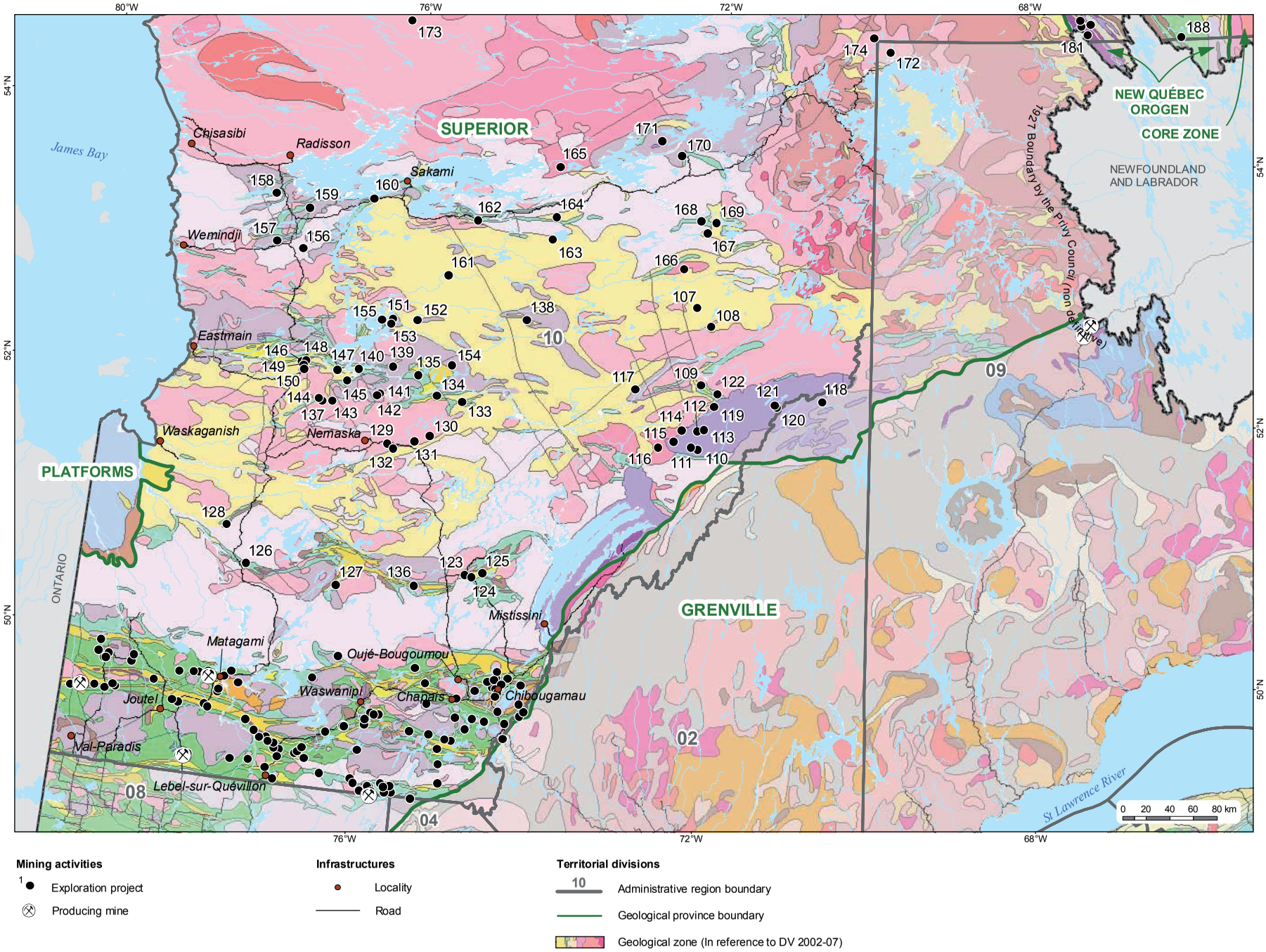

FIGURE 4.2. Exploration projects in the Nord-du-Québec, Baie-James territory, in 2010.

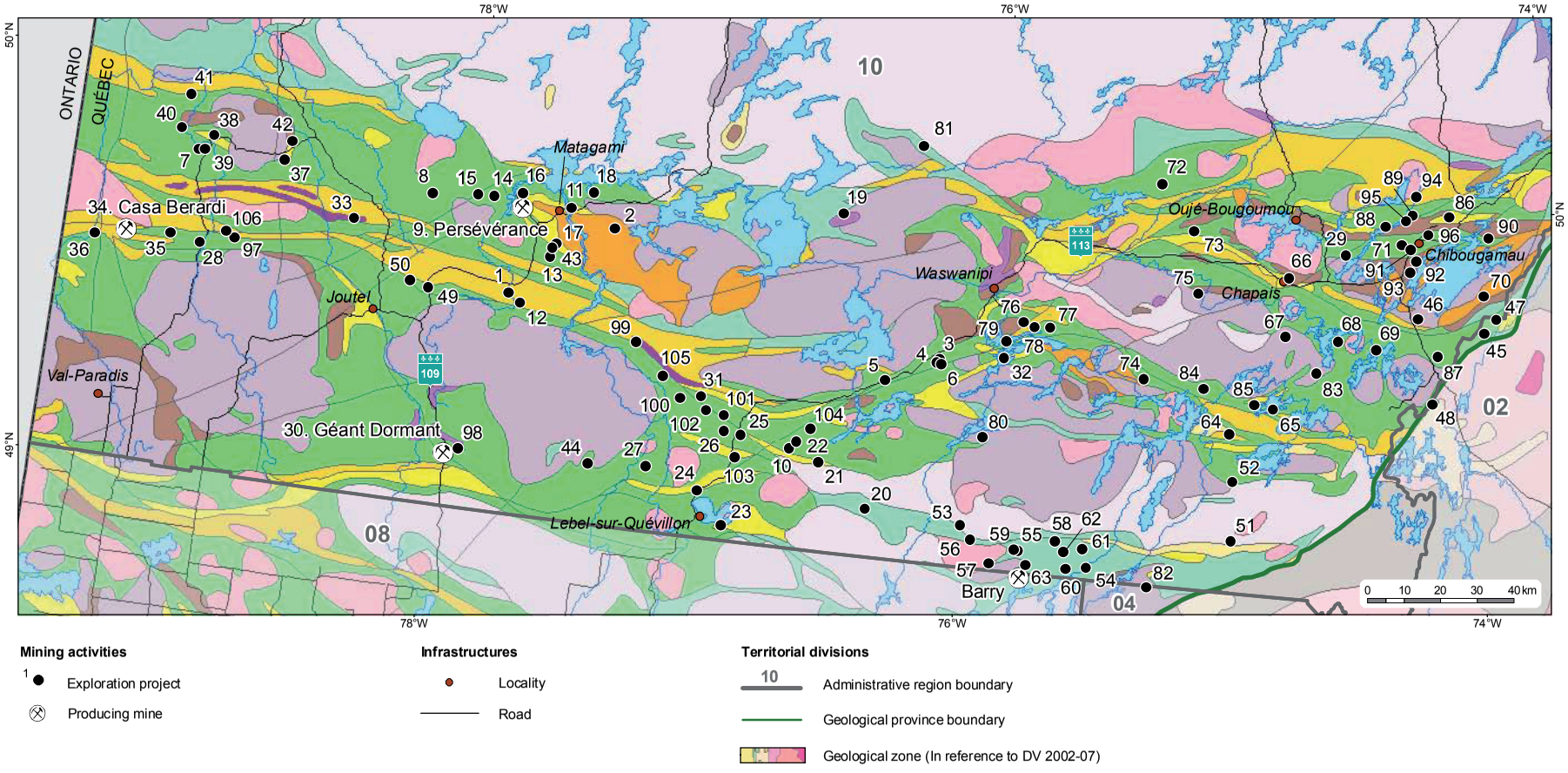

FIGURE 4.3. Exploration projects in the Nord-du-Québec, Matagami-Chibougamau sector, in 2010.

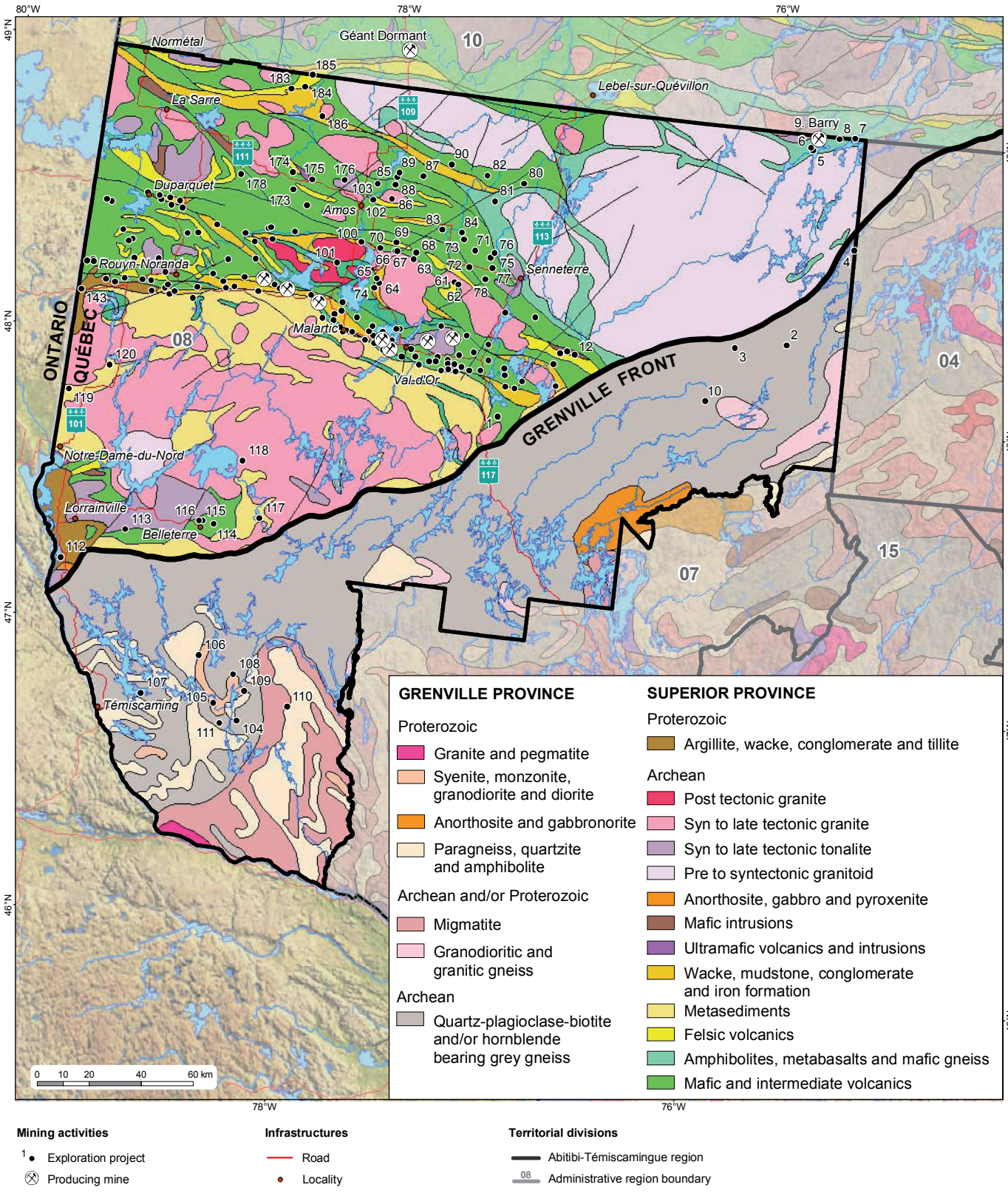

FIGURE 4.4. Exploration projects in the Abitibi-Témiscamingue in 2010.

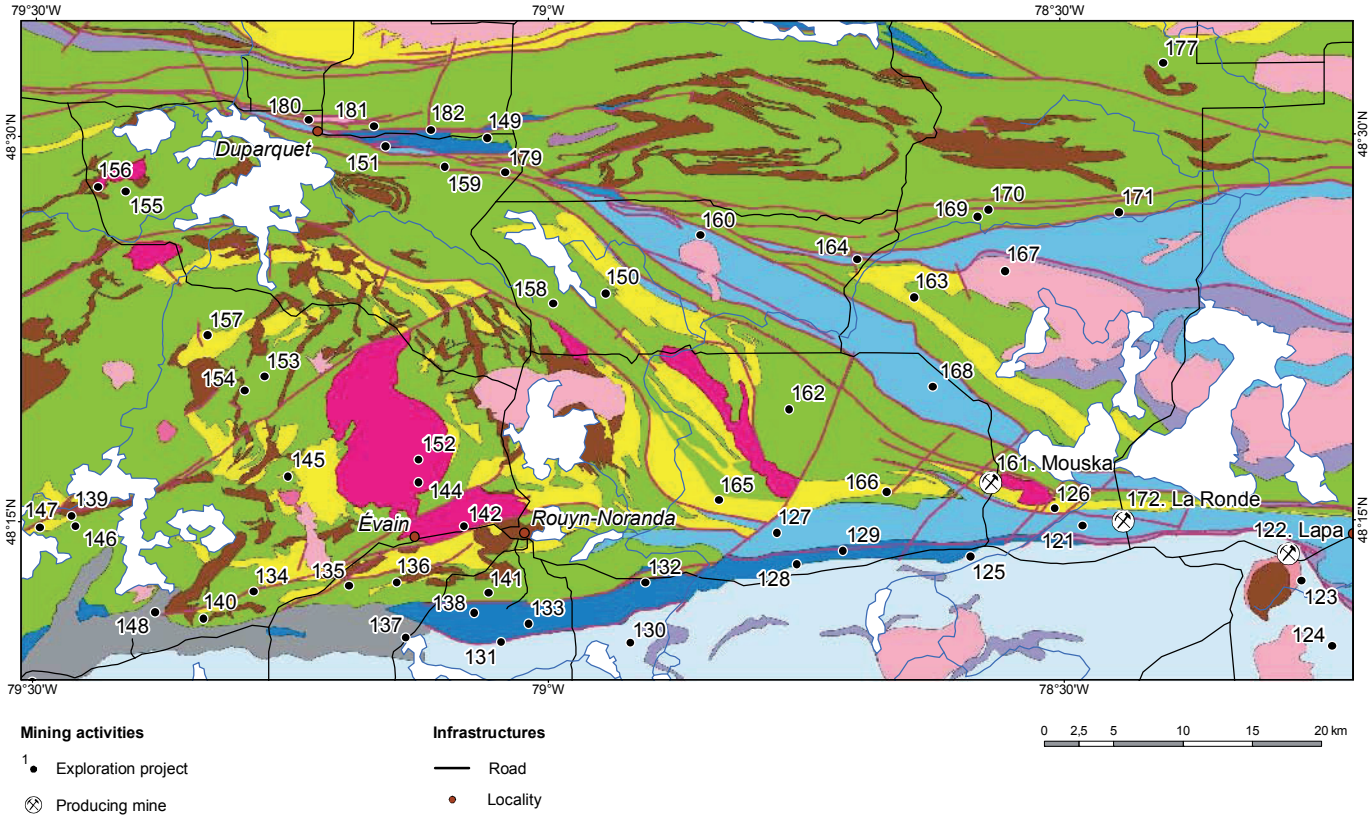

FIGURE 4.5. Exploration projects in the Abitibi-Témiscamingue, Rouyn-Noranda-Cadillac sector, in 2010.

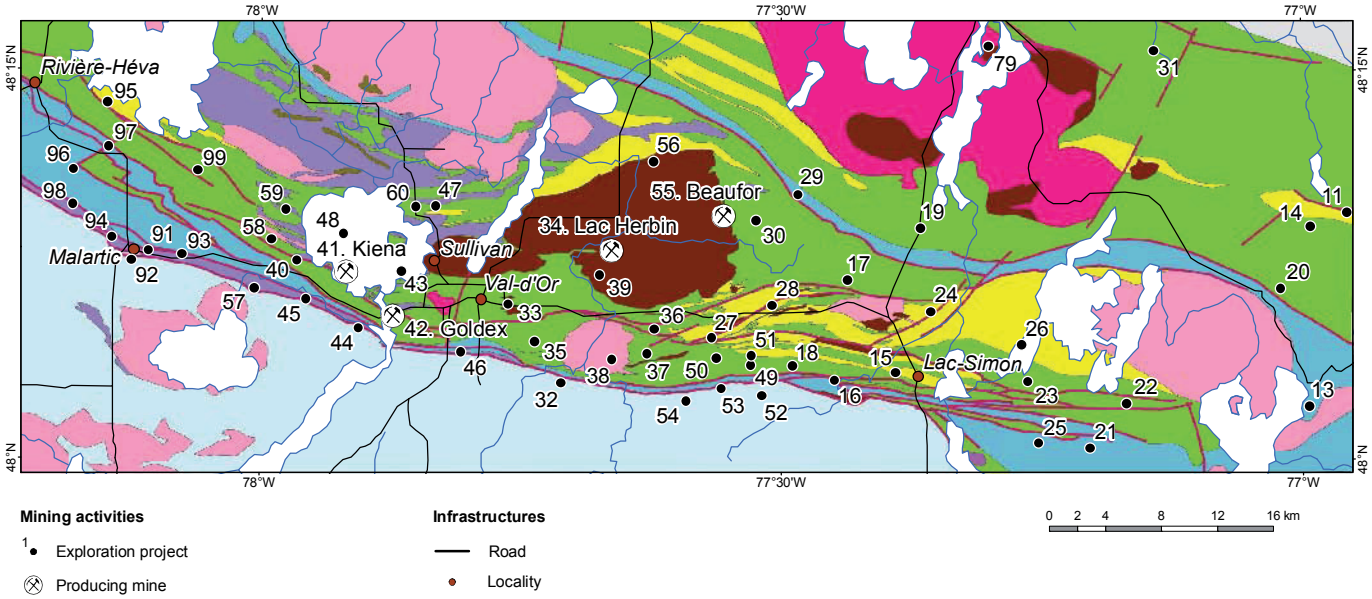

FIGURE 4.6. Exploration projects in the Abitibi-Témiscamingue, Malartic-Val-d'Or sector, in 2010.

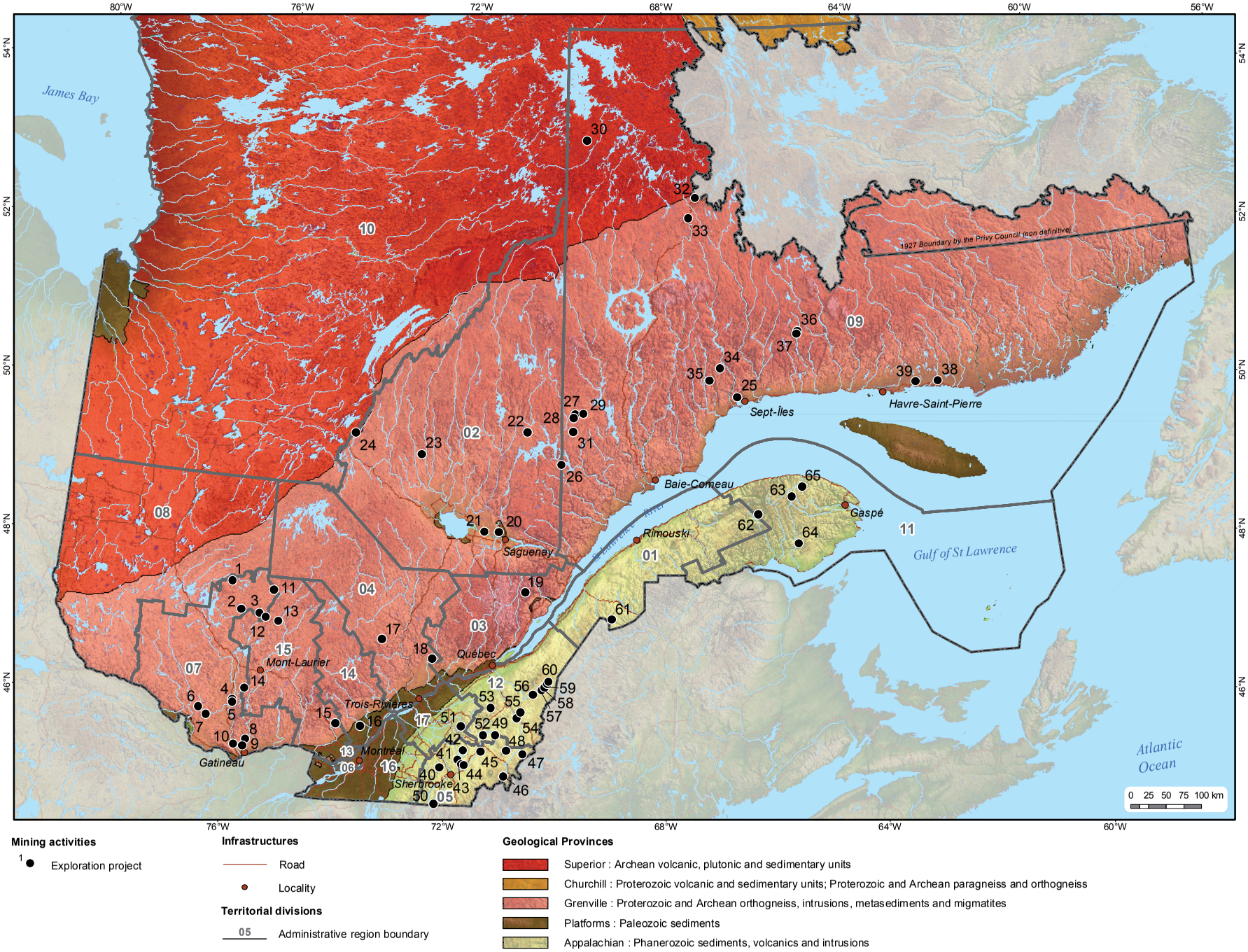

FIGURE 4.7. Exploration projects in Québec's administrative regions except Abtibi-Témiscamingue and Nord-du-Québec in 2010.

TABLE 4.1 - Exploration and development expenditures in M$ for Québec.

Substances	2004	2005	2006	2007	2008	2009
Precious metals	135.0	115.6	145.4	225.9	263.3	230.9
Base metals	57.0	53.0	70.8	118.3	122.4	59.1
Diamond	28.0	22.8	29.0	26.9	12.8	9.9
Ferrous metals	0.3	1.4	22.2	29.2	23.5	14.8
Uranium	1.4	4.3	22.0	70.9	87.3	48.1
Lithium	-	-	-	-	0.2	6.4
Rare earth elements	-	-	-	-	1.3	2.8
Others	5.5	8.0	5.7	5.1	15.3	7.1
Total	227	205	295	476	526	379

Source : Institut de la statistique du Québec

TABLE 4.2 - Distribution of exploration and mining development expenditures within Québec's administrative regions.

Administrative regions	Expenditures for 2008 (1) (in 000 $)	Expenditures for 2009 (1) (in 000 $)	% of total expenditures for 2009
01 Bas-Saint-Laurent	c	c	-
02 Saguenay–Lac-Saint-Jean	7,7	7,6	2,0%
03 Capitale-Nationale	0,6	c	-
04 Mauricie	1,8	1,1	0,3%
05 Estrie	0,3	0,5	0,1%
06 Montréal	-	-	-
07 Outaouais	2,3	0,3	0,1%
08 Abitibi-Témiscamingue	182,4	166,4	43,9%
09 Côte-Nord	31,5	13,5	3,6%
10 Nord-du-Québec	289,7	184,8	48,7%
11 Gaspésie–Îles-de-la-Madeleine	3,5	1,9	0,5%
12 Chaudière-Appalaches	3,8	1,8	0,5%
13 Laval	-	-	-
14 Lanaudière	c	-	-
15 Laurentides	2,2	1,1	0,3%
16 Montérégie	c	c	-
17 Centre-du-Québec	0,0	0,0	-
Total	526,1	379,3	100%

c: confidential data
Source: Institut de la statistique du Québec

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
1	**32F12**	**Vezza, Noyon**	**North American Palladium Ltd / Agnico-Eagle Mines Ltd**	**Vezza**	**Au**	**D (74:12105), GpMa(A)**
			Project description: A new resource estimate for the Vezza deposit established measured and indicated resources totalling 1.51 Mt at 5.9 g/t Au (288,600 gold ounces) and inferred resources of 0.75 Mt at 5 g/t Au (121,500 gold ounces), based on a cut-off grade of 3.0 g/t Au.			
2	32F11, 12	Lozeau, Comporté, Galinée, Isle-Dieu	Apella Resources Inc.	Iron-T	Fe-Ti-V	D (17:2222), G, GpMa(G), Re, S, TE
			Project description: Inferred resources were estimated at 11.63 Mt at 0.4% V_2O_5, 37.88% Fe_2O_3 and 6.33% TiO_2. Three mineralized zones were discovered (T1, T2, T3). A channel sample from the T3 zone yielded grades of 0.42% V_2O_5, 41.64% Fe_2O_3 and 7.73% TiO_2 over 11.75 m.			
3	**32F08, 09**	**Le Sueur**	**Metanor Resources Inc.**	**Bachelor**	**Au**	**D (x:1000), FM, Re**
			Work to deepen the shaft began on December 20, 2010. Pre-feasibility study underway looking at the possibility of resuming mining operations at the Bachelor Lake mine in 2012.			
4	32F08, 09	Le Sueur	Metanor Resources Inc. / Aur Resources Inc. / Teck Cominco Ltd	Hewfran	Au	D (x:600), T, TE
			Project description: Discovery of a gold zone (Zone 3), 2 km west of the Bachelor mine mill, composed of E-W-trending quartz veins, which yielded up to 14.80 g/t Au in grab samples.			
5	32F08	Nelligan, Benoist	Adventure Gold Inc.	Céré-113	Au	GpMa(G), Pr, TE
6	32F08, 09	Le Sueur, Nelligan, Benoist	Murgor Resources Inc. / Metanor Resources Inc.	Nelligan	Au	D (x:500), TE
7	32E14	Brouillan	NQ Exploration Inc.	Carheil	Cu-Zn-Au-Ag	D (5:3161), GpEm(B), Gs(r)
			Project description: At the Nordest showing, drill holes intersected felsic volcanic rocks locally altered to black chlorite. Best results include 0.26% Zn, 1.78% Cu, 4.78 g/t Au and 18.5 g/t Ag over 1.3 m (drill hole CA-2009-07) and 1.66% Zn and 550.0 g/t Ag over 10.5 m (drill hole CA-2009-05).			
8	32E09, 16	La Gauchetière	Xstrata Canada Corporation / Donner Metals Ltd	PD1	Zn-Cu-Au-Ag	D (24:3090), FM, Re
			Project description: The new combined measured and indicated resource estimate for the PD1 deposit is 1.74 Mt at 4.55% Zn, 1.16% Cu, 19.88 g/t Ag, from 25 to 515 metres depth.			
9	*32F12, 13*	*Daniel*	*Xstrata Canada Corporation - Xstrata Zinc Canada Division*	*Perseverance Mine*	*Zn-Cu-Au-Ag*	*D(x:x)*
10	**32F02, 07**	**Grevet**	**Breakwater Resources Ltd**	**Langlois Mine**	**Zn-Cu-Ag**	**TE**
			Project description: The mine was shut down in November 2008. Development of two ramps to access zones 3, 4 and 97 and exploration drilling are currently underway at the mine in preparation for the resumption of operations in 2012.			
11	32F13	Daniel, Isle Dieu	Xstrata Canada Corporation / Donner Metals Ltd	Radiore (North Flank)	Zn-Cu-Au-Ag	D (3:1512)
			Project description: Drill hole DR-82-1Aext. intersected the depth extension of the Radiore No 2 (Cu-Zn-Au-Ag) volcanogenic massive sulphide deposit, with grades of 2.35% Cu, 0.13% Zn, 2.59 g/t Ag and 0.07 g/t Au over 8.9 m.			
12	32F12	Noyon	Société d'exploration minière Vior inc.	Noyard	Au	D (x:x)
13	32F12	Galinée	Xstrata Canada Corporation / Donner Metals Ltd	Galinée 14	Cu-Zn-Au-Ag	D (x:x)
14	32F13	Daniel	Xstrata Canada Corporation / Donner Metals Ltd	West New Hosco	Zn-Cu-Au-Ag	D (1:700)
15	32F13, 32E16	Daniel, La Gauchetière	Xstrata Canada Corporation / Donner Metals Ltd	McIvor	Zn-Cu-Au-Ag	D (3:2046)

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
16	32F13	Daniel	Xstrata Canada Corporation / Donner Metals Ltd	North Perseverance - DJV	Zn-Cu-Au-Ag	D (3:2112)
			Project description: Drill hole DJV-10-84 intersected a thin copper-rich sulphide horizon in a gabbro intrusion (1.44% Cu over 0.4 m).			
17	32F13	Galinée	Xstrata Canada Corporation / Donner Metals Ltd	South Flank	Zn-Cu-Au-Ag	D (1:651)
18	32F13	Lozeau	Geodefor inc. / D. Bouchard	Lozeau	Au-Cu-Zn	D (1:20)
19	32F15, 16	Montviel, Urfé	Ressources Géoméga inc. / Niogold Mining Corporation	Montviel	REE-Nb	D (x:700),TE
20	32F01, 02	Ralleau, Wilson	Megastar Development Corporation	Ralleau	Cu-Zn-Au-Ag	G, Pr
21	32F01, 02	Mountain	Breakwater Resources Ltd	Orphée	Zn-Ag	D (x:10000), GpEl(G), GpEm(B)
22	32F02, 07	Duplessis, Grevet	Breakwater Resources Ltd	Langlois North	Zn-Ag	GpEm(B), Gs(r)
23	32F02, 03	Quévillon, Verneuil	Hinterland Metals Inc.	Moulin	Au	TE
24	32F02	Quévillon	Hinterland Metals Inc.	Rouge	Au	TE
25	32F02, 07	Grevet, Franquet	Kirrin Resources Inc. / M. Proulx	Grevet ETR	REE	G, GpMa(G), Gs(r,sl), Pr, S, T, TE
			Project description: Sampling of a carbonatite dyke yielded a grade of 1.61% light rare earth oxides (La, Ce, Pr, Nd, Sm). Another sample collected in a thin (2.5 cm wide) carbonatite dyke yielded a grade of 14.08% light rare earth oxides.			
26	32F02, 07	Franquet	Ressources Géoméga inc.	Émilie	REE	TE
27	32F03, 04	Comtois, Fraser, Quévillon, Cramolet, Themines	Maudore Minerals Ltd	Comtois	Au-Zn	D (323:82595), Gs(r), Re, TE
			Project description: A new resource estimate encompassing 17 distinct gold zones was released. From surface to 150 m depth, inferred resources are estimated at 4.87 Mt grading 3.2 g/t Au (504,384 gold ounces), based on a cut-off grade of 1.0 g/t Au. Below 150 m depth, inferred resources are 3.25 Mt at a grade of 6.8 g/t Au (1,212,793 gold ounces), based on a cut-off grade of 4.6 g/t Au.			
28	32E10, 11	Estrées	Cogitore Resources Inc. / Iamgold-Québec Inc.	Caribou	Zn-Cu-Au-Ag	D (13:3789), G, GpEM(B,G), Gs(r), TE
29	32G15	Scott, Lévy	Cogitore Resources Inc.	Scott Lake	Zn-Cu-Au-Ag	D (25:10300), G, GpEm(B), Gs(r)
			Project description: Discovery of a massive sulphide lens, dubbed the CFO lens, hosted in a new rhyolite horizon located 100 m north of the Scott rhyolite. Drill hole SL-93-106W intersected 26.7 m grading 2.1% Cu, 5.2% Zn, 24.9 g/t Ag and 0.3 g/t Au. The Scott rhyolite hosts the West massive sulphide Lens (3.6 Mt inferred resources grading 1.1% Cu, 5.2% Zn, 0.3 g/t Au and 36 g/t Ag).			
30	*32F04*	*Chaste, Glandelet*	*North American Palladium Ltd*	*Sleeping Giant Mine*	*Au-Ag*	*D (194:37862), GpEl(G), GpMa(A), Rcd (x:3500)*
			Project description: The first gold pour took place on October 6, 2009. Underground mining progressively increased, reaching commercial production on January 1, 2010. The production shaft is currently being deepened by 200 m. A drilling program to delineate the extensions of known zones was undertaken. Best results include: 14.38 g/t Au over 1.6 m (Zone 30 West, drill hole 85-141-09), 21.9 g/t Au over 1.2 m (drill hole 65-967b-09, Zone 3) and 16 g/t Au over 2.2 m in the new Zone 785N.			
31	32F06	Desjardins	North American Palladium Ltd	Florence	Au	D (4:1377)
32	32F09, 32G12	Lespérance, Gand, Le Sueur	Northern Superior Resources Inc. / Matamec Explorations Inc. / Iamgold-Québec Inc.	Wachigabau	Au-Cu-Zn - Diamond	D (4:900), GpEl(G), GpMa(G)
			Project description: A drilling program was carried out to delineate gold-bearing structures identified in historic drill holes. Best results include 1.69 g/t over 0.82 m (drill hole LS10-020) and 0.56 g/t Au over 0.8 m (drill hole LS10-018).			

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
33	32E09, 10	Montgolfier, Aloigny	Barlow Exploration Inc.	Iron Hills	Fe	D (x:300), GpMa(G)
34	*32E11*	*Casa Berardi*	*Aurizon Mines Ltd*	*Casa Berardi Mine*	*Au*	*D (24:x), FM, Re*
			Project description: Drill holes collared from an exploration drift at level 810 m in the mine intersected gold-bearing lenses along the extension of Zone 123. Gold is hosted in quartz veins, cherty units and massive sulphides. Best results include 42.1 g/t Au over 21.5 m in drill hole CBP-0160. Considering the open pit mining potential in the Principal Area, a new resource calculation estimated measured and indicated resources totalling 5.35 Mt at 4.02 g/t Au and inferred resources of 1.37 Mt at 2.96 g/t Au, based on a cut-off grade of 0.86 g/t Au.			
35	32E11	Casa Berardi, Raymond, Estrées, Puiseaux	Lake Shore Gold Corporation / Aurizon Mines Ltd	Casa Berardi, East Block	Au	D (8::2814)
			Project description: Drill holes in Zone G intersected several gold-bearing intervals. Best results include 11.54 g/t Au over 3.89 m (drill hole CE-10-30). Gold is hosted in an alteration zone composed of lithic wacke, magnetite-rich sedimentary rocks and chert-magnetite iron formation.			
36	32E11, 12	Dieppe	Lake Shore Gold Corporation / Aurizon Mines Ltd	Casa Berardi, West Block	Au	D (23:6000)
			Project description: Drill hole CW-09-23 intersected altered and deformed wacke and graphitic sediments with quartz-ankerite veinlets and pyrite-pyrrhotite-arsenopyrite. Best results include 3.44 g/t Au over 3.91 m (drill hole CW-09-23) .			
37	32E15	Beschefer	SOQUEM INC.	Beschefer	Cu-Au-Zn-Ag	GpEm(G)
38	32E14, 15	Brouillan	SOQUEM INC.	Wagosic	Cu-Au-Zn-Ag	GpEl(G), TE
39	32E14, 15	Brouillan	Xstrata Canada Corporation / Virginia Mines Inc.	Puiseaux Stream	Zn-Cu-Au-Ag	D (2:950), Gs(r)
40	32E14	Carheil, Brouillan	Cogitore Resources Inc.	Selbaie West	Zn-Cu-Au-Ag	Gs(r), Pr
41	32E14, 15	La Peltrie, Lanouillier	Adventure Gold Inc.	Casgrain	Au	GpMa(G), Pr, TE
42	32E15	Beschefer	Adventure Gold Inc.	Sicotte	Au	GpMa(G), Pr, TE
43	**32F12**	**Galinée**	**Canada Xstrata Corporation / Donner Metals Ltd**	**Bracemac-McLeod**	**Cu-Zn-Au-Ag**	**D (15:x), FM, Re**
			Project description: Construction of the Bracemac-McLeod mine began on July 9, 2010. According to the feasibility study, confirmed probable reserves are 3.73 Mt at 9.60% Zn, 1.26% Cu, 28.25 g/t Ag and 0.43 g/t Au. The mine life is estimated at 4 years, at a production rate of 2,500 t/d. Inferred resources in the Deep McLeod Zone were estimated at 2.47 Mt grading 9.21% Zn, 1.22% Cu, 39.81 g/t Ag and 1.12 g/t Au. This new zone is located along the Key Tuffite stratigraphic marker horizon.			
44	32F03, 04	Cramolet, Comtois, Themines, Fraser, Fonteneau, Barrin	Midland Exploration Inc. / North American Palladium Ltd	Laflamme	Au	D (7:2569), GpEl(G), GpEm(A,B), GpMa(G)
45	32G09	Dollier	Cartier Resources Inc.	Dollier	Au	G, GpEl(G), S, T
46	32G09	Queylus	Lounor Exploration Inc.	Queylus	Au-Cu-Ag	D (6:x)
47	32G09	Dollier, Lemoine	SOQUEM INC.	Dollier	Au-Cu-Zn	G, S, T
48	32G08, 09	La Dauversière, Charron, Rohault	Priority Uranium Corporation	Frontline (Malo Lake)	U-Cu-Au	GpMa(G), Pr

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
49	32E08, 09	Douay	Société d'exploration minière Vior inc. / Norvista Gold Corporation	Douay, Douay West, Douay East, Joutel	Au	D (x:12 000), Env, Re
			Project description: A new resource estimate was completed on the Douay West deposit, whereby measured and indicated resources total 313,000 t at 7.75 g/t Au (78,000 gold ounces) and inferred resources total 267,000 t at 8.53 g/t Au (73,232 gold ounces).			
50	32E08	Douay, Joutel	Société d'exploration minière Vior inc. / SOQUEM INC. / Northern Abitibi Mining Corporation	Douay JV, NW	Au	D (7:x)
51	32G02	Bressani	Montero Mining and Exploration Ltd	Yvonne Lake	U-Au	Pr, S
52	32G02, 03, 06, 07	Lespinay, Hazeur, Druillettes, Pambrun, Machault, Langloiserie, Bressani	Northern Superior Resources Inc.	Surprise	Au	GpEl(G), GpMa(G), Gs(sl), S
53	32F01, 32G04	Effiat	Semeco Inc.	Urban	Au	G, Pr
54	32G04	Urban, Lacroix	Amseco Exploration Ltd	Urban West	Au	GpMa(G)
55	32G04	Carpiquet, Urban	Amseco Exploration Ltd	Urban Moïse	Au	GpMa(G)
56	32F01, G04	Carpiquet, Effiat	Amseco Exploration Ltd	Urban Oasis	Au	GpMa(G)
57	32G04	Carpiquet	Hinterland Metals Inc.	Lockout	Au	D (13:2105)
			Project description: Drill holes intersected gold-bearing intervals along the contacts between a graphitic unit and mafic lavas, injected with porphyry dykes. Best results include 5.9 g/t Au over 3.0 m within a larger interval grading 1.9 g/t Au over 14.1 m (drill hole LK10-25).			
58	32G04	Urban	Eagle Hill Exploration Corporation / Noront Resources Ltd / Murgor Resources Inc. / Freewest Resources Canada Inc.	Windfall Lake	Au	D (57:17340), GpEl(G), GpEm(G)
			Project description: Drill holes in the Gold Zone 27 intersected several mineralized intervals. Best results include 17.36 g/t Au over 12 m (drill hole EAG-10-240). Mineralization consists of pyrite-rich veins hosted in silicified and sericitized rhyolite.			
59	32G04	Barry, Urban, Carpiquet	Amseco Exploration Ltd	Barry-Urban	Au-Cu-Zn	GpEl(G), GpMa(A,G), Pg, S, TE
60	32G04	Urban	Amseco Exploration Ltd / Beaufield Resources Inc.	Rouleau Lake	Au	GpEm(G), GpMa(A,G), Pr
61	32G04	Urban, Belmont, Lacroix	Stellar Pacific Ventures Inc.	Urban Lake	Au	D (x:x), Gp, S, TE
62	32G04	Urban	Alto Ventures Ltd	Alcudia	Au	D (x:x), S, T
63	32G04	Urban	Urbana Corporation	Macho River Gold Mines Ltd	Au	GpMa(G), TE
64	32G06, 07	Gradis, Druillettes	Paget Minerals Corporation	Doda Lake	Au	D (x:x), GpEm(G), GpMa(G)
65	32G07	Hazeur, Druillettes	Golden Share Mining Corporation / B. Boudreault	Vent d'Or	Au	G, GpEm(G), GpMa(G), Gs(t), Pr
66	32G15	Lévy	Explorateurs-Innovateurs de Québec inc.	Opémisca	Cu-Au	D (19:1900), GpEl(G), T, TE

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
67	32G10	Rale, Brongniart, Lescure, Brochant	L. Desgagné	Sebastien Lake	Mo-REE	S
68	32G10	Brongniart, Rale, Fancamp, Hauy	G.L. Géoservice inc. / M. Bouchard	WinWin	Au	G, S, T
69	32G09, 10	Fancamp, Queylus, La Dauversière, Hauy	Tawsho Mining Inc.	Chevrier	Au	TE, Re
			Project description: A new resource estimate for the Chevrier deposit established inferred resources of 4.6 Mt at 1.99 g/t Au (295,000 gold ounces) from surface to 250 m depth, based on a cut-off grade of 1 g/t Au. The gold mineralization consists of quartz-ankerite-pyrite veins injected in gabbroic and volcanic rocks.			
70	32G09, 16, 32H13	Lemoine, Rinfret, Dollier	Blackrock Metals Inc.	Blackrock	Fe-V-Ti	D (77:20803), Env, FM, Met
71	32G16	McKenzie	SOQUEM INC.	David	Zn-Au	D (2:800)
72	32G14, 32J03	Guettard, Lamarck	Acrex Ventures Ltd / G.L. Géoservice inc. / M. Bouchard	Grizzly-Kellar	Au	D (5:500), G, GpEl(G), S
73	32G14	Lamarck	Sirios Resources Inc. / G.L. Géoservice inc. / M. Bouchard	MTK	Au-Ag-Cu	Pg, S
74	32G11	Guercheville	SOQUEM INC.	Fenton	Au	S, T
75	32G11, 14	Anville, Dolomieu, Daubree	Ressources Géoméga inc.	Oriana	Au	TE
76	32G12	Gand	NQ Exploration Inc. / Globex Mining Enterprises Inc.	Shortt Lake	Au	Gs(r), Pr, TE
77	32G12	Gand, La Roncière	NQ Exploration Inc. / Inmet Mining Corporation / SOQUEM INC.	La Roncière	Au	G, Gs(r), Pr, T
78	32G12	Gand	NQ Exploration Inc.	Gand I	Au	G, Gc(r), Pr, S
79	32G12	Lespérance	NQ Exploration Inc.	Opawica	Au	G, Pr
80	32G05	Margry, Le Tac	L. Desgagné	Nicobi	Cu-Ag-Au	E, T
81	32K01	Bernières, Monseignat	Z-Gold Exploration Inc.	Coda	Zn	D (3:1000), GpEm(G), GpMa(G), Pr
82	32G03, 32B14	Buteux	L. Desgagné	Buteux	Au	S,T
83	32G10	Rale	Stellar Pacific Ventures Inc. / 9148-5706 Québec inc. / G.L. Géoservice inc. / M. Bouchard	Monster Lake Gold	Au	D (x:3000), Gs(r), Pr, S, T, TE
			Project description: A stripping and channel sampling program was carried out on a series of gold showings. On the Mégane showing consisting of a mineralized and altered shear zone injected with a black quartz vein, best results include 9.71 g/t Au over 5.2 m and 3.24 g/t Au over 7.2 m.			
84	32G06, 11	Drouet, Gradis, Druillettes	Cartier Resources Inc.	Diego	Au	Pg, S, TE
85	32G07, 10	Rale, Hazeur, Druillettes	Agnico-Eagle Mines Ltd	Windy Lake	Cu-Zn-Au-Ag	D (x:1000)
86	32G16	McKenzie, Roy	Agnico-Eagle Mines Ltd	Blondeau	Au-Cu	D (4:2000)

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
87	32G09	Charron, Dollier, La Dauversière, Queylus	Arianne Resources Inc.	R-14 (La Dauversière)	Au-Ag	S, T
88	32G15, 16	Barlow, McKenzie	Alexandria Minerals Corporation	Gwillim	Au	D (4:x)
89	32G16	McKenzie	Agnico-Eagle Mines Ltd	Gwillim Fault	Au	D (4:x)
90	32G16	Roy	Agnico-Eagle Mines Ltd	Roy	Cu-Zn-Au-Ag	D (2:x)
91	32G16	McKenzie	2736-1179 Québec inc.	Sauvage Lake	Au-Cu	D (x:1443)
92	32G16	Obalski	2736-1179 Québec inc.	Noll Island	Cu-Au-Fe-Ti-V	D (x:3297)
93	32G15, 16	Obalski, Scott	2736-1179 Québec inc.	Caché Lake	Cu-Au-Fe-Ti-V	D (6:918)
94	32G15, 16, 32J01, 02	Barlow, Blaiklock, McKenzie, Richardson	Murgor Resources Inc.	Waconichi	Au	Gs(r,t), GpEm(A), S, TE
95	32G16	McKenzie	SOQUEM INC.	McGold (MOP II)	Au-Cu	D (10:2540)
96	32G16	McKenzie	SOQUEM INC.	Brosman	Cu-Au	D (x:x)
97	32E10	Estrées, Estrades, Orvilliers	Cogitore Resources Inc.	Estrades	Zn-Cu-Au-Ag	D (5:1823), Gc(r), GpEm(B,G), S, TE
98	32E01, 32F04	Maizerets, Chaste, Glandelet, Soissons	North American Palladium Ltd	Dormex	Au	D (21:9966), GpEl(G), Rcd (x:x)
99	32F06	Noyelles	Otish Energy Inc.	Noyelles	Au	D (x:1000), TE
100	32F06	Bruneau, Desjardins	North American Palladium Ltd	Discovery	Au	D (40:495)
101	32F07	Desjardins	North American Palladium Ltd	Flordin	Au	D (212:25720)
			Project description: A new resource estimate established measured and indicated resources at 0.68 Mt grading 4.25 g/t Au and inferred resources at 1.45 Mt grading 3.63 g/t Au.			
102	32F06, 07	Desjardins	North American Palladium Ltd / Canadian Royalties Inc.	Cameron Shear	Au	D (12:3567)
103	32F02	Franquet, Grevet	Breakwater Resources Ltd	Wedding River	Au	D (x:1500), GpEm(G), GpMa(G), T
104	32F07	Duplessis, Mountain	Breakwater Resources Ltd	Duplessis-Mountain	Au	D (x:1500), T
105	32F06	Bruneau	Adventure Gold inc.	Bruneau-Sinclair	Au	D (1:738), GpMa(G), Pr, S, TE
106	32E10	Puiseaux, Orvilliers	GLR Resources Inc.	Puiseaux	Au-Cu-Ag	D (3:1800),GpEl(G), GpMa
107	**33A16**		**Stornoway Diamond Corporation / SOQUEM INC.**	**Foxtrot**	**Diamond**	**D (91:7830), Env, FM, Re**
			Project description: The joint venture started a feasibility study and an environmental and social impact study on the Renard diamond project, to be completed in the third quarter of 2011. Depth extension of the Renard 3, 4, and 65 kimberlite pipes.			
108	33A08, 09,15, 16, 33H01, 23D12,13		Dios Exploration Inc.	33Carats	Diamond-Au	G, Gs(t), Pr

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
109	33A08		Eastmain Resources Inc.	Eastmain Mine	Au-Ag-Cu	D (46:14584), G, Gs(r,sl), Pr, S
			Project description: Drill hole EM-10-04 intersected 7.51 g/t Au, 3.49 g/t Ag, and 0.24% Cu over 7.83 metres (320.3-328.2 m) under the Mine A Zone. Results from drilling in the A, B, and C zones indicate the latter remain open at depth and along strike. Pyrite, pyrrhotite, and chalcopyrite mineralization occurs in altered basalts and rhyolitic tuff units injected with quartz veins.			
110	32P16, 22M13		Cameco Corporation	Otish South	U	D (11:3400), GpEm(A), GpMa(A), GpGr(G)
111	32P16, 33A01		Ditem Explorations Inc.	Otish Uranium	U	D (4:479), GpEm(G), GpRa(G)
112	**32P16, 33A01**		**Strateco Resources Inc.**	**Matoush**	**U**	**D (18:10268), Gp(A)**
			Project description: Discovery of a new lens, MT-36, about 1.5 km south of the three known lenses on the Matoush project, where drill hole MT-10-011 intersected 5.1 metres at a grade of 0.33% U_3O_8, including a 0.70-m section grading 2.21% U_3O_8.			
113	32P16, 33A01		Strateco Resources Inc.	Matoush Extension	U	Gp(A), Pg
114	32P16		Strateco Resources Inc.	Éclat	U	D (47:27589), Gp(A)
115	32P16		Strateco Resources Inc. / Pacific Bay Minerals Ltd	Pacific Bay	U	D (3:1989), Gp(A), Pr
			Project description: Discovery of a uraniferous structure, dubbed the "Alfred Fault", similar to the Matoush Fault on the Matoush project, located 4 km further east.			
116	32P10, 15, 16, 22M13, 33A01		Dios Exploration Inc.	Hotish	U-Diamond	Pg
117	**33A02**		**Western Troy Capital Resources Inc.**	**MacLeod Lake**	**Cu-Mo-Ag-Au**	**Env, FE, Rcd(20:65)**
118	23D02		Virginia Energy Resources Inc.	Magneron Lake	U	S, T
119	23D03		Virginia Energy Resources Inc.	Redgreen	U	S, T
120	23D03		Abitex Resources Inc.	Epsilon	U-Au-Ag-Pb	D (21:1159), G, GpMa(G), GpRa(G), Pr, T, S
			Project description: Channel sampling on the Epsilon-B showing yielded 9.6 metres at 0.413% U_3O_8 and 1.14 g/t Au, and 5.1 metres at 0.449% U_3O_8 and 0.84 g/t Au.			
121	23D02, 03		Abitex Resources Inc. / Areva NC Inc. / SOQUEM INC.	Lavoie	U-Au-Ag-Pb	Gs, Re, TE
			Project description: Indicated resources are estimated at 391,000 t grading 0.45% U_3O_8 and inferred resources at 749,000 t at 0.56% U_3O_8 for all zones in the "L" deposit.			
122	23D04, 05, 06		Majescor Resources Inc. / Virginia Energy Resources Inc.	Lappare Lake	U	S, T
123	32J10		Globestar Mining Corporation / SOQUEM INC.	Moblan Lithium	Li-Na-K feldspar	D (99:13456), Met, Re
			Project description: The drilling campaign confirmed the continuity of the pegmatite sill over at least 700 metres strike length, by nearly 40 metres in thickness; drill hole 1331-10-89 intersected 44.4 m at a grade of 1.94% Li_2O.			
124	32J09, 10, 11 15, 16, 32O01		Beaufield Resources Inc. / Melkior Resources Inc.	Troilus JV	Cu-Zn-Au-Ag	D (22:7132), GpGr(A)
			Project description: Drill hole TO-10-19, drilled parallel to the fold hinge at the Tortigny deposit, intersected 322.15 metres grading 4.20% Zn, 2.72% Cu , 0.19% Pb, 500.93 g/t Co, 72.02 g/t Ag and 0.53 g/t Au.			
125	32J10		Western Troy Capital Resources Inc.	Troilus	Cu-Mo	Pg
126	32K11, 12		Western Troy Capital Resources Inc.	Eider	Cu-Au-Ag-Pd	Pr, S
127	32K09		Canadian Royalties Inc.	Foreurs	Cu-Ni	GpEm(G), GpMa(G)
128	32K13		Canadian Royalties Inc.	Horden	Cu-Ni	GpEm(G), GpMa(G)

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
129	32O12		Nemaska Exploration Inc.	Whabouchi	Li-Rb-Be	D (82:15670), Er, G, Pr, Re, S, T, TE
			Project description: Measured and indicated resources are estimated at 9.8 Mt grading 1.63% Li_2O and 449 ppm BeO, and inferred resources at 15.4 Mt grading 1.57% Li_2O and 420 ppm BeO .			
130	32O11, 12, 14		Nemaska Exploration Inc.	Levac Lake	Cu-Ni-Co-PGE-Au-Ag-Zn	D (2:1200), G, Pr
			Project description: Drill intersection grading 1.17% Ni, 1.94% Cu, 0.05% Co, and 1.84 g/t Pd over 6.5 m, aproximately 100 metres deeper than measured and indicated resources estimated at 2.0 Mt grading 1.06% Ni and 0.55% Cu.			
131	32O11, 12, 13, 14		Nemaska Exploration Inc.	Arques Lake (Bouvier, Rupert Complex)	Cu-Ni-Co-PGE-Au-Ag-Zn	D (2:400), G, Gs(sl), GpEm(A), GpMa(A), Pr, S, T
132	32O12, 32N09		Nemaska Exploration Inc.	Lac des Montagnes (Duval)	Cu-Ni-Co-PGE-Au-Ag-Zn	G, GpEl(G), Pr, S, T
			Project description: Discovery of an exhalative massive sulphide horizon, from 1 to 4 metres thick by 12 km long, Bouvier conductor.			
133	33B03		Virginia Mines Inc.	Auclair	Au	D (13:4033)
134	33B02, 03, 04		Goldcorp Inc./ Azimut Exploration Inc.	Wabamisk	Au-Ag-Cu-Zn-Pb-Mo	D (8:1976), G, Pr, S, T
			Project description: Anomalous gold, arsenic and antimony values. In drill hole: 1.22 g/t Au over 10.0 m; in trench: 8.26 g/t Au over 1.0 m.			
135	33B04, 05		Eastmain Resources Inc.	Clearwater	Au-Bi-Te	D (39:9255), G, Gs(sl), Met, Re, S, T
			Project description: Discovery of quartz-tourmaline-gold veins (SNL showing), with grades up to 41.5 g/t Au and 23.10 g/t Te, about 2.5 km east of the Eau Claire gold deposit. Potential for a low-grade near-surface gold zone outlined in a target area north of zone 850 W.			
136	32J11		Nemaska Exploration Inc.	Sirmac	Li	Pg
137	32N14,15		Sirios Resources Inc. / Dios Exploration Inc.	Pontax-Lithium	Li-Rb-Be-Ta-Cs	S(x:x)
138	33B09, 10, 16		Dios Exploration Inc.	PAM	U-Au	Pg
139	33C01, 08, 33B04, 05		Dios Exploration Inc.	U33	Au-Ag-Pb-Zn-Diamond	G, GpEl(G), GpMa(A), Gs(t), Pr
			Project description: Discovery of the "Conductor" gold showing (East block), where channel samples yielded grades of 4.9 g/t Au, 14 g/t Ag, 0.28% Pb and 0.125% Zn over 1.0 metre in silicified, carbonatized and chloritized basalts with disseminated sulphides, cut by cm-scale mineralized quartz veins.			
140	33C01, 02, 07, 08		Eastmain Resources Inc.	Reservoir	Cu-Au-Ag	Pg
141	33C01		Jourdan Resources Inc.	Pivert East / Stairs	Li-REE	GpMa(A), GpRa(A), Pg, S
142	33C01		First Gold Exploration Inc.	Pivert/ Rose Lithium	Li-Ta-Rb-Cs-Be	D (139:17000), G, Pg, Re, S, T
			Project description: Several new drill intersections of spodumene-bearing pegmatite dykes, including in drill hole LR-10-110, where a 12.6-m interval graded 2.15% Li_2O, 1,594 g/t Rb, 150 ppm Ta2O5, 147 ppm BeO and 75 ppm Ga. On the Rose deposit, indicated resources are estimated at 11.44 Mt grading 1.34% Li_2O, 165 ppm Ta_2O_5, 2,668 ppm Rb, 377 ppm BeO and 71 ppm Ga, and inferred resources are 2.17 Mt at 1.27% Li_2O, 138 ppm Ta_2O_5, 1,529 ppm Rb, 311 ppm BeO and 70 ppm Ga.			
143	33C02		Sirios Resources Inc. / Dios Exploration Inc.	Pontax-Diamond	Diamond	G, Pr
144	32N14, 15, 33C01, 02		Sirios Resources Inc. / Dios Exploration Inc.	Pontax	Au-Ag-Cu-Zn-Pb	D (x:x), Gp, Gs, S
145	33C01, 02		Arianne Resources Inc.	Opinaca	Au	Pr, S
146	33C02, 03, 06, 07		Arianne Resources Inc. / Lithium One Inc.	Wabamisk / Komo	Au-Cu-Zn-Li	Pr, S

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
147	33C02, 07		Virginia Mines Inc.	Anatacau / Wabamisk	Au	D (30:4215),G,GpEl(G), GpMa(G), Gs(t), Pr, S, T
			Best drill intersection: 46.5 g/t Au over 4.0 metres.			
148	33C03		Lithium One Inc. / Galaxy Resources Ltd	James Bay Lithium	Li	Met, Re, S
			Project description: Lithium One Inc. released a resource estimate, with 11.75 Mt indicated resources grading 1.30% Li_2O and 10.47 Mt inferred resources grading 1.20% Li_2O.			
149	33C03, 32N14		Rock Tech Lithium Inc.	Kapiwak	Li-REE	Pg
150	33C03		Y. Lemelin	Val Joe Lin	Au-Cu	Pg
151	33B12, 33C09		Goldcorp Inc. (Opinaca Mines Ltd)	Éléonore	Au	D (50:24000), G, Re, S, T
			Project description: In the fourth quarter of 2010, sinking of an exploration shaft to 750 metres depth commenced. Development of a 5.3-km-long ramp is expected to begin in 2011.			
152	33C09, 33B12, 13		Golden Valley Mines Ltd / Sirios Resources Inc.	Cheechoo B	Au	G, GpMa(G), Gs(sl), Pr, S
153	33C09, 33B12		Eastmain Resources Inc. / Goldcorp Inc. (Opinaca Mines Ltd) / Azimut Exploration Inc.	Eleonore South JV	Au	D (17:3622), G, Gs(r), Pr, T
			Project description: Drill results confirmed the km-scale extent of the JT Target near surface, with a drill intersection grading 3.8 g/t Au over 0.5 m.			
154	33C08, 09, 10, 33B02, 03, 06		Midland Exploration Inc.	James Bay Eleonore	Au	Gs(r), Pr, S
155	33C09		Beaufield Resources Inc.	Opinaca	Cu-Au-Ag-Mo	GpEl(G), Pg, S
156	33F03		G. L. Géoservice inc.	Langelier	Au-Cu-Ni-Pd-Pt	Pg, S
157	33F04		Vanstar Mining Resources Inc.	Patica	Au-Cu-Zn	D (9:1090)
158	33F05, 12		Augyva Mining Resources Inc./ Canadian Century Iron Ore Corporation	Duncan Lake	Fe	Env, Met, Re
			Project description: Measured resources are estimated at 5.7 Mt grading 23.29% Fe, indicated resources at 25.6 Mt grading 23.48% Fe, and inferred resources at 821.1 Mt grading 24.56% Fe for deposits 1 to 6 .			
159	33F06		Pro-Or Mining Resources Inc./ Everett Resources Inc.	Ménarik	Cr-Ni-Cu-Au-Pt-Pd	TE
160	33F09, 10		Virginia Mines Inc.	La Grande Sud	Au	D (3:409), G, Gs(t)
161	33B14, 33G03, 04		Sirios Resources Inc. / Dios Exploration Inc.	Upinor	U	Pr, S
162	33G05, 06, 07		Virginia Mines Inc.	Poste Lemoyne Extension	Au	D (x:1043), GpEl(G), GpMa(G), Gs(t), Pg, T
			Project description: Several new showings discovered in 2010, namely in the "David Grid" area, characterized by a broad gold anomaly in till over a distance of 1 km by 250 metres.			
163	33G08, 33H05		Virginia Mines Inc. / Goldcorp Inc.	Corvet East	Au	D (7:3361)
			Project description: A few anomalous gold values in drill holes, including 3.09 g/t Au over 1.05 m, and 1.29 g/t Au over 6.2 m.			
164	33G09, 33H12		Virginia Mines Inc.	FCI	Au	D (11:3035), G
			Project description: Several anomalous gold values in drill holes, including 0.66 g/t Au over 12.0 m, and 0.13 g/t Au over 10.7 m.			
165	33G16		Sirios Resources Inc.	Tilly	Mo-Cu-Au	G, Gs(r), Min
166	33H01, 02, 07, 08, 09, 10, 33G11		Midland Exploration Inc. / Agnico-Eagle Mines Ltd	James Bay Gold	Au	D (10:1520), Gs(r)

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
167	33H08, 09		Virginia Mines Inc.	Nichicun-Escale	Au	Pr, S, T
			Project description: A few new gold showings were discovered, with grades of 1.02 g/t Au over 5.7 m and 1.19 g/t Au over 4.0 m in channel samples.			
168	33H09		Sirios Resources Inc. / Virginia Mines Inc.	Escale	Au-Zn	Gp, Gs
169	33H09		Somdra Inc.	Duhesme Lake	Au-Cu-Ag	S, T
170	33I02		Golden Tag Resources Ltd / Sirios Resources Inc.	Aquilon Main	Au	Met, D (x:1400)
			Project description: Several drill intercepts with more than 1 ounce of gold per ton are reported in the Lingo Vein, following a series of vertical holes less than 100 metres deep drilled over a strike length of 40 metres.			
171	33H15		Stornoway Diamond Corporation / Virginia Mines Inc./ SOQUEM INC. / Aurizon Mines Ltd	LG-4 Diamond Consorem	Diamond	GpMa(G), Gs(t), Pg
172	23K13		Virginia Mines Inc.	Pau Lake	Au	D (28:3612), G, GpEl(G), GpMa(G), S, T
			Project description: A gold system has been traced over more than 12 km strike length, in altered and sheared tonalitic intrusions and encompassing several surface occurrences including the Hope showing which graded 3.91 g/t Au over 5.0 m in 2010.			
FAR NORTH (Figure 4.1)						
173	33K16, 33N01, 02		Niocan Inc.	Great Whale Iron	Fe	Met
174	23K13, 23L16, 23M01		Sirios Resources Inc.	Cognac	Au-Cu-Ag-Zn-Pb	Pg
175	34I02, 03		Virginia Mines Inc. / Nunavik Mineral Exploration Fund	Vizien	Au-Ag-Cu-Zn	Pg
176	34P11, 14		Virginia Mines Inc. / Nunavik Mineral Exploration Fund	Pelican	Au-Ag-Cu-Zn	Pg
177	23M15, 16		Fission Energy Corporation	Dieter	U	D (x:x)
178	34O07, 10, 11, 14, 15		Azimut Exploration Inc./ Aurizon Mines Ltd	Rex South	Cu-Au-Ag-W-Zn-Mo	GpMa(A), GpRa(A), Gs(l), Pg, S
			Project description: The joint venture reported the discovery of zones with copper-gold-silver-tungsten-molybdenum-zinc mineralization (Augossan, Larissa, Le Breuil) based on grab samples collected on surface, associated with sheared mafic metavolcanic rocks, paragneisses, and granitic, pegmatitic, and aplitic dykes.			
179	34G12, 24F02, 04, 23C11, 12, 13, 14, 15, 24C04, 12, 24J10, 23M06, 11, 14, 24D14, 23D16, 24E01, 33N03		Azimut Exploration Inc./ Kativik Resources Inc.	Kativik	U-REE	Pg, S
LABRADOR TROUGH (Figure 4.1)						
180	23O03		New Millennium Capital Corporation	KeMag	Fe	GpMa(A), GpGr(A)
181	23O03, 23J14, 15		New Millennium Capital Corporation / Tata Steel Minerals Canada Ltd	DSO	Fe	D (x:x), GpMa(A), GpGr(A), Gs, S
182	23O03		Beaufield Resources Inc.	Schefferville	Au-Zn-Fe	GpEm(A), GpGr(A), GpMa(A), GpRa(A)
183	23O03, 05, 06		0849873BC Ltd	Rainy Lake	Fe	D (x:x)
184	23O03, 06		0849873BC Ltd	Iron Lake	Fe	D (x:x)

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
185	23O04, 05, 23J13, 14		Western Troy Capital Resources Inc. / Rockland Minerals Corporation	Shefferville Gold	Au-Ag-Zn-Pb	D (12:1525), G, Gs, Pr, S
			Project description: About 50 km northwest of Schefferville, in the Ashuanipi Subprovince, the company reported two gold-bearing drill intersections under the Arsène showing. Drill hole RL10-17 intersected 1.20 m grading 6.63 g/t Au (11.45-12.65 m) and 1.10 m grading 9.02 g/t Au (57.30-58.40 m).			
186	23P05		Western Troy Capital Resources Inc.	Deborah Lake	Cu-Au-Ni	GpEm(A), Pg, S, T
			Project description: Several copper assays reaching 5.74% Cu and 6.4 g/t Au were announced for grab samples collected on the Deborah Lake project.			
187	23O03		Western Troy Capital Resources Inc. / Key Gold Holdings	Franelle Copper	Cu	Pg, S
188	23P04, 23O01, 08		Western Troy Capital Resources Inc. / Match Capital Resources Corporation	Indian Lake	Cu-Zn-Au-Ag-Ni-PGE	Pr, S, T
189	23N16, 24C01, 02		Adriana Resources Inc.	Otelnuk Lake	Fe	D (40:5680), Env, G, Met, S
			Project description: In early 2010, the South Zone contains indicated resources estimated at 4.29 billion tonnes at 29.08% Fe and inferred resources of 1.97 billion tonnes at 29.24% Fe.			
190	34K04, 05, 24F13, 14		Canadian Royalties Inc.	Gerido	Ni-Cu-Co-PGE	G, GpEm(A), GpMa(A), Pg
191	24C15, 16, 24F01		Commerce Resources Corporation	Eldor	REE-Ta-Nb-U-F	D (21:5390), G, GpEm(G), Pr, S, T
			Project description: Drill hole EC10-046 intersected 303.42 metres (55.15-358.57 m) grading 2.02% REE_2O_3 in the Ashram zone.			
UNGAVA TROUGH (Figure 4.1)						
192	35G, 35H		Goldbrook Ventures Inc. / Jilin Jien Nickel Industry Co. Ltd	Raglan	Ni-Cu-Co-PGE	D (131:23075), G, GpEM(B), GpMa(G), Gs(h), Gs(s), Gs(sl), Gs(t), Pr, S
			Project description: Discovery of a new mineralized system in the Echo Ultramafic Complex (drill hole ECH10-021: 0.46% Ni, 0.93% Cu, 0.03% Co, 3.93 g/t PGE + Au over 21.00 m). Also, the joint venture estimated indicated resources of 5.64 Mt grading 0.60% Ni, 0.66% Cu, 0.03% Co, 0.07 g/t Au, 0.32 g/t Pt and 1.31 g/t Pd in the Bravo, Getty, Mystery, Pad, Timtu, and Sylvie deposits, and inferred resources of 1.77 Mt grading 0.56% Ni, 0.55% Cu, 0.03% Co, 0.06 g/t Au, 0.29 g/t Pt and 1.27 g/t Pd in the Bravo, Getty, and Mystery deposits.			
193	*35G09, 35H11, 12*		*Xstrata Canada Corporation-Xstrata Nickel Canada Division*	*Raglan Mine*	*Ni-Cu-Co-PGE*	*D (205:42500), GpEm(B)*
194	**35G, 35H**		**Canadian Royalties Inc. / Jien Canada Mining Ltd**	**Nunavik Nickel Mine**	**Ni-Cu-Co-PGE**	**D (120:20500), G, GpEm (B,S), GpMa(S), Pr, S**
			Project description: Definition and delineation work on the Allamaq, Expo and Mesamax deposits. Delineation of the Endah showing.			
195	35F01, 08		Canadian Royalties Inc.	Begin	Ni-Cu-Co-PGE	G, Pg
196	35F08, 35G05, 06		Anglo American Exploration (Canada) Ltd / Knight Resources Ltd	West Raglan	Ni-Cu-Co-PGE-Zn-Au	D (21:4998), G, GpEm(B,G), GpMa(G), Pr, S
			Project description: Drill hole WR-10-189 intersected 3.2 m (69.6-72.8 m) of massive sulphides grading 1.70% Cu, 3.56% Zn and 0.36 g/t Au in a basalt unit.			
197	25C04, 25D01, 08		Virginia Mines Inc. / Anglo American Exploration (Canada) Ltd	Payne Bay	Ni-Cu-Co-PGE	G, Pg
TORNGAT OROGEN AND CORE ZONE (Figure 4.1)						
198	24A08		Quest Rare Minerals Ltd	Strange Lake	REE-Zr-Nb-Be	D (82:16000), G, Gs(r), Met, Re, S, T, TE
			Project description: Quest Rare Minerals Ltd estimated inferred resources in the B-Zone, at 114.8 Mt grading 1.00% REE_2O_3, 1.97% ZrO_2, 0.21% Nb_2O_5, 0.05% HfO_2 and 0.08% BeO. Technical and economic studies are underway.			

TABLE 4.3- Exploration projects in the Nord-du-Québec administrative region in 2010[1] (see Figures 4.1, 4.2 and 4.3).

NOS	NTS	TOWNSHIP	COMPANIES / PROSPECTORS	PROJECT	COMMODITIES	EXPLORATION WORK
199	13M05		Quest Rare Minerals Ltd	Misery Lake	REE-Zr-Nb-Ti-Fe	D (8:1200), G, GpMa(G), Gs(t), Pr
200	24A01, 08, 14D04, 05, 13M12, 13, 13L13		Midland Exploration Inc. / Japan Oil, Gas and Metals National Corporation	Ytterby	REE	GpMa(A,G), GpRa(A,G), Gs(r), Gs(t), Min, Pr, S
			Project description: Discovery of new rare earth element (REE) enriched zones on the Ytterby 2 and Ytterby 3 properties.			
201	24I06, 07		Azimut Exploration Inc.	Daniel Lake	U	Pg, S
202	24I05, 06, 11, 12, 24J09		Azimut Exploration Inc.	Rae North	U	Pg, S
203	24I11		170364 Canada Inc.	Ungava	U	Rsi

1. See the legend of abbreviations and the meaning of bold ans italic type in Appendix 2.

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Eastern part of region 08: Val-d'Or - Amos area						
1	31N14	Villebon	LiteWave Corporation / St-Georges Platinum and Base Metals Ltd / Fancamp Exploration Ltd / Sheridan Platinum Group Ltd	Villebon	Au-Pt-Ni-Cu	D (32:2000)
2	32B04, 05	Baudin, Bourgmont	Cartier Resources Inc.	Decorta	Au-Cu-Zn-Ag	D (x:x), Pr, T, TE
3	32B04, 05, 32C01	Baudin, Trevet	Cartier Resources Inc.	Cadillac Extension	Au-Cu-Zn-Ag	Pr, S
			Project description: A channel sampling program on the Langlade polymetallic deposit (Zn-Cu-Ag-Au) outlined a gold and silver-rich horizon some 3 m thick by 120 m in length. Best channel sample results include 7.68 g/t Au and 333 g/t Ag over 0.85 m.			
4	32B11,12	Deschamps, Juneau, Hanotaux	Threegold Resources Inc.	Mercier	REE	D (14:3112)
			Project description: In the Mercier alkaline intrusive complex, drill holes intersected mineralized zones with rare earth concentrations (0.27% REE_2O_3 over 44.0 m, drill hole MER10-17).			
5	32B13	Barry, Souart	Amseco Explorations Ltd	Urban South	Au	GpEl(G), GpMa(A)
6	32B13	Souart, Barry	KeyGold Holding Inc. / Rivercrest Resources Inc. / Glen Eagle Resources Inc.	Souart	Au	Re,TE
7	32B13, 32G04	Bailly, Barry	BonTerra Resources Inc. / Abitex Resources inc.	Eastern Extension	Au	D (7:958)
			Project description: Drill holes intersected two mineralized zones consisting of veins with smoky quartz and sulphides cross-cutting rocks altered to silica, carbonate, chlorite, tourmaline and sericite. Drill hole BA-10-03 intersected 12.7 g/t Au over 6.75 m.			
8	32B13, 32G04	Barry	BonTerra Resources Inc. / North American Exploration Ltd	Urban - Barry (Lac Barry)	Au	D (3:567), G, GpMa(A,G), Pr
9	*32B13, 32G04*	*Barry, Urban*	*Metanor Resources Inc.*	*Barry Mine*	*Au*	*D (x:3200), GpEl(G), GpMa(G), Re, TE*
			Project description: A new resource calculation for the Barry deposit, including the Main, West, 43 and 45 zones, established indicated resources of 7.70 Mt at 1.25 g/t Au and inferred resources of 10.41 Mt at 1.41 g/t Au, based on a cut-off grade of 0.5 g/t Au, from the surface to 125 m depth.			
10	32C01	Pétain, Esperey	Les Investissements Pierre et Mica inc.	Lac Néron 002	Au-Ag-PGE	Gs(r,sl), T
11	32C02	Tavernier, Pershing	X-Ore Resources Inc.	Lac Tavernier	Au-Zn-Pb-Cu-Ag	GpEl(G)
12	32C02	Tavernier, Pershing, Haig, Jurie	Ressources Aurtois inc.	Stella	Au	TE
13	32C02, 03	Pershing	Forest Gate Energy Inc.	Pershing	Au	TE
14	32C02, 03	Tavernier, Pershing	Exploration First Gold inc. / Brionor Resources Inc.	Matchi-Manitou	Cu-Zn-Ag-Au	D (5:x)
			Project description: The exploration program was designed to test electromagnetic anomalies in intermediate volcanic rocks. Drill hole MM10-03 intersected a silicified, pyritized structure injected with quartz-tourmaline-chlorite veins hosting several gold-bearing horizons, including 6.57 g/t Au over 1 m.			
15	32C03	Louvicourt	Alexandria Minerals Corporation	Sleepy	Au	D (3:x)
16	32C03	Louvicourt	Alexandria Minerals Corporation	Trivio	Au	D (14:x)
17	32C03	Louvicourt	Richmont Mines Inc. / SOQUEM INC.	Monique	Au	D (10:2000), Pr
18	32C03	Louvicourt	Alexandria Minerals Corporation	Orcour	Au	D (32:x)
19	32C03	Pascalis, Vauquelin	Golden Valley Mines Ltd	Pascalis Cu-Zn	Cu-Zn-Ag	D (5:684), Pr, G, Gp(G), S
			Project description: Along the edges of a quartz-biotite vein, a drill hole intersected a sericite-pyrrhotite-rich zone with anomalous copper and zinc values (0.3% Cu and 0.2% Zn over 1.55 m).			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
20	32C03	Pershing	X-Ore Resources Inc. / First Gold Exploration Inc.	Croinor 1	Au	D (x:2794), GpEm(B), TE
			Project description: Positive pre-feasibility study, based on the following scenario: 500 tpd production, 5-yr mine life, proven and probable reserves: 689,829 t at 8.35 g/t Au for a total of 180,629 gold ounces. Received certificate of authorization from the MDDEP to begin dewatering the mine as well as construction and mine development work. Drill holes in the W-West Pit area intersected gold-bearing zones near surface (2.23 g/t Au over 4.0 m; drill hole CR-10-369). Drill holes intersected the depth extension of known lenses, with 5.7 m at 29.3 g/t Au (drill hole CR-10-376). Gold mineralization occurs in 23 distinct zones consisting of quartz veins and their altered, pyritized wall rocks, within a diorite sill.			
21	32C03	Vauquelin	Plato Gold Corporation / Globex Mining Entreprises Inc.	Nordeau	Au	D (3:836), TE
			Project description: Drill hole NE-10-02 intersected 1 m grading 4.51 g/t Au in a mineralized zone hosted in a magnetite-rich iron formation. The mineralized zone consists of quartz-sulphide veins (arsenopyrite-pyrite-pyrrhotite).			
22	32C03	Vauquelin	Golden Share Mining Corporation	Forsan	Au	D (4:546), GpEl(G), Pr,TE
23	32C03	Vauquelin	Threegold Resources Inc. / P.T. Coyle	South Bay	Au	D (5:205), T, S
24	32C03	Vauquelin	Galahad Metals Inc.	Regcourt	Au	D (9:2500), TE
25	32C03	Vauquelin	Blue Note Mining Inc. / X-Ore Resources Inc.	Chimo	Au	D (x:1037)
			Project description: Three drill holes intersected the extensions of gold zones 2 West and 6P at the former Chimo gold mine. In Zone 2 West, drill hole CH-10-01 intersected 4 mineralized horizons; best results are 18.25 g/t Au over 1.0 m.			
26	32C03	Vauquelin	170364 Canada Inc.	Rayon d'Or	Au-Ag	GpMa(G), TE
27	32C03, 04	Bourlamaque, Louvicourt	Alexis Minerals Corporation	Dunraine	Ag-Au-Zn	GpEm(G), TE
28	32C03, 04	Bourlamaque, Louvicourt	Alexis Minerals Corporation / Novicourt Inc.	Louvex	Base metals	D (3:2857), GpEm(B,G), Pr
			Project description: Deep drill hole 17314-11 intersected the Deep West Zone at a vertical depth between 1000 and 1350 m. Best results include 0.40% Cu over 37.4 m.			
29	32C03, 04	Pascalis	X-Ore Resources Inc.	Pascalis	Au	G, Pr
30	32C03, 04	Pascalis, Louvicourt	Adventure Gold Inc.	Pascalis-Colombière	Au	Er, S(2:625)
			Project description: Best results include 8.2 g/t Au over 1.0 m in a wider mineralized zone grading 0.8 g/t Au over 13.4 m (drill hole PC-09-08), hosted in a gabbro dyke.			
31	32C03, 06	Tiblemont, Tavernier	Adventure Gold Inc.	Mégiscane-Tavernier	Au-Cu	GpMa(S), Pr, TE
32	32C04	Bourlamaque	Alexandria Minerals Corporation	Orenada	Au	D (20:x)
33	**32C04**	**Bourlamaque**	**Century Mining Corporation**	**Lamaque Complex**	**Au**	**B(20 000:x), D (x:45 000/3 yrs), RM**
			Project description: An underground development, exploration, and drilling program totalling 45,000 m began in 2010 and will continue over three years. In the Bédard Dyke, drill holes intersected several gold-bearing structures (ex: 10.06 g/t Au over 1.92 m, drill hole 2610-7). Underground work at Lamaque was suspended on July 2, 2008 but resumed in January 2010. The first gold pour took place on May 3, 2010. Ore is mined in three distinct zones: Lamaque Flats, Bédard Dyke and North Wall. At Lamaque, gold occurs in shallowly-dipping auriferous quartz veins ranging from 5 to 90 cm in thickness. Data compilation and modelling of resources under the Sigma pit were updated, leading to an increase in measured and indicated resources, to 6.5 Mt at 5.02 g/t Au. Reserves still stand at 7.7 Mt grading 4.6 g/t Au.			
34	*32C04*	*Bourlamaque*	*Alexis Minerals Corporation*	*Lac Herbin Mine*	*Au*	*D (x:x)*
			Project description: In 2009, a major drilling program led to a substantial increase in reserves at the mine, to 617,374 t at 7.36 g/t Au. As a result, the mine life is increased to 5 years. The Aurbel gold mill, located less than 1 km from the Lac Herbin mine, resumed oprations on February 25, 2010. Occurring as gold-bearing quartz-pyrite veins, the mineralization is hosted in 7 shear zones (HW, WE, HW2, Bonanza, S3, LH and S1) cross-cutting the Bourlamaque Batholith. In 2010, drill results in the HW2 Zone include 25.4 g/t Au over 4.6 m (drill hole LH06-060).			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
35	32C04	Bourlamaque	Kalahari Resources Inc.	Lamaque	Au	D (66:17 479), Re, TE
			Project description: A drilling campaign focused on the Forestel and Triangle zones yielded several intersections with gold-bearing quartz-tourmaline veining, hosted in shear zones that cross-cut mafic volcanic rocks and diorite intrusions. Best results include 10.85 g/t Au over 2.3 m (TM-09-02-A) in the Triangle Zone and 15.05 g/t Au over 1 m (FOR-09-03) in the Forestel Zone.			
36	32C04	Bourlamaque	Alexis Minerals Corporation	Manitou	Au	D (4:3773), GpEm(B,G), Pr
37	32C04	Bourlamaque	Alexis Minerals Corporation	Annamaque	Au	GpEm(G), TE
38	32C04	Bourlamaque	Alexis Minerals Corporation	Faraday	Au	GpEm(G), TE
39	32C04	Bourlamaque, Senneville	Alexis Minerals Corporation	Aurbel	Au-Ag	D (24:10 050), GpEm(B), TE
40	32C04	Dubuisson	Knick Explorations Inc.	East-West	Au	G, GpEm(B), Pr, S, T
			Project description: A gold-bearing shear zone in gabbro, feldspar porphyry and intermediate volcanic rocks, was stripped over 250 m strike length. Drill holes intersected multiple mineralized horizons (10.08 g/t Au over 1.45 m; drill hole LEO-09-33).			
41	*32C04*	*Dubuisson*	*Wesdome Gold Mines Ltd*	*Kiena Complex*	*Au*	*D (94:40 876)*
			Project description: Underground definition drilling program totalling 24,000 m, in the VC, North, 388 and S-50 zones. Underground exploration drilling, for a total of 19,000 m, will test the depth extension of the S50 Zone as well as new targets. In 2010, in the S50 Zone, drill hole U4928 intersected 12.31 g/t Au over 12.8 m.			
42	*32C04*	*Dubuisson*	*Agnico-Eagle Mines Ltd*	*Goldex Mine*	*Au-Ag*	*D (109:38 000), Pr*
			Project description: Definition drilling underwary in the E Zone, along the eastward extension of the GEZ Zone currently being mined, to convert resources into reserves. Exploration drilling in the D Zone, located at depth underneath the GEZ Zone, yielded grades up to 2.04 g/t Au over 160.5 m (drill hole 84-051). Development work is underway in the M Zone, located west of the GEZ Zone, where production is slated to begin in 2013.			
43	32C04	Dubuisson	Wesdome Gold Mines Ltd	Dubuisson	Au	D (x:27 000)
			Project description: About 3 km east of the Kiena mine, a new gold-bearing zone (Dubuisson Zone) was discovered in 2008. The mineralized zone consists of quartz-albite-tourmaline-pyrite veinlets hosted in albitized diorite and fractured feldspar porphyry. Best results, obtained in 2009, include 10.3 m grading 26.1 g/t Au. A drift at 330 m depth will be extended by 1 km to reach the zone. Surface drill holes are planned to test the zone.			
44	32C04	Dubuisson	Adventure Gold Inc. / Agnico-Eagle Mines Ltd	Dubuisson	Au	Te
45	32C04	Dubuisson	Wesdome Gold Mines Ltd	Kiena Bloc Sud	Au	S(95:x)
46	32C04	Dubuisson	Niogold Mining Corporation	Val d'Or	Au	TE
47	32C04	Dubuisson, Vassan	Alexandria Minerals Corporation / Niogold Mining Corporation	Siscoe Est / Vassan	Au	TE
48	32C04	Dubuisson, Vassan	Wesdome Gold Mines Ltd	Wesdome	Au	D (x:5000)
49	32C04	Louvicourt	Adventure Gold Inc.	Lapaska	Au	Re
			Project description: New inferred resource estimate, at 220,000 t grading 3.14 g/t Au, based on a cut-off grade of 2.0 g/t Au, in the Lapaska Central Zone. Gold mineralization is associated with quartz-carbonate-tourmaline-pyrite veins hosted in silicified felsic volcanic rocks.			
50	32C04	Louvicourt	Eloro Resources Ltd / Megastar Development Corporation	Simkar	Au	D (22:8325)
			Project description: Best results include 9.4 g/t Au over 5.9 m in drill hole SK10-12, which intersected a potentially new gold zone underneath the B Zone, located near the former Louvicourt Goldfields mine.			
51	32C04	Louvicourt	Alexandria Minerals Corporation	Lourmet	Au	D (8:x)
52	32C04	Louvicourt	Alexandria Minerals Corporation	Bloc Sud Ouest	Au	D (13:x)

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
53	32C04	Louvicourt, Bourlamaque	Alexandria Minerals Corporation	Akasaba	Au-Ag-Cu	D (54:18 700), G, GpEm(B), S, T
			Project description: Best drill results include low-grade mineralized horizons intersected over wide intervals near the former Akasaba mine (Au-Cu), with grades such as 2.01 g/t Au over 78.77 m (drill hole IAX-10-72). Some higher-grade intervals were also intersected, such as 20.48 g/t Au over 3.3 m (drill hole IAX-09-64).			
54	32C04	Louvicourt, Bourlamaque	Alexandria Minerals Corporation	Sabourin	Au-Ag-Cu	D (20:x)
55	*32C04*	*Pascalis*	*Richmont Mines Inc. / Louvem Mines Inc.*	*Beaufor Mine*	*Au-Ag*	*D (x:55 604)*
			Project description: Surface drilling for a total of 8,551 m was completed on September 21, 2010. Drill holes tested the extensions of the W, 350 and 367 zones, all located south of the mine. Best results include 5.30 m at 29.69 g/t Au in the W Zone (drill hole 80-44) and 0.95 m at 23.57 g/t Au in the 350 Zone (drill hole 35-01). Gold is hosted in quartz-tourmaline-pyrite veins.			
56	32C04	Senneville	Golden Valley Mines Ltd	Lac Laverdière	Au	D (2:235), G, Gp(G), Pr, S
57	**32C04, 32D01**	**Dubuisson, Fournière**	**Northern Star Mining Corporation**	**Midway (Malartic Goldfields)**	**Au**	**Level, raise, B(6000:x), D (x:x), Re, TE**
			Project description: Development of a decline and exploration drifts until work was interrupted in June 2010. A drill hole intersected mineralized gabbro (11.43 g/t Au over 9.23 m; drill hole MU 225W-2) in the Briar Zone.			
58	32C04, 32D01	Malartic, Fournière, Dubuisson, Vassan	Niogold Mining Corporation / Aurizon Mines Ltd	Bloc Marban	Au	D (45:13 674)
59	32C04, 32D01	Vassan, Malartic	Northern Star Mining Corporation	Callahan	Au	D (14:4150)
60	32C04, 32D01	Vassan	Stellar Pacific Ventures Inc.	Vassan	Au	D (x:x), Re
61	32C05	Fiedmont	Corporation minière Animiki ltée			T
62	32C05	Fiedmont	Northern Star Mining Corporation / Britannica Resources Corporation	McKenzie-Break	Au	Ramp, B (x:x)?, D (x:6000), Re, TE
			Project description: Development of an exploration decline in the Murray Zone to 80 m depth and exploration drilling, until work was interrupted in June 2010. Best results include 11.15 m at 5.05 g/t Au in drill hole 10-171.			
63	**32C05**	**La Corne**	**Canada Lithium Corporation**	**Québec Lithium**	**Li**	**B (20:x), D (49:6724), FM, Met, Re**
			Project description: New resource estimation released: measured and indicated resources = 46.67 Mt at 1.19% Li_2O; inferred resources = 57.58 Mt at 1.18% Li_2O, based on a cut-off grade of 0.80% Li_2O. Metallurgical testing and pre-feasibility and feasibility studies were completed in 2010. The base case scenario is for an open pit mine with a production rate of 2,950 tpd, start-up of production anticipated for 2013, and mine life of at least 14.8 years, possibly up to 30 years.			
64	32C05	La Corne	Mineral Hill Industries Ltd	Chubb	Li	Gs(r), GpEm(G)
			Project description: Samples collected in three spodumene-bearing pegmatite dykes yielded grades from 0.01 to 2.84% Li_2O, averaging 0.89%.			
65	32C05	La Corne	Glen Eagle Resources Inc. / S. Leblanc	Glen Eagle	Li	TE
66	32C05	La Corne, Landrienne	Mineral Hill Industries Ltd	Canadian Lithium	Li	D (15:x), TE, G, GpEl, GpMa, Met, S, T
67	32C05	La Corne, Landrienne	Mineral Hill Industries Ltd	Martin McNeely	Li	G, GpEl, GpMa, Met, S, T, TE
68	32C05	Landrienne	J. Frigon	Landrienne	Ni	D (1:x)
69	32C05	Landrienne	Cogitore Resources Inc.	Landrienne	Base metals	Gs(r), TE
70	32C05	Landrienne	Mineral Hill Industries Ltd	Athona	Mo	Gs(r)
			Project description: North of Lacorne Pluton, samples from albitite dykes cross-cutting sedimentary and volcanic rocks yielded grades from 0 to >1.69% MoS_2.			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
71	32C05, 06	Carpentier	Abitex Resources Inc.	Jolin	Au	Re
72	32C05, 06	Courville	Golden Valley Mines Ltd / Kalahari Resources Inc.	Perestroika	Au	D (2:495), TE
			Project description: Within the Uniake deformation zone, two drill holes intersected multiple gold intervals associated with sheared and altered mafic volcanic rocks intruded by quartz diorite. The highest gold grades, such as 20.69 g/t Au over 3.05 m (drill hole GPS09-02) are associated with late quartz-carbonate veins.			
73	32C05, 12	Barraute, Carpentier	Laurentian Goldfields Ltd	Abitibi Greenstone Belt	Au	S, Pr, Gs(l,r,s)
74	32C05, 32D08	Malartic, La Motte, La Corne, Vassan	Romios Gold Resources Inc.	La Corne Molybdenum	Mo-Li	D (5:1000), TE
75	32C06	Carpentier	Titan Resources International Inc.	Cooper Gold	Au	G, Gs(r,sl), GpEm, GpMa, Pr, TE
76	32C06	Carpentier	D. Ferberber			D (x:x), T
77	32C06	Courville	Laurentian Goldfields Ltd	Belcourt	Au	G, Gs(r,sl), TE
			Project description: Grab samples collected in deformed and altered volcanic rocks with 3-5% pyrite yielded gold grades up to 4.23 g/t Au. The samples were collected along the margins of a felsic porphyry dyke altered to sericite and carbonates, within a regional fault zone.			
78	32C06	Courville	Pershimco Resources Inc.	Courville	Au -Tonalite	G, TE
79	32C06	Tiblemont	Les Explorations Carat inc. / J. Robert			T
80	32C11	Ducros, Bartouille	Golden Valley Mines Ltd			D (3:x), T
81	32C11	Rochebeaucourt	3421856 Canada Inc. / R.Tremblay / A. Beaudoin / R. Lamothe	Charlemagne	Au	E, G, Pr, T
82	32C11, 12, 13, 14	Despinassy, Rochebeaucourt	Pacific North West Capital Corporation / Alto Ventures Ltd	Destiny	Au	B(8:3384), Gs(sl), GpEm(B), GpMa(A), Re
			Project description: Best results include 8.46 g/t Au over 3.0 m (drill hole DES10-137) in the DAC deposit, consisting of gold-bearing quartz veins injected in wide shear zones.			
83	32C12	Barraute	Abcourt Mines Inc.	Abcourt-Barvue	Ag-Zn	D (15:4000)
84	32C12	Barraute	Threegold Resources Inc. / A. Beaudoin	Barraute	Au	TE
85	32C12	Duverny	Tres-Or Resources Ltd / Sementiou Inc. / Globex Mining Entreprises Inc. / Aurizon Mines Ltd	Duvay	Au	G, GpMa(G), Pr, Re, S, TE
			Project description: Nineteen channels were sampled. Best results include: 3.56 g/t Au over 4.02 m (samples 36937-36941) and 0.64 g/t Au over 8.0 m (samples 36947-36954).			
86	32C12	Duvernay	Tres-Or Resources Ltd / Sementiou Inc.	East Mac	Au	G, Pr, S
87	32C12	Duverny, Castagnier, La Morandière	Aurizon Mines Ltd	Duvernay	Au	Gs(sl), Pr, S
88	32C12	Duverny, Dalquier	Bowmore Exploration Ltd	Duvernay Gold	Au	Rcd (125:x), G, Gs(r), Pr, S
89	32C12	Duverny, Dalquier	Tres-Or Resources Ltd / Sementiou Inc. / J. Mongrain / H. Lessard / C. Perron	Duvay Nord	Au	GpMa(G)
90	32C12, 13	Vassal, La Morandière	Alto Ventures Ltd	Vassal	Au-Base metals	D (6:1200), GpEm(g)
91	32D01	Fournière	Osisko Mining Corporation	Barnat Extension	Au	D (80:18 000)
			Project description: The Barnat Extension comprises two mineralized zones: the northerly extension (Sheehan Zone) is located within the Cadillac Fault and is hosted in a mineralized porphyry enclosed in altered and sheared ultramafic rocks. The southerly extension (Mammoth Zone) is located south of the Cadillac Fault, in Pontiac sedimentary rocks. Gold is hosted in silicified porphyry intrusions and metasedimentary rocks. Best results include 107 m at 2.14 g/t Au in drill hole BA10-3901.			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
92	**32D01**	**Fournière**	**Osisko Mining Corporation**	**Canadian Malartic**	**Au**	**D (192:38 716), Re**
			Project description: Construction of administrative buildings and workshop is completed. Construction of the green wall, pre-stripping and installation of equipment in the processing plant are underway. A new reserve calculation including the Canadian Malartic and South Barnat deposits established proven and probable reserves at 246 Mt grading 1.13 g/t Au (8.97 M gold ounces). Production is expected to begin in May 2011.			
93	32D01	Fournière	Osisko Mining Corporation / Golden Valley Mines Ltd	Malartic CHL, Jeffrey Zone	Au	D (142:27 326)
			Project description: Drilling program underway in the Jeffrey, Shaft, and Mammoth zones and the CHL Porphyry. Best results include 0.86 g/t Au over 91.2 m (drill hole CHL10-2240) in the Jeffrey Zone.			
94	32D01	Fournière	Osisko Mining Corporation	Western Porphyry Zone	Au	D (82:21 000)
			Project description: The mineralized zone consists of disseminated sulphides and a stockwork of veinlets invading porphyry intrusions, basalts and ultramafic rocks. Potassic and carbonate alteration are present. Best results include 0.82 g/t Au over 197.2 m in drill hole WP10-4023.			
95	32D01	Malartic	Golden Share Mining Corporation	Malartic Lakeshore	Au	G, TE
			Project description: Within the RLM shear zone, drill hole ML-09-41 intersected zones with altered (silica, sericite, hematite) feldspar porphyry dykes injected with quartz-tourmaline-pyrite veins. The best result, 2.88 g/t Au over 0.8 m, is from a quartz-pyrite-chalcopyrite vein.			
96	32D01	Malartic	Arianne Resources Inc.	Héva Est	Au	Pr, S, T
97	32D01	Malartic	Amseco Exploration Ltd / Les Mines J.A.G. ltée	Malartic Rivière Héva	Au-Base metals	GpEl(G), GpMa(G), S
98	32D01	Malartic	Savant Exploration Ltd / Globex Mining Entreprises Inc.	Parbec	Au	D (8:4005), TE
			Project description: In the Cadillac Tectonic Zone, drill hole Par-10-08 intersected a mineralized zone (Central Veins Zone) hosted in an altered porphyry intrusion and deformed ultramafic rocks (28.6 m at 1.37 g/t Au, including 1.5 m at 16.2 g/t Au).			
99	32D01	Malartic, Fournière	Niogold Mining Corporation / Aurizon Mines Ltd / Thundermin Resources Inc. / Northern Star Mining Corporation / Breakwater Resources Ltd	Bloc Malartic	Au	D (62:13 031), Re, TE
			Project description: A new resource calculation was released. For the Norlartic-Kierens deposit: 1) Near-surface resources (0-200 m, cut-off grade of 0.5 g/t): 5.9 Mt at 1.59 g/t Au (indicated) and 4.4 Mt at 1.26 g/t Au (inferred) and 2) Deeper resources (200-630 m, cut-off grade of 2.5 g/t): 0.9 Mt at 3.96 g/t Au (indicated) and 0.58 Mt at 3.88 g/t Au (inferred). For the Marban deposit: indicated resources = 1.24 Mt at 4.55 g/t Au and inferred resources = 0.87 Mt at 4.08 g/t Au (cut-off grade of 2.5 g/t Au). In the Marbenite shear zone, about 450 m east of the Marban deposit, drill hole MB-10-098 intersected 23.2 g/t Au over 1.2 m.			
100	32D08	Figuery	Mineral Hill Industries Ltd	International	Li	Gs(r), GpEm(G), GpMa(G)
			Project description: Samples from a spodumene-bearing pegmatite dyke yielded grades of 0.04-2.91% Li_2O, averaging 1.51% Li_2O.			
101	32D08	La Motte	Glen Eagle Resources Inc. / Globex Mining Entreprises Inc.	LaMotte Lithium (Authier Lithium)	Li	D (17:1900), FM, GpMa, TE
			Project description: Drill holes intersected near-surface spodumene-bearing pegmatite dykes (53.5 m at 1.3% Li_2O, 1,388 ppm Rb and 78.7 ppm Cs; drill hole AL-10-01).			
102	32D09	Dalquier	Abcourt Mines Inc.	Jonpol	Base metals	D (2:xx)
			Project description: Near the Jonpol volcanogenic massive sulphide deposit, drill hole J09-2B intersected a wide mineralized zone (26.98 m at 0.15% Cu, 1.21% Zn, 40.05 g/t Ag and 0.14 g/t Au) with 4 narrow higher-grade horizons (0.50 m at 1.72% Cu, 11.18% Zn, 89.10 g/t Ag and 0.15 g/t Au).			
103	32D09	Dalquier	D.M.C. Soudures inc. / N. Vallières	Dalquier	Co-Cu-Ag-Au-Ni-VMS	GpMa(G), S, T

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Western part of region 08: Rouyn-Noranda - La Sarre - Témiscamingue area						
104	31L09, 16		X-TERRA Resources Corporation	Lindsay	REE-Th-U	D(3:358)
105	31L10, 14, 15	Gendreau, Mercier	Matamec Explorations Inc.	Zeus	REE-Nb	TE, E, Env, T, G, D (20:2115)
			Project description: A new resource estimate was released on January 20, 2011. Indicated resources total 4.92 Mt at 0.607% $REE_2O_3+Y_2O_3$ and 0.883% ZrO_2 and inferred resources total 4.26 Mt at 0.628% $REE_2O_3+Y_2O_3$ and 1.008% ZrO_2 based on a cut-off grade of 0.016% Dy_2O_3. Tests to determine REE and zirconium recovery from eudyalite were carried out and established a recovery rate of 89.2% REE. A scoping study was launched in the fall. Channel sampling was performed on the Surprise and TH showings. In October, the company announced the discovery of 3 new showings: Falaises A1, Medium Falaises, and Coin.			
106	31L10, 15	Booth, McLachlin, Atwater, Reclus	Globex Mining Enterprises Inc.	Hunters Point	U-REE-Au	S
			Project description: Samples from the Coconut Club showing yielded the following results: # 589189: 3.96% La, 8.08% Ce, 0.89% Pr, 3.00% Nd, 0.51% Sm, 412 ppm Eu, 0.33% Gd, 493 ppm Tb, 0.25% Dy, 468 ppm Ho, 0.12% Er, 166 ppm Tm, 872 ppm Yb, 96.9 ppm Lu and 0.89% Y.			
107	31L15	Atwater	Hinterland Metals Inc.	Kipawa REE	REE-Y-Zr-Au	
108	31L15, 16, 31M01, 02	Booth, McLachlin, Senezergues	Aurizon Mines Ltd	Kipawa	Au-REE	D (x:6 549), S, Gc(sl), Pr
109	31L16	Villedieu	Globex Mining Enterprises Inc.	Turner Falls	REE-Y	S, GpMa, GpRa, G
			Project description: Grab samples yielded the following results - # 16714: 7.10% $REE_2O_3 + Y_2O_3$ and # 16716: 12.81% $REE_2O_3 + Y_2O_3$.			
110	31L16	Villedieu	Fieldex Exploration Inc.	Lac Sairs	REE-Nb	D (x:4 225)
			Project description: Eight drill holes completed in the fall, with results including a 10.45-m interval grading 0.37% REE_2O_3 and 0.15% ZrO_2 in drill hole LS-10-20.			
111	31L16	Villedieu	Diamond Frank Exploration Inc.	Blackrock	REE-Y-Zr	S, T
			Project description: Grab sample yielded grades of 0.7% $LREE_2O_3$ and 0.3% $HREE_2O_3$ with 1% Zr and 0.4% Y.			
112	31M03	Fabre	Tres-Or Resources Ltd	Fabre	Au-Ag-Co-Bi-Ni-Cu	D (2:200)
113	31M06	Gaboury	Fieldex Exploration Inc.	Gaboury	Au	GpMa(G), GpEm(G),
114	31M07	Guillet	Exploration Aurtois Inc.	Belleterre Extrême Est	Au	D(x:x), Gp, T, TE
			Project description: Results from the drilling campaign carried out in late 2010 include 2.5 m grading 6.12 g/t Au and 7.5 m grading 8.63 g/t Au in drill hole Aur-04-10.			
115	31M07	Guillet	Conway Resources Inc.	Belleterre Mine	Au	GpMa(G), GpEm(G), S
116	31M07	Guillet, Blondeau	Conway Resources Inc.	Conway Paquin	Au	TE, B(1 635:2,28)
			Project description: Processing of a 1,635-t bulk sample at an average grade of 2.28 g/t Au.			
117	31M08	Hallé	Richmond Minerals Inc. / Fort Chimo Minerals Inc.	Hallé	Cu-Zn-Au	S, GpEm(G), GpMa(G), D (7:1 600)
118	31M09, 10	Delbreuil, Guy	Fieldex Exploration Inc.	Delbreuil	REE-U	Pr, G, S
119	31M13, 14	Montreuil	Adventure Gold Inc.	Montreuil	Au	Pr
120	31M14	Pontleroy, Desandrouins	Adventure Gold Inc.	Solitaire	Au-Ni-Cu-Zn	Pr
121	32D01	Bousquet	Agnico-Eagle Mines Ltd	Ellisson	Au	D (1:3255)
			Project description: Drill hole # 114-10-16J intersected 13.3 m (true thickness) grading 8.0 g/t Au and 0.11% Cu, including 7.0 m at 14.1 g/t Au and 0.16% Cu, intrepreted as the depth extension of the Westwood Zone onto Agnico-Eagle's property. The company is planning a $4.8M exploration program, including 9,500 m of drilling in 2011.			
122	*32D01*	*Cadillac*	*Agnico-Eagle Mines Ltd*	*Lapa Mine*	*Au*	*D (x:11 078)*
			Project description: Sinking of an exploration drift at level 1010 toward the SE along the Cadillac Fault, and another drift at level 980 m eastward to convert resources into reserves.			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
123	32D01	Cadillac	Midland Exploration Inc. / Agnico-Eagle Mines Ltd	Maritime-Cadillac	Au	D (5:4 468)
			Project description: Drill hole 141-10-26 intersected a 5.5-m interval grading 8.6 g/t Au in the new V4 West mineralized zone, including a higher-grade section grading 13.8 g/t Au over 3.0 m.			
124	32D01	Cadillac	Knick Exploration Inc. / M. Fekete	Malartic West	Au	D (11+:x)
125	32D02	Bousquet	IAMGOLD Corporation	Bousquet-Odino	Au	D (3:1 479), GpEm(G)
126	**32D02**	**Bousquet**	**IAMGOLD Corporation**	**Westwood**	**Au**	**D (x:83 660), Re**
			Project description: Exploration drilling campaign totalling 71,500 m planned for 2010. Sinking of exploration shaft should reach 1,100 metres at the end of 2010. Definition and exploration drilling programs continue. Commercial production is expected to commence in early 2013.			
127	32D02	Joannès	Newbaska Gold and Copper Mines Ltd	Davidson Creek (Joannes)	Au-Cu-Ag	D (5:501)
128	**32D02**	**Joannès**	**Aurizon Mines Ltd**	**Joanna**	**Au**	**FM, Met, D (290:70 000), GpGr**
			Project description: A drilling campaign was completed in the spring, with results including, in drill hole JA-10-522, 47.4 m at 1.7 g/t Au. The company released a new resource estimate in the summer of 2010: the Hosco deposit contains measured and indicated resources of 40.55 Mt at 1.33 g/t Au and inferred resources of 23.17 Mt at 1.19 g/t Au (cut-off grade of 0.5 g/t Au). A feasibility study is underway and should be completed in mid-2011.			
129	32D02	Joannès	Aurizon Mines Ltd / Alexandria Minerals Corporation	Joanna-Alexandria (Canton Joannes)	Au	D (55:8 500)
130	32D02	Rouyn	Threegold Resources Inc.	Adanac	Au	GpEm(B)
131	32D02	Rouyn	Adventure Gold Inc.	Granada Extension	Au	Pr, G, S
			Project description: Discovery of 12 gold occurrences. Grab samples yielded grades up to 8.9 g/t Au. A drilling campaign is planned for early 2011.			
132	32D02	Rouyn	Savant Explorations Ltd	McWatters	Au	GpEm(A), GpMa(A), D (3:1 500)
133	32D02, 03	Rouyn	Gold Bullion Development Corporation	Granada Mine	Au	D (x:32 000), Env
			Project description: Major drilling campaign targeting the LONG BARS Zone. Drill results include, in drill hole GR-10-41, 75 m at 1.50 g/t Au including a 20.65-m section grading 4.98 g/t Au.			
134	**32D03**	**Beauchastel**	**Richmont Mines Inc.**	**Francoeur**	**Au**	**D (x:x)**
			Project description: Dewatering of former mine, shut down in 2001, and refurbishing of infrastructure completed early in the year; development work began in July 2010. At the end of the third quarter, 436 metres of lateral development completed and definition drilling expected to begin in the fourth quarter.			
135	32D03	Beauchastel	Richmont Mines Inc.	Wasamac	Au	Re, D (30:20 000)
			Project description: Results of diamond drilling include, in drill hole WS-10-33, 10.56 m grading 4.62 g/t Au. The drilling campaign was expanded to 20,000 metres at the end of the year.			
136	32D03	Beauchastel	Cadillac Mining Corporation	Wasa	Cu-Zn	D (1:213)
137	32D03	Beauchastel	Cadillac Mining Corporation	Kekeko East	Cu-Zn	D (2:617)
138	32D03	Beauchastel, Rouyn	Yorbeau Resources Inc.	Rouyn	Au	D (x:x), TE
			Project description: Drilling campaign completed in early 2010. Drill hole 10-CI-535a in the Cinderella Block intersected 33.0 m grading 3.35 g/t Au, including a 7.0-m section at 9.59 g/t Au.			
139	32D03	Dasserat	Richmont Mines Inc.	Lac Boissier	Au	G
140	32D03	Dasserat	Golden Share Mining Corporation / Vanstar Mining Resources Inc.	Lac Forturne West	Au	Pg, TE

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
141	**32D03**	**Rouyn**	**Alexis Minerals Corporation**	**Lac Pelletier**	**Au**	**FM, B(2009-2010)=(40 000), D (x:x)**
			Project description: Processing of 12,794 t of ore and recovery of 1,924 gold ounces. New drifts were excavated in the spring. Drill holes intersected mineralized intervals, including 2.40 m at 25.25 g/t Au in drill hole U-112. The positive feasibility study considers production of 33,501 gold ounces over a mine life of 14 months. Proven and probable reserves are estimated at 168,000 t grading 6.46 g/t Au.			
142	32D03	Rouyn	Visible Gold Mines Inc.	Silidor	Au	S, Pr
			Project description: Several grab samples collected about 1 km SW of the former mine yielded grades such as # 80788: 52.16 g/t Au and 6.3 g/t Ag. A 13-hole drilling campaign totalling 2,060 metres was undertaken at year-end to test this new discovery, dubbed the E Vein.			
143	32D03, 04	Dasserat, Dufay	SEMECo inc.	Border	Au	G
144	32D06	Beauchastel	Abcourt Mines Inc.	Elder Mine	Au	D (27:x)
			Project description: Dewatering of the mine and drift development. Drill hole E10-11, collared near the former Elder mine, intersected 4.26 m grading 9.12 g/t Au.			
145	32D06	Beauchastel, Duprat	Société d'exploration minière Vior inc.	Beauchastel	Au	D(x:x), S
146	32D06	Dasserat	Richmont Mines Inc.	Lac Labyrinthe	Au	GpEl(G)
147	**32D06**	**Dasserat**	**Rocmec Mining Inc.**	**Rocmec 1**	**Au**	**S(RS-02-09), (RS-03-09), D (x:5 000)**
			Project description: Resource estimate: McDowell Vein - measured and indicated resources = 233,000 t at 6.41 g/t Au and Shaft Vein - measured and indicated resources = 136,900 t at 5.92 g/t Au. Drill results include 0.20 m grading 26.92 g/t Au and 0.44 m grading 8.72 g/t Au in drill hole RS-02-10.			
148	32D06	Dasserat	Vantex Resources Ltd	Galloway	Au	Pg, D (x:10 000), TE, GpEm(G), GpMa(G)
			Project description: Diamond drilling completed to test the Galloway-Pitchvein and Soaker Hill zones. Drill results include, in drill hole VHD10-25, 73.65 m grading 0.67 g/t Au.			
149	32D06	Destor	Explor Resources Inc.	Destor	Au	GpEm
150	32D06	Dufresnoy	Xstrata Canada Corporation / Alexis Minerals Corporation	Collines Camac	Au-Ag-Cu-Zn	S, G
151	32D06	Duparquet	Brionor Resources Inc.	Pitt Gold	Au	D (x:x)
			Project description: Drill hole PG10-03 intersected 1.30 m grading 3.55 g/t Au, including a 0.30-m section at 12.43 g/t Au.			
152	32D06	Duprat	Abcourt Mines Inc.	Tagami	Au	D (20:3 331)
			Project description: Diamond drilling in the West Gold Zone yielded a 2.70-m interval grading 13.71 g/t Au in drill hole T10-14.			
153	32D06	Duprat	Xstrata Canada Corporation / Alexis Minerals Corporation	Rivière Mouilleuse	Au-Ag-Cu-Zn	D (1:385)
154	32D06	Duprat	Xstrata Canada Corporation / Alexis Minerals Corporation	Lac Remillac-Four Corners	Au-Ag-Cu-Zn	S, G
155	32D06	Hébécourt	Alexis Minerals Corporation	Lac Milly	Au-Ag-Cu-Zn	S, G
156	32D06	Hébécourt	Xstrata Canada Corporation / Alexis Minerals Corporation	Lac Monsabrais	Au-Ag-Cu-Zn	S, G
157	32D06	Montbray	Xstrata Canada Corporation / Alexis Minerals Corporation	Ruisseau St-Pierre-Lac Montbray-Lac Fabie	Au-Ag-Cu-Zn	D (2:798), GpMa(G), GpEm(B), G
158	32D06, 07	Dufresnoy	Xstrata Canada Corporation / Alexis Minerals Corporation	Dalembert-Dufresnoy	Au-Ag-Cu-Zn	GpEm(G), S

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
159	32D06, 11	Duparquet, Destor	Xmet Inc. / Globex Mining Enterprises Inc.	Duquesne-Ottoman	Au	GpEl(A),(B) and (G), TE, Re, D (23:9 228), T
			Project description: A new resource calculation was completed in September for the Liz, Fox, South Shaft, Shaft, and Stinger zones. The 5 zones contain inferred resources estimated at 2,731,276 t at a grade of 5.29 g/t Au (cut-off grade of 3.0 g/t Au). A drill hole in the Nip Zone - DQ-10-17 - intersected 17.0 m grading 2.95 g/t Au. Discovery of the 20-20 Zone, located about 800 m NW of the Nip Zone.			
160	32D07	Aiguebelle, Cléricy, Destor	Typhoon Exploration Inc. / Aurizon Mines Ltd	Fayolle	Au-Ag	FM, Min, T, Pr, D (24:13 000)
			Project description: Diamond drilling results include a 10.50-m section grading 5.08 g/t Au, including 5.0 m at 7.11 g/t Au in drill hole FA-10-20.			
161	*32D07*	*Bousquet*	*IAMGOLD-Québec Management Inc.*	*Mouska Mine*	*Au*	*D (x:14 829),Re*
162	32D07	Cléricy	Xstrata Canada Corporation / Alexis Minerals Corporation	Noralex	Au-Cu-Zn-Ag	D (6:2 460), GpEl(G)
163	32D07	Cléricy, La Pause	Typhoon Exploration Inc.	Faille 1	Au	Gc(s), GpMa(A), GpEm(A)
164	32D07	Cléricy, La Pause	Midland Exploration Inc. / Osisko Mining Corporation	Dunn	Au	D (9:1 253), GpEl
165	32D07	Joannès	Xstrata Canada Corporation / Alexis Minerals Corporation	Ruisseau Davidson-Lac Marillac	Au-Ag-Cu-Zn	D (1:225), GpEl(G),(B)
166	32D07	Joannès	Jefmar Inc.	Arrowhead Mine	Au-Ag	TE
167	32D07	La Pause	Diamond Frank Exploration Inc.	Gold Peak	Au	GpEm(A), GpMa(A), Gs(e), Gs(t)
168	32D07	La Pause,Cléricy	Midland Exploration Inc. / Aurizon Mines Ltd	Patris	Au	Pr, Gs(r)
169	32D07	Manneville	Xstrata Canada Corporation	Xstrata-option	Au-Cu-Zn-Ag	GpEl(S), S(3:995), T
			Project description: Diamond drilling results include, in drill hole XTA-10-01, a 1.20-m section grading 0.51% Cu, 0.49% Zn and 7.46 g/t Ag.			
170	32D07	Manneville, La Pause	Cartier Resources Inc.	MacCormack	Cu-Zn-Au-Ag	D (5:1610), GpEm(G),(B)
171	32D07, 08	Manneville, Villemontel	Cartier Resources Inc.	Preissac	Au-Cu-Zn-Ag	S, G
172	*32D08*	*Cadillac*	*Agnico-Eagle Mines Ltd*	*LaRonde Mine*	*Cu-Zn-Au-Ag-Pb*	*D (x:19 300)*
173	32D09	Launay	J. Frigon	Low Mag	Au	GpMa, GpEl
174	32D09	Launay	J. Frigon		Cu-Ni	GpMa
175	32D09	Launay, Trécesson	Royal Nickel Corporation	Dumont	Ni-PGE	D (29:11 000), Met, Env
			Project description: A resource estimate released in the summer of 2010 established measured and indicated resources of 1,159,167,000 tonnes at an average grade of 0.27% Ni and inferred resources of 581,405,000 t at 0.25% Ni (cut-off grade of 0.20% Ni). The company is planning a pre-feasibility study in 2011.			
176	32D09	Trécesson	Knick Exploration Inc. / Les Explorations Carat inc.	Trecesson Gold	Au	S
177	32D09	Villemontel	D.M.C. Soudures inc. / N. Vallières	Villemontel	Cu-Ni-Co	GpMa(G), S, T
178	32D10	Privat	Trijet Mining Corporation	Letourneur	Au	D (15:2 190)
			Project description: Results from the drilling campaign include, in drill hole LE 2010-11, a section grading 4.70 g/t Au over 4.20 m and another interval grading 18.50 g/t Au over 0.75 m.			
179	32D11	Destor	Clifton Star Resources Inc. / Osisko Mining Corporation	Duquesne	Au	D (69:20 300)
			Project description: Diamond drilling program completed. Drill hole DQ10-46 intersected 28.7 m at a grade of 1.45 g/t Au, including 1.5 m at 11.30 g/t Au.			

Table 4.4 - Exploration projects in the Abitibi-Témiscamingue administrative region in 2010[1] (see Figures 4.4, 4.5 and 4.6).

NO	NTS	TOWNSHIPS	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
180	32D11	Duparquet	Clifton Star Resources Inc. / Osisko Mining Corporation	Beattie Mine	Au-Ag	D (219:69 800), GpMa(A), GpEm(A)
			Project description: Major drilling campaign with results such as, in drill hole BD10-265, 88.0 m at a grade of 1.90 g/t Au.			
181	32D11	Duparquet	Clifton Star Resources Inc. / Osisko Mining Corporation	Donchester	Au-Ag	D (96:32 700)
			Project description: Drilling program completed, including drill hole D09-01B, which intersected 171.1 m grading 1.62 g/t Au.			
182	32D11	Duparquet	Tres-Or Resources Ltd	Duparquet	Au	T, G, GpMa(G)(A), GpEm(A)
183	32D15	Ligneris	J. Frigon	Ligneris	Au	Pr
184	32D15, 16	Ligneris	Otish Energy Inc.	Chicobi	Au	TE
185	32D15, 16, 32E01, 02	Ligneris, Desboues, Mazarin, Celoron	Société d'exploration minière Vior inc.	Ligneris	Au-Cu-Zn	
186	32D16	Berry, Desboues	Stratabound Minerals Corp. / O. Lemieux	Gemini Hill	Au	Pr

1. See the legend of abbreviations and the meaning of bold ans italic type in Appendix 2.

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Outaouais administrative region (07)						
1	31N09, 10 31O12, 13	07 and part of 08 / Grenville	Cartier Resources Inc. / Copper One Inc.	Rivière Doré	Cu-Ni-Co-Pt-Pd-Au	GpMa(A), GpEm(A), S, T
			Project description: Large erratic boulders containing up to 1.54% Cu and 0.14% Pd and mineralized outcrops grading up to 0.74% Cu were recently discovered 10 km from the Bruges showing on the Rivière Doré property. The mineral occurrences are associated with a layered mafic complex.			
2	31O05, 31N08	07 / Grenville	Virginia Mines Inc. / SOQUEM	Colonel	Ni-Cu-PGE	T
3	31O05	07 / Grenville	Ressources Maxima inc.	Boxi	REE-U	G, GpRa(G)
			Project description: Spectrometer readings of more than 55,000 counts per second (cps) were obtained on a pegmatite dyke more than 3 km long, cross-cutting metasedimentary rocks.			
4	31J04	07 / Grenville	Midland Exploration Inc. / Zincore Metals inc.	Gatineau Zinc (Leitch)	Zn	S, GpEm(G), GpMa(G), D (x:x), T
			Project description: A total of 35 samples were collected from six channels within the mineralized horizon, which is hosted by marbles and can be traced for more than 80 m in length. Best results are 24.1% Zn over 3.0 m, including 32.5% Zn over 2.0 m.			
5	31J04	07 / Grenville	Midland Exploration Inc. / Zincore Metals inc.	Gatineau Zinc (Lafontaine)	Zn	S, GpEm(G), GpMa(G), D (x:x), T
			Project description: A total of 14 samples were taken along three channels within a massive sulphide zone hosted by marbles. Best results are 21.0% Zn over 2.0 m. On the Leitch and Lafontaine deposits, channel sampling produced 12 intervals, ranging in length from 0.45 m to 0.80 m, with grades above 30% Zn, one of them 43.13% Zn.			
6	31K02	07 / Grenville	Stelmine Canada Ltd	Gatineau Block 1 (Black Lake)	REE-U	G, Pr
7	31F16	07 / Grenville	Stelmine Canada Ltd	Gatineau Block 1 (Murray)	REE-U	G, Pr
8	31G12	07 / Grenville	Stelmine Canada Ltd	Gatineau Block 1 (Dam Lake)	REE-U	G, Pr
9	31G12	07 / Grenville	Stelmine Canada Ltd	Gatineau Block 1 (Cantley-Templeton-Quinville)	REE-U	G, Pr
10	31G12	07 / Grenville	Stelmine Canada Ltd	Gatineau Block 2 (Meach Lake)	REE-U	G
Cf. 14	31J05	15 and part of 07 / Grenville	Golden Share Mining Corporation	Lutetium	REE	S, G, GpRa
Laurentides administrative region (15)						
11	31O11	15 / Grenville	Virginia Mines Inc. / SOQUEM	Coucou	Ni-Cu-PGE	D (3:435)
12	31O03, 04, 05, 06	15 / Grenville	Virginia Mines Inc. / SOQUEM	Picher	Ni-Cu-PGE	T
13	31O03	15 / Grenville	Ressources Maxima inc.	Peter Lake	Cu-Ni	S, T
			Project description: Grades of more than 31% Cu and 2.75% Ni were obtained for grab samples collected in gabbro.			
14	31J05	15 and part of 07 / Grenville	Golden Share Mining Corporation	Lutetium	REE	S, G, GpRa
			Project description: Among the 53 samples collected from outcrops representing radiometric anomalies, seven yielded rare earth element grades ranging from 0.5 to 2.53% REE_2O_3. A result of 2.53% confirmed a historical occurrence. Two samples yielding values greater than 1% were taken 1 km and 1.5 km from the historical showing. The mineralized zones are hosted in pegmatites at the contact between metasedimentary rocks and migmatites.			
15	31G16, 31J01	15 / Grenville	Pacific Arc Resources Ltd	Lac du Pin Rouge	Fe-Ti	G, Gs, Gp

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Lanaudière administrative region (14)						
16	31H13	14 / St. Lawrence Platform	Graymont (QC) Inc.	Joliette	Limestone	D (4:74,8)
Mauricie administrative region (04)						
17	31P03	04 / Grenville	Jourdan Resources Inc.	Lac Baude	REE	Pg, S
			Project description: Since 2009, Jourdan Resources has been investigating an old allanite and zircon showing for its rare earth potential. The showing was first discovered in 1893. During the company's exploration work in 2010, five grab samples graded 0.02% to 3.50% rare earth oxides and up to 0.17% uranium oxide.			
18	31I16	04 / Grenville	Excel Gold Mining Inc.	Batiscan (Montauban)	Au-Ag-Zn-Pb-Cu	Pg, D (61:1830)
			Project description: The aim of the drilling program launched in the fall of 2009 was to assess the remaining gold and silver mineralization in the old Montauban mine where the company hopes to mine ore from a small open pit. A total of 61 vertical drill holes averaging 30 metres depth were completed. Mineralized intersections grade up to 14.32 g/t Au and 25.84 g/t Ag over 2.58 metres.			
Capitale-Nationale administrative region (03)						
19	21M15	03 / Grenville	Silicium Québec	Malbaie	Quartzite	T
Saguenay - Lac-Saint-Jean administrative region (02)						
20	22D11	02 / Grenville	Dios Exploration Inc.	Shipshaw	REE-Nb-Zr-P	GpMa(A), D (20:3200), G, S
			Project description: The Shipshaw Carbonatite Complex was discovered in the spring of 2010 while drilling a strategic metal and rare earth target. The target is a circular magnetic low situated 7 km from the Niobec niobium mine. A helicopter-borne magnetic survey in 2010 covered a 40-km2 area with flight lines spaced 75 m apart. A drilling program has just begun. Several mineralized zones were intersected in carbonatite, with assay values reaching 0.053% niobium oxide, 12% phosphate and 0.49% total rare earth oxides, excluding yttrium and zirconium.			
21	22D11	02 / Grenville	Micrex Development Corp.	Saint-Charles	REE-Ti-V-P	Pg
			Project description: The Saint-Charles-de-Bourget iron-titanium deposit is being re-assessed for its rare earth and vanadium potential. The deposit is located on the north shore of Rivière Saguenay, midway between Alma and Jonquière.			
22	22E10, 15	02 / Grenville	Arianne Resources Inc.	Lac à Paul	P-Ti	FM, D (18:3590)
			Project description: The Lac à Paul property covers more than 15,000 hectares on which three mineralized zones have been explored fairly intensely. Work to date on the Paul, 2, and Manouane zones has delineated a total of 260.25 Mt of inferred resources at 5.7% P_2O_5 and 7.64% TiO_2 and 78 Mt of indicated resources at 7.24% P_2O_5 and 7.84% TiO_2. The company recently completed a definition drilling program on the Paul Zone totalling 3,590 metres in 18 holes, which clearly demonstrated that the Paul Zone continues at depth to 400 vertical metres and remains open. The pre-feasibility study for the Lac à Paul phosphorous-titanium project should start in January 2011.			
23	32H07, 10	02 / Grenville	MDN Inc.		Ta-Nb	FM
			Project description: The positive preliminary economic assessment study looking at the potential mining of a niobium and tantalum resource prompted MDN and Minéraux Crevier Inc. to proceed with a feasibility study. The planned open pit would have an 18-year mine-life and a planned output of 4,000 tonnes per day.			
24	32G09	02 / Superior	Cartier Resources Inc.	Dollier	Au	GpEm(A), GpMa(A)
			Project description: The gold showing discovered in the fall of 2009 is characterized by an association of magnetic highs and electromagnetic anomalies. The showing consists of a semi-massive sulphide horizon (pyrite-pyrrhotite) in mafic lavas. A helicopter-borne electromagnetic and magnetic survey totalling 530 kilometres was completed in the fall of 2009 along flight lines spaced 100 metres apart. The survey results identified 206 electromagnetic anomalies, of which 48 were prioritized for follow-up prospecting and stripping.			

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Côte-Nord administrative region (09)						
25	**22J07**	**09 / Grenville**	**Arnaud Mines inc.**	**Arnaud**	**Apatite**	**D (x:19 000), FM**
26	22E08	09 / Grenville	Argex Silver Capital Inc.	Lac Brule	Fe-Ti	
27	22K04	09 / Grenville	Nevado Resources Corporation	La Blache #1 Iron-Titanium-Vanadium	Fe-Ti-V	S, Pr, GpMa(A), GpEm(A)
			Project description: Samples were collected from various showings: Leduc showing: # 701169: 63.7% Fe_2O_3, 17.6% TiO_2 and 0.12% V_2O_5; Farrell-Taylor showing: 63.5% Fe_2O_3, 18.7% TiO_2 and 0.10% V_2O_5; Leduc-Farrell showing: # 698056: 60.6% Fe_2O_3, 19.2% TiO_2 and 0.10% V_2O_5.			
28	22K04	09 / Grenville	Argex Silver Capital Inc.	La Blache (West Hervieux)	Ti-Fe-V-Mg	D (41:6 000), TE
			Project description: Drilling program completed; best results include, in drill hole HW-10-029, a 105.4-m interval grading 61.92% Fe_2O_3, 17.85% TiO_2 and 0.50% V_2O_5.			
29	22K04	09 / Grenville	Argex Silver Capital Inc.	La Blache (East Hervieux)	Ti-Fe-V-Mg	GpMa(A), GpEm(A), D (136:20 294), Met
			Project description: Drill hole HE-10-001 intersected 91.2 m grading 63.87% Fe_2O_3, 19.05% TiO_2 and 0.53% V_2O_5. A resource calculation is underway in early 2011.			
30	23F11, 12, 13, 14	09 / Grenville	Virginia Mines Inc.	Ashwanipi	Au-Cu-Zn-Mo	T, Pr
31	22F13		Jourdan Resources Inc.	Dissimieux Lake Titanium-Phosphate-Rare Earth Elements	Ti-P-REE	
32	*23B14*	*09 / Grenville*	*Consolidated Thompson Iron Mines Ltd*	*Bloom Lake*	*Fe*	*FM, first ore shipment in July 2010*
			Project description: Construction of the Bloom Lake mine is complete and the first shipment of iron concentrate destined for China left the port at Sept-Îles in July 2010. The company began a feasibility study to double production from 8.0 Mt to 16.0 Mt of concentrate per year, starting in 2012.			
33	23B11, 12, 14, 23B05, 06, 22O13	09 / Grenville	Champion Minerals Inc. / Fancamp Exploration Ltd	Fermont (16 properties)	Fe	Met, TE, D (x:18 000), (Re: Fire Lake North)
			Project description: The company performed a resource calculation for the Fire Lake North deposit. The deposit contains inferred resources of 388 Mt at 29% total Fe. Metallurgical tests were performed and the company is preparing three sites for bulk sampling. On the Fire Lake North Block, drill hole sections included 197.8 m grading 38.3% total Fe in hole FL10-24. Fifty-four (54) drill holes were also completed on the Harvey-Tuttle block; results include, in drill hole HT10-07, a 168.4-m interval grading 30.3% total Fe.			
34	22J10	09 / Grenville	M. Richard / S. Landry	Lachipie	Au-Pt-Ni-Cu-Ag-REE	T, Gp, S
35	22J06	09 / Grenville	Big Red Diamond Corporation / Arctic Star Diamond Corp.	J6L1 Rare Earth Element	REE	S, G, GpMa(A), GpRa(A)
36	22P03	09 / Grenville	Gitennes Exploration Inc.	Blue Ice	REE-Li-Be-Ni-Cu	G, S, Pr
37	22P03	09 / Grenville	Focus Metals / SOQUEM Inc.	Kwyjibo	REE-P-F-Mo-U-Au-Cu	S, PR, G, GpEm(A)
			Project description: Results for channel samples from the historical Gabriel Cu-REE zone included 1.0 m grading 1.12% REE_2O_3, 4.71% P_2O_5 and 68.3% Fe_2O_3.			
38	12L08	09 / Grenville	Jourdan Resources Inc.	Baie-Johan-Beetz	U	D (20:2 111)
			Project description: The drilling program on the Drucourt Uranium Zone is now complete. Best results include, in drill hole BJB-10-06, 131.2 m grading 0.013% U_3O_8.			

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
39	12K12, 12L07, 08, 09	09 / Grenville	Uracan Resources Ltd	North Shore	U	Re, D (x:x), GS, Pr, S
			Project description: The company drilled the Costebelle A4 Zone; results include, in drill hole CA4-10-2, an interval of 8.4 m grading 0.046% U_3O_8. Channel samples were also collected in the Costebelle Block, where trench CC-11-4 yielded 11 m grading 0.084% U_3O_8.			
Estrie administrative region (05)						
40	31H08	05 / Appalachians	Fancamp Exploration Ltd	Brompton Copper	Cu	GpEm(A)
41	21E12	05 / Appalachians	Adventure Gold Inc.	Stoke	Au	G
42	21E05, 11, 12, 13, 14 31H01, 08, 09	05 / Appalachians	Bowmore Exploration Ltd	St-Victor	Au	S, GpMa(A), GpEm(A)
			Project description: About 20 km southeast of the municipality of Asbestos, three gold zones (Camille, Wotton, and Wotton NW) were discovered in partially carbonatized (ankerite) sedimentary rocks belonging to the Saint-Victor Synclinorium. In all, 418 samples collected over an area of 1.25 km^2 yielded values ranging from 0.05 g/t to 0.99 g/t Au.			
43	21E12	05 / Appalachians	Fancamp Exploration Ltd	Stoke	Cu-Zn- Au	S, GpEm(A), D (6:x), T
			Project description: The company discovered angular erratic boulders with grades up to 23.4% Zn and 2.74% Cu. A channel sample yielded 1.32 g/t Au over 4.0 m, including 4.0 g/t Au and 0.61% Zn over 1.0 m. At a depth of 45 m, hole ST-10-06 yielded 6.21 g/t Au over 4.2 m, including 22.4 g/t Au, 7.73% Zn, 1.73% Cu, 2.62% Pb and 231 g/t Ag over 1.0 m. The property lies within the Ascot-Weedon Belt, which hosts many volcanogenic massive sulphide deposits and old mines.			
44	21E12	05 / Appalachians	Fancamp Exploration Ltd	Jackson Gold	Au	GpEm(A), D (x:x)
45	21E11, 14	05 / Appalachians	Midland Exploration Inc.	Weedon	Cu-Zn-Au	G, Gs(sl), GpGr
			Project description: The 2009 gravity survey was extended in the Lingwick area. The survey confirmed the presence of two anomalous lobes about 500 m northwest of the Lingwick deposit. A gravity survey and a geochemical survey were started between the old Weedon and Cupra mines. The aim of the Weedon project is to locate volcanogenic massive sulphide (VMS) mineralization in the Ascot-Weedon volcano-sedimentary belt, which hosts many VMS deposits and old mines.			
46	21E07	05 / Appalachians	Fancamp Exploration Ltd	Clinton	Cu-Zn	GpEm(A), D (x:x)
47	21E10, 15, 16	05 and part of 12 / Appalachians	Fancamp Exploration Ltd	North Megantic	Cu-Zn	GpEm(A), D (x:x)
48	21E10	05 / Appalachians	Western Troy Capital Resources Inc.	Galloway	Mo	GpEm(G), GpMa, D (3:x)
49	21E14	05 / Appalachians	Adventure Gold Inc.	Saint-François	Au	G
Cf. 52	21E13, 14	12 and part of 05, 17 / Appalachians	Nevado Resources Corporation	Nicolet, Nicolet-North, Nicolet-East	Au	S, G, Gp, Gc(r)
50	31H01	05 / Appalachians	Centre du Granit Beebe Inc.		Granite	D (x:x)
			Project description: Extraction of several blocks to test the quality of the stone.			
Centre-du-Québec administrative region (17)						
51	21L04	17 / Appalachians	Nevado Resources Corporation	Chester	Au	S, G, Gp, Gs(r)
Cf. 52	21E13, 14	12 and part of 05, 17 / Appalachians	Nevado Resources Corporation	Nicolet, Nicolet-North, Nicolet-East	Au	S, G, Gp, Gs(r)

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Chaudière-Appalaches administrative region (12)						
Cf. 47	21E10, 15, 16	05 and part of 12 / Appalachians	Fancamp Exploration Ltd	North Megantic	Cu-Zn	GpEm(A), D (x:x)
52	21E13, 14	12 and part of 05, 17 / Appalachians	Nevado Resources Corporation	Nicolet, Nicolet-North, Nicolet-East	Au	S, G, Gp, Gc(r)
			Project description: About 1,500 samples were collected 10 km south of Thetford Mines, leading to the discovery of an anomalous gold zone, the Old Quarry Zone. This zone encompasses partially carbonatized (ankerite) sedimentary rocks belonging to the Saint-Daniel Mélange, adjacent to the Thetford Mines Ophiolite Complex. In all, 60 samples were taken from an area measuring 40 m by 25 m. They yielded grades of 0.25 g/t Au. Other isolated anomalies, distributed over a distance of 10 km, contained up to 0.37 g/t Au.			
53	21L03, 06	12 / Appalachians	Nevado Resources Corporation	Harvey-Hill	Au	S, G, Gp, Gc(r)
54	21L02	12 / Appalachians	Fancamp Exploration Ltd	Beauce	Au	D (22:1219)
			Project description: Reconnaissance drilling was carried out on two gold targets. On the Timrod showing, 13 holes were drilled at an average depth of 50 m for a total of 400 m. On the Rapides du Diable target, 9 holes were drilled totalling 819 m. The best value was 0.57 g/t Au.			
55	21L02	12 / Appalachians	Uragold Bay Resources Inc.	Beauce Placer Gold	Au	S, TE
			Project description: Uragold Bay Resources plans to develop a paleoplacer parallel to the south shore of Rivière Gilbert, previously mined by the Beauce Placer Company in the early 1960s. The company will start a sampling and trial mining program at the paleoplacer.			
56	21L08	12 / Appalachians	Golden Hope Mines Ltd	Bellechasse (FSG)	Au-Zn-Cu-Pb	Pg, S
			Project description: The Bellechasse project comprises about 700 exploration claims and extends along a strip 10 km wide by 95 km long, between Saint-Victor and Sainte-Lucie-de-Beauregard. It notably includes the FSG, Timmins, Laval's Mountain and Béland areas. A soil geochemistry survey performed in the FSG area revealed four gold anomalies where the company carried out stripping and sampling work in trenches.			
57	21L09	12 / Appalachians	Golden Hope Mines Ltd	Bellechasse (Béland)	Au	D (3:633)
58	21L09	12 / Appalachians	Golden Hope Mines Ltd	Bellechasse (Timmins)	Au	D (57:13991), B (710:3), G
			Project description: The Timmins gold showing consists of quartz-carbonate-sulphide-gold veins in gabbro. The deposit was drilled with 57 holes. Mineralized intersections yielded results up to 9.05 g/t Au over 9 metres. A bulk sample of about 710 tonnes yielded a grade of about 3 g/t Au.			
59	21L09	12 / Appalachians	Golden Hope Mines Ltd	Bellechasse (Sugar Bush)	Au	Pg
60	21L09	12 / Appalachians	Golden Hope Mines Ltd	Bellechasse (Laval's Mountains)	Au	D (6:1414), Gs(sL)
Bas-Saint-Laurent administrative region (01)						
61	21N06, 07	11 / Appalachians	Ardoisière du Témis Inc.	Ardoise - Témiscouata	Slate	D (x:x)
Cf. 62	22B09, 16	11 and part of 01 / Appalachians	Threegold Resources Inc.	Lemieux Dome	Au-Ag-Cu-Zn-Pb	D (12:x)

TABLE 4.5 - Exploration projects in Québec (Abitibi-Témiscamingue and Nord-du-Québec regions excluded) in 2010[1] (see Figure 4.7).

NO.	NTS	ADMINISTRATIVE REGION/GEOLOGICAL PROVINCE	COMPANIES / PROSPECTORS	PROJECTS	COMMODITIES	EXPLORATION WORK
Gaspésie–Îles-de-la-Madeleine administrative region (11)						
62	22B09, 16	11 and part of 01 / Appalachians	Threegold Resources Inc.	Lemieux Dome	Au-Ag-Cu-Zn-Pb	D (12:X)
			Project description: The objective of a 12-hole diamond drilling program is to explain the distribution of precious metals (silver and gold) associated with zinc-lead veins around the Brandy South and A4-B4 showings.			
63	22A13	11 / Appalachians	Xstrata Canada Corporation	Mont Porphyre	Cu	D (x:x), Gp, M
			Project description: Xstrata has completed all of its demolition and soil rehabilitation work following the closure of the Gaspé smelter in Murdochville. The company continues exploring for copper in the area.			
64	22A06	11 / Appalachians	Western Troy Capital Resources Inc.	Rivière Reboul	Li	Pr
65	22H03	11 / Appalachians	Exploration Orbite V.S.P.A. inc.	Grande-Vallée	Al	Met, D (10:3000)
			Project description: A total of 500 tonnes of aluminous argillite from the Grande-Vallée deposit were processed at the pilot plant in Cap-Chat to conduct metallurgical tests for aluminum extraction. The Grande-Vallée deposit was also targeted by a 10-hole drilling program totalling 3,000 metres, with the goal of deepening and enlarging the future open pit mine.			

1- See the legend of abbreviations and the meaning of bold and italic type in Appendix 2.

CHAPTER 5 - DEPOSIT APPRAISAL AND MINE DEVELOPMENT

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In 2010, seventeen mining projects reached or remained in the deposit appraisal phase (Figure 5.1; Table 5.1) and nine projects were in the mine development phase (Figure 5.1; Table 5.2).

Within the scope of the **Plan Nord**, the assessment study concerning the project to extend Route 167 into the **Monts Otish** area is a key element to consider. This road would namely facilitate work to assess the mineral potential of this northern region, including projects currently in the development phase for diamond (Renard), uranium (Matoush), and copper (McLeod Lake). Several mining companies have shown an interest in **Northern Québec** and consequently, in the development of the "Route des Monts Otish".

5.1 - Deposit appraisal

IRON

ArcelorMittal Mines Canada is examining the possibility of operating the **Fire Lake** mine year-round (8 Mt/year of iron concentrate). This decision would lead to significant investments for capital assets (construction of a processing plant) and mine site development (tailings pond). At the moment, 1 Mt/year of iron concentrate is produced on a seasonal basis and shipped to the company's facilities in Mont-Wright.

NICKEL, COPPER, COBALT, AND PLATINUM GROUP ELEMENTS (PGE)

Royal Nickelis conducting metallurgical tests on a 50-tonne bulk sample from the **Dumont Nickel** project, for which all required authorizations have now been obtained.

About 275 km northeast of Chibougamau, **Western Troy Capital Resources** commenced a feasibility study for its open pit mining project at the **MacLeod Lake** copper-molybdenum-silver deposit. This project would benefit from the future "Route des Monts Otish".

GOLD

Alexis Minerals carried out underground work on the **Lac Pelletier** project. It also extracted a bulk sample of 15,000 tonnes of ore, shipped to the recently refurbished Aurbel mill, which generated nearly 2,300 gold ounces after mill recovery. The results will be used for the feasibility study on the project.

Rocmec Mining announced a NI 43-101 compliant resource estimate for the **Rocmec 1 – Russian Kid** deposit. Further drilling, for a total of 2,000 metres, is currently underway. The company uses thermal fragmentation to extract gold ore from narrow high-grade veins. Ore is processed on site.

Following a series of information sessions in communities neighbouring the **Joanna** project, located east of Rouyn-Noranda, **Aurizon Mines** commenced a feasibility study, which should be completed over the course of 2011.

North American Palladium, is proceeding with dewatering of facilities at the **Vezza** project to carry out an exploration campaign which could lead to the reopening of the mine in 2012.

In June, **Northern Star** suspended excavation work on an access ramp and exploration drifts underway at the **Malartic-Midway** project.

Metanor Resources began preparation work to deepen the shaft at the former **Bachelor** mine by 180 meters. The company is planning to extract a 5,000-tonne bulk sample from three levels. Results will be used for a feasibility study.

URANIUM

Strateco Resources continued work to develop its **Matoush** uranium project, located on lands subject to the James Bay and Northern Quebec Agreement. The economic scoping study was updated. This project was also the object of an environmental and social impact assessment study, and public hearings were held by the COMEX and COFEX in May and November of 2010. Certain groups spoke up against the project, among which the Mistissini Cree community and the Cree Grand Council. Strateco management is hoping to bring this mine into production by 2013. This project would also benefit from the future "Route des Monts Otish".

LITHIUM

Canada Lithium was very active in 2010 to develop its **Québec Lithium** project, located near La Corne in the Abitibi region. This $200M project will lead to an open pit mine where spodumene is extracted and a lithium carbonate processing plant. Based on the feasibility study, the start-up of production is anticipated in 2013, pending financing and receipt of all required permits and authorizations.

RARE EARTH ELEMENTS

Quest Rare Minerals continued its drilling program and completed an initial rare earth resource estimate for the **B-Zone** on its **Strange Lake** property, north of Schefferville. Metallurgical tests and various technical studies were carried out and led to the publication of a preliminary economic scoping study. An updated resource estimate and technical studies are planned in early 2011. A pre-feasibility study will be carried out in 2011-2012.

INDUSTRIAL MINERALS

MDN is hoping to bring its niobium-tantalum deposit into production on the Crevier project, located north of the municipality of Girardville in Lac-Saint-Jean. Environmental studies were carried out on site. The feasibility study should be completed in 2011.

Specializing in fertilizers, the multinational **corporation Yara International** from Norway and the **Société générale de financement** are examining the feasibility of mining an apatite deposit at the **Arnaud** project in Sept-Îles. **Mines Arnaud** is pursuing its drilling program on this project, in order to finalize the feasibility study in 2011.

Mine Jeffrey is continuing its efforts to obtain $78M in financing for its underground mining project at its chrysotile mine in Asbestos.

Niocan Inc. released a NI 43-101 compliant technical report on the niobium resources of the **Niocan** project, where it intends to review the potential to recover rare earth elements as well as other commodities. The feasibility study is expected in 2011.

DIAMOND

About 360 km north of Chibougamau, **Stornoway Diamond** released an updated economic assessment, whereby the potential mine life of the project could reach 25 years. The feasibility study and the environmental and social impact assessment study for the **Renard** diamond project are underway and scheduled for completion in the fall of 2011. This project would also benefit from the future "Route des Monts Otish".

5.2 - Mine development

IRON

In September, Indian mining company **Tata Steel** announced a $300M investment to restart mining operations in iron ore mines of the Schefferville area, shut down in 1982 by the **Iron Ore Company of Canada**. The **DSO** project is carried out in partnership with a Canadian mining company, **New Millennium Capital**. The high-grade direct-shipping ore extracted in Schefferville will be used to supply Tata Steel's plants in Europe. An assessment of reconstruction work needed on the railway line is currently underway before a final production decision is announced.

COPPER AND ZINC

At the former **Langlois** mine near Lebel-sur-Quévillon, **Breakwater Resources** continued development work to resume mining operations in 2012.

With the end of mining operations at the Perseverance mine anticipated in 2012, **Xstrata Zinc Canada** continued development of the **Bracemac-McLeod** project south of Matagami. The company announced a $160M investment for the construction of this mine, where production is slated to begin in 2013.

NICKEL, COPPER, COBALT, AND PLATINUM GROUP ELEMENTS (PGE)

In northernmost Québec, about 20 km south of the Raglan mine, **Canadian Royalties** began construction of infrastructure needed to commence mining operations at the Expo and Mesamax deposits on the **Nunavik Nickel** property. Construction work was interrupted in August of 2008, due to financing problems. The start-up of mining operations on site is planned for 2012.

GOLD

Over the course of 2010, **Century Mining** continued its underground development program to resume operations at the **Lamaque** mine, one of the oldest gold mines in Abitibi-Témiscamingue. In 2010, the company produced nearly 15,000 gold ounces. In 2011, the mine is expected to reach commercial production at a rate of 100,000 ounces/year and continue over a mine life of about ten years.

Osisko Mining Corporation carried out significant preparation and development work to finalize its open pit mining project at **Canadian Malartic**. Mining operations to reach commercial production are slated to begin in the spring of 2011.

Based on the preliminary study released by **Iamgold-Québec**, the **Westwood** project has the potential to produce 200,000 ounces/year over a period of 15 years. Shaft sinking, to a depth of 1,990 metres, has been underway for a year and a half. The company plans to commence production in 2013, after investing nearly half a billion dollars.

Agnico-Eagle Mines owns and operates several gold mines in the Abitibi region. The company is currently developing the **LaRonde Extension** project, where start-up of production is planned for 2011.

Richmont Mines carried out underground work at the former **Francoeur** gold mine to resume mining operations. To date, surface infrastructure has been recommissioned and all the equipment needed for mine development is on site. The company is planning to conduct metallurgical tests on a 50-tonne bulk sample, and has obtained all the required authorizations to proceed. Commercial production is expected to begin in 2011.

FIGURE 5.1. Location of projects at the deposit appraisal or mine development phase in Québec in 2010.

TABLE 5.1 - Mining projects at the deposit appraisal phase in Québec in 2010 (see Figure 5.1).

Site	Township / NTS / Administrative region	Project	Company	Summary description of deposit Type of mining project	Commodities	Proven and probable reserves	Measured resources	Indicated resources	Inferred resources	Expected daily production capacity	Expected start-up date	Expected mine life
Base metals: nickel												
1	Launay / 32D09 / Abitibi-Témiscamingue	Dumont Nickel	Royal Nickel Corporation	Magmatic Ni-Cu-PGE Open pit mine	Nickel	na	156 M mt at 0.3% Ni	1 G mt at 0.3% Ni	581 M mt at 0.3% Ni	80,000 mt/d	2015	31 years
2	2331 / 33A02 / Nord-du-Québec	McLeod Lake	Western Troy Capital Resources Inc.	Cu-Au-Mo porphyry intrusions Open pit mine	Copper Molybdenum Gold Silver	na	na	18 M mt at 0.6% Cu 0.09% Mo 0.06 g/t Au 4.5 g/t Ag	2 M mt at 0.4% Cu 0.08% Mo 0.04 g/t Au 3.6 g/t Ag	6,000 mt/d	na	9 years
Precious metals: gold												
3	Le Sueur / 32F08 / Nord-du-Québec	Bachelor	Metanor Resources Inc.	Orogenic lode gold Underground mine	Gold	844 K mt at 7.4 g/t Au	192 K mt at 8.8 g/t Au	649 K mt at 7.5 g/t Au	426 K mt at 6.5 g/t Au	690 mt/d	2012	na
4	Joannès / 32D02 / Abitibi-Témiscamingue	Joanna	Aurizon Mines Ltd	Shear-related disseminated sulphides and quartz veinlets Open pit mine	Gold	na	27 M mt at 1.4 g/t Au	18 M mt at 1.4 g/t Au	33 M mt at 1.4 g/t Au	8,500 mt/d	na	8 years
5	Rouyn / 32D03 / Abitibi-Témiscamingue	Lac Pelletier	Alexis Minerals Corporation	Lode gold: greenstone-hosted quartz-carbonate veins Underground mine	Gold	168 K mt at 6.5 g/t Au	58 K mt at 8.6 g/t Au	222 K mt at 8.6 g/t Au	420 K mt at 8.4 g/t Au	620 mt/d	na	1 year
6	Fournière / 32D01 / Abitibi-Témiscamingue	Malartic-Midway	Northern Star Mining Corporation	Orogenic lode gold Underground mine	Gold	na	na	2.4 M mt at 3.7 g/t Au	2,0 M mt at 3.6 g/t Au	na	na	na
7	Dasserat / 32D04 / Abitibi-Témiscamingue	Rocmec 1	Rocmec Mining Corporation Inc.	Lode gold: greenstone-hosted quartz-carbonate veins Underground mine	Gold	na	125 K mt at 7.0 g/t Au	445 K mt at 6.4 g/t Au	1.5 M mt at 7.4 g/t Au	na	na	na
8	32F12 / Nord-du-Québec	Vezza	North American Palladium Ltd	Orogenic lode gold Underground mine	Gold	na	193 K mt at 6.1 g/t Au	1.3 M mt at 5.9 g/t Au	754 K mt at 5.0 g/t Au	750 mt/d	2012	na
Diamond												
9	33A16 / Nord-du-Québec	Renard	Stornoway Diamond	Kimberlite-hosted diamond deposit Open pit and underground mine	Diamond	na	na	27 M mt at 0.89 c/t	31 M mt at 0.56 c/t	5,000 mt/d	2013	25 years

TABLE 5.1 - Mining projects at the deposit appraisal phase in Québec in 2010 (see Figure 5.1).

Site	Township / NTS / Administrative region	Project	Company	Summary description of deposit Type of mining project	Commodities	Proven and probable reserves	Measured resources	Indicated resources	Inferred resources	Expected daily production capacity	Expected start-up date	Expected mine life
Niobium and tantalum												
10	Crevier / 32H07 / Saguenay–Lac-St-Jean	Crevier	MDN Inc.	Nepheline syenite dykes, alkaline igneous complex Open pit mine	Niobium Tantalum	na	12 M mt at 0.2% Nb_2O_5 0.02% Ta_2O_5	13 M mt at 0.19% Nb_2O_5 0.02% Ta_2O_5	15 M mt at 0.17% Nb_2O_5 0.03% Ta_2O_5	4,000 mt/d	2013	18 years
11	Lac des Deux-Montagnes / 31G09 / Laurentides	Niocan	Niocan Inc.	Carbonatite-associated deposit Underground mine	Niobium	na	na	na	na	2,500 mt/d	Pending CA from the MDDEP	17 years
Chrysotile												
12	Shipton / 21E13 / Estrie	Jeffrey mine	Mine Jeffrey inc.	Chrysotite asbestos deposit in ultramafic rocks Underground mine	Chrysotile	na	na	na	na	20,000 mt/d	2011	21 years
Apatite												
13	22J02 / Côte-Nord	Arnaud	Mines Arnaud inc.	Layered mafic complex Open pit mine	Apatite	132 M mt at 6% P_2O_5	na	na	na	23,000 mt/d	2015	30 years
Uranium, lithium, and rare earth elements												
14	24A08 / Nord-du-Québec	B-Zone	Quest Rare Minerals Corporation	REE- and yttrium-enriched pegmatites and aplites in peralkaline granite Open pit mine	REE Yttrium Zirconium Niobium	na	na	na	115 M mt at 1% REE_2O_3 0.28% Y_2O_3 1.97% ZrO_2 0.21% Nb_2O_5	4,000 mt/d	2015	25 years
15	32P16 / Nord-du-Québec	Matoush	Strateco Resources Inc.	Shear-related uranium deposit Underground mine	Uranium	na	na	436 K mt at 0.78% U_3O_8	1.2 M mt at 0.50% U_3O_8	750 mt/d	2013	7 years
16	La Corne / 32C05 / Abitibi-Témiscamingue	Québec Lithium	Canada Lithium Corporation	Spodumene-bearing granitic pegmatites Open pit mine	Lithium	15 M mt at 1.2% Li_2O	6 M mt at 1.2% Li_2O	41 M mt at 1.2% Li_2O	58 M mt at 1.2% Li_2O	2,950 mt/d	2013	15 years
Iron												

TABLE 5.1 - Mining projects at the deposit appraisal phase in Québec in 2010 (see Figure 5.1).

Site	Township / NTS / Administrative region	Project	Company	Summary description of deposit Type of mining project	Commodities	Proven and probable reserves	Measured resources	Indicated resources	Inferred resources	Expected daily production capacity	Expected start-up date	Expected mine life
17	Bergeron / 23B06 / Côte-Nord	Fire Lake	ArcelorMittal Mines Canada	Algoma-type iron formations Open pit mine	Iron	na	na	na	na	14,000 mt/d	(seasonal mining since 2006)	na

NOTES:
Data compiled in this table are preliminary and are based on information publicly released by mining companies.
The distinction between proven and probable reserves, and between measured, indicated, and inferred resources is defined in accordance with National Instrument 43-101.
The list of abbreviations is provided in Appendix 2.

TABLE 5.2 - Mining projects at the development phase in Québec in 2010 (see Figure 5.1).

Site	Township / NTS / Administrative region	Project	Company	Summary description of deposit Type of mining project	Commodities	Proven and probable reserves	Measured resources	Indicated resources	Inferred resources	Expected daily production capacity	Expected start-up date	Expected mine life
Base metals: zinc, copper, and nickel												
18	Le Sueur / 32F12 / Ungava	Bracemac-McLeod	XStrata Canada Corporation / Donner Metals Ltd	Volcanogenic massive sulphides Underground mine	Zinc Copper Gold Silver	3.7 M mt at 9.6% Zn 1.3% Cu 28 g/t Ag 0.43 g/t Au	2.6 M mt at 11.3% Zn 1.6% Cu 37 g/t Ag 0.45 g/t Au	1.0 M mt at 8.9% Zn 1.1% Cu 21 g/t Ag 0.56 g/t Au	2.6 M mt at 8.8% Zn 1.3% Cu 39 g/t Ag 1.1 g/t Au	2,500 mt/d	2013	4 years
19	Bousquet / 32D08 / Abitibi-Témiscamingue	LaRonde Extension	Agnico-Eagle Mines Ltd	Gold-rich volcanogenic massive sulphides Underground mine	Zinc Copper Gold Silver	17.5 M mt at 5.8 g/t Au 20 g/t Ag 0.3% Cu 0.8% Zn 0.03% Pb	na	1.8 M mt at 2.7 g/t Au 22 g/t Ag 0.3% Cu 0.8% Zn 0.08% Pb	9.8 M mt at 6.4 g/t Au 28 g/t Ag 0.3% Cu 2.1% Zn 0.06% Pb	6,900 mt/d	2011	11 years
20	Grevet / 32F02 / Nord-du-Québec	Langlois	Breakwater Resources Ltd	Volcanogenic massive sulphides Underground mine	Zinc Copper Gold Silver	5.1 M mt at 9.7% Zn 0.6% Cu 0.07 g/t Au 45 g/t Ag	2.4 M mt at 9.4% Zn 0.6% Cu 0.06 g/t Au 41 g/t Ag	4.3 M mt at 10.4% Zn 0.7% Cu 0.08 g/t Au 51 g/t Ag	1.5 M mt at 8.0% Zn 0.5% Cu 0.09 g/t Au 44 g/t Ag	2,570 mt/d	2012	10 years
21	35H11 / Nord-du-Québec	Nunavik Nickel	Canadian Royalties Inc.	Magmatic Ni-Cu-PGE Open pit and underground mine	Nickel Copper Cobalt PGE Gold	na	560 K mt at 0.93% Ni 1.10% Cu 0.04% Co 0.60 g/t Pt 2.7 g/t Pd 0.10 g/t Au	21 M mt at 0.93% Ni 1.15% Cu 0.05% Co 0.54 g/t Pt 2.2 g/t Pd 0.14 g/t Au	5 M mt at 0.72% Ni 0.92% Cu 0.04% Co 0.51 g/t Pt 2.0 g/t Pd 0.13 g/t Au	4,500 mt/d	2012	na
Precious metals: gold												
22	Fournière / 32D01 / Abitibi-Témiscamingue	Canadian Malartic	Osisko Mining Corporation	Porphyry gold Open pit mine	Gold	246 M mt at 1.13 g/t Au	na	70.1 M mt at 1 g/t Au[1]	20 M mt at 0.73 g/t Au	55,000 mt/d	2011	12 years
23	Beauchastel / 32D03 / Abitibi-Témiscamingue	Francoeur	Richmont Mines Inc.	Shear-related alteration and replacement Underground mine	Gold	616 K mt at 6.9 g/t Au	na	76 K mt at 7.5 g/t Au	202 K mt at 6.0 g/t Au	600 mt/d	2011	4 years
24	Bourlamaque / 32C04 / Abitibi-Témiscamingue	Lamaque	Century Mining Corporation	Orogenic lode gold Underground mine	Gold	7.7 M mt at 4.6 g/t Au	3.4 M mt at 4.5 g/t Au	4.9 M mt at 5.1 g/t Au	20 M mt at 5.0 g/t Au	3,000 mt/d	2011	11 years
25	Bousquet / 32D07 / Abitibi-Témiscamingue	Westwood	Iamgold-Québec Management Inc.	Gold-rich volcanogenic massive sulphides, stockwork and disseminated sulphides Underground mine	Gold	na	na	408 K mt at 7.5 g/t Au	9 M mt at 11.4 g/t Au	2,300 mt/d	2013	16 years
Iron												
26	23J15 / Côte-Nord	DSO	New Millennium Capital Corp.	Enriched iron formations Open pit mine	Iron	64 M mt at 60% Fe	22 M mt at 60% Fe	45 M mt at 58% Fe	7 M mt at 57% Fe	25,000 mt/d 7 months/ year	2012	15 years

NOTES:

Data compiled in this table are preliminary and are based on information publicly released by mining companies.

The distinction between proven and probable reserves, and between measured, indicated, and inferred resources is defined in accordance with National Instrument 43-101.

The list of abbreviations is provided in Appendix 2.

1- Total of measured and indicated resources

CHAPTER 6 - MINERAL PRODUCTION

6.1 - Economic data and statistics on mineral production

Martin Labrecque

MINERAL SHIPMENTS

In 2009, Québec ranked second among Canadian provinces in terms of the value of its mineral shipments, just behind Ontario.[1]

The value of shipments (metallic and non-metallic minerals) from Québec in 2009 reached a historic peak of $6.2B. This is practically identical to levels observed in 2008 (Table 6.1). The value of shipments in 2009 for all of Canada on the other hand, dropped by 32% relative to the previous year, due to the global economic crisis.

A few key elements may explain the good performance recorded in Québec compared to Canada as a whole. First, shipments for certain commodities increased in Québec from 2008 to 2009 (*e.g.,* iron, nickel, zinc). Also, the price of gold, which is an important commodity for Québec's mining sector in terms of production, progressed steadily, namely due to its role as a safe haven in times of economic uncertainty. Finally, prices collapsed for several commodities that are largely produced in other Canadian provinces but very little or not at all in Québec (potash, sulphur, diamond, etc.).

TABLE 6.1 - Value of mining product shipments per administrative region in Québec in 2008 and 2009p.

Regions	$M	
	2008	2009p
01 Bas-Saint-Laurent	c	c
02 Saguenay–Lac-Saint-Jean	c	c
03 Capitale-Nationale	166	150
04 Mauricie	35	20
05 Estrie	62	73
06 Montréal	c	c
07 Outaouais	24	20
08 Abitibi-Témiscamingue	977	905
09 Côte-Nord	1 410	1 716
10 Nord-du-Québec	1 164	1 259
11 Gaspésie–Îles-de-la-Madeleine	c	c
12 Chaudière-Appalaches	77	87
13 Laval	23	35
14 Lanaudière	197	196
15 Laurentides	87	74
16 Montérégie	1 610	1 339
17 Centre-du-Québec	36	27
Total	**6 162**	**6 240**

p: data for 2009 are preliminary. c: confidential data.

Source: *Institut de la statistique du Québec*.

1- Based on preliminary data from the *Institut de la statistique du Québec* and Natural Resources Canada.

More detailed data is available at the following address (French only): http://www.mrnf.gouv.qc.ca/mines/statistiques/index.jsp

COMMODITIES PRODUCED IN QUÉBEC

In Québec, iron, gold, nickel, crushed stone, titanium, zinc, and cement are the main commodities produced in terms of value of shipments (Table 6.2).

COMPANIES OPERATING METALLIC ORE MINES IN QUÉBEC

In the second half of 2010, 12 mining operators were active and 16 metallic ore mines were in operation in Québec (Table 6.3).

MINING INVESTMENTS

In addition to exploration and deposit appraisal expenditures, the mining sector generates substantial investments in mine development, either to develop new mining complexes or on existing mine sites. These investments include mine development work, capital assets, and repairs (Table 6.4).

6.2 - Mineral Production

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METAL COMMODITIES

Figure 6.1 shows the location of active mines in Québec in 2010, whereas Table 6.5 provides mining statistics for metal commodities produced in Québec.

Iron

ArcelorMittal Mines Canada worked on a major investment project for its facilities in **Mont-Wright**. The company wants to increase its production capacity by 60%, from 15 to 24 Mt/yr of iron concentrate and to build a new pellet plant in **Port-Cartier**. During the first half of 2011, the board of directors of this multinational corporation based in Luxembourg will announce its final decision regarding this project, which would require an investment of over two billion dollars and create close to 1,000 jobs.

TABLE 6.2 - Mining product shipments from Québec.

Substances	2008		2009p	
	Quantity	Value ($M)	Quantity	Value ($M)
Metallic minerals				
Silver (t)	164	84	160	86
Cadmium (t)	211	1	220	1
Cobalt (t)	364	33	388	17
Copper (t)	37 217	276	29 580	171
Iron (minerai) (kt)	13 358	c	14 500	c
Ilmenite (kt)	c	c	c	c
Nickel (t)	21 707	504	27 181	462
Niobium (t)	4 400	c	4 329	c
Gold (kg)	27 603	825	28 013	985
Platinoides (kg)	c	c	c	c
Lead (t)	442	1	80	< 1
Selenium (t)	16	1	20	1
Tellurium (t)	3	1	2	< 1
Zinc (t)	164 759	329	201 689	373
Total - Metallic minerals	**-**	**4 438**	**-**	**4 631**
Non metallic minerals				
Amiante (kt)	c	c	c	c
Chaux (kt)	661	78	608	73
Ciment (kt)	2 870	391	2 562	369
Pierre concassée (kt)	41 099	394	43 735	428
Sable et gravier (kt)	22 265	108	17 960	92
Sel (t)	c	c	c	c
Silice (kt)	541	14	449	19
Soufre (kt)	161	32	161	24
Titane (t) (dioxyde)	c	c	c	c
Tourbe (kt)	376	65	345	62
Total -	**-**	**1 724**	**-**	**1 609**
Grand total	**-**	**6 162**	**-**	**6 240**

p: data for 2009 are preliminary. c: confidential data.
Québec also produces small amounts of bismuth, clay, graphite, mica, and talc.
Source: *Institut de la statistique du Québec*.

In July 2010, **Consolidated Thompson Iron Mines (CTIM)** completed construction and development work at its mining complex and began production at its **Bloom Lake** iron ore deposit. The mining company's objective is to produce 8 Mt/yr of iron concentrate in 2011, although over a two to three-year timeframe, **CTIM** is planning to increase its production capacity to 16 Mt/yr at the Bloom Lake mine.

Until the spring of 2009, **Rio Tinto, Fer et Titane** supplied its metallurgical complex in Sorel-Tracy exclusively with ilmenite ore from the **Lac Tio** mine (2.5 Mt/yr) in the Côte-Nord region. Since then, the plant has also been receiving ore from its mine in Madagascar (0.9 Mt/yr). The company is working on plans to extend the mine life of the Lac Tio site at least until 2050.

Copper and zinc

Mining operations began at the **Perseverance** mine in the fall of 2008 and are expected to continue at least until 2012 according to management at **Xstata Canada**, **division Xstrata Zinc Canada**. In 2010, a total of 1.0 Mt of ore was extracted at the mine; this level should be maintained in 2011.

Nickel, copper, cobalt, and platinum group elements (PGE)

Xstata Canada, **division Xstrata Nickel Canada** has been mining ore at its **Raglan** mine for 13 years and is currently working on a plan to extend the mine life beyond 2030. Nevertheless, the ore extraction rate in 2011 is expected to remain at 1.3 Mt/yr.

TABLE 6.3 - Companies operating metallic ore mines in Québec.

Name of mine	Name of company	Company status	Head office
Barry	Metanor Resources	public	Val-d'Or
Beaufor	Richmont Mines	public	Rouyn-Noranda
Casa Berardi	Aurizon Mines	public	Vancouver
Sleeping Giant	North American Palladium	public	Toronto
Goldex	Agnico-Eagle Mines	public	Toronto
Kiena	Wesdome Gold Mines	public	Toronto
Bloom Lake	Consoildated Thompson	public	Montréal
Lac Herbin	Alexis Minerals Corporation	public	Toronto
Lac Tio	Rio Tinto Fer et Titane	subsidiary of Rio Tinto Group	London (UK)
Lapa	Agnico-Eagle Mines	public	Toronto
LaRonde	Agnico-Eagle Mines	public	Toronto
Mont-Wright	ArcelorMittal, Mines Canada	ArcelorMittal	Luxembourg
Mouska	Iamgold-Québec Management	subsidiary of Iamgold Corp.	Toronto
Niobec	Iamgold-Québec Management	subsidiary of Iamgold Corp.	Toronto
Perseverance	Xstrata Canada	subsidiary of Xstrata Plc.	Zoug (Switzerland)
Raglan	Xstrata Canada	subsidiary of Xstrata Plc.	Zoug (Switzerland)

* Accurate as of August 31, 2010
Source: *Ministère des Ressources naturelles et de la Faune*.

TABLE 6.4 - Mining investments per administrative region in Québec (exploration and deposit appraisal, and mine development, in $M)

	Abitibi-Témiscamingue			Côte-Nord			Nord-du-Québec			Other regions			Total		
	Expl and dep. app.	Mine devel.	Total	Expl and dep. app.	Mine devel.	Total	Expl and dep. app.	Mine devel.	Total	Expl and dep. app.	Mine devel.	Total	Expl and dep. app.	Mine devel.	Total
2006	96	285	382	25	228	253	164	352	516	9	53	62	295	918	**1 213**
2007	152	330	481	40	252	291	270	509	780	15	57	72	476	1 148	**1 624**
2008	182	426	608	32	382	413	290	602	891	22	76	98	526	1 485	**2 011**
2009	166	820	987	14	497	510	185	263	447	15	82	96	379	1 661	**2 041**
2010ri	na	na	na	na	na	na	na	na	na	na	na	na	576	1 596	**2 172**

The "mine development" category includes investments for capital assets and repairs on and off mine sites.
Data for 2010 are revised intentions (ri).
Source: *Institut de la statistique du Québec*.

Gold

In 2010, in an effort to lower costs, **Alexis Minerals** began processing ore from the **Lac Herbin** mine at the refurbished Aurbel mill. Total annual production at the Lac Herbin mine reached 22,637 gold ounces recovered from 155,000 tonnes of ore, due to lower than expected mill head grades. Reserves at the Lac Herbin mine are reportedly sufficient to ensure a mine life of at least 5 years.

Although mining operations ceased at the **Troilus** mine in 2008, **Inmet Mining** continues to produce copper concentrate and gold from ore stockpiled near the plant since the start-up of operations in 1996. Over the next two years, the company will proceed with dismantling of infrastructure and mine site rehabilitation work.

Iamgold-Québec continues to use its processing facilities at the former **Doyon** mine in Preissac to process ore from the **Mouska** mine. These facilities will remain operational and will eventually be used to process ore from the **Westwood** project in 2013.

Agnico-Eagle Mines operates the **LaRonde** (Cadillac), **Goldex** (Val-d'Or), and **Lapa** (Rivière-Héva) gold mines. In 2010, Goldex decided to increase its daily output capacity from 6,900 to 8,000 tonnes for 2011 and in doing so, its annual gold production could reach nearly 175,000 ounces. At the Lapa mine, production exceeded forecasted levels by 500,000 tonnes, for an annual production of more than 100,000 gold ounces.

Since operations resumed in 2007 at the **Casa Berardi** mine, **Aurizon Mines** has continued its drilling program at the mine to renew reserves and maintain its current production levels. In 2010, mining of more than 700,000 tonnes of ore led to the production of nearly 150,000 gold ounces.

Officially reopened in 2005, the **Kiena** mine held by **Wesdome Gold Mines** extracted less than 300,000 tonnes of ore to produce more than 32,000 gold ounces in 2010.

Richmont Mines processed more than 100,000 tonnes of ore from the **Beaufor** mine at its Camflo mill. Proven and probable reserves at the mine stood at nearly 300,000 tonnes of ore as at December 31, 2010.

In January 2010, **North American Palladium**, new owner of the **Sleeping Giant** gold mine, reached commercial production. The company reported that reserves had practically doubled during the year, warranting the deepening of its production shaft by 200 metres, to develop additional levels in the mine in 2011.

In October 2010, **Metanor Resources** ceased mining operations at the **Barry** mine. It is currently considering the possibility of building a concentrator on the mine site.

Niobium

Iamgold-Québec produced nearly 6.5 million kg of niobium in 2010 at the **Niobec** mine. Production levels are relatively stable and reserves are sufficient for more than 15 years. Niobium consumption is largely related to the manufacture of certain types of specialty steel. The plant expansion was completed in 2010. The new facilities will increase the processing capacity by 24%. The Niobec mine has been in production since 1975 and its mine life is currently assured until 2024.

NON-METAL COMMODITIES

The value of industrial mineral shipments, as determined by the *Institut de la statistique du Québec*, was $723M in 2010 (provisional data) compared to $630M in 2009, for a 13% increase in the value of mineral shipments. These figures do not include limestone and dolomite shipments, which are included with stone products. These data also do not take into account the value of sand and gravel shipments.

Figure 6.1 shows the location of mining operations for non-metal commodities and information on these mines is compiled in Table 6.6. Note that non-metal mines are currently all located on mining leases. Non-metal commodities (industrial minerals) produced in Québec in 2010 include chrysotile asbestos, graphite, mica, rock salt, K-feldspar, and silica.

The **Black Lake** mine has been maintaining its production levels in recent years, but chrysotile fibre reserves are depleting for **Lac d'Amiante du Canada.**

Mine Jeffrey continues it's mining operations in the open pit.

Flaky graphite is extracted at the Lac-des-Îles mine south of Mont-Laurier by Timcal Canada inc.

Les Produits Mica Suzorite has been in operation since 1970 at the **Lac Letondal** mine. The company normally extracts ore for a few months to supply its processing plant in Boucherville and manages its ore stockpiles over a five-year plan. Reserves are sufficient for several years to come.

Production at **Mines Seleine** by the **Canadian Salt Company** is stable and follows market demand.

Silica namely comes from mines in Saint-Rémi-d'Amherst, Saint-Canut, and Saint-Donat. In addition, **Silicium Québec** extracts and processes ore in **Petit Lac Malbaie**. Its production is earmarked to supply the silicon plant in Bécancour.

Dentsply Canada extracts feldspar for the manufacture of dental ceramics at the **Othmer** site. Operations are sporadic and excavation work will be required shortly to replenish reserves for the plant.

INDUSTRIAL STONE

Figure 6.2 shows the location of industrial stone quarries in Québec and information on these quarries is compiled in Table 6.7.

Varieties of industrial stone produced in Québec in 2010 include limestone, dolomite, marble, quartzite, sandstone, and shale. Limestone, dolomite and marble are mined for industrial purposes in fourteen quarries and are used to produce quick lime, various aggregate products (soil amendments, mineral fillers, granules), or cement. The main sources of silica are quartzites, sandstones, and natural sand deposits. Shale (argillaceous schist) is quarried in the Montréal area and is used to manufacture bricks.

Graymont built a construction wood waste chipper plant to supply its vertical kiln at its facilities in **Marbleton**. At its quarry in **Bedford**, the company obtained a major supply contract to produce 350,000 tonnes of crushed stone needed for the construction of a highway interchange.

ARCHITECTURAL STONE

Figure 6.3 shows the location of architectural stone quarries in operation in Québec in 2010. Table 6.8 provides a brief description of each operation.

A total of 96 architectural stone quarries are currently active in Québec. The Rivière-à-Pierre area, with its sixteen quarries in operation, constitutes the most important region in Québec for the production of dimension stone. The Saint-Nazaire and Chute-des-Passes areas with four quarries each, as well as the Saint-Alexis-des-Monts and Saint-Didace areas with five quarries in operation, are also among the most attractive areas for the production of architectural stone.

In 2010, investors from Québec and Europe reopened the Glendyne slate quarry in Saint-Marc-du-Lac-Long, enabling 250 workers to return to their jobs.

PEAT

The location of producing peatlands in Québec is shown in Figure 6.2 and information on these operations is compiled in Table 6.9.

In 2010, 17 peat producers were active in Québec, harvesting from 35 sites mainly located in the Bas-Saint-Laurent, Centre-du-Québec, Côte-Nord, Saguenay–Lac-Saint-Jean, Chaudière-Appalaches and Capitale-Nationale regions. After a few particularly difficult years of production due to inclement weather conditions, production levels in 2010 are nothing short of exceptional, showing a 20% increase relative to 2009 based on preliminary data. Weather conditions, characterized by long sunny periods and precipitation rates well below average, enabled the industry to restore its inventories to normal levels. Most producers were even able to interrupt their harvesting as early as September.

Finally, the Québec Peat Moss Producers Association launched its new website in the fall of 2010.

6.3 - Jobs in the mining sector

In 2009, based on preliminary data, mineral extraction activities in Québec (metallic and non-metallic ore) created a total of 10,272 jobs distributed in all of Québec's regions, but mostly in Abitibi-Témiscamingue, Côte-Nord, and Nord-du-Québec (Table 6.9). Overall, when primary processing activities and diamond drilling companies are included, the mining sector in Québec accounted for 13,745 direct jobs. Note that activities related to peat harvesting, sand and gravel extraction, and crushed stone production are present in other regions, such that all of Québec's regions are involved in one way or another in the mining sector.

In addition to these direct jobs, the MRNF estimates that indirect jobs generated by the mining sector represent more than 12,000 jobs for production activities, and more than 3,000 jobs related to capital investments and construction of new mines. Overall, once jobs related to mineral exploration are included, the mining sector represents nearly 35,000 direct and indirect jobs in Québec.[2]

N.B. Data on diamond drilling is not collected during the preliminary survey, it is based on the 2008 annual survey. Jobs include those in the primary processing industry (smelters (except aluminium plants), refineries, and cement, lime, and clay plants).

2- Data estimated using the Québec input-output model developed by the Institut de la statistique du Québec, October 2010.

6.4 - Primary processing activities

In addition to mineral production activities, the mining sector in Québec encompasses a primary processing industry. The MRNF defines this industry as including refineries, smelters, and clay, lime, and cement plants. This industry is often based outside of mining regions and as a result, the economic benefits of the mining sector are more widely distributed throughout Québec. In 2009, the primary processing industry accounted for 4,300 direct jobs, in 13 plants mainly located in the Montérégie, Abitibi-Témiscamingue and Montréal areas.

LIST OF REFINERIES, SMELTERS, AND CLAY, LIME AND CEMENT PLANTS:

Refineries

- Canadian Copper Refinery (CCR), property of Xstrata, located in Montréal.
- Canadian Electrolytic Zinc (CEZ), property of the Noranda Income Limited Partnership, located in Salaberry-de-Valleyfield.

Smelters

- Horne smelter, property of Xstrata Copper, located in Rouyn-Noranda.
- QIT - Fer et titane, property of Rio Tinto, Fer et Titane (RTFT), located in Sorel.

Clay plant

- Hanson-Briqueterie Saint-Laurent, located in La Prairie, Montérégie region.

Lime plants

- Marbleton plant, property of Graymont.
- Joliette plant, property of Graymont.
- Bedford plant, property of Graymont.
- Bas-Saint-Laurent plant, property of the *Coopérative de producteurs de chaux du Bas-Saint-Laurent*.

Cement plants

- Ciment St-Laurent, property of Holcim, located in Joliette.
- Ciment Québec, located in St-Basile-de-Portneuf.
- Lafarge Canada, located in St-Constant, Montérégie region.
- Colacem Canada, located in Grenville-sur-la-Rouge.

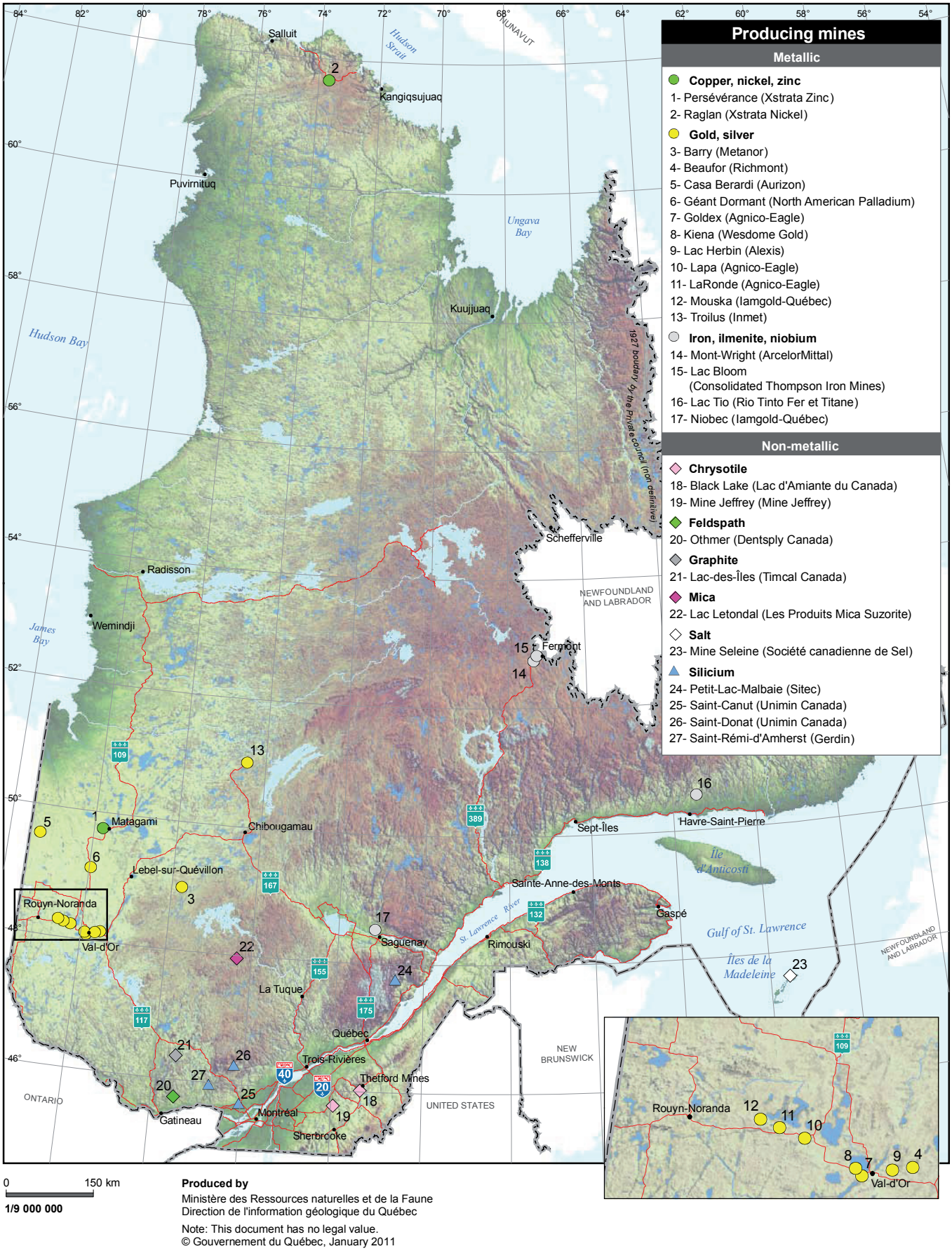


FIGURE 6.1. Active mines in Québec in 2010.

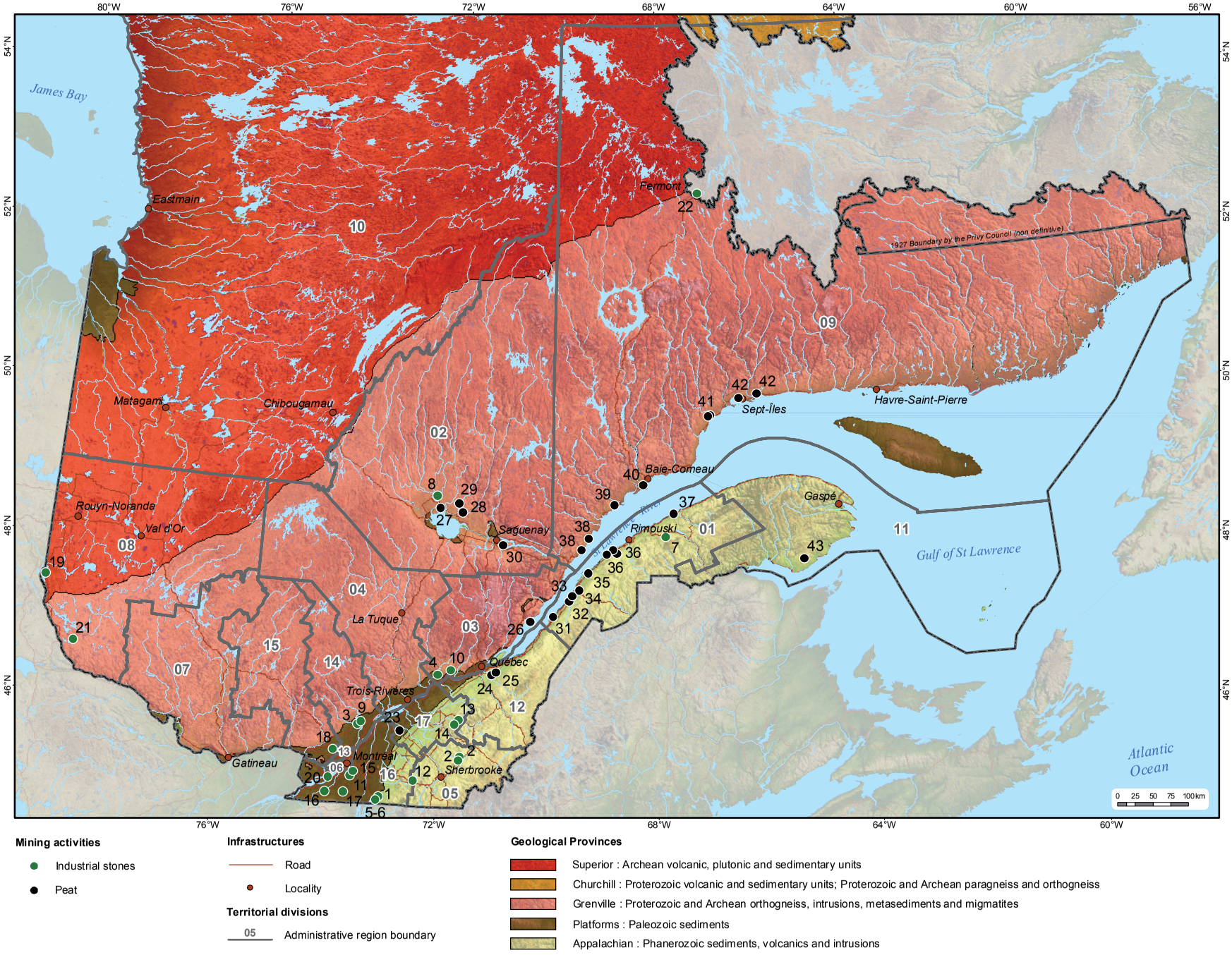


FIGURE 6.2. Industrial stone quarries and peatlands exploited in Québec in 2010.

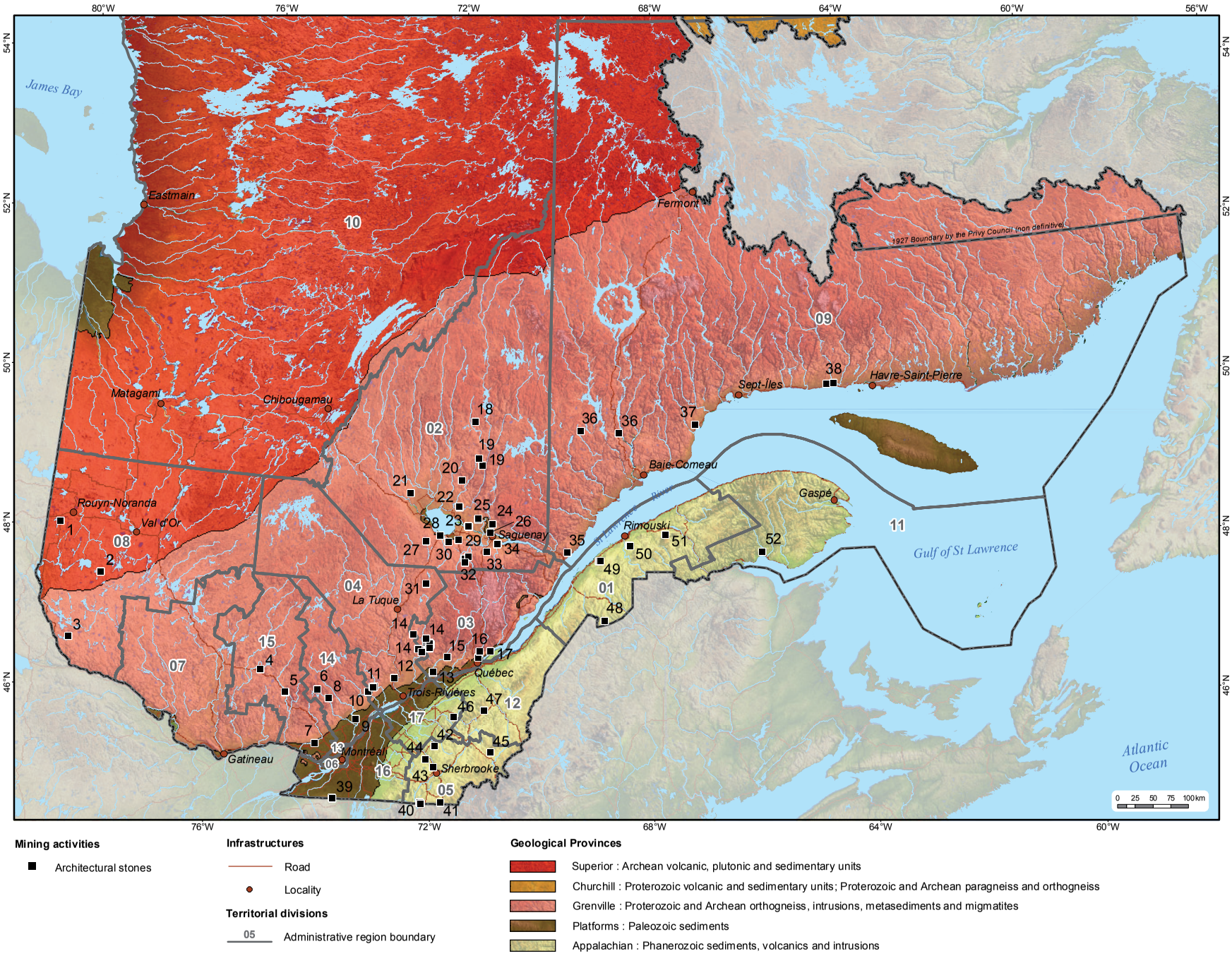


FIGURE 6.3. Architectural stone quarries exploited in Québec in 2010.

Table 6.5 - Production of metal commodities in Québec in 2010 (see Figure 6.1).

Site	Township / NTS / Administrative region	Mine	Company	Summary description of ore deposit and Type of mine	Production: ore mined in 2010	Metal produced in 2010	Reserves (as at December 31, 2010)	Number of jobs in 2010	Years of production (number)
Base metals: Cu, Ni and Zn									
1	Daniel / 32F12, 13 / Nord-du-Québec	Perseverance (Mattagami mine)	Xstrata Canada Corporation	VMS-type in a mafic and felsic lava sequence. Underground mine	1,090,643 mt at 14.1% Zn	139,350 mt Zn 10,005 mt Cu	na	220	2008-20.. (3)
2	/ 35G09, 35H11 and 35H12 / Nord-du-Québec	Raglan (Smelter: Sudbury /Refinery: Norway)	Société minière Raglan du Québec ltée - Xstrata Nickel	Magmatic Ni-Cu in massive sulphide lenses at the base of ultramafic flows. Underground and open pit mine	1,279,778 mt at 2.45% Ni 0.68% Cu	28,237 mt Ni 7,134 mt Cu 567 mt Co	na	762	1998-20.. (13)
Precious metals: Au and Ag									
3	Barry / 32B13 / Abitibi-Témiscamingue	Barry (Bachelor Lake mill -Desmaraisville)	Metanor Resources Inc.	Quartz-carbonate-albite veins associated with shear zones. Open pit mine	200,034 mt at 2.03 g/t Au 0.35 g/t Ag	406 kg Au 69 kg Ag	**** 18 M mt at 1.5 g/t Au	71	2008-2010 (3)
4	Pascalis / 32C04 / Abitibi-Témiscamingue	Beaufor (Camflo mill)	Richmont Mines Inc.	Auriferous veins within E-W-trending shear zones along the margins of the Bourlamaque Batholith. Underground mine	107,204 mt at 6.29 g/t Au	718 kg Au	*** 283 K mt at 7.58 g/t Au	100	1933-1951 1996-20.. (33)
5	Casa-Berardi / 32E11 / Nord-du-Québec	Casa Berardi	Aurizon Mines Ltd	Quartz-carbonate-pyrite-arsenopyrite veins in shear zones or stockworks. Underground mine	722,746 mt at 6.76 g/t Au	4,389 kg Au 833 kg Ag	*** 4.4 M mt at 7.09 g/t Au	475	1988-1997 2006-20.. (15)
6	Chaste / 32F04 / Nord-du-Québec	Sleeping Giant	North American Palladium Ltd	Auriferous quartz-sulphide veins along contact between dacitic intrusion and volcanic flows. Underground mine	na	na	na	~125	1987-1991 1992-2008 2009-20.. (22)
7	Dubuisson / 32C04 / Abitibi-Témiscamingue	Goldex	Agnico-Eagle Mines Ltd	Quartz-tourmaline veins with Py-Cp cross-cutting granodiorite sills and dykes. Underground mine	3,017,396 mt at 2.21 g/t Au	5,735 kg Au 48 kg Ag	na	225	2008-20.. (3)
8	Dubuisson / 32C04, 08 / Abitibi-Témiscamingue	Kiena	Wesdome Gold Mines Ltd	Auriferous breccias and quartz veins lodged between two komatiitic flows. Underground mine	285,600 mt at 3.54 g/t Au, 0.6 g/t Ag	997 kg Au 166 kg Ag	*** 1.1 M mt at 2.79 g/t Au 0.55 g/t Ag	170	1981-2002 2006-20.. (26)

Table 6.5 - Production of metal commodities in Québec in 2010 (see Figure 6.1).

Site	Township / NTS / Administrative region	Mine	Company	Summary description of ore deposit and Type of mine	Production: ore mined in 2010	Metal produced in 2010	Reserves (as at December 31, 2010)	Number of jobs in 2010	Years of production (number)
9	Bourlamaque / 32C04 / Abitibi-Témiscamingue	Lac Herbin (Camflo mill)	Alexis Minerals Corporation	Gold associated with quartz-pyrite veining in shear zones cross-cutting the Bourlamaque Batholith. Underground mine	154,343 mt at 5.15 g/t Au (processed ore)	704 kg Au	na	~ 90	2008-20.. (3)
10	Dubuisson/ 32C04 / Abitibi-Témiscamingue	Lapa (LaRonde mine)	Agnico-Eagle Mines Ltd	Blue-grey quartz vein in biotite- and sericite-rich volcanic rock. Underground mine	571,279 mt at 8.30 g/t Au	3,653 kg Au	na	162	2009-20.. (2)
11	Bousquet / 32D08 / Abitibi-Témiscamingue	LaRonde	Agnico-Eagle Mines Ltd	Massive to semi-massive pyrite lenses in sericitized felsic volcanic rocks metamorphosed to andalusite-kyanite schists. Underground mine	2,803,286 mt at 3.2% Zn, 0.23% Cu, 2.17 g/t Au, 57.09 g/t Ag, 0.42% Pb	62,544 mt Zn, 4,224 mt Cu, 5,064 kg Au, 111,371 kg Ag 1,955 mt Pb	na	724	1988-20.. (23)
12	Bousquet / 32D07 / Abitibi-Témiscamingue	Mouska (Doyon mine)	Iamgold-Québec Management Inc.	Quartz veins in Mooshla diorite near the northern sheared contact. Underground mine	58,982 mt at 18.01 g/t Au	10,174 kg Au 319 kg Ag 237 mt Cu	** 175 K mt at 12.9 g/t Au 7.1 g/t Ag 0.19% Cu	160	1991-20.. (20)
13	1524 / 32O01 / Nord-du-Québec	Troilus	Inmet Mining Corporation	Porphyry Au-Cu in diorite. Open pit mine	No ore was mined but ore stockpiles were processed	202 kg Au 298 kg Ag 1,898 mt Cu	na	109	1997-2009 (14)
Iron, ilmenite and niobium									
14	Normanville / 23B14, 23B11 and 23B09 / Côte-Nord	Mont-Wright	ArcelorMittal Mines Canada	Specular hematite in metamorphosed Lake Superior-type iron formation. Open pit mine	na	na	na	~ 2,000 (Mt-Wright and Port-Cartier)	1976-20.. (35)
15	/ 23B14 / Côte-Nord	Bloom Lake	Consolidated Thompson Iron Mines Ltd	Specular hematite and magnetite in metamorphosed Lake Superior-type iron formation. Open pit mine	na	na	na	256	2010-20.. (1)
16	Parker / 12L09 / Côte-Nord	Lac Tio	Rio Tinto - Fer et Titane Inc.	Massive hemo-ilmenite in anorthosite from the Havre-Saint-Pierre Intrusive Suite. Open pit mine	na	na	na	~250	1950-20.. (61)

Table 6.5 - Production of metal commodities in Québec in 2010 (see Figure 6.1).

Site	Township / NTS / Administrative region	Mine	Company	Summary description of ore deposit and Type of mine	Production: ore mined in 2010	Metal produced in 2010	Reserves (as at December 31, 2010)	Number of jobs in 2010	Years of production (number)
17	Simard / 22D11 / Saguenay–Lac-St-Jean	Niobec	Iamgold-Québec Management Inc.	Pyrochlore in the St-Honoré Carbonatite Underground mine	na	na	na	~240	1976-20.. (35)

NOTES:

The list of abbreviations is provided in Appendix 2.

Several figures compiled in this table are preliminary and were obtained from mining companies before they published their own official statements.

The distinction between proven reserves and probable reserves is defined in accordance with National Instrument 43-101.

The location where ore is processed is indicated in parentheses if it is different from the mining site.

Reserves listed in the table take into account:

* Ore losses

** Ore dilution

*** Combined ore losses and ore dilution

**** None of these factors

TABLE 6.6 - Production of non-metal commodities in Québec (see Figure 6.2).

Site	Canton / SNRC / Région administrative	Deposit	Company	Summary description of deposit Mining method	Production: ore mined in 2010	Metal produced in 2010	Reserves (as at December 31, 2010)	Number of jobs in 2010	Years of production (number)
Chrysotile									
18	Irlande / 21L03 / Chaudière-Appalaches	Black Lake	Lac d'Amiante du Canada inc.	Vein stockwork in serpentinized ultramafic rocks Open pit mine	na	na	na	~425	1958-20.. (53)
19	Shipton / 21E13 / Estrie	Mine Jeffrey	Mine Jeffrey inc.	Vein stockwork in serpentinized ultramafic rocks Open pit mine	na	na	na	~50	1878-20.. (133)
Feldspath									
20	Portland / 31G11 / Outaouais	Othmer	Dentsply Canada ltd	Pegmatite-hosted K-feldspar Open pit mine	na	na	na	~10	2002-20.. (9)
Graphite									
21	Bouthiller / 31J05 / Laurentides	Lac-des-Îles	Timcal Canada inc.	Disseminated flaky graphite in crystalline limestone Open pit mine	na	na	na	~55	1989-20.. (22)
Mica									
22	Suzor / 31O16 / Mauricie	Lac Letondal	Les Produits Mica Suzorite inc.	Lens-shaped alkaline intrusion with 80-85% phlogopite (suzorite variety) Open pit mine	na	na	na	~30	1974-20.. (37)
Sel									
23	Îles-de-la-Madeleine/ 11N12 / Gaspésie–Îles-de-la-Madeleine	Mine Seleine	Société canadienne de Sel ltée	Carboniferous salt dome Underground mine	na	na	na	~160	1982-20.. (29)
Silicium									
24	Charlevoix 3 / 21M15 / Capitale-Nationale	Petit-Lac-Malbaie	Sitec s.e.c.	Quartzite Open pit mine	nd	nd	nd	~20	1977-20.. (34)
25	Lac des Deux-Montagnes / 31G09 / Laurentides	Saint-Canut	Unimin Canada ltd	Potsdam Group sandstone Open pit mine	nd	nd	nd	~60	1978-20.. (33)

TABLE 6.6 - Production of non-metal commodities in Québec (see Figure 6.2).

Site	Canton / SNRC / Région administrative	Deposit	Company	Summary description of deposit Mining method	Production: ore mined in 2010	Metal produced in 2010	Reserves (as at December 31, 2010)	Number of jobs in 2010	Years of production (number)
26	Lussier / 31J08 / Lanaudière	Saint-Donat	Unimin Canada ltd	Quartzite Open pit mine	nd	nd	nd	~15	1974-20.. (37)
27	Amherst / 31G15 / Laurentides	Saint-Rémi-d'Amherst	Société minière Gerdin inc.	Quartzite Open pit mine	nd	nd	nd	nd	1970-20.. (41)

NOTES:

The list of abbreviations is provided in Appendix 2.

Several figures compiled in this table are preliminary and were obtained from mining companies before they published their own official statements.

The distinction between proven reserves and probable reserves is defined in accordance with National Instrument 43-101.

The location where ore is processed is indicated in parentheses if it is different from the mining site.

Reserves listed in the table take into account:

* Ore losses

** Ore dilution

*** Combined ore losses and ore dilution

**** None of these factors

TABLE 6.7 – Industrial stone quarries in production in Québec in 2010 (see Figure 6.2).

SITE	DEPOSIT	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP / NTS	ADMINISTRATIVE REGION
Calcaire, dolomie et marbre						
1	Bedford	Graymont (Qc) Inc. (division Bedford)	Corey Formation limestone	Quicklime, ground limestone products for industrial use, crushed stone	Stanbridge / 31H03	16
2	Domlim #5 et #6	Graymont (Qc) Inc. (division Marbleton)	Lac Aylmer Formation limestone	Quicklime, ground limestone products for industrial use, crushed stone	Dudswell / 21E12	12
3	Jolichaux	Graymont (Qc) Inc. (division Joliette)	Deschambault Formation limestone	Quicklime, ground limestone products for industrial use, crushed stone	Lavaltrie / 31I03	14
4	Calco	Graymont Inc. (Portneuf)	Deschambault Formation limestone	Crushed stone, ground limestone products for industrial use	Seigniory of Grondines / 31I09	3
5	Saint-Armand, Messier-Missisquoi	Omya Canada Inc. (division St-Armand)	Strites Pond Formation limestone	Pulverized limestone for use as mineral filler	Seigniory of Saint-Armand / 31H03	16
6	Saint-Armand Principale	Omya Canada Inc. (division St-Armand)	Strites Pond Formation limestone	Pulverized limestone for use as mineral filler, white terrazzo granules	Seigniory of Saint-Armand / 31H03	16
7	La Rédemption	Coopérative des Producteurs de chaux du Bas-Saint-Laurent	Dolomitic marble from the Sayabec Formation	Magnesian soil improvement	Awantjish / 22B05	1
8	Pères Trappistes	Les Calcites du Nord inc.	Calcitic marble	White granules for artificial stone, masonry sand, soil improvement	Pelletier / 32A16	2
9	Ciment indépendant	Ciment St-Laurent (indépendant) inc.	Limestone from the Trenton and Black River Groups	Cement production	Lanoraye / 31I03	14
10	Saint-Basile-sud	Ciment Québec inc.	Limestone from the Trenton and Black River Groups	Cement production	Auteuil / 21L12	03
11	Ciment Lafarge	Lafarge Canada Inc.	Limestone from the Trenton and Black River Groups	Cement production	Sault-Saint-Louis / 31H05	16
12	Soca	Agrégats Waterloo Inc.	Dolomitic marble from the Stukely-South fault zone	Magnesium-rich soil improvement, terrazzo granules, decorative aggregate	Stukely / 31H08	5
13	Saint-Ferdinand	Les Carrières St-Ferdinand Inc.	Oak Hill Group dolomite	Magnesium-rich soil improvement, decorative aggregate	Halifax / 21L04	17
14	Trottier Mills	Les Carrières St-Ferdinand inc.	Oak Hill Group dolomite	Magnesium-rich soil improvement	Chester / 21L04	17

TABLE 6.7 – Industrial stone quarries in production in Québec in 2010 (see Figure 6.2).

SITE	DEPOSIT	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP / NTS	ADMINISTRATIVE REGION
Minéraux d'argile						
15	Briqueterie Saint-Laurent	Hanson Brick Ltd	Nicolet shale Formation	facing bricks	La Prairie / 31H06	16
Silice						
16	Ormstown	La Compagnie Bon Sable ltée (division Ormstown)	Natural sand	Washed sand for sandblasting, smelting, ceramic glue mixtures	Beauharnois-2 / 31H04	16
17	Sainte-Clotilde	Les Sables Silco inc.	Potsdam Group sandstone	Silica-rich crushed stone for cement plant and ferrosilicon	Beauharnois-1 / 31H04	16
18	Saint-Joseph-du-Lac	La Compagnie Bon Sable ltée	Natural sand	Washed sand for masonry and sandblasting	Lac-des-Deux-Montagnes-1 / 31H12	15
19	Saint-Bruno-de-Guigues	OPTA Minerals Inc.	Ordovician sandstone	Sand for filtering, smelting, hydraulic fracturing	Guigues / 31M06	8
20	Chromasco	Carrières Sud-Ouest inc.	Potsdam Group sandstone	Crushed stone and silica-rich aggregate for cement plant and ferrosilicon	Beauharnois / 31H05	16
21	Lac Beauchêne	Les Pierres du Nord inc.	Muscovite quartzite from the Kipawa Formation	Quartz granules for artificial stone	Campeau / 31L10	8
22	Lac Daviault	Exploration Québec / Labrador inc.	Quartzite from the Wishart Formation, Gagnon Group	Quartz granules for artificial stone	Lislois / 23B14	9

TABLE 6.8 - Architectural stone quarries exploited in Québec in 2010 (see Figure 6.3).

SITE	LOCATION	HOLDER	TYPE OF ROCK - PRODUCT[1]	COMMERCIAL NAME	NTS	ADMINISTRATIVE AREA	MINING TITLES
1	Beaudry	Les Pierres du Nord	Biotite schist - BS	Schiste Nordic	32D03	8	BEX 86
2	Winneway	Polycor inc.	Granite - DS	Winneway	31M09	8	BEX 167
2	Winneway	Polycor Inc.	Granite - DS	Winneway	31M09	8	BEX 323
3	Téminscaming	Les Pierres du Nord	Muscovite quartzite - BS	Aventurine	31L10	8	BEX 355
4	Guénette	Rock of Ages Canada Ltd	Monzogranite - DS, MO	Laurentian Pink, Autumn Pink	31J11	15	CM 79
5	Labelle	Les Pierres Mitchell Inc.	Paragneiss – BS	–	31J07	15	BEX 330
5	Labelle	Les Pierres Mitchell Inc.	Paragneiss – BS	–	31J07	15	BEX 337
5	Labelle	Les Pierres Naturelles Durand Enr.	Paragneiss – BS	–	31J07	15	BEX 76
6	Saint-Donat-de-Montcalm	Carrières F. L. Inc.	Gneiss – BS	–	31J08	14	BEX 140
7	Mirabel	Les Pierres Saint-Canut ltée	Sandstone - BS	Saint-Canut Sandstone	31G09	15	Aucun
8	Notre-Dame-de-la-Merci	A. Lacroix et Fils Granit ltée	Anorthosite - DS	Orion	31I05	14	BEX 255
9	Joliette	Firstake Capital Corporation	Limestone - BS	Joliette Gris, Joliette Jaune	31I03	14	Aucun
10	Saint-Didace	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Nordix Red	31I06	14	Aucun
11	Saint-Alexis-des-Monts	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Autumn Brown	31I06	4	BEX 463
11	Saint-Alexis-des-Monts	Polycor inc.	Quartz mangerite - DS	Newton Brown	31I06	4	BEX 174
11	Saint-Alexis-des-Monts	Granicor inc.	Quartz mangerite – DS, CS	Autumn Brown	31I06	4	Aucun
11	Saint-Alexis-des-Monts	Polycor inc.	Quartz mangerite - DS	Newton Brown	31I06	4	Aucun
12	Shawinigan	Les Entreprises Élie Grenier inc.	Gneiss - BS	–	31I10	4	Aucun
13	Saint-Marc-des-Carrières	Graymont (Portneuf) inc.	Limestone - DS	Saint-Marc Limestone	31I09	3	Aucun
13	Saint-Marc-des-Carrières	Les Pierres de Rocaille du Québec	Limestone - BS	–	31I09	3	Aucun
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Atlantic Blue	31P01	3	BEX 178, 372
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Forest Green	31P01	3	BEX 349
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Farsundite - DS	Salmon Brown	31P01	3	BEX 366, 367
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Gneiss - DS	Silver Mist	31P01	3	BEX 378

TABLE 6.8 - Architectural stone quarries exploited in Québec in 2010 (see Figure 6.3).

SITE	LOCATION	HOLDER	TYPE OF ROCK - PRODUCT[1]	COMMERCIAL NAME	NTS	ADMINISTRATIVE AREA	MINING TITLES
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Farsundite - DS	Deer Brown, Atlantic Green, Deer Brown D.D.	31P01	3	BM 723, 746
14	Rivière-à-Pierre	A. Lacroix et Fils Granit ltée	Farsundite, quartz mangerite - DS	Forest Green, Atlantic Green, Atlantic Blue	31P01	3	CM 488
14	Rivière-à-Pierre	Granicor inc.	Farsundite - DS, CS	New New	31I16	3	Aucun
14	Rivière-à-Pierre	Granicor inc.	Farsundite - PD, UB	Abbey Rose	31P01	3	Aucun
14	Rivière-à-Pierre	Granicor inc.	Quartz mangerite and jotunite - PD, UM, UB	Vert Prairie	31P01	3	BEX 164, 165
14	Rivière-à-Pierre	Granicor inc.	Quartz mangerite, farsundite - PD, UB	Nara	31P01	3	BEX 231
14	Rivière-à-Pierre	Granite D. R. C. inc., Gesrock	Farsundite - PD, PB, UB	Calédonia Canadien, Boca Foncé	31P01	3	Aucun
14	Rivière-à-Pierre	Polycor inc.	Farsundite - DS	Ashen Pink	31I16	3	Aucun
14	Rivière-à-Pierre	Polycor inc.	Farsundite - DS, CS	Caledonia, Caledonia Dark	31P01	3	Aucun
14	Rivière-à-Pierre	Polycor inc.	Farsundite - DS, CS	Caledonia Dark	31P01	3	BEX 33
14	Rivière-à-Pierre	Polycor inc.	Farsundite - DS	Riviera	31I16	3	BEX 114
14	Rivière-à-Pierre	Polycor inc.	Quartz mangerite - DS	Boreal Green	31I16	3	BEX 333
15	Saint-Raymond	A. Lacroix et Fils Granit ltée	Gneiss - DS	Rainbow	21L13	3	Aucun
16	Charlesbourg	Construction B. M. L.	Limestone - BS	–	21L14	3	Aucun
16	Québec	Les Pierres S.D. enr.	Limestone - BS	–	21L14	3	Aucun
16	Sainte-Brigitte-de-Laval	Sablière Vallière inc.	Granit block - BS	–	21L14	3	Aucun
17	Château-Richer	Carrière Laplante enr.	Calcaire - BS	–	21L14	3	Aucun
18	Chute-des-Passes	A. Lacroix et Fils Granit ltée	Gneiss - DS	New Rainbow	22E14	2	BEX 377
19	Chute-des-Passes	A. Lacroix et Fils Granit ltée	Gabbroic anorthosite - DS	Nordic Café	22E06	2	BEX 471
19	Chute-des-Passes	Polycor inc.	Gabbroic anorthosite - DS	Kodiac	22E06	2	BEX 402
20	Chute-des-Passes	Polycor inc.	Farsundite - DS	Astra	22E04	2	BEX 1
21	Saint-Thomas-Didyme	Granicor inc.	Quartz mangerite - DS, CS	Acajou	32A15	2	Aucun
22	Chute-du-Diable	Granicor inc.	Anorthosite - DS, MO, CS	Canadian Black (Peribonka)	22D13	2	Aucun
22	Chute-du-Diable	Granicor inc.	Anorthosite - DS, MO, CS	Canadian Black (Peribonka)	22D13	2	BEX 449

TABLE 6.8 - Architectural stone quarries exploited in Québec in 2010 (see Figure 6.3).

SITE	LOCATION	HOLDER	TYPE OF ROCK - PRODUCT[1]	COMMERCIAL NAME	NTS	ADMINISTRATIVE AREA	MINING TITLES
23	Saint-Nazaire	A. Lacroix et Fils Granit ltée	Leucogabbronorite - DS	Nordix Green, Atlantic Black, Forest Black	22D12	2	Aucun (2 carrières)
23	Saint-Nazaire	A. Lacroix et Fils Granit ltée	Leucogabbronorite - DS	Nordix Green, Atlantic Black	22D12	2	BEX 148
23	Saint-Nazaire	Granicor inc.	Leucogabbronorite – DS, MO, CS	Cambrien	22D12	2	BEX 332
23	Saint-Nazaire	Polycor inc.	Leucogabbronorite - DS, MO	Cambrien Black	22D12	2	BM 705 (2 carrières)
24	Saint-Honoré	Les Pierres Naturelles Tremblay	Limestone - BS	–	22D11	2	Aucun
25	Bégin	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Atlantic Pink	22D11	2	Aucun
25	Bégin	Granicor inc.	Quartz mangerite – DS, CS	Granville	22D11	2	Aucun
26	Tremblay	Carrière 500	Limestone - BS	–	22D06	2	Aucun
27	Saint-François-de-Sales	A. Lacroix et Fils Granit ltée	Quartz mangerite - DS	Spring Green	32A08	2	BEX 203
28	Chambord	A. Lacroix et Fils Granit ltée	Limestone - DS	Chambord Limestone	32A08	2	Aucun
29	Saint-André-du-Lac-Saint-Jean	Jean-Guy Simard et Fils	Quartz mangerite - DS	Saint-André Green	22D05	2	BEX 80
30	Métabetchouan	Polycor inc.	Farsundite - DS	Canadian Violetta	22D05	2	Aucun
31	La Tuque	Granitslab International inc.	Gabbro - DS	Heritage Black	31P16	4	BEX 405
32	Réserve faunique des Laurentides	A. Lacroix et Fils Granit ltée	Farsundite - DS	Autumn Harmony	22D03	2	BEX 225
32	Réserve faunique des Laurentides	Granicor inc.	Quartz mangerite - DS, CS	Laurentian Green	22D04	2	BEX 421
32	Réserve faunique des Laurentides	Polycor inc.	Quartz Jotunite - DS, MO	Laurentian Green	22D04	2	BEX 210
33	Laterrière	Intergestion GL inc.	Stromatolite dolostone block - BS	Pikauba	22D03	2	BEX 343
34	La Baie	Granicor inc.	Farsundite - DS, CS	Polychrome	22D07	2	Aucun
34	La Baie	Polycor inc.	Farsundite - DS	Polychrome	22D07	2	Aucun
34	La Baie	Sablière B Y inc.	Granit Block - BS	–	22D07	2	Aucun
35	Grandes-Bergeronnes	Granicor inc.	Gneiss – DS, CS	Tadoussac	22C04	9	Aucun
36	Lac Poulin	Granijem inc.	Granit - DS	Nordic Frost	22F14	9	BEX 490
36	Manic 3	Granijem inc.	Gneiss - DS	Manic	22F15	9	BEX 489
37	Rivière-Pentecôte	Polycor inc.	Anorthosite - DS	Nordic Black	22G14	9	BEX 155
38	Magpie	Granijem inc.	Hypersthene Syenite - DS	Anticosti	22I08	9	BEX 436
38	Magpie	Polycor inc.	Hypersthene Syenite - DS	Picasso	22I07	9	BEX 419

TABLE 6.8 - Architectural stone quarries exploited in Québec in 2010 (see Figure 6.3).

SITE	LOCATION	HOLDER	TYPE OF ROCK - PRODUCT[1]	COMMERCIAL NAME	NTS	ADMINISTRATIVE AREA	MINING TITLES
39	Havelock	Carrières Ducharme inc.	Sandstone – BS	Ducharme	31H04	16	Aucun (2 carrières)
40	Stanstead	Centre du Granite Beebe inc.	Granite – DS, BS	Beverly Grey	31H01	5	Aucun
40	Stanstead	Polycor inc.	Granodiorite – DS, MO	Stanstead Grey	31H01	5	Aucun
40	Stanstead	Rock of Ages du Canada ltée	Granodiorite – DS, MO	Stanstead Grey	31H01	5	Aucun
41	Stanhope	Granicor inc.	Granodiorite – DS, MO, SC	Snow White	21E04	5	Aucun
42	Asbestos	Ardobec inc.	Slate – BS	–	21E12	5	Aucun
43	Bromptonville	Ardoise 55 inc.	Slate – DS, BS	–	21E05	5	Aucun
44	Melbourne	Maurice Houle	Slate - DS	–	31H09	5	Aucun
45	Saint-Sébastien	Polycor inc.	Granite - DS	St-Sébastien Grey	21E10	5	Aucun
46	Saint-Ferdinand	Les Carrières St-Ferdinand inc.	Sanstone, dolomite - BS	–	21L04	17	Aucun
47	East Broughton	Les Pierres Stéatites inc.	Steatite, talc-carbonate rock, serpentinite - RS	–	21L03	12	Aucun
48	Saint-Marc-du-Lac-Long	Glendyne inc.	Slate - BS, UT	La Canadienne, La Québécoise	21N07	1	Aucun
49	Saint-Mathieu-de-Rioux	J.-C. Ouellette	Sandstone - BS	–	22C03	1	Aucun
49	Saint-Mathieu-de-Rioux	Les Pierres St-Mathieu enr.	Sandstone - BS	Grès Basques	22C02	1	BEX 460
50	Mont-Lebel	Entreprises Antoine Jean inc.	Siltstone - BS	–	22C08	1	Aucun
50	Mont-Lebel	Les Pierres Naturelles du Québec	Siltstone - BS	–	22C08	1	Aucun
51	Saint-Cléophas	Carrière Bernier	Siltstone - BS	–	22B05	1	Aucun (2 carrières)
52	Maria	Polycor inc.	Limestone breccia - DS, DeS	Cascapédia	22A04	11	Aucun

1. See legend of abbreviations in Appendix 2.

TABLEAU 6.9 - Peatlands exploited in Québec in 2010 (see figure 6.2).

SITE	DEPOSIT	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP / NTS	ADMINISTRATIVE REGION
23	Saint-Bonaventure	Fafard et Frères (division Saint-Bonaventure)	Peat	Sphagnum peat moss, potting soil, compost, biofilters	Upton / 31H15	4
24	Saint-Henri-de-Lévis	Premier Horticulture (division Saint-Henri)	Peat	Sphagnum peat moss	Seigniory of Lauzon / 21L11	12
25	Saint-Charles	Les tourbes M.L. (division Saint-Charles)	Peat	Sphagnum peat moss, potting soil	Seigniory Lauzon and Fief de La Martinière (Beauchamp) / 21L10	12
26	Îsles-aux-Coudres	Tourbières Pearl	Peat	Sphagnum peat moss	Seigniory of Îsle-aux-Coudres / 21M08	3
27	Sainte-Marguerite	Fafard et Frères (division Sainte-Marguerite)	Peat	Sphagnum peat moss	Racine / 32A16	2
28	L'Ascension Ouest	Lambert Peat Moss Inc. (division l'Ascension)	Peat	Sphagnum peat moss	Garnier / 22D13	2
29	Saint-Ludger-de-Milot SW	Fafard et Frères (divison Milot)	Peat	Sphagnum peat moss	Milot / 22D13	2
30	La Baie	Gazon Savard Saguenay inc.	Peat	Sphagnum peat blocks and sphagnum peat moss	Bagot / 22D07, 02	2
31	Rivière Ouelle	Lambert Peat Moss Inc. (division Rivière-Ouelle)	Peat	Sphagnum peat moss, potting soil, floral moss	Seigniory of Rivière-Ouelle / 21N05	1
32	Saint-Alexandre	Tourbière Berger inc. (division Saint-Alexandre)	Peat	Sphagnum peat moss	Seigniory of Islets-du-Portage et Lachenaie / 21N12	1
33	Notre-Dame-du-Portage	Premier Horticulture (Tardif division)	Peat	Sphagnum peat moss	Seigniory of Terrebois / 21N12	1
34	Rivière-du-Loup	Premier Horticulture (Premier division)	Peat	Sphagnum peat moss, potting soil, compost, endomycorrhiza, biofilters	Seigniories of Rivière-du-Loup and Cacouna / 21 N13, 14	1
34	Rivière-du-Loup	Premier Horticulture (Verbois division)	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Premier Horticulture (Saint-Laurent division)	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Tourbière Michaud ltée	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Les tourbes M.L. (Rivière-du-Loup division)	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Tourbière Berger inc.	Peat	Sphagnum peat moss, potting soil, peat granules	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Tourbière Henri Théberge et associés	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1
34	Rivière-du-Loup	Tourbière Omer Bélanger	Peat	Sphagnum peat moss	Seigniories of Rivière-du-Loup and Cacouna / 21N13, 14	1

TABLEAU 6.9 - Peatlands exploited in Québec in 2010 (see figure 6.2).

SITE	DEPOSIT	COMPANY	SUMMARY DESCRIPTION OF DEPOSIT	PRODUCTS	TOWNSHIP / NTS	ADMINISTRATIVE REGION
35	Isle-Verte, Est	Tourbière Réal Michaud et fils	Peat	Sphagnum peat moss	Seigniory of Isle-Verte / 22C03	1
36	Saint-Eugène-de-Ladrière	La tourbière Yvon Bélanger	Peat	Sphagnum peat moss	Seigniory of Nicolas-Rioux 03 / 22C07	1
36	Saint-Fabien-sur-Mer	La tourbière Rio-Val	Peat	Sphagnum peat moss	Seigniory of Nicolas-Rioux 03 / 22C07	1
36	Saint-Fabien	Tourbière du Port-Pic	Peat	Sphagnum peat moss	Seigniory of Nicolas-Rioux 03 / 22C07	1
36	Saint-Fabien	Tourbière Berger inc. (Saint-Fabien division)	Peat	Sphagnum peat moss	Seigniory of Nicolas-Rioux 03 / 22C07	1
37	Rivière-Blanche	Premier Horticulture (Saint-Ulric division)	Peat	Sphagnum peat moss	Matane / 22B13	1
37	Saint-Ulric	Les tourbes M.L. (Saint-Ulric division	Peat	Sphagnum peat moss	Matane / 22B13	1
38	Les Escoumins	Lambert Peat Moss Inc. (Anse-aux-Basques division)	Peat	Sphagnum peat moss	Bergeronnes / 22C06	9
38	La Petite Romaine	Lambert Peat Moss Inc (Saint-Paul-du-Nord division)	Peat	Sphagnum peat moss	Iberville / 22C06	9
39	Sainte-Thérèse Colombier	Tourbière Omer Bélanger (Sainte-Thérèse division)	Peat	Sphagnum peat moss	Betsiamites / 22C15	9
40	Pointe-Lebel	Premier Horticulture (Sogevex division)	Peat	Sphagnum peat moss	Manicouagan / 22F01	9
41	Port-Cartier Ouest	Les tourbes M.L. (Port-Cartier division)	Peat	Sphagnum peat moss, sphagnum peat blocks	Babel / 22J02	9
41	Port-Cartier Ouest	Exportations Daniel Sage inc.	Peat	Sphagnum peat moss	Babel / 22J02	9
42	Ville de Sept-Îles	Les tourbes M.L. (division tourbières Sept-Îles)	Peat	Sphagnum peat moss	Letellier / 22I05	9
42	Rivière Moisie	Premier Horticulture (Sept-Îles division)	Peat	Sphagnum peat moss	Moisie / 22I05	9
43	Saint-Jogues	Shigawake Organics Ltd	Peat	Sphagnum peat moss	Hope / 22A03	11

TABLE 6.10 - Distribution of direct jobs in the mining sector per administrative region in Québec in 2009p.

Regions	Total number of jobs in the mining sector	Paid wages and salaries ($M)	Hours worked (in thousands)
01 Bas-Saint-Laurent	387	11	568
02 Saguenay–Lac-Saint-Jean	609	33	1 120
03 Capitale-Nationale	487	24	924
04 Mauricie	81	3	106
05 Estrie	365	16	645
06 Montréal	c	c	c
07 Outaouais	76	3	130
08 Abitibi-Témiscamingue	2 709	229	5 381
09 Côte-Nord	2 778	206	4 858
10 Nord-du-Québec	1 294	116	2 463
11 Gaspésie–Îles-de-la-Madeleine	c	c	c
12 Chaudière-Appalaches	c	c	c
13 Laval	c	c	c
14 Lanaudière	204	11	387
15 Laurentides	318	14	609
16 Montérégie	2 864	186	5 083
17 Centre-du-Québec	c	c	c
Diamond drilling	750	48	1 739
Total	14 495	989	26 898

p: preliminary data. c: confidential data.

CHAPTER 7 - MINE REHABILITATION

Philippe-André Lafrance

As at March 31, 2010, an amount of $648.2M was recorded in public accounts for the rehabilitation and monitoring of mine sites targeted under the rehabilitation program for contaminated sites under the responsibility of the State.

For the year 2010-2011, a total of $5.3M has been set aside for mine rehabilitation. The main activities took place in the Abitibi-Témiscamingue region where about 80% of this amount was spent. The Aldermac ($2.6M) and Manitou ($1.1M) mine sites, where rehabilitation work is underway, account for most of the work performed. Rehabilitation work also took place in the Nord-du-Québec ($0.88M) and Estrie ($0.28M) regions. In the case of the Nord-du-Québec region, rehabilitation work at the Opémiska site is almost complete, with final adjustments to the vegetation project to be made in 2011. At the Principale mine site, a characterization study was started in the fall of 2010 and will be finished in the summer of 2011. At Barvue, work started in November 2010 on the plans and specifications for the rehabilitation of the old mine site. And major clean-up operations at 18 priority exploration sites in Nunavik are almost done. In the Estrie region, rehabilitation work on the Eustis project is nearing completion.

TABLE 7.1 - Environmental liability: sites where work was performed during the 2010-2011 fiscal year in Québec in 2010.

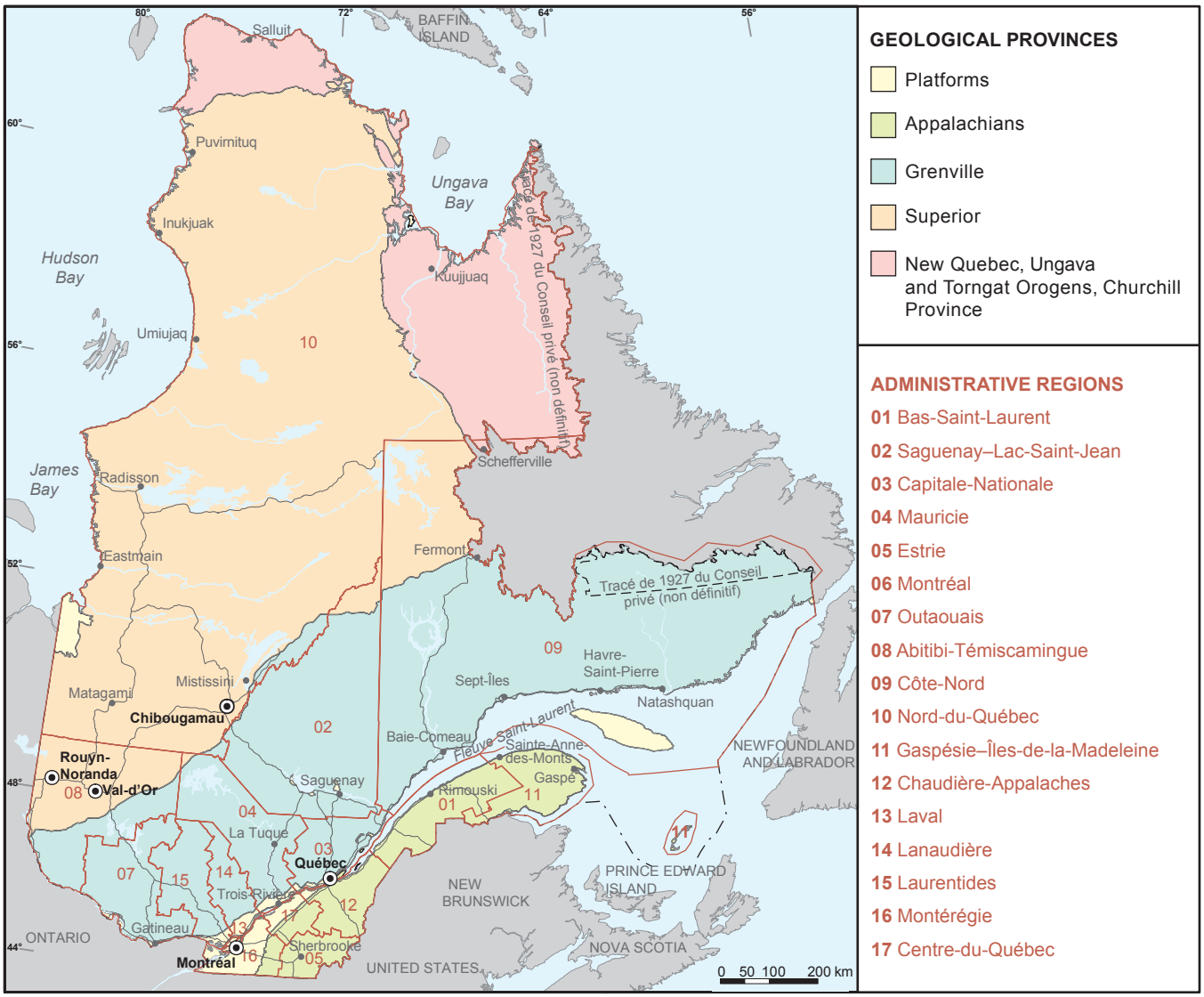
Mine site	Region	Approximate surface area (hectares)	Period of activity	Extracted metal or mineral	Progress
Rehabilitation work underway					
Aldermac	8	170	Mined from 1932 to 1943	Gold, silver and copper	Rehabilitation work underway
Barvue	8	38	Periods of activity from 1952 to 1957	Zinc and silver	Development of rehabilitation plan started in fall 2010
Bevcon	8	60	Mined from 1951 to 1965	Gold and silver	Revegetation work almost finished
East Sullivan	8	175	Mined from 1949 to 1967	Copper and zinc	Rehabilitation work underway
Eustis	5	16	Mined from 1880 to 1939	Pyrite and copper	Revegetation work almost finished
Manitou	8	200	Multiple periods of activity from 1942 to 1979 and 1992 to 1994	Gold, silver, zinc and copper	Rehabilitation work underway
Opémiska	10	170	Mined from 1954 to 1991	Copper, gold and silver	Work complete
Principale	10	400	Mined from 1955 to 2008	Copper, gold and silver	Characterization study started in summer 2010
Nunavik exploration sites (18 major sites)	10	Undetermined			Clean-up work underway
Sites where work started in late 2010					
Beattie	8	140	Mined from 1933 to 1956	Gold and silver	Call for tenders for site's characterization study
Preissac Molybdenite A	8	12	Mined from 1962 to 1971	Molybdenum and bismuth	Field visits and emergency work

Appendix I

Geological subdivisions, limits of administrative regions, and mining customer service offices in Québec.

APPENDIX I

Geological subdivisions, limits of administrative regions, and mining customer service offices in Québec.



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Appendix II

Legend of abbreviations used in tables

APPENDIX II

Legend of abbreviations used in tables.

Prospecting and geology works

B (mt:g/t)	Bulk sampling including tonnage and grade or (mt: % Xx) (metric tons:gram per ton) or (metric tons: % Xx)
Bs	Block sampling for dimension stones
Ct	Characterization tests and analysis (peat)
D (#h:m)	Diamond drilling (number of holes:total meters)
G	Geological mapping
Min	Mineralogical studies
Pg	Unspecified prospecting and geological works
Pr	Prospection
Pt	Polishing test
Rcd (#h:m)	Reversed circulation drilling (number of holes: total meters)
Rsi	Remote sensing interpretation
S	Sampling
T	Trenching and stripping

Geochemical surveys

Gs	Unspecified geochemical surveys
Gs(e)	Esker geochemical survey
Gs(h)	Humus geochemical survey
Gs(l)	Lake sediments geochemical survey
Gs(r)	Lithogeochemical survey (rock)
Gs(s)	Stream sediments geochemical survey
Gs(sl)	Soils geochemical survey
Gs(t)	Till geochemical survey

Geophysical surveys

Gp	Unspecified geophysical survey
GpEl	Electric survey
GpEm	Electromagnetic survey
GpGr	Gravimetry survey
GpMa	Magnetometric (magnetic) survey
GpMt	Magnetotelluric survey
GpRa	Radiometric survey
GpSi	Seismic survey

(A) aerial, (B) borehole, (G) ground

Other types of works

Env	Environmental studies
FM	Feasability and/or market studies
M	Mining site rehabilitation
Met	Metallurgical test
Re	Reserve and resource evaluation
TE	Technical evaluation

Substances

Ag	Silver
Au	Gold
Be	Beryllium
Bi	Bismuth
Co	Cobalt
Cr	Chrome
Cs	Cæsium
Cu	Copper
Fe	Iron
Ga	Gallium
Li_2O	Lithium oxyde
Mg	Magnesium
Mo	Molybdenum
Nb	Niobium
Nb_2O_5	Niobium oxyde
Ni	Nickel
TREO	Total Rare Earth Oxydes
P	Phosphorus
P_2O_5	Phosphorus oxyde
Pb	Lead
Pd	Palladium
PGE	Platinum Group Elements
Pt	Platinum
Rb	Rubidium
REE	Rare earth elements
REE_2O_3	Rare earth elements total oxydes
Ta	Tantalum
Ta_2O_5	Tantalum oxyde
Te	Tellurium
Th	Thorium
Ti	Titanium
U	Uranium
U_3O_8	Uranium oxyde
V	Vanadium
V_2O_5	Vanadium oxyde
W	Tungsten
Y	Yttrium
Y_2O_3	Yttrium oxyde
Zn	Zinc
Zr	Zirconium
ZrO_2	Zirconium oxyde

Measurement Units

c/t	Carat/ton
G	Billion
g/t	Gram per ton
K	Thousand
M	Million
tm	Metric ton
tm/d	Metric ton per day

Products and usages of architectural stones

BS	Building stone and landscaping
CS	Curbstone
DeS	Decorative stone
DS	Dimension stone
MO	Monument stone
RS	Refractory stone
RT	Roofing tiles

Other abbreviations used

CA	Certificate of authorization
MDDEP	Ministère du Développement durable, de l'Environnement et des Parcs du Québec
Na	Non available
Italic	Exploration work done on mine properties
Bold	Advanced exploration project

Appendix III

The mineral development process

APPENDIX III

The mineral development process.

	Mineral Resource Assessment	Exploration				
Phase	VRM	EX- 1	EX- 2	EX- 3	EX- 4	EX- 5
Work	Surveys, research, and metallogenic syntheses.	Exploration planning.	Regional reconnaissance and surveys.	Prospecting and ground surveys on anomalies.	Verification of anomalies and showings.	Discovery and delineation of a deposit with estimated tonnage.
Duration				1 to 5 years		
Objectives	Provide information and tools to develop mineral resources in a sustainable development perspective.	Select targeted minerals and metals. Establish objectives and strategies. Select prospective target areas.	Find regional and local anomalies. Select the most promising targets.	Acquire properties. Confirm the presence, position and characteristics of anomalies.	Determine the source of anomalies. Find mineral showings. Acquire additional properties as needed.	Discover, confirm and delineate a first mineral inventory for the deposit. Assess its economic potential in a preliminary fashion. First pre-feasibility study.
Evaluation methods	Surveys, research, and geoscientific, metallogenic and economic syntheses by governments, universities, and other research groups.	Studies and selection of metals and minerals. Review and synthesize geological and metallogenic information for various regions. Assess legal and political context.	Remote sensing, aerial photography, airborne geophysics. Prospecting, geology and geochemistry. Assessment and selection of anomalies.	Prospecting and ground geoscientific surveys. Overview and selection of anomalies for follow-up.	Geological mapping and other surveys. Trenching, sampling, drilling. Assessment of results and selection of targets.	Stripping, trenching, mapping, sampling, drilling, geophysics. Preliminary resource estimation. Environmental characterization.
Targeted results	Databases, maps, and models	Exploration projects	Regional anomalies	Local anomalies	Mineral showings	Deposit with estimated tonnage
Mineral Inventory	MINERAL POTENTIAL	NEW UNIDENTIFIED, SPECULATIVE, HYPOTHETICAL, OR MODELLED MINERAL RESOURCES				INFERRED MINERAL RESOURCES
Investment Risk	Moderate Low to moderate	Low investment level, but gradually increasing . Very high risk of loss, that gradually decreases pending successful results.				

Ressources naturelles et Faune
Québec

APPENDIX III

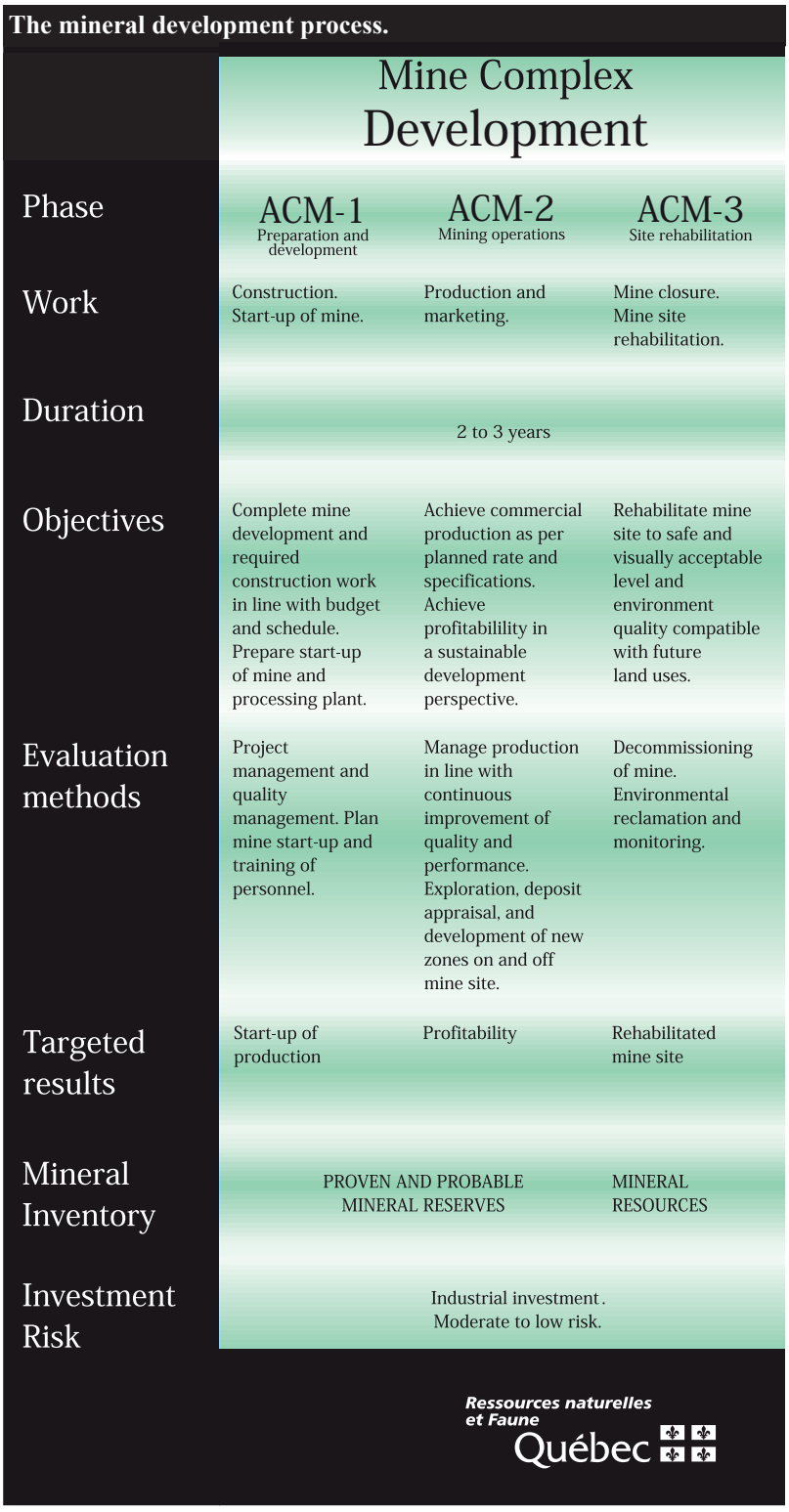
The mineral development process.

	Deposit Appraisal			
Phase	MV- 1	MV- 2	MV- 3	MV- 4
Work	Definition of deposit with estimated tonnage.	Definition of technical parameters. (Engineering)	Definition of economic parameters.	Feasibility study.
Duration	3 to 8 years			
Objectives	Define the extent, controls, and internal distribution of the mineralogy and ore grade of the deposit. Plan and design project engineering.	Establish technical feasibility. Establish mining plans, schedules and estimations for the project.	Establish parameters for economic and financial assessment. Examine potential sources of financing.	Ensure validity of data, assumptions, and estimations. Decide whether or not to proceed.
Evaluation methods	Definition work by mapping, sampling, surface and underground drilling. Acquire data for project engineering. Detailed surveys of site and environment.	Bulk sampling. Pilot-scale tests, engineering and cost estimates for the mine, the ore concentration process, infrastructure, environmental protection and site rehabilitation.	Market, price, and financial studies. Analysis of technical, economic, financial, social, political, and environmental risks.	Due diligence review of all available information on the project. Assess profitability, risks, and positive aspects of the project.
Targeted results	Define mineral resources	Determine mining methods	Technical and economic feasibility	Ore deposit Decision to go into production
Mineral Inventory	MEASURED AND INDICATED MINERAL RESOURCES			
Investment Risk	Much more substantial investment, gradually increasing . High risk of failure, that decreases pending successful results.			

Ressources naturelles et Faune
Québec

APPENDIX III

The mineral development process.



Source: Modifications coordinated by S. Lacroix in August 2001, based on SOQUEM Annual Report 1976-77, pages 4-5 and Vallée, M., 1992. Guide to the Evaluation of Gold Deposits, CIM Special Volume, page 4.

Graphic Design: Charlotte Grenier

Appendix IV

References

APPENDIX IV

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