

CANADIAN HOTSPOTS

THE NEXT G OF CANADIA

GENERATION AN MINING

Canada has a lengthy and fascinating mining history and it is no exaggeration to state that a multitude of communities across the Dominion owe their existence to the development of mining operations.

MANY OF the great past mining events include the opening up of the British Columbia Province in the mid-19th century through the gold rush near the historic town of Barkerville; initial discoveries in the same period in the Eastern Townships of Quebec Province; and, of course, the world-famous Klondike gold rush of the late 19th century.

In fact, it can truly be stated that there has seldom been a period during the past two centuries when new and important mineralisation has not

been discovered and the modern era is no exception as exciting, dynamic Canadian area “plays” are moving forward right into the present era.

RING OF FIRE

One of the most interesting involves a region known as the Ring of Fire, where exploration and development of both metals and diamonds is advancing at a rapid rate.

Two of the most important ROF discoveries relate to chromium and diamonds.

The ring itself is located in northern Ontario in a region known as the James Bay Lowlands located to

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the west of the bay, itself an extension of the vast inland sea known as Hudson Bay, home to the world-famous – and endangered – beluga whales.

An important, potentially world-class chromium discovery known as Big Daddy is now under development in the ROF area.

Big Daddy is being advanced through a joint venture between KWG Resources, Freewest (a subsidiary of Cliffs Natural Resources) and ►



Spider Resources, now controlled by Cliffs, giving it a majority interest at the project.

Big Daddy itself well deserves its name, with projections indicating it has the potential to become the world's largest chromium mine.

According to a resource estimate from May 2010, 90% of the chromium is contained in a tightly constrained high-grade zone containing 23.2 million tonnes grading 40.66% chromium oxide in the indicated category.

Future production is planned initially as an open-pit operation and, therefore, further exploration at depth is not considered a high priority at the moment.

Chromium ore is a vital component of today's industrial workings and about 90% is converted to ferrochrome.

At the moment, most sources for ferrochrome are in the eastern hemisphere and, therefore, metals analysts consider it to be of vital importance that a supply source emerge in North America to satisfy the West's requirements.

Big Daddy is sufficiently large that it may enable the construction of major infrastructure developments for northern Ontario, allowing for the construction of a railway northward from the present Canadian National main line as well as the introduction of new power lines into the area.

As the project goes forward, it could have a major beneficial impact on First Nations people in the area, as direct employment to build and operate the mine is estimated to be 4000 to 5000 people and First Nations will have significant opportunities for training and employment in many fields.

Diamond exploration and development is also playing an important role in the ROF thanks to the development of De Beers Canada's Victor mine which went into production during 2008.

The company, through various predecessor entities, began initial diamond prospecting in the region during the 1960s, but it was not until 1987 when a serendipitous event opened the door to substantial progress.

A university student named Brad Wood was fishing in the Attawapiskat River when he happened to notice kimberlite boulders in the river.

This led to renewed exploration interest and by 1995, those kimberlite samples – and the exploration which followed – led to the discovery and eventual development of the Victor mine.

As knowledge of the Victor mine discovery spread, other companies moved into the region.

Metalex Ventures has focused its attention on the Kyle Lake diamond project, located approximately 100 kilometres west of Victor. ►

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Aeromagnetic surveys of the area suggested anomalies which were later drill-tested, with five kimberlite pipes being identified by the late 1990s.

Metalex continues to work on several recently discovered glacial trains containing diamond indicator minerals.

Renforth Resources currently holds one of the largest land positions in the area, covering 4624 hectares in the James Bay region.

The company believes these claims encompass geophysical targets with high kimberlite potential that require ground follow-up and exploration drilling.

Spider Resources and KWG Resources have also been actively exploring for diamonds at the ROF and together discovered eight kimberlites during the mid-1990s.

A new kimberlite named Kyle 6 has been located during 2010 on the eastern edge of the ROF exploration area.

QUEBEC LITHIUM AND RARE EARTH ELEMENTS

Canadian mining activity has frequently been driven by outside world events and recently escalating levels of exploration and development relating to both lithium and rare earth elements (REE) which have taken place in north central Quebec are attributed to two rising demands: lithium for newly invented electric car batteries and the search for new sources of REE thanks to the recently announced cessation of exports from China which had been supplying virtually all the worldwide demand for those metals, which are essential for many highly technical applications, both civilian and military.

Without question, the unique metal lithium has been the focus of a great deal of attention in recent years, most particularly regarding the strong growth predicted for lithium-ion batteries used in hybrid and electric vehicles.

As a result, the mining industry has been actively seeking to develop lithium resources and an area receiving increasing attention is inside the Province of Quebec, in the area to the east of James Bay, where lithium deposits are contained in a mineral known as spodumene, which itself is typically found inside a pegmatite ore body.

It must also be noted that battery applications are only one source of demand for lithium.



It has important uses in alloys for aerospace and armour; as a flux in porcelain enamel formulations; in the glass manufacturing industry; in aluminum smelting/refining and in the production of several medical treatments.

The Whabouchi lithium project owned by Nemaska Exploration is one of the region's important projects.

Located near the Cree community of the same name, the company is concentrating on advancing Whabouchi as rapidly as possible.

After acquiring it in September, 2009, Nemaska immediately carried out an exploration program involving 900m of drilling and the recovery of samples from 16 trenches, followed by two phases of drilling programs, resulting in a just-concluded positive preliminary economic assessment.

Lithium One's James Bay lithium offers an impressive array of visible, snow-white pegmatite ore bodies. Its project was sufficiently attractive to motivate Australia's Galaxy Resources to sign a memorandum of understanding with Lithium One, forming a joint venture with the objective of carrying the project to a definitive feasibility study.

Other lithium projects in the area include the Moblan project, a joint venture between Globestar Mining and SOQUEM, an industrial and financial holding corporation of the Province of Quebec.

Moblan is located 112km northeast of the regional center of Chibougamau.

Canadian Lithium's project is located about 60km north of Val d'Or on paved and all-weather roads and the Pontax lithium project, a joint venture between Sirios Resources and Dios Exploration is also found in the same general vicinity.

As noted, Quebec has also become a "happy-hunting-ground" for REE development and a host of companies now are involved in such projects.

Commerce Resources' Eldor project is growing steadily.

The property covers several zones, including the Northwest, Southeast, and Star Trench tantalum and niobium zones.

One drill program has recently been completed and another is scheduled for early 2011 with an NI 43-101 resource estimate scheduled for the first quarter.

Other companies involved in

Exploration for rare metals and lithium has increased in Quebec



Historic mining regions have been the focus of renewed exploration in recent years

the search for REE in Quebec include First Gold Exploration, Matamec Explorations and Focus Metals, with many others entering this highly prospective region on a regular basis.

THE BEAUCE

A most interesting combination of the very old and new is to be found in another new area play, this one found in a southeast Quebec region called the Beauce.

Although the area had been somewhat overlooked in recent years, all of that is changing rapidly.

However, in more recent times, a staking rush involving several active mining companies has developed.

Among the mining companies involved in the Beauce is Golden Hope and Osisko Mining, the latter through its strategic partner Bowmore Exploration.

Also active are Fancamp Exploration, VVC Exploration, Uragold Bay Resources and Niogold Mining.

One of the most intriguing features about the Beauce is its lengthy history

of mining activity, going back to the first half of the 19th century – decades before the more famous Klondike Gold Rush.

In one of those delightful moments which can occur in mining, a young girl came upon an egg-sized gold nugget in what is now called the Gilbert River, and when word of her good fortune became known, the first gold rush in North America took place in the form of alluvial mining along that stream.

Golden Hope has been the most active company in the area during recent years and their Bellechasse claims cover some 110,000 acres stretching along 110km.

Particular areas of interest are the Timmins gold deposit, comprising Timmins 1 (T1), Timmins 2, Ascot, and the 88 Zone, as well as the FSG Zone, a polymetallic target.

Osisko's work in the Beauce can be traced back to 2003-04 when it participated in a joint venture with Golden Hope when the T1 mineralised zone was drilled in a joint venture.

Fancamp Exploration began a reconnaissance program in the second

half of 2009 and recently reported results of that program which revealed what the company described as "very interesting geology" and VVC Exploration recently optioned a 100% interest in a property known as the Beauce-Bellechasse.

There are many other newly opened areas of specific interest in Canada such as the new White River gold discoveries in the Yukon territory in the region of the Klondike Gold Rush and the newly emerging iron ore plays along the Quebec-Labrador border regions where the climate may be ice-cold, but exploration is red-hot.

It is also worth observing that provincial governments in Canada are generally pro-mining and it is no coincidence that several of the Canadian provinces stand regularly at the pinnacle of favorable jurisdictional lists for mining enterprises.

Mining in Canada is alive, it is growing and the potential is exciting to contemplate.

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