## NEWFOUNDLAND AND LABRADOR MINERAL EXPLORATION HIGHLIGHTS

## **YEAR END – 2006**

#### Overview

In 2006, expenditures on mineral exploration and deposit appraisal in Newfoundland and Labrador are forecast to rise to about \$80 million (about \$50 million in Labrador), up from \$48.7 million in 2005. Mostly, the rise is due to uranium exploration in Labrador, estimated to increase fourfold to about \$28 million, and base-metal exploration on the Island of Newfoundland, estimated to double to about \$20 million.

The main commodities making up the Labrador expenditure estimate are uranium (53%), base metals (29%) and iron ore (12%); those for the Island are base metals (62%), gold (22%) and uranium (10%).

Almost 58,000 claims were staked in 2006 and at year's end, claims in good standing stood at 132,766. Uranium exploration accounted for the majority of the staking.

For 2007, exploration spending is expected to rise to record levels of about \$100 million.

# Labrador

Most of the exploration for uranium in Labrador is located in the Central Mineral Belt of central and east-central Labrador.

The most advanced project is that of Aurora Energy Resources Inc. in the eastern part of the belt. The project area covers the Michelin deposit as well as other deposits and prospects. Aurora completed about 20,000 m of diamond drilling at the Michelin deposit and reported a new resource estimate of 35.6 million pounds of  $U_3O_8$ . SNC-Lavalin Inc. has been commissioned to complete a preliminary engineering and logistics study of the Michelin deposit.

Aurora also completed an additional 20,000 m of diamond drilling on the property at the Jacques Lake and White Bear Lake prospects and on the Rainbow, Nash, Inda and Gear Lake deposits.

In the central part of the Central Mineral Belt, Crosshair Exploration & Mining Corp. completed about 23,000 m of diamond drilling on its Moran Lake uranium property, mostly on the Upper and Lower Moran "C" zones. Both zones have been extended along strike and at depth and, in 2007, Crosshair plans to upgrade their resource estimates with additional drilling.

Bayswater Uranium Corporation controls 16,860 claims in, and to the north of, the central part of the Central Mineral Belt. This is the largest uranium-related property position in the

province. Bayswater completed a compilation of historical data and a 41,100-line-km, airborne, radiometric and magnetic geophysical survey over most of its holdings, together with follow-up prospecting, mapping and sampling.

In the eastern half of the Central Mineral Belt, Santoy Resources Ltd. operates a joint venture with Monster Copper Resources Ltd. on the Mustang Lake and Bruce River properties. At the former, ongoing diamond drilling is designed to locate the source of several uranium-bearing boulder trains. Santoy completed prospecting and sampling programs on the Bruce River property as well as on several other, wholly owned, properties in the region.

Silver Spruce Resources Inc. has acquired over 5,000 claims in properties scattered throughout the Central Mineral Belt. Silver Spruce completed 10,000 line-kilometres of airborne geophysical survey and follow-up fieldwork on most of these properties. The claims are under option to Universal Uranium Limited.

Recently initiated exploration for uranium in the Central Mineral Belt is by Tripple Uranium Resources Inc., The Venila Development Company Inc., Altius Resources Inc., White Bear Resources Incorporated and Comerstone Resources Inc.

Silver Spruce Resources Inc. is conducting a data compilation on uranium-exploration projects at the Straits, in southeast Labrador, in the Benedict Mountains east of the Central Mineral Belt, and at Lake Melville, northeast of Happy Valley - Goose Bay, and plans airborne radiometric and magnetic surveys of these properties.

In eastern and southeastern Labrador, uranium-exploration projects have commenced in the Benedict Mountains, by Monster Copper; near Rigolet and at the Straits, by Tripple Uranium; along the Alexis River, by Altius, Tripple Uranium and Venila Development; and near Hawke Bay, also by Venila Development and Tripple Uranium.

In western Labrador, Consolidated Abaddon Resources Inc. completed airborne geophysics and follow-up prospecting and mapping on its Sims Lake and Gabbro Lake properties. Diamond drilling also was completed at Sims Lake, which is under option to International Uranium Corporation, and additional diamond drilling, ground geophysics and fieldwork are planned.

Also in western Labrador, Monster Copper is exploring for uranium at McKay Lake.

Freewest Resources Canada Inc. completed an airborne survey of its George River uranium project, a part of which is located in northern Labrador, abutting the Quebec border west of Nain. Reconnaissance mapping, follow-up prospecting and sampling were completed in fall 2006.

Also in northern Labrador, Altius operates projects covering uranium potential at Flowers River (Nuiklavik property) and near the Notakwanon River.

Nickel exploration is concentrated in northern Labrador near Voisey's Bay.

In February 2006, Inco Limited ramped up production from the Ovoid nickel-copper-cobalt

deposit at Voisey's Bay from 110 to 120 million pounds of nickel-in-concentrate per annum. In the surrounding area, Voisey's Bay Nickel Company Limited is evaluating satellite nickel deposits at the Reid Brook Zone and the Western Extension. At the former, Voisey's Bay Nickel has identified two zones of mineralization and is conducting a diamond-drilling program designed to upgrade its resources.

To the south of Voisey's Bay, an airborne magnetic and gradiometry survey was completed by Inco over a large area under a data-sharing agreement with Celtic Minerals Ltd., Cornerstone Resources Inc. (now under option to Celtic) and Freeport Resources Inc. The area is centred around Inco's Garland Lake property. Follow-up ground geophysical programs will be renewed in 2007.

In an adjacent area to the west, a Celtic and Merex Gold Inc. joint venture is diamond drilling deep tartets identified by gravity, magnetic and magnetotelluric geophysical surveys. The Celtic/Merex partnership recently optioned the adjacent VB-2 property from CanAlaska Ventures Ltd. and Columbia Yukon Explorations Inc.

Within an 80-km radius of Nain, nickel exploration projects have been established by Cornerstone, at the Konrad property west of Voisey's Bay and at several smaller properties farther north; by Nortec Ventures Corp. (under option from Vulcan Minerals Inc.), at the TL property to the northwest of Voisey's Bay; and by Northstar Exploration Limited, in the Kiglapait Mountains to the north of Voisey's Bay.

New projects have been initiated in the Voisey's Bay West area by Altius and Blue Ridge Resources Ltd. and near Kingurutik Lake by Teck Cominco and Benton Resources Corp.

In western Labrador, Brilliant Mining Corp. completed airborne geophysics over four nickel properties, together with follow-up prospecting and diamond drilling at the largest (Michikamau Lake) of these properties.

Also in western Labrador, Gallery Resources Limited and Altius maintain, respectively, the Shabogamo and Michikamau nickel projects and White Bear Resources Incorporated has commenced exploration for nickel  $\pm$  uranium near Colville Lake.

Western Labrador is the focus of the iron-ore exploration in the province.

The LabMag Iron Ore Project is operated by New Millenium Capital Corp. near Schefferville in western Labrador. An all-categories mineral resource of 5.140 billion tonnes containing 29.5 to 29.9 weight percent iron and yielding concentrates of from 69.5 to 70 percent iron was reported in April 2006. As well as exploration and ongoing resource upgrades, New Millenium is conducting pre-feasibility engineering, environmental and economic studies.

In the same area of western Labrador, Labrador Iron Mines Limited, a wholly owned subsidiary of Anglesey Mining Corp., operates the Labrador Iron Mountain joint venture with Fenton Scott. In 2006, Labrador Iron Mines Limited completed a pre-feasibility study that included an engineering and economic scoping study of the James Mine (past-producer) and Knob Lake

deposits. The mining proposal envisages production of direct-shipping-grade lump (67% iron) and sinter (63% iron) ores.

Iron ore exploration is also underway in western Labrador under the auspices of Iron Ore Company of Canada, Bedford Resource Partners Inc. and Canadian Maple Leaf Investment Co. Ltd.

Other commodities under exploration in Labrador are: heavy-mineral-sands, conducted by Freeport Resources Inc. at Iron Strand in northern Labrador for garnet, and by Markland Resource Development Inc. in the Churchill River estuary at Happy Valley - Goose Bay for garnet, zircon and titanium-iron oxides; and granite pegmatite by Torngait Ujaganniavingit Corp. for ceramic-grade feldspar near Wilson Lake in central Labrador.

## Newfoundland

Base-metal exploration occurs throughout Newfoundland.

Messina Minerals Inc. has commissioned Snowden Mining Industry Consultants Inc. to prepare a resource estimate for the Boomerang base-metal deposit on its zinc-lead-copper-silver, Tulks South property in west-central Newfoundland. Since the discovery of the Boomerang deposit near Victoria Lake in the south of the property in December 2004, Messina has completed over 80,000 m of diamond drilling, mostly at Boomerang, and discovered additional mineralization in the immediate vicinity at the Domino and Hurricane prospects. The Boomerang deposit averages ten metres thick over a strike of 500 m and a height of 275 m. Diamond drilling is scheduled to resume at these and several other prospects in the Boomerang area, as well as at the Tulks East deposit in the north of the property.

In May 2006, Messina optioned its adjacent Long Lake zinc–lead–copper–silver property to Aldrin Resource Corp.

North of Messina, in the same area of west-central Newfoundland, diamond drilling programs were completed on predominantly zinc–lead, base-metal properties at Tulks Hill by Prominex Resource Corp. (under option from Buchans River Ltd.), at the Daniels Pond deposit in its Tulks North property by Royal Roads Corp. and at the Bobbys Pond deposit by Mountain Lake Resources Inc. In April 2006, Mountain Lake reported a new all-categories resource for the Bobbys Pond deposit of 0.93 million tonnes grading approximately 4.37% zinc, 0.82% copper, 0.42% lead and 16.06 g/mt silver. Diamond drilling designed to further upgrade the resources continues on each property.

Royal Roads Corp. is scheduled to complete the takeover of Buchans River Ltd. in the winter of 2007. When completed, Acadian Gold Corp. (78% owner of Royal Roads) will control property to both north and south of Red Indian Lake, at Buchans and Tulks North, respectively. The former covers the past producing Buchans mines; both areas contain many base-metal deposits and prospects.

To the east of the Tulks properties, Aur Resources Inc. continues to explore for base metals in the area surrounding its Duck Pond zinc–copper–silver–gold mine. First production from the mine is scheduled for early 2007.

In the region between Tulks South, Tulks North and Duck Pond, zinc-rich, base-metal projects are operated by Paragon Minerals Corporation (formerly Rubicon Minerals Corporation) at South Tally Pond (under option from Altius) and at Lake Douglas, by Cornerstone at Noel Paul's Brook, by Celtic at Hungry Hill and by Crosshair at Victoria Lake.

Rambler Metals and Mining plc's Rambler North copper–gold project is located on the Baie Verte Peninsula and contains the past-producing Ming and Ming West mines. In 2006, exploration consisted of directional drilling utilizing previously completed drillholes. The drilling program is designed to upgrade the resources in the Ming massive sulphide and the Ming Footwall Zone. Dewatering of the Ming Mine will facilitate the resource upgrade through underground exploration in 2007. Project operator Altius has a 30% interest in Rambler Metals and Mining.

In a belt of favourable geology extending from the Baie Verte Peninsula to Buchans, base-metal+/- gold exploration is being conducted by Prominex (under option from Buchans River) for copper–lead–zinc–gold at Burtons Pond, by Cornerstone at the copper–gold Colchester property, by Vinland Resources for zinc–lead–copper at Buchans Junction and by Canstar Resources Inc. for zinc–lead–copper at Mary March. Additionally, base-metal projects are maintained by Altius for zinc at Pilley's Island and by Copper Hill Resources Inc. at Powderhorn Lake (under option to Champion Natural Health.com Inc.) for nickel–lead and at Gullbridge for copper, and Prominex has initiated a project for zinc–lead–copper at Lake Bond. On the Springdale Peninsula, British Canadian Mines Ltd. has optioned its Little Deer copper property to Ursa Major International Inc. This property covers the past-producing Little Deer and Whalesback copper mines.

In 2006, TLC Ventures Corp. completed an airborne geophysical survey over the Point Learnington zinc-copper-gold-silver deposit and surrounding areas of new staking. The Point Learnington deposit is located in north-central Newfoundland and is now wholly owned by TLC Ventures having formerly been under option from Rubicon (now Paragon).

In central Newfoundland, Celtic is exploring for copper at Great Burnt Lake and in eastern Newfoundland, Atlas Mining Company holds an option for a 50% interest in a half dozen copper properties held by Kat Exploration, mostly on the Avalon Peninsula.

Playfair Mining Ltd. holds two properties having tungsten potential, at Grey River on Newfoundland's south coast and at Granite lake, 70 km farther north. Diamond drilling, bulk sampling and metallurgical studies are ongoing at Grey River and are designed to upgrade a historic resource estimate. An airborne geophysical survey is planned for the Granite Lake property, which is under option from Buchans River.

In southwest Newfoundland, Phelps Dodge Corporation of Canada, Limited opted to proceed with its option on Cornerstone's Codroy copper project. Cornerstone completed diamond drilling on the property in the fall of 2006. Locally, these claims also have uranium, gypsum, potash, coal and methane potential.

In western Newfoundland, Noranda Inc. completed diamond drilling on the Twentieth Brook zinc property near Stephenville.

Beaver Brook Antimony Mine Inc. plans to reactivate its antimony mine in central Newfoundland in 2007.

Gold exploration in Newfoundland is concentrated in the Baie Verte Peninsula - White Bay area and in a belt extending from Victoria Lake in west-central Newfoundland, east-northeastward to Gander Bay in northeast Newfoundland.

At Jackson's Arm in White Bay, diamond drilling by Kermode Resources Ltd. is designed to delineate the geometry of newly interpreted feeder zones to the gold mineralization.

On the Baie Verte Peninsula, gold exploration is underway around the Pine Cove mine by Anaconda Gold Corp., at Nugget Pond by New Island Resources Inc. and at El Strato by Cornerstone. The Pine Cove gold mine is scheduled to start producing in early to mid 2007. The Nugget Pond property contains the former Nugget Pond gold mine. New Island is testing extensions to the main zone of mineralization, as well as similar structures elsewhere on the property, with diamond drilling. In October 2006, Crew Gold Corporation purchased the Nugget Pond mill from New Island and, in 2007, will commence processing of ore from its Nalunaq gold mine, located in southern Greenland, at Nugget Pond. At El Strato, diamond drilling is being used to test coincident geochemical and geophysical anomalies.

Also on the Baie Verte Peninsula, South Coast Ventures Inc. was awarded the rights to further explore and evaluate the Stog'er Tight gold property and Paragon initiated exploration at Ming's Bight.

Near Victoria Lake, Richmont Mines Inc. completed several phases of diamond drilling on its Valentine Lake option from Mountain Lake. Mapping, ground geophysics and additional diamond drilling will be factored into the next phase of exploration.

To the northeast of Victoria Lake, Crosshair has optioned the South Golden Promise (February 2003) and Golden Promise (May 2006) properties from Paragon (then Rubicon). In 2006, diamond drilling extended several of the main gold-bearing, quartz-vein arrays along strike and at depth.

Farther to the east-northeast, Paragon conducts gold exploration at Golden Bullet, on the Linear and Joe Batts Linear properties and at Wings Point - Titan, as well as at several other properties in the area. At H-Pond on the Joe Batts Linear property, diamond drilling and trenching are being used to help source quartz-vein boulders that have returned bonanza grades of up to 798.87 g/mt gold.

Elsewhere on the Island, gold-silver exploration is being conducted by Cornerstone (under option to Thundermin Resources Inc.) at Cape Ray in southwest Newfoundland and by Paragon on the northeast Avalon Peninsula. In October 2006, Lewis Murphy initiated a gold-exploration program on a large property at Branch, also on the Avalon Peninsula.

On the Island, uranium exploration is concentrated along the Hermitage Flexure in southern Newfoundland and in the Carboniferous basins of western Newfoundland. Along the western half of the Hermitage Flexure, Commander Resources Ltd. and partner Pathfinder Resources Ltd. control almost 10,000 claims. An airborne geophysical survey was completed over their properties in June 2006. Commander has completed follow-up fieldwork (prospecting, sampling and radon and scintillometer surveys) over its ground in the central part of the property; Pathfinder completed data compilation and processing of the airborne survey for its holdings, mostly at the east and west ends of the property, and will commence its follow-up program in 2007.

In the fall of 2006, Hot Rock Uranium Corp. (now U-Core Uranium Inc.), Venila Development and Tripple Uranium also initiated projects in the Hermitage Flexure area.

Altius, in a joint venture with JNR Resources Ltd., completed an airborne geophysical survey and diamond drilling around clusters of uranium- and silver-bearing boulders on its Rocky Brook property in the Deer Lake Basin. Elsewhere in the basin, Spruce Ridge Resources Ltd. prospected radiometric anomalies and sampled sections of known mineralization, at two properties; the North Brook property in the southwest and the Turners Ridge property in the north.

To the southwest, in the Bay St. George Basin, U-Core operates projects at Lost Pond, Stephenville and Fischells Brook, all located within a radius of 30 km from Stephenville, and farther south in the basin, Vulcan Minerals Inc. holds properties at Flat Bay and Robinsons River.

Other commodities under exploration on the Island are: limestone and dolomite by AggMapR Inc. on the Port au Port Peninsula and Vulcan's Flat Bay and Robinsons River properties also have potential for oil and gas, salt, gypsum, potash and methane.

For the locations of most of these properties, please see the associated map (Mining and Exploration Properties Map).