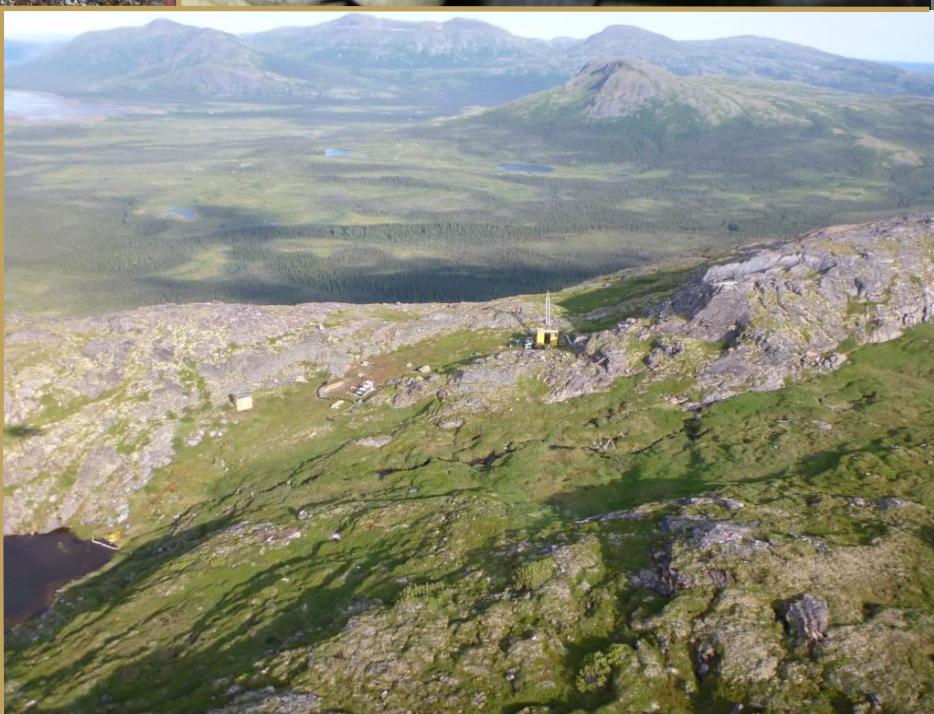
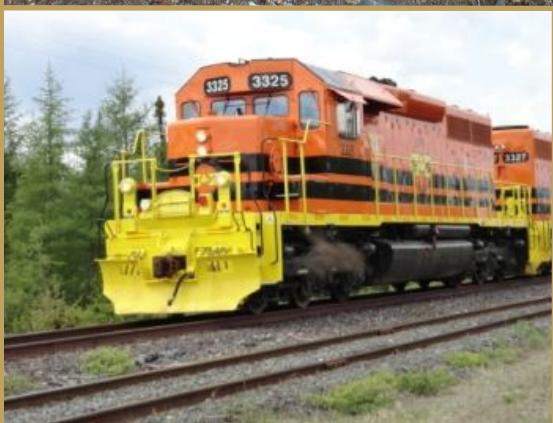


# MINERAL EXPLORATION & DEVELOPMENT HIGHLIGHTS 2011



# NEWFOUNDLAND AND LABRADOR

## EXPLORATION AND DEVELOPMENT HIGHLIGHTS 2011

### OVERVIEW

The minerals industry in Newfoundland and Labrador continued to grow in 2011, with two new mines in production, expansion at several existing operations, and a substantial increase in exploration, as measured by several indicators. As in 2010, new developments in the iron ore sector dominated the industry; however strong gold and non-ferrous metal prices had a significant impact on exploration programs throughout the Province.

Exploration spending in the Province is forecast to rise to about \$155 million in 2011, an all-time high. A total of 28,534 claims were staked, down slightly from 2010 levels, and drilling activity is estimated to increase to about 220,000 m, up from about 160,000 m in 2010 (Figure 1). Major exploration projects are highlighted in Figure 2.

### GOVERNMENT SERVICES

The Department of Natural Resources' Mineral Incentive Program continued its targeted support of the exploration sector with a budget of \$2.9 million for the 2011/12 fiscal year, for cost-shared funding of approved projects. This program also supports prospectors through direct grants, mentoring and training courses.

Likewise, the Department maintained delivery of its expanded geoscience program (\$1.2 million long-term funding increase in 2011/12). Key initiatives designed to encourage exploration included geophysical and geochemical surveys in Labrador, geochemical surveys in Newfoundland, and gold and rare earth metallogenetic studies in both regions.

The Department also assists the mineral industry through its extensive web-based research tools and utilities, including GIS-based databases and mineral claim staking. The web-based Geoscience Atlas is updated regularly with new geochemical and geophysical data, with a continuing focus on building the Provincial bedrock geology database.

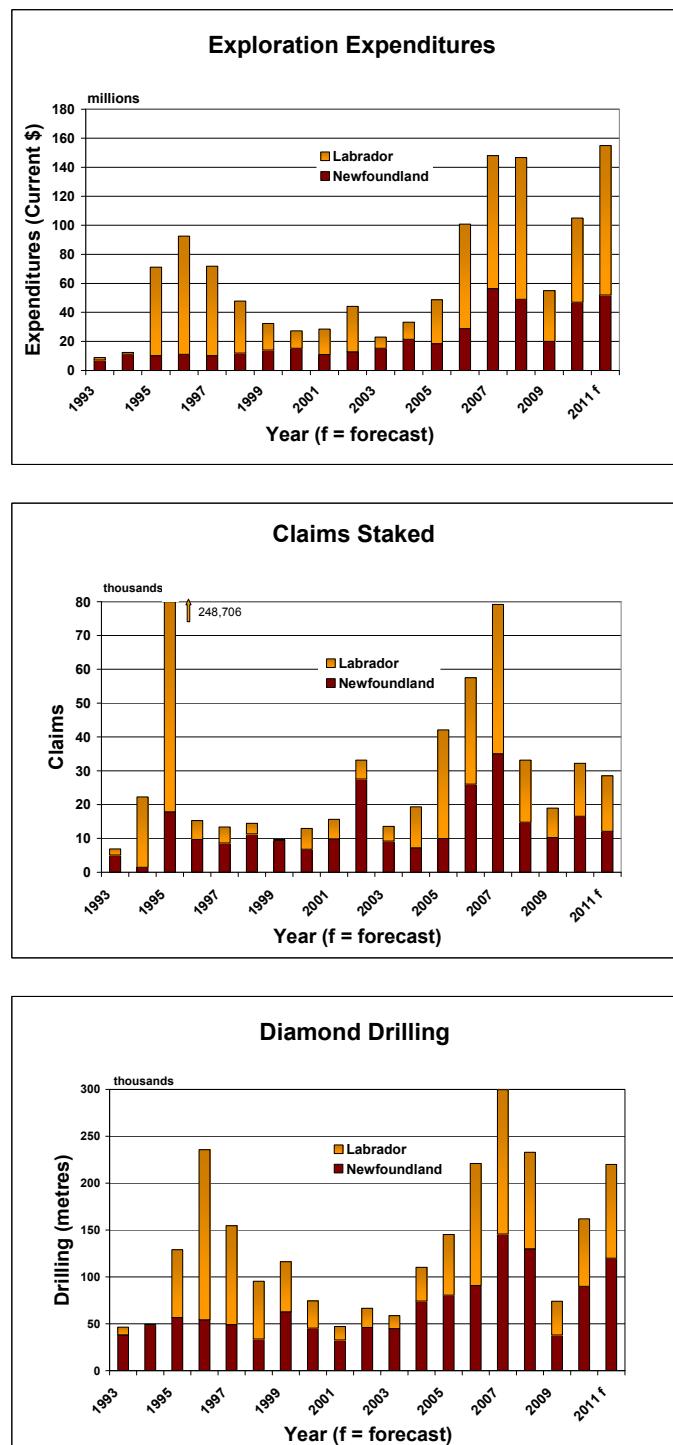


Figure 1. Exploration statistics, 1993 – 2011.

A new legislative development in 2011 gives mineral licence holders the option to file assessment reports in digital form only, without the requirement to file hard copy. Prospectors will still have the option to file hard copy only.

The Department plays a lead role in informing potential investors, both in Canada and abroad, about the Province's mineral resources, mineral potential and the overall operating environment of the mineral sector. This effort is conducted through a variety of initiatives and activities including participation in annual technical conferences such as the PDAC, Roundup and our own Mineral Resources Review; developing and maintaining technical/promotional materials relating to the mineral sector; publishing general or sector-specific technical articles in trade journals; responding to queries on mineral investment opportunities; and developing and maintaining a substantial minerals investment section on the Department website.

In recent years, the Department's marketing efforts have increasingly turned to the fast-growing Asian sector, both as a source of investment capital for advanced projects, and as a market for our existing and potential mineral resources. This effort includes participating in the annual China Mining conference, and related mineral investment forums in China and Canada; helping organize, in

cooperation with other jurisdictions and the federal government, inbound trade missions from China; and developing and maintaining a Mandarin section on the investment side of the website.

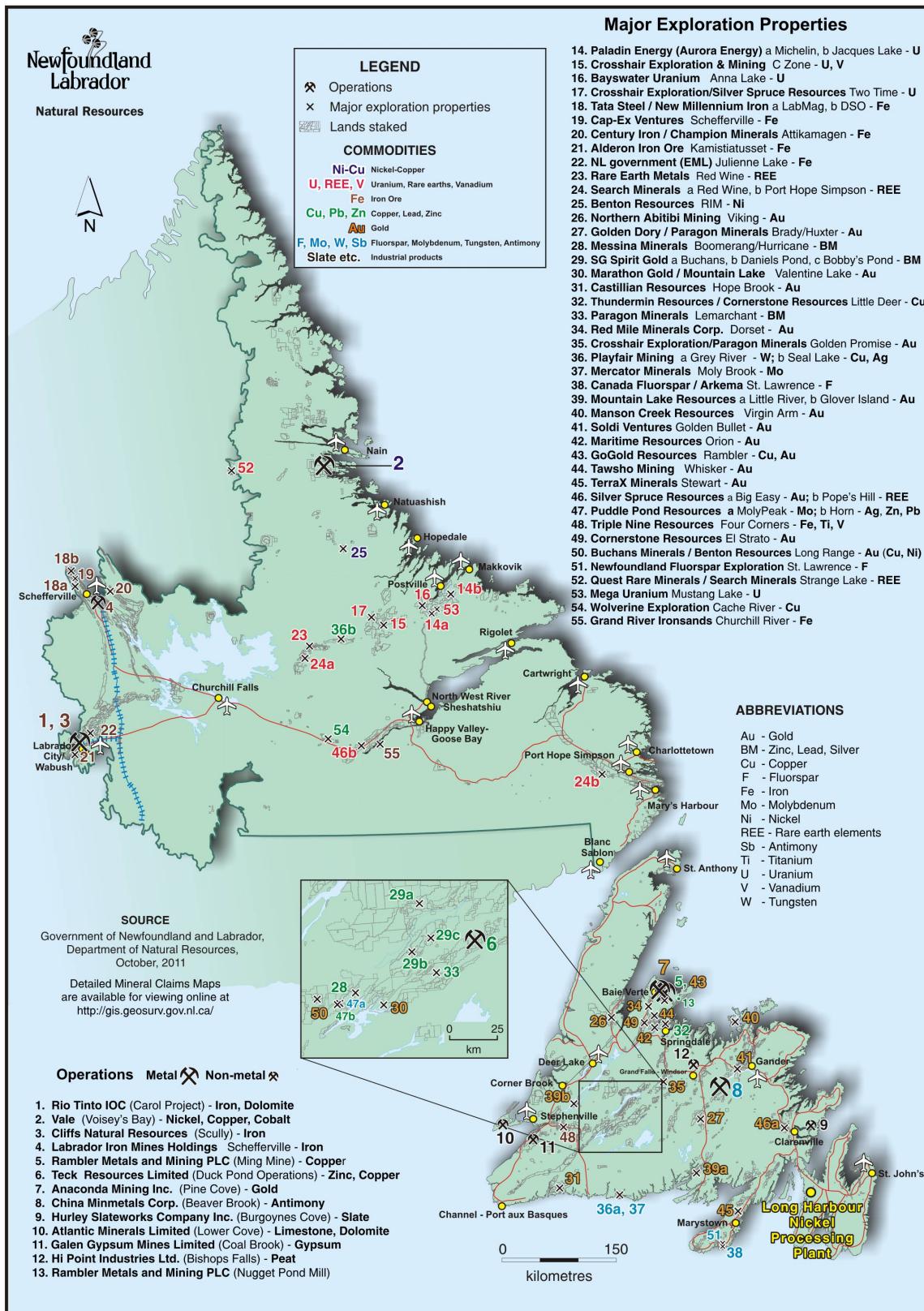
## OUTLOOK

The 2012 outlook for all stages of the minerals sector in the Province is strongly positive. Prices for most of the commodities we produce or explore for, although down somewhat from recent all-time highs, are still relatively strong, and forecast demand for most is healthy. The iron ore sector in particular is seeing record levels of production and growth, but prices for gold and base metals, especially copper, and speciality products such as antimony and fluorspar are also very strong. Significantly lower prices for rare earths in the second half of 2011 reflected slumping demand, although interest in advanced projects is expected to remain high. Committed and forecast capital expenditures for major projects are at record levels, as are exploration expenditures.

For further information on the minerals sector in Newfoundland and Labrador, please visit the Department of Natural Resources website at [http://www.nr.gov.nl.ca/nr/mines/exploration/exploration\\_activity/exp\\_overview.html](http://www.nr.gov.nl.ca/nr/mines/exploration/exploration_activity/exp_overview.html) or contact [Phil Saunders](#), project geologist for exploration monitoring.

## NOTE TO READER

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**Figure 2. Mining operations and major exploration properties, 2011.**

## NEW MINING AND PROCESSING DEVELOPMENTS



*Plant construction – Schefferville Project,  
Labrador Iron Mines*

The strong and sustained demand for iron, particularly from developing nations, led to vigorous growth in the Labrador Trough iron mining district. This includes new production, expansion of existing operations, and accelerated exploration throughout the region.

In western Labrador, **Rio Tinto IOC** started phase two of its Concentrate Expansion Program at the Labrador City operation that will bring the annual concentrate capacity to 23.3 million tonnes. This is the second of three planned stages of expansion, to increase annual capacity to 26 million tonnes.

Elsewhere in the Labrador Trough, **Labrador Iron Mines Holdings Ltd.** (LIM) became the first new producer of iron ore in western Labrador in almost 50 years, when they shipped concentrate from the Schefferville DSO Project in June. The production comes from high-grade, direct shipping ore (DSO) deposits previously exploited by the Iron Ore Company of Canada. LIM is working to extend the resources at several of its deposits.

**Tata Steel Minerals Canada Ltd.** is also advancing a DSO Project near Schefferville. The project was released from environmental assessment and first production is expected in 2012. Additional drilling will be completed on several of the individual DSO deposits to upgrade the resources to NI 43-101-compliant status.

**Anaconda Mining Inc.** achieved full commercial production at its Pine Cove gold mine on the Baie Verte Peninsula. Continued improvements in the mill resulted in steady increases in throughput, gold recovery and sales.

**Rambler Metals and Mining plc** started production at the Ming copper-gold mine on the Baie Verte Peninsula. The first gold doré was poured, and commissioning of the copper concentrator is expected in 2012. Rambler also updated the resource estimate for the Lower and Upper Footwall zones with a total indicated resource of 9,850,000 t at 1.70% copper, 0.09 g/t gold, 1.56 g/t silver and 0.01% zinc.

In separate developments, a total of 1,041 ounces of gold were recovered at the Nugget Pond mill from the Tilt Cove East Mine tailings, under an NSR agreement with **Metals Creek Resources Corp.** In addition, Rambler mined and processed the crown pillar at the former Nugget Pond gold mine. After refining and cleanout, a total of 1,053 ounces of gold were recovered.

**Canada Fluorspar (NL) Inc.** (CFI) announced the results of an NI 43-101 Technical Report and Preliminary Feasibility Study ("PFS") for its underground St. Lawrence Fluorspar Project on the Burin Peninsula. The PFS calculates a base case, pre-tax Net Present Value (NPV) of \$129.1 million and a pre-tax Internal Rate of Return (IRR) of 20.3%, assuming a 5.0% discount rate. Production of fluorspar is estimated to average 122,000 t/y over a fifteen year mine life.

Canada Fluorspar also signed a joint agreement with France's leading chemical producer **Arkema** to re-activate the St. Lawrence Mine. Arkema's total investment in CFI will amount to \$83.5 million. The partnership, called Newspar, holds mining rights and permits related to Blue Beach Mine, Tarefare Mine, mill facilities and a tailings pond.

**Teck Resources Limited** is continuing with a feasibility study on the Boundary open pit project, with a goal to initiate production in 2013. Process improvements at the mill to improve product quality are ongoing.

The **Beaver Brook Antimony** mine operated at full production in 2011. Development of the main ramp to access ore lower in the resource was a major focus.

## EXPLORATION HIGHLIGHTS

### Iron Ore



*Massive magnetite – Kami Project,  
Alderon Iron Ore Corp.*

Exploration for iron in the Labrador Trough has increased dramatically in recent years. Two principal ore types are targeted: magnetite-hematite-bearing taconite and metamorphosed equivalents (e.g., Alderon, Altius/Rio Tinto) and weathered, hematite-rich, high-grade, direct shipping ores (DSO) (e.g., Champion / Century, Cap-Ex).

**Alderon Iron Ore Corp.** has advanced its Kamistiatusset ("Kami") Property near Labrador City-Wabush to the development stage. The company announced it received the results of a Preliminary Economic Assessment (PEA) on the Rose Central Deposit. Highlights include:

- Concentrate production rate of 8 million tonnes per year at a grade of 65.5% iron
- Commercial production starting in 2015 with a mine life of 15.3 years
- Pre-Tax IRR of 40.2%
- NPV (discounted at 8%) of US\$3.07 billion

Alderon also reported an initial mineral resource estimate on the North Rose Deposit. Inferred mineral resources at North Rose total 480 million tonnes at 30.3% iron based on a cut-off grade of 20% iron. Total resources for all three zones (North Rose, Rose Central and Mills Lake) in the Kami Project are:

- 490,000,000 t at 30.0% iron (indicated)
- 598,000,000 t at 30.3% iron (inferred)

**Champion Minerals Inc.** announced assay results from its drilling program at the Attikamagen Project in western Labrador, which is under option to **Century Iron Mines Corp.**

Reverse circulation drilling at the Joyce Lake target returned intersections of 139.0 m grading 52.8% total iron ("FeT"), 91.0 m grading 52.5% FeT, and 127 m at 50.65% FeT in separate holes.

**Altius Minerals Corporation** reported that 2,633 m of drilling was completed on the Goethite Bay Prospect in western Labrador, by **Rio Tinto Exploration Canada** through an earn-in option agreement. Preliminary results included an intersection of 279 m grading 29.8% iron.

**Cap-Ex Ventures Ltd.** conducted an extensive exploration program, including drilling, on newly acquired claims in western Labrador. Initial drilling on the Green Bush Zone intersected high-grade magnetite, including one interval of 159.9 m grading 31.3% iron beginning at 1.52 m. Current drilling combined with previous results suggests this zone has a strike length exceeding 10 km.

Cap-Ex also announced the discovery of a second high grade magnetite zone on the property. The Northwest Zone, located approximately 3 km west of the Green Bush Zone, was tested by 6 holes over 5.3 km of strike length. The northern-most drill hole intersected 107.9 m averaging 31.8% iron starting at 1.22 m.

**Metals Creek Resources Corp.** and joint venture partner **Golden Dory Resources Corporation** announced assay results from a sampling program on the Gabbro Lake Project in western Labrador. Results from grab sampling of both outcrop and angular float ranged from 11.42%  $\text{Fe}_2\text{O}_3$  to 75.38%  $\text{Fe}_2\text{O}_3$  with 79% of the samples assaying greater than 25%  $\text{Fe}_2\text{O}_3$  and 62% of the samples over 40%  $\text{Fe}_2\text{O}_3$ . Future work, including additional prospecting/sampling, ground geophysics and drilling, is planned.

## Gold



**Marathon**  
PGM CORPORATION

*High grade gold – Valentine Lake Project ,  
Marathon Gold / Mountain Lake Resources*

The steady increase in gold prices on world markets since late 2008 helped to stimulate gold exploration on the Island of Newfoundland. New resource estimates were reported, or are pending, for several projects, and drilling activity increased markedly. Deposit types vary considerably, reflecting the diverse geology and mineralizing environments of the region. Advanced projects are targeting orogenic gold (Marathon/Mountain Lake), as well as epithermal-style (Castillian) and intrusion-hosted gold (Golden Dory / Paragon).

Joint venture partners **Marathon Gold Corporation** and **Mountain Lake Resources Inc.** continued to increase their gold resource with an extensive drilling campaign at the Valentine Lake Property in south-central Newfoundland. The partners completed 25,250 m of drilling in 2011. Highlights included an intersection of 13.95 g/t gold over 26.1 m. An earlier drill-hole returned a wide intersection of 2.09 g/t gold over 65.6 m.

The partners also announced the discovery by trenching of two new gold occurrences at Valentine Lake. The first is a quartz-tourmaline-pyrite vein structure that extends over an 80 m strike length in an area 1 km southwest of the current Leprechaun Gold Deposit resource boundary. Numerous grab samples of quartz-tourmaline-pyrite with coarse visible gold returned assays of up to 113.3 g/t gold.

The second discovery, termed the J. Frank Zone, consists of multiple, stacked quartz-

tourmaline-pyrite veins that are exposed in an area 1.5 km southwest of the current Leprechaun resource boundary. Grab samples of vein material with coarse visible gold returned assays of up to 581.88 g/t gold. Initial drilling returned an intersection of 3.49 g/t gold over 3.75 m.

**Castillian Resources Corp.** conducted drilling, planned for 25,000 m, around the margins of the former Hope Brook gold mine, on Newfoundland's south coast. The company targeted zones of lower grade mineralization that were not mined due to lower gold prices at the time. Intersections of 11.44 g/t gold and 0.52% copper over 29.2m from the Mine Zone; 3.37 g/t gold and 0.37% copper over 8.3 m from the Hanging Wall Zone; and 2.78 g/t gold and 0.21% copper over 19.8 m from the Pit Zone were obtained. The Pit Zone was intersected along a strike length of 700 m and the Mine Zone was tested 400 m below surface and 400 m along strike from the historical mine workings. Both zones remain open at depth and along strike.

In addition, IP surveys indicate that the Hope Brook mineralized structure appears to be offset approximately 150 to 200 m to the north along a north-south striking fault, and may continue along strike to the northeast on the other side of this fault. No historical drill holes have tested this target area.

**Northern Abitibi Mining Corp.** is exploring an extensive, vein-hosted gold system on the Viking Property in western Newfoundland. The 2011 exploration program included a total of 4,698 m of drilling as well as trenching and an induced polarization survey. Highlights of the drilling included an interval of 65.3 m grading 0.5 g/t gold. Prospecting and trenching revealed new showings and zones of gold mineralization which, along with geophysical targets, remain to be explored.

Following the program, the company announced an updated resource estimate for the project. At a cut-off grade of 0.2 g/t gold, the Thor Trend deposit contains an indicated resource of 98,000 ounces gold (3,232,000 t at an average grade of 0.95 g/t) plus an inferred resource of 45,000 ounces gold (2,123,000 t at an average grade of 0.66 g/t).

**Crosshair Exploration & Mining Corp.** and joint venture partner **Paragon Minerals Corporation** announced results of trenching and bulk sampling carried out on the Golden Promise Property in central Newfoundland.

2,174 t of material were delivered to the Nugget Pond mill, owned and operated by **Rambler Metals and Mining plc**. Two gold bars weighing 5.37 kg were produced, along with 482.5 kg of concentrate from the mill. After refining, the bars and concentrate produced a total of 313.59 ounces of gold and 23.05 ounces of silver.

Based on mill records and total gold recovered, the average recovered gold grade was 4.47 g/t and the average tails grade was 1.12 g/t, indicating a back-calculated head grade of 5.59 g/t gold with an 80% recovery. A new resource estimate, including the 2010 drilling and surface sampling, is being calculated.

**Mountain Lake Resources Inc.** completed 7,227 m of drilling on its Glover Island gold property in western Newfoundland. The program focused on upgrading historical resource estimates to NI 43-101 status. Highlights included intersections of 0.7 g/t gold over 130.9 m from a vertical depth of 135 m and 1.34 g/t over 99.3 m from 131m, both in an area outside the resource boundary of the historical Lunch Pond South East Prospect.

Mountain Lake also completed a 1,714 m drill program on the Little River gold-antimony property in southern Newfoundland. The program focused on the Le Pouvoir and South Zones, and on a gold-in-soil anomaly. Stibnite was encountered in all holes drilled in the South Zone, which now extends over a 500 m strike length. A best intersection of 0.43 g/t gold and 0.21% antimony over 4.4m was obtained.

**Maritime Resources Corp.** completed 4,948 m of drilling at the Orion gold project near Springdale. Highlights included an interval grading 15.5 g/t gold over 1.3 m in the Discovery Vein, and one grading 16.58 g/t gold over 1.2 m in the Main Vein.

The 2011 program was successful in extending the Discovery and Main veins to the southwest. This will add significant ounces of gold to the established resource at Orion.

Maritime also reported a preliminary estimate of gold mineralization remaining at the former

Hammerdown mine. The mineralization is estimated to range from 1,800,000 t grading 8.3 g/t gold at a possible 1.0 g/t gold cut-off, to 675,000 t grading 16.6 g/t gold using a possible 7.0 g/t gold cut-off. This would result in a mineralized deposit ranging from 360,000 to 480,000 ounces of gold.

**Manson Creek Resources Ltd.** completed a summer drill program on its Virgin Arm gold project, in central Newfoundland. Results included a number of multi-gram gold intervals including 1.51 g/t gold over 3.5 m at the Hank Zone, and 5.75 g/t gold and 3.39 g/t gold over 1.0 m and 1.2 m respectively at the Homer Zone.



*Drill rig – Virgin Arm Project  
Manson Creek Resources*

**Buchans Minerals Corporation** and **Benton Resources Corp.** announced additional results from the recently discovered Goldquest gold prospect within their Long Range joint venture property in central Newfoundland. Trenching located additional mineralized quartz material in bedrock and float, suggesting potential of the mineralized system to host high-grade gold mineralization over an open-ended, 750 metre-long trend. The companies drilled eight holes totaling 823 m on the Goldquest Trend. Drilling intersected mineralized quartz veins in the Goldquest North area, including intervals with 5.49 g/t gold and 4.5 g/t silver over 0.3 m as well as 2.13 g/t gold and 8.4 g/t silver over 0.1 m.

The partners have discovered a new area of gold-bearing quartz float similar to that observed at Goldquest, and located 26 km to the east. The new prospect, called Goldrange, consists of a cluster of sub-angular quartz float from which four grab samples assayed up to 25.8 g/t gold with 130.2 g/t silver.

Trenching at Goldrange revealed anomalous gold in bedrock, with a best result of 1.04 g/t gold over 0.7 m in a channel sample. However, high grade gold veins similar to the surface float were not encountered. The companies intend to undertake additional work in 2012.

**Golden Dory Resources Corp.** announced final results from a 6-hole drill program at its Brady gold project in central Newfoundland. All holes encountered multiple zones of gold mineralization, including an intersection of 25.45 m grading 1.48 g/t. The company also reported the resumption of drilling at the adjacent Huxter Lane Property, under option from **Paragon Minerals Corporation**.

**GoGold Resources Inc.** started exploring around the historic Rambler Main Mine, a VMS-style copper-gold deposit near Baie Verte. The company reported results of re-sampling of historic drill holes including intersections of 11.0 g/t gold over 14.78 m, and 10.1 g/t gold over 8.38 m in separate holes. The company drilled 5 holes targeting IP anomalies along the periphery of the Main Mine deposit. Results are pending.

**Cornerstone Capital Resources Inc.** announced it has completed a 1,160 m drill program on the El Strato gold property in north-central Newfoundland. One drill hole intersected a new gold-bearing breccia zone grading 3.15 g/t gold over a core length of 3.2 m along the southwest portion of the Rocky Bottom Trend. This new mineralized zone is the widest drill intersection encountered on the property to date and is open in all directions.

**TerraX Minerals Inc.** is exploring the Stewart gold-copper property on the Burin Peninsula. Mapping, prospecting and an IP survey outlined a 6 km-long by up to 1.4 km-wide epithermal- to porphyry-style alteration zone with extensive, low-grade gold-copper mineralization. A sample from float at the Forty Creek showing assayed 13.3 g/t gold, 670 g/t silver and >0.5% lead.

The company drilled five holes at the Stewart prospect. Wide intervals of epithermal- to porphyry-style alteration with 1 to 10% pyrite and locally anomalous gold were intersected. Results included 111 m grading 0.13 g/t gold, within which was 42 m at 0.2 g/t gold, and 18.03 m at 0.11 g/t gold, all with anomalous silver, copper and zinc.

**Anaconda Mining Inc.** drilled 3 holes to test a gold-mineralized area less than 100 m north of the open pit at its Pine Cove gold mine near Baie Verte. The best intersection obtained was 2.5 g/t gold over 40.8 m, including 7.18 g/t over 3.2 m and 11.44 g/t over 4.3 m.

**Silver Spruce Resources Inc.** conducted prospecting and drilling at its Rambler South gold property on the Baie Verte Peninsula. Highlights of the 10-hole drill program included intersections of 1.07 g/t gold over 4.6 m and 10.5 g/t over 1.75 m, in separate holes.

The company also drilled 11 holes on the Big Easy gold property in eastern Newfoundland. All holes intersected strongly altered sedimentary units with anomalous gold and silver, including an intersection of 0.41 g/t gold and 15.4 g/t silver over 89.2 m. The company reported the discovery of a new mineralized alteration zone with anomalous gold and silver, 3.5 km south of Big Easy.



*Crustiform-colloform banding – Big Easy Project  
Silver Spruce Resources*

**Tawsho Mining Inc.** completed an 11 hole drill program on its Whisker Valley Property on the Baie Verte Peninsula. Best results included an intersection of 7.9 g/t gold over 1.3 m.

**Soldi Ventures Inc.** reported assays up to 222.5 g/t gold from grab samples on its Golden Bullet Project in central Newfoundland. Quartz-antimony veins in the immediate area of this showing assayed up to 26 g/t gold and 12.5% antimony. Assays up to 298.8 g/t gold were obtained from the Vg showing, located between the Quarry showing and Bullet prospect. In addition, a newly discovered area of quartz-veined greywacke that assayed up to 45.3 g/t gold was located approximately 3 km along strike from the high-grade Knob prospect.

Soldi completed soil sampling, IP surveys, trenching and diamond drilling. An intersection of 7.2 g/t gold over 5.4 m was obtained.

**Metals Creek Resources** discovered high-grade gold mineralization on its Jackson's Arm Property near White Bay. Gold mineralization occurs over a large area termed the Boot 'n Hammer Zone. Grab samples from veined and altered granodiorite returned assays up to 24.6 g/t gold, with most of the higher assays occurring within quartz veins and stockwork. Two additional showings were discovered in the vicinity, with assays from grab samples ranging up to 56.7 g/t gold.

**Zonte Metals Inc.** conducted IP surveys and soil sampling at its Wings Point gold project in northeast Newfoundland. Anomalous results from these surveys provided targets for planned trenching and drilling.

### **Base Metals (Zinc, Lead, Copper)**



*Zn-Pb-Cu sulphides – Lemarchant project  
Paragon Minerals*

Base metal exploration on the Island of Newfoundland has traditionally focused on volcanogenic massive sulphide (VMS) deposit types. Two sub-classes are generally recognized: *polymetallic* (Zn-Pb-Cu +/- Au, Ag), and *Cu dominated* (+/- Au). Strong base metal prices are having a positive impact on exploration and development, with the Ming Mine project now in production and with positive Preliminary Economic Assessments published on others (e.g., Little Deer, Lundberg).

**Thundermin Resources Inc.** and joint venture partner **Cornerstone Resources Inc.** completed a 12,690 m drill program on the Little

Deer copper deposit near Springdale, and subsequently reported the results of an updated mineral resource estimate for the deposit. The revised estimate provided a 66% increase in the indicated mineral resource to 99.8 million lbs of copper with 1,911,000 t grading 2.37% copper; and a 61% increase in the inferred mineral resource to 175.9 million lbs of copper with 3,748,000 t grading 2.13% copper. There is potential to further increase mineral resources with additional drilling below and to the west of the current resources.

The partners have reported the results of a PEA for the project, based on an 1,800 t/d underground mine, over a 9.5 year mine life. The project's base case is forecast to provide an after-tax IRR of 21.5% and an after-tax NPV (at a 6% discount rate) of \$86.7 million

The joint venture partners also announced that a compilation of historical drill data from the past-producing Whalesback copper mine suggests excellent potential for establishing additional copper resources on the property. Significant results from these holes include 4.5% copper over 6.1 m, 4.0% copper over 3.4 m, 3.2% copper over 5.5 m and 3.0% copper over 4.3 m.

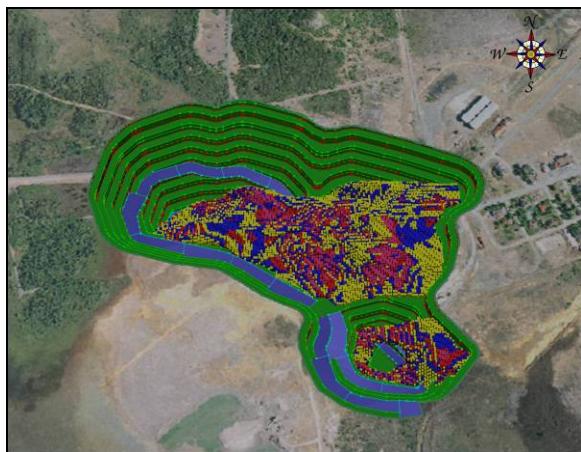
**Paragon Minerals Corporation** continued step-out and infill drilling on the high-grade Lemarchant Main massive sulphide zone at its South Tally Pond Project, located near Teck Resources Duck Pond Operations in central Newfoundland. The drill program further outlined and expanded the massive sulphide mineralization intersected over a 300 m strike length. Results include an interval of 1.61% copper, 11.83% zinc, 3.27% lead, 528.31 g/t silver and 3.13 g/t gold over 10.3 m. An initial resource estimate is in progress.

Paragon also drilled three reconnaissance holes totaling 875 m at the Beaver Lake VMS prospect. All three holes intersected altered felsic volcanic rocks, with assays up to 4.24% copper and 11.0 g/t silver over 0.5 m and 1.2% zinc and 8.5 g/t silver over 1.5 m.

**Buchans Minerals Corporation** announced the completion of a positive PEA on its Lundberg base metal deposit near Buchans in central Newfoundland. The PEA is based on a 5,000 t/d open pit mining and milling operation over a 10 year mine life. The project's base case is forecast to provide a pre-tax IRR of 40.92% and

an NPV (at a 6% discount rate) of \$192.6 million.

The Lundberg Deposit, along with several other VMS deposits have since been sold to **SG Spirit Gold Inc.** (see *Major Transactions*).



*3D model – Lundberg deposit  
Buchans Minerals*

**Playfair Mining Ltd.** reported results of a 4,350 m drill program at its copper-silver project at Seal Lake in central Labrador. All but one of the twenty four drill holes intersected the favourable reduced Adeline Island Formation rocks with cumulative thicknesses ranging up to 136.6 m. Three of the holes encountered copper and silver grades of potential economic value. Twenty of the remaining twenty-one drill holes contain anomalous amounts of copper.

**Messina Minerals Inc.** reported results from late 2010 drilling of the Hurricane massive sulphide target on their Tulks South Property in central Newfoundland. Best results included an intersection of massive sulphide mineralization assaying 8.5% zinc, 4.7% lead, 1.5% copper, 288 g/t silver and 1.0 g/t gold over 1.1 m.

At **Teck Resources Limited** Duck Pond Operations, about 23,000 m of drilling was completed on the Lower Duck deposit in 2011, and about 9,000 m on other targets, in an ongoing effort to extend the mine life.

**Puddle Pond Resources Inc.** completed a 6-hole drill program on the Horn-Mesher Project in central Newfoundland. This work follows up on targets developed by airborne electromagnetic surveys and trenching conducted earlier in 2011.

Strongly altered and sulphide-enriched stockwork was encountered, as well as zones with anomalous copper, lead, zinc and silver.

**Prominex Resource Corp.** drilled five holes for 331 m to better-define the T1 and T2 lenses on its Tulks Hill property. All five holes intersected moderately- to intensely-altered felsic volcanic rocks with intersections of massive to semi-massive sulphide mineralization.

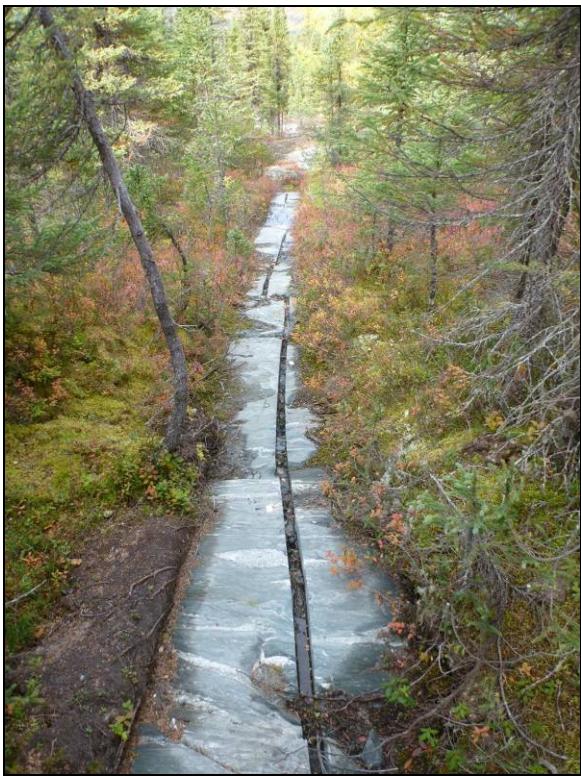
### ***Rare Earth Elements (REEs)***



*Cerium oxide*

In 2009, sharp price increases for some rare earth elements prompted staking and re-evaluation of a number of historic REE prospects in the Province, particularly in Labrador. Renewed exploration led to discovery of several new REE occurrences, particularly in the Grenville Province of southern Labrador. REE mineralization is documented in a variety of rock types, but is most commonly hosted in Proterozoic volcanic and intrusive rocks of alkaline affinity, as well as in pegmatite and felsic gneisses.

**Rare Earth Metals Inc.** is exploring for REEs in the Letitia Lake area of central Labrador. The 2011 drill program focused on the Two Tom and Dory Pond prospects. Highlights include an intersection of 2.15% Total Rare Earth Oxides (TREO) over 120 m at Two Tom, and 1.55% TREO over 21.0 m at Dory Pond.



*Channel samples – Red Wine Project  
Rare Earth Metals*

The company reported an initial inferred resource estimate for the Two Tom deposit of 40,635,000 t grading 1.18% TREO, 0.26% niobium oxide and 0.18% beryllium oxide at a 0.6% TREO cut-off grade.

**Search Minerals Inc.** is continuing detailed exploration on six REE prospects in the Port Hope Simpson area in southeast Labrador. The work focused on newly discovered prospects.

Two drill campaigns of about 4,000 m each were completed on the Foxtrot zirconium-yttrium-niobium prospect, and the company reported an initial resource estimate. The Foxtrot Prospect is estimated to contain an indicated mineral resource of 3,410,000 t with a grade of 1.07% total rare earth oxides (TREO+Y), including 218 ppm dysprosium oxide ( $Dy_2O_3$ ) and 1,687 ppm neodymium oxide ( $Nd_2O_3$ ). There is also an inferred mineral resource of 5,850,000 tonnes at a grade of 0.96% TREO+Y, including 208 ppm  $Dy_2O_3$  and 1,494 ppm  $Nd_2O_3$ .

**Search Minerals Inc.** and **Great Western Minerals Group Ltd.** completed a first-phase 1,906 m drill program on Search's Red Wine Property, located northeast of Churchill Falls,

Labrador. The drilling confirmed that previously reported REE-zirconium-yttrium mineralization continues to depth in the Pinot Rose and Cabernet showings. Analytical results from core samples returned 550 ppm dysprosium, 3451 ppm yttrium and 1.25% total rare earth elements (TREE) over 4 m at the Cabernet showing. Follow-up drilling is planned for the Cabernet Showing to outline the extent of dysprosium-enriched mineralization. Drilling is also planned for the Malbec showing.

**Quest Rare Minerals Ltd.** and partner **Search Minerals Inc.** reported first results from a drill program completed on the Strange Lake Option Project. A best intersection of 1.13% TREO over 48.0 m, including 1.78% TREO over 24.0 m and 2.37% TREO over 14.7 m was obtained.

**Silver Spruce Resources Inc.** is exploring for REEs on several properties in central and eastern Labrador of which the most advanced is the Popes Hill Property, located along the Trans Labrador Highway west of Happy Valley-Goose Bay. The company conducted a first phase 1,120 m drill program in the MP showing area at Popes Hill. Results indicated anomalous REE+Y values over significant widths, with narrow high grade intersections in most holes.

Trenching of REE-mineralized areas on the Popes Hill Property revealed wide zones (up to 30 m) with anomalous REEs including a section which assayed 0.61% Total Rare Earth Elements + yttrium over 22.6 m.

#### **Antimony, Tungsten, Vanadium, Uranium, Fluorspar**



*Stibnite ore - Beaver Brook Antimony Mine  
China Minmetals*

Prices and markets for specialty metals and minerals such as antimony, tungsten, vanadium and fluorspar continue to be strong, and increased exploration and development are expected in 2012.

In late 2011 the Nunatsiavut Government voted to lift the three-year moratorium on the mining, development and production of uranium on Labrador Inuit Lands. The moratorium will end in March 2012, upon proclamation of the previously passed Nunatsiavut Environmental Protection Act. This will provide a significant stimulus to uranium exploration and development in Labrador.

**Beaver Brook Antimony Mine** continues to delineate current ore resources and explore the property for new deposits. Over 10,000 m of drilling was conducted in 2011.

**Playfair Mining Inc.** reported an updated resource estimate for the Grey River tungsten deposit on the south coast of Newfoundland. Results from the estimate indicate an inferred resource of 1,200,000 t grading 0.73%  $WO_3$ , containing 18.8 million pounds of tungsten trioxide or 853,000 metric tonne units (MTU). The updated resource is reported at vein width using a 0.2%  $WO_3$  cut-off with all areas grading less than 0.2%  $WO_3$  over a 1 m minimum mining width removed from the resource.

**Crosshair Exploration & Mining Corp.** completed additional drilling, as well as prospecting and trenching on its CMB Uranium / Vanadium project and on the CMB Joint Venture ("CMB JV") uranium project in central Labrador.

At the CMB Uranium/Vanadium Project, Crosshair drilled 19 holes (3,138 m) in the structural corridor between the C Zone and Area One, and on the Blue Star Prospect. Results of drilling included intersections of 48.5 m grading 0.195%  $V_2O_5$  and 62.0 m at 0.185%  $V_2O_5$ .

At the CMB JV Project, a joint venture with **Silver Spruce Resources**, Crosshair drilled seven holes at the Two Time Zone for a total of 2,961 m. Among the better results was a 4.5 m intersection grading 0.069%  $U_3O_8$ .

**Triple Nine Resources Ltd.** conducted airborne surveys and drilling on the Four Corners Fe-Ti-V project in southwest Newfoundland. Seven holes were drilled in 2011. Highlights include a 200 m

section grading 21.85%  $Fe_2O_3$ , 4.71%  $TiO_2$  and 0.12%  $V_2O_5$  including a 73.5 m section grading 26.65%  $Fe_2O_3$ , 6.35%  $TiO_2$  and 0.147%  $V_2O_5$ .



*High grade Fe-Ti-V — Four Corners Project  
Triple Nine Resources*

**Mega Uranium Ltd.** completed 888 m of drilling on the Mustang Lake property in central Labrador. One hole intersected a 46 m-thick zone with discontinuous anomalous radioactivity with best results of 1 m grading 0.08%  $U_3O_8$ , and 1 m at 0.06%  $U_3O_8$ .

On the Aillik East Project, Mega drilled eleven holes for a total of 1,109 m. Drilling tested four main targets; Harbinger, Priority One, Powe and NB. The most encouraging results were on the NB target where drilling intersected 10 m of 0.048%  $U_3O_8$ .

The company also completed three drill holes for 361 m at the Noseman showing on the Bruce River property. The best uranium result was 0.13%  $U_3O_8$  over 1.0 m.

**Newfoundland Fluorspar Exploration Ltd.** (NewFluorEx) staked claims covering historic fluorspar prospects near the former-producing St. Lawrence fluorspar mine on the Burin Peninsula.

Drilling on the Mount Margaret vein returned intersections of 12.0%  $CaF_2$  over 2.5 m and 27.89%  $CaF_2$  over 2.77 m. In the Little St. Lawrence area an intersection of 22.89%  $CaF_2$  over 2.0 m was obtained.

NewFluorEx has started a 6 hole, 1,200 m drill program to provide data for an updated resource

estimate on the Mount Margaret Vein and to test additional targets in the area.

### **Nickel-Copper**



*Ni-Cu-Co ore – Voisey's Bay Project  
Vale Newfoundland and Labrador Limited*

**Vale Newfoundland and Labrador Limited's** 2011 exploration program at Voisey's Bay focused on a number of near-mine targets. These included the Southeast Extension (between the current Ovoid pit and the Eastern Deep deposit); zones south and west of the Eastern Deep; and areas north of the Reid Brook Zone. In addition to these targets, work continued from last year on the Reid Brook infill drilling program. This was designed to add confidence to the resource to support a pre-feasibility study. A number of supporting technical studies were also conducted. Approximately 18,000 m of diamond drilling was planned for 2011.

**Buchans Minerals Corporation and Benton Resources Corp.** reported results from their recently completed 12-hole drill program on the Long Range joint venture property in central Newfoundland. A best intersection of 12.9 m averaging 0.48% copper and 0.023% cobalt, including 0.91 m averaging 2.24% copper and 0.011% cobalt was obtained from the Range Prospect. Additional surveys and drilling are planned.

### **Major Transactions**

**Paladin Energy Ltd** announced it has acquired the uranium assets of Aurora Energy Resources Inc. from Fronteer Gold Inc. Paladin now holds title to uranium assets totalling 83,800,000 lbs of  $U_3O_8$  (measured and indicated) and 53,000,000

lbs of  $U_3O_8$  (inferred) across six deposits within the highly prospective Central Mineral Belt in Labrador. The transaction was completed for a total consideration of \$260.87 million via the issuance of 52,097,937 ordinary shares in Paladin. This valued the current resources at US\$1.90/lb.

**New Millennium Iron Corp.** recently concluded two major agreements with **Tata Steel**, one of the top 10 steel producers in the world. In the first, Tata Steel will invest \$300 million to earn an 80% interest in New Millennium's DSO Project near Schefferville.

Under the second agreement, Tata Steel will participate in a feasibility study on New Millennium's much larger Taconite Project, comprising the LabMag and KeMag deposits in Labrador and Quebec respectively. Tata Steel will arrange the required equity portion of the financing for the project of up to \$4.85 billion if both deposits are developed.

**WISCO International Resources Development & Investment Limited** entered into joint venture agreements with Century Iron Ore Holdings Inc. for ownership of Century subsidiaries holding interests in three iron properties. These subsidiaries include Labec Century Iron Ore Inc., a partner with **Champion Minerals Inc.** on the Attikamagen property in Labrador. The joint venture agreements provide for WISCO to inject new capital in exchange for a 40% equity interest in each subsidiary.

**Grand River Ironsands Incorporated** announced that South African mining company **Petmin** and Vancouver-based **Cardero Resource Corporation** will invest \$25 million in **North Atlantic Iron Corporation's** iron sands project located near Happy Valley – Goose Bay. This investment will allow the company to begin metallurgical test work for producing pig iron from magnetite-bearing river sands and to begin engineering studies that will be incorporated in a bankable feasibility study.

**Altius Minerals Corporation and Century Iron Mines Corporation** announced they have signed a principal agreement and a royalty agreement covering four of Altius' regional iron ore projects in the Labrador Trough. Preliminary results from a 22,000 line km airborne survey and initial ground follow-up work indicate that multiple targets for each of the major recognized

iron ore types in the region are present throughout the property. A minimum \$4.3 million program is underway for the year 1 program.

**Altius Minerals Corporation** has expanded its exploration alliance with **Cliffs Natural Resources Exploration Inc.** to include the Saglek iron ore project in northern Labrador. Approximately 1,800 claims covering 450 square km were staked to cover seven priority target areas identified from mapped Archean iron formation and associated magnetic anomalies. An initial \$400,000 reconnaissance program of mapping and sampling is in progress.

**Rambler Metals and Mining plc** announced that it has entered into an exploration and development alliance with **Maritime Resources Corp.** and **Commander Resources Corp.** The alliance will allow the sharing of technical expertise for the exploration and development of two main properties in the Green Bay area with projects in the advanced exploration stage.

Highlights of the agreement include completion of an economic assessment for reopening the former-producing Hammerdown gold mine, and evaluating the potential of the Orion Deposit as a potential feed source for Nugget Pond

**Vulcan Minerals Inc.** has received approval to proceed with the Plan of Arrangement to spin out a new subsidiary company focused on potash exploration and development. The new company is called **Red Moon Potash Inc.**

**Buchans Minerals** and **Mountain Lake Resources** signed letters of intent to sell their respective interests in various base metal projects in central Newfoundland to **SG Spirit Gold Inc.** Spirit acquired interests in the Lundberg, Daniels Pond and Tulks Hill deposits from Buchans Minerals, and in the Bobby's Pond deposit from Mountain Lake. As part of the agreement, Spirit must raise gross proceeds of at least \$12.5 million, and spend at least \$7.5 million on the Buchans Property within 24 months of the date of the agreement.

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## Notes