

# **Northern Mining News**

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#### From the Executive Director ...

Mineral production statistics are out this month and, as we expected, 2015 saw a drop in both territories, just as in the rest of Canada. Our industry is still moving forward, although not as quickly as we need, particularly with exploration. But with many governments feeling the effects of industry downturn, signals of support are emerging.

We are hopeful land use planning in NU will also be supportive; read our position on how existing regulatory processes in Nunavut are already helping protect caribou. Training efforts continue, the Federal budget has renewed the METC, and prospecting and exploration funding is available. Read up on progress on construction of the Gahcho Kué mine, and how success is spelled at the neighbouring Kennady Diamonds project.

Happy reading! ... Editor

**Our Mission:** To be the leading advocate for responsible and sustainable mineral exploration and development in the NWT and Nunavut.

#### **Nunavut and Northwest Territories Mining Revenues Down But Still Significant**

The value of mining production has decreased in the Northwest Territories and in Nunavut over the last year, as they have in Canada according to Federal government statistics released in March.

Preliminary estimates for 2015 mineral production posted by Natural Resources Canada (NRCan) show that the total value of NWT mining production is \$1.791 billion, down \$94 million (5%) from \$1.882 billion in 2014. Of this:

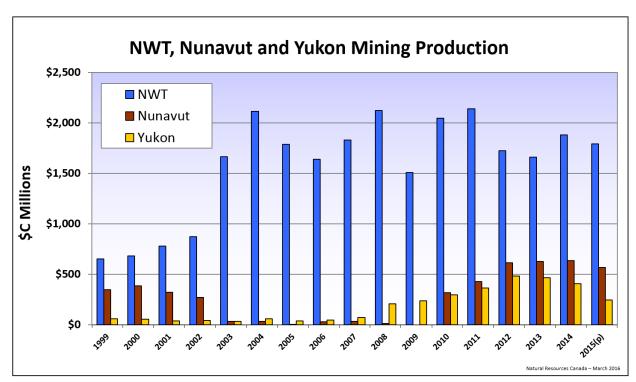
- Diamond production value is \$1.726 billion, down \$66 million (4%) from \$1.791 billion;
- Tungsten value is \$56.5 million, down \$28 million (33%) from \$84.3 million; and
- Copper value is \$1.35 million, down \$0.43 million (24%) from \$1.78 million.

In Nunavut, the total value of mining production was \$567 million, down \$69 million (12%) from \$636 million in 2014. Of this:

- Gold production value was \$563 million, down \$71 million (11%) from \$634 million in 2014; and
- Silver production value was \$4.6 million up \$1.8 million (63%) from \$2.9 million last year.

In Canada, preliminary estimates for 2015 production are also down to \$42.766 billion a drop of \$1.134 billion (3%) from \$43.900 billion in 2014.

# Value of Mineral Production, 2015(p)



"As price takers in the market place, our northern mines are not immune to global commodity prices. As a result, mineral production is down in all three northern territories, as it is in Canada. However, the revenue and benefits produced from mining continue to be important contributors to our economies," said Chamber of Mines President Gary Vivian. "Markets are cyclical, and this will turn around in time. Of course, we still need to encourage exploration and investment to sustain our industry. Two mine closures in the NWT remind us of the importance of taking actions to attract exploration investment to help us find the mines of tomorrow. The keys to creating an attractive investment climate are regulatory reform and landlord clarity as well as increasing the supply of infrastructure and other incentives that can help address the higher cost of doing business in the North."

See chart of the NWT and Nunavut data. Visit NRCan's site <u>here</u> to examine detailed source statistics.

#### Mountain Province Updates Gahcho Kué Diamond Mine Development

- Overall project more than 87 percent complete
- On plan for first production in H2 2016
- Appointment of Mine General Manager

In mid-March, Mountain Province Diamonds Inc. has announced that development of the Gahcho Kué diamond mine is progressing according to plan with the overall project more than 87 percent complete and on track for first production during H2 2016.

Patrick Evans, Mountain Province President and CEO, commented: "We continue to make excellent progress at Gahcho Kué. Key areas of focus are remaining earthworks, commissioning of the primary crusher and diamond plant, pre-stripping and stockpiling of kimberlite as well as preparations for operational readiness."

Mountain Province is also pleased to announce that the Gahcho Kué Joint Venture has appointed Allan Rodel as the mine general manager. Mr. Rodel joined the De Beers Group in 1997 and has held a number of senior management positions, including that of Gahcho Kue project manager since 2013. Mr. Rodel has an honors degree in chemical engineering from the University of Natal and resides in Yellowknife, N.T.

In addition to Mr. Rodel, nine senior operational appointments have been made at Gahcho Kue, including the mining manager, engineering and maintenance manager, ore processing manager and technical services manager. Under the leadership of Mr. Rodel and the operations management team, commissioning of the Gahcho Kué mine is well underway.

Mr. Evans added: "We are also pleased to report that the ice road deliveries to Gahcho Kué are proceeding to plan. Importantly, delivery of critical large mining equipment to site was completed last week with the bulk of the remaining deliveries being diesel fuel. The project also continues to meet our lending group's tests-to-completion with US\$73M advanced to fund cash calls during Q1 2016. A total of US\$231M has been drawn against the US\$370M facility. An update on performance against budget will be provided with the yearend results at the end of March."

#### Exploration success at Kennady – another kimberlite discovered!

#### Kelvin North Lobe Bulk Sampling at +300 tonnes

In mid-March, Kennady Diamonds Inc. announced that exploration drilling at the Kennady North project has resulted in the discovery of a third kimberlite body at the high-grade Faraday kimberlite cluster. Following the completion of ice-based infill drilling at the Faraday 1

kimberlite, the core rig was moved to a geophysical target approximately 80 meters to the southwest where indications of the presence of volcaniclastic kimberlite were discovered during the winter of 2015. Three exploration drill holes have been completed at the Faraday 3 discovery within the past week with the latest hole intersecting more than 55 meters of kimberlite.

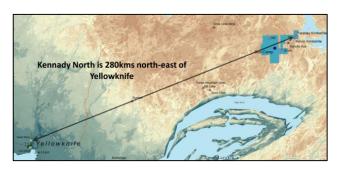


Table 1 below summarizes the latest Faraday 3 drill results.

Table 1: Faraday 3 2016 Winter Drill Program

Drill Hole	Target	Azimuth	Inclination	Kim	berlite Inte	rcepts (m)	End of
	J			From	То	Intercept*	Hole (m)
KDI-16-006a	Faraday 3	140	-46	42.90	78.00**	26.26	115
KDI-16-006b	Faraday 3	140	-65	54.25	84.88**	27.96	115
KDI-16-006c	Faraday 3	140	-90	56.90	112.70	55.80	124

<sup>\*</sup> Intercepts in sub-vertical holes not true widths

Kennady Diamonds President and CEO, Patrick Evans, commented: "Faraday 3 is the fourth kimberlite body that we have discovered at Kennady North over the past three years. Methodical exploration over the Kelvin – Faraday kimberlite corridor has increased our confidence in the potential for the discovery of further kimberlite bodies within the corridor."

Kennady Diamonds is also pleased to announce that the Kelvin North Lobe bulk sampling program is progressing well with thirteen of 26 planned large-diameter holes completed and over 300 tonnes of kimberlite recovered to date. The Company's target is to recover approximately 500 tonnes, which is expected to result in the recovery of diamonds weighing more than 1,000 carats. The diamond parcel will be used for revenue modeling of the Kelvin North Lobe.

Mr. Evans added: "To ensure that we achieve our target of at least 500 tonnes, we've decided to keep one of the two reverse-circulation ("RC") drill rigs on site following the closing of the ice road later this month. This will also provide us with the opportunity to commence the 2017 Faraday bulk sampling program well ahead of the opening of the ice road next year."

<sup>\*\*</sup> Includes minor country rock intercepts



Diamonds from previous Kelvin bulk sampling.

The Company also reported the recovery of a second diamond in chip samples taken from the RC drilling. The diamond measures approx. 2mm in maximum dimension. A photograph of the diamond will be posted under "Media Links" on the homepage of the Company's website at <a href="www.kennadydiamonds.com">www.kennadydiamonds.com</a> together with maps illustrating the latest drill results from Faraday 3.

#### Canadian Zinc 2016 Preliminary Study Supports Longer Year Mine Life!

Canadian Zinc reports that the results of its 2016 Preliminary Feasibility Study ("2016 PFS"), on the Company's 100% owned Prairie Creek lead, zinc, silver mine in the NWT supports a longer mine life at 17 years.

The updated 2016 PFS based on optimization work completed over the past three years, including the 2015 underground exploration program at Prairie Creek which increased total Measured and Indicated Resource tonnages by 32%, indicates a Base Case pre-tax Net Present Value ("NPV") of \$509 million using an 8% discount rate, with an Internal Rate of Return ("IRR") of 32% and a post-tax NPV of \$302 million, with a post-tax IRR of 26%.

#### Summary Highlights of the 2016 PFS

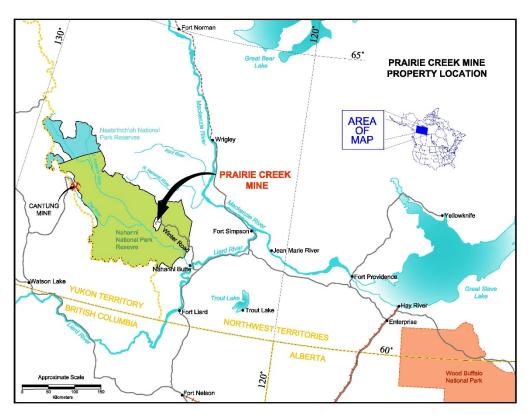
(All costs are in Canadian dollars unless indicated otherwise, t=tonne, M=million, g=gram, lb=pound, lbs=pounds, oz=ounces, tpd=tonnes per day, dmt=dry metric tonnes, LOM=life of mine, CDN=Canadian, US=United States).

- Post-tax Net Present Value, using an 8% discount, of \$302M, with a post-tax internal rate
  of return of 26%, based on base case metal price forecasts of US\$1.00/lb for both zinc
  and lead and US\$19.00/oz silver, for the Life of Mine ("LOM") production at an exchange
  rate of \$1.25CDN:\$1.00US.
- Average EBITDA of \$90M per year and cumulative EBITDA of \$1,432M over the LOM.
- 17 year mine life based exclusively on a Mineral Reserve of 7.6 million tonnes, grading 8.9% zinc and 8.3% lead, with 128 g/t silver, including a Mineral Reserve in the Main Quartz Vein of 5.2 million tonnes, grading 9.4% zinc, 10.4 % lead and 160 g/t silver.
- Average annual production of 60,000 dmt of zinc concentrate and 55,000 dmt of lead concentrate containing 86M lbs of zinc, 82M lbs of lead and 1.7M ounces of silver.

- Pre-production capital cost is estimated to be \$216M, of which \$59M will be incurred in Year 1 and \$157M in Year 2, with an additional contingency of \$28M.
- Average LOM cash operating costs per tonne of ore mined (before transportation costs) are estimated at \$165/t.

The 2016 PFS does not take into consideration the Inferred Mineral Resources of 7.0 million tonnes of 11.3% zinc, 7.7% lead and 166 g/t silver, which are currently too speculative geologically to have economic considerations applied to them, but could have the potential to more than double the presently considered mine life. The Prairie Creek orebody continues openended at increasing depths to the north.

The 2016 PFS was undertaken to follow up on optimization recommendations listed in the 2012 study and to incorporate the increased Mineral Resources and Mineral Reserves, construction and use of an all season road, advanced engineering details and updated capital and operating costs.



The 2016 PFS was completed by AMC Mining Consultants (Canada) Ltd., ("AMC"), Tetra Tech Inc. ("TTI"), Tom Morrison, P.Eng., and Canadian Zinc consultants and personnel and builds upon and supersedes the 2012 Pre-Feasibility Study ("2012 PFS") completed by SNC-Lavalin and AMC. A new Technical Report has been prepared in connection with the 2016 PFS and will be filed on SEDAR and will supersede the June 15, 2012 Technical Report (subsequently revised July 23, 2014 and filed on SEDAR).

For considerably more details, read the entire release here.

#### **Existing Nunavut Regulatory Processes Protect Caribou Herds**

The Chamber of Mines continues to participate in discussions under the Nunavut Land Use Planning process. Most recently, we participated in a workshop on caribou, which led to the release of our Chamber position on the importance of caribou, and for the regulatory process which protects them.

The NWT & Nunavut Chamber of Mines is committed to provide input to governments and regulatory agencies on policy and legislation relating to mineral exploration and mine development. From March 7-10, the Nunavut Planning Commission held technical meetings in Iqaluit on proposed protection measures for caribou in the *Draft Nunavut Land Use Plan*. The Chamber attended those meetings to provide the perspective of the exploration and mining industry and to listen to the views of other stakeholders and planning partners.

Exploration has been at all-time lows for over eight years in the NWT and it is approaching that now in Nunavut. Some caribou populations are declining in Northern regions in areas with and without development. "No definitive link has been established between the current decline in caribou populations across the North and exploration or mining," says Gary Vivian, President of the Chamber.

The Chamber agrees with the Government of Nunavut's position that, with effective mitigation measures and monitoring programs, mineral exploration and development activities can coexist with sustainable development in caribou calving grounds and access corridors. In addition, the Chamber is comfortable that the existing Nunavut regulatory regime allows for all stakeholders and communities to participate in the review and shaping of well-designed mineral exploration and development projects that are protective of wildlife. "This is a cautious approach that makes sense," said Vivian.

"We recognize that mining projects in Nunavut will likely interact with caribou," explains Vivian, "however Northerners should know that for many years now, industry has been subject to stringent Northern regulatory processes designed to ensure that there are no significant adverse environmental effects on caribou. These can include reducing or modifying activities at important times such as the calving season."



The minerals industry is committed to planning and designing projects in collaboration with stakeholders to avoid or minimize potential effects to caribou populations and habitat. Caribou protection measures have been applied across Nunavut for many years. Environmental baseline and environmental assessment studies on advanced exploration and mining projects continue to analyze potential project and cumulative effects on Nunavut's caribou populations. Environmental assessments have been

completed and reviewed that include sections devoted to the Bathurst, Beverly, Ahiak, Qamanirjuaq and Wager Bay caribou herds.

Caribou protection plans have been developed through a regulated and collaborative process with input from governments, regulatory bodies, Regional Inuit Associations, Hunter and Trapper Associations, communities, and industry. Through the Nunavut Impact Review Board review process, industry is leading many efforts in studying and monitoring the effects of exploration and mining activities on caribou. Industry continually adapts to new information and new approaches to monitoring and reducing those impacts.

A particularly interesting presentation was provided for discussion purposes by Nunavut Tunngavik Inc. You can view the entire presentation here.

#### Meadowbank mine featured in National Geographic

The March issue of *National Geographic Magazine* featured a story about the challenges of developing resource projects in the Arctic and featured Agnico Eagle's Meadowbank mine.

National Geographic contacted Agnico Eagle back in 2014 to ask if the company would consider participating in a feature the magazine was developing about the challenges of developing resources in the Arctic. The goal of the article was to illustrate the tremendous technological and logistical challenges that any natural resource company must face to operate and be successful in the Arctic, as well as the socioeconomic impacts such developments bring to remote Arctic villages.

Five projects were chosen for the feature: an off-shore oil rig in Norway; gold mining in Canada (Meadowbank); oil and gas in Russia; natural gas field in Siberia; and a permafrost research center in Alaska.

The National Geographic photographer visited Meadowbank in August 2014 and the writer in March 2015. In both cases, they spent time in Baker Lake before traveling to the mine.

Click <u>here</u> to read the National Geographic March issue.



#### Our Chamber of Mines' take on Northern Items in Federal Budget 2016

Canada's Federal Budget 2016 released March 22 proposes several actions that will be helpful to both northerners and the northern minerals industry. These include:

- Increasing the Northern Residents Cost Deduction from the maximum daily residency deduction of \$16.50 to \$22;
- Renewal of the Mineral Exploration Tax Credit for an additional year;
- As a first phase, pilot funding the Aboriginal Skills and Employment Training Strategy;
- Continued funding for the Canadian Northern Economic Development Agency's (CanNor) Northern Project Management Office to improve the timeliness, predictability and transparency of northern regulatory review processes;
- Continued support for CanNor's SINED program which provides important geoscience and other economic development funding; and
- Funding of research and traditional knowledge of the Arctic environment.

What the Chamber had recommended but was not addressed in this Budget were:

- Support for the settlement of northern Aboriginal land claims;
- Creation of a multi-year Mineral Exploration Tax Credit that would be higher for northern Canada given the competitive disadvantage we face due to higher costs in the north compared to southern Canada;
- Direct spending on new nation-building northern infrastructure in roads, power, and ports in the NWT and Nunavut which would help grow and sustain mineral development for the benefit of northern and Indigenous residents and Canada; and
- Curbing the increased alienation of lands and waters in conservation areas. The Budget proposes to continue developing national parks and national marine conservation areas at Thaidene Nene in the Northwest Territories and Lancaster Sound in Nunavut.

This is the first budget of the new Liberal Government.

The Chamber of Mines will continue to work with all levels of Government to take appropriate actions to create a more certain investment climate for responsible mineral development in the Northwest Territories and Nunavut so as to sustain and grow the many significant opportunities and benefits that Indigenous and public governments and residents are receiving from the largest industry in the two territories.

#### Mining Essentials Graduates in Kugluktuk

#### Helping Companies, Communities Meet Joint Hiring and Employment Targets

There is a mismatch – mining employers are seeking to train and recruit a local workforce, and communities want their members to find rewarding work – yet research shows meeting training and hiring goals outlined in many agreements is challenging. *Mining Essentials*: A Work Readiness Training Program for Aboriginal Peoples was developed in partnership between the Mining Industry Human Resources Council (MiHR) the Assembly of First Nations (AFN), and in collaboration with industry, educators, and other Aboriginal organizations. The Program

supports local hiring requirements in a way that is inclusive of culture and the local employer's needs and prepares learners for entry-level employment in the sector.

Mining Essentials is unique in that skills are taught using workplace examples (scenarios, workplace documents) and traditional teaching methods (sharing circles, involvement of Elders). The Program is approximately 360 hours long and is divided between classroom curriculum training and enrichment opportunities (on-site industry visit/work experiences, safety certificate training, environmental education, etc.) Program partners recognize that Mining Essentials prepares graduates for immediate entry into the mining workforce, and instills a drive for a career, not just a job.

For more information on Mining Essentials, please email plarouche@mihr.ca.



Graduates of the Kugluktuk Mining Essentials program pose proudly with their driving learner permits, just one part of their training program. Bottom row from left to right are: Nelson Kuana, Hannah Anavilok, Jonathan Aklok, and Ryan Niptanatiak. In the back row from left to right: Zachary Kuana, Nicole Nivingalok, Mitchel Anavilok, Moses Bolt, and Ron Taylor. (Photo courtesy Mining Industry Human Resources Council)

#### **Nunavut Prospecting funding available**

The Government of Nunavut is accepting applications to the Nunavut Prospectors Program.

To be eligible, you must:

- be a Nunavut resident
- be 18 years of age or older
- have a prospecting licence or experience

If eligible, you could receive up to \$8,000 yearly to help pay for wages, materials, supplies and transportation to explore for rocks and minerals.

The deadline to apply is April 30, 2016. For more information, please call toll free at Telephone 1-888-975-5999, email <a href="minerals@gov.nu.ca">minerals@gov.nu.ca</a> or visit our website at <a href="www.gov.nu.ca/edt">www.gov.nu.ca/edt</a>, and click on the <a href="mailto:Programs/Funding">Programs/Funding</a> tab.

#### Nunavut Senator supports industry in reply to Speech from Throne

On February 25, Nunavut's Senator Dennis Patterson rose in the Senate to provide his response to the Speech from the Throne. What follows are some salient excerpts from his speech.

Honourable Senators, I rise today to deliver my response to the Speech from the Throne.

On December 4, 2015, the Governor General "[called] on all parliamentarians to work together, with a renewed spirit of innovation, openness and collaboration" and I hope that my comments today will be greeted by the Government of Canada in that same spirit.

I was pleased, honourable Senators, to hear that the Government recognizes that "public investment is needed to create and support economic growth, job creation, and economic prosperity."

The Governor General went on to elaborate that "public transit, green infrastructure and social infrastructure" would garner significant new investment in the years to come.

... green infrastructure initiatives in Nunavut, which are currently in the pre-feasibility phase, include a proposed hydro power plant in Iqaluit. Honourable Senators, each one of Nunavut's communities is powered by diesel generators. They burn 45,000 litres per year and create 110,0000 tonnes of carbon each year; A hydro dam in Iqaluit, where there is plenty of hydro potential, will reduce Nunavut's carbon dioxide emissions from diesel plants by approximately 37,000 tonnes per year. It will allow secondary manufacturing industries to develop, such as we've seen in our eastern neighbour, Nuuk, Greenland, where 70 per cent of the country is powered by hydro.

The other project I am enthusiastic about is the potential for the construction of a hydroelectric transmission line that would bring power from Churchill, Manitoba to the Kivalliq, the central region of the territory, with its seven communities and gold mine.

... The Government of Nunavut has also identified an exciting project in the Kitikmeot, the western region of the territory, as a territorial priority because it could be the first link in North America to the Arctic Coast in Nunavut. I speak of the Gray's Bay Road and Port that would be the first road linking the Canadian highway and rail system to tide water in Nunavut.

To make this project happen, a 227 km road needs to be built, through the very rich greenstone belt of the Slave Geological Province with plenty of mineral prospects that would become viable with a road and a port at the end of it.

The construction of this road would have many lasting benefits for the region, and for Canada. The mineral deposits in Izok and High Lake would provide a minimum of 18 years of employment and business opportunities for northerners. The mine would result in over 600 jobs

for Canadians and the road and port, combined with the mine, are projected to add a total of \$5.1 billion to the gross domestic product of Nunavut. Additionally, it is estimated that Nunavut and Canada would receive approximately \$390 million over the life of these projects in corporate taxes and resource royalties while a total \$100 million paid in royalties and Impact and Benefit Agreement payments to beneficiaries of the Nunavut Land Claims Agreement.

The Gray's Bay Road and Port could also serve as an alternative access route to key mines and sites in the Northwest Territories. Colleagues, there is a real possibility that global warming could threaten the winter road from Yellowknife which currently supplies two diamond mines and soon to be a third. The all-weather road from the Arctic Coast south, could allow those three mines, and others being planned, to be accessed by sea from the north, instead of by rail and road from southern Canada.

This project complements stated NWT priorities to "improve access to the Slave Geological Province" that abuts this region in Nunavut, which is why Premier Bob Mcleod has publicly stated his support for Nunavut Premier Peter Taptuna and this project. It was further supported by the Canada Transportation Act Review Report tabled by Minister Garneau today. The report recommended the immediate support of 3 three projects in the north, including "the Coronation Yellowknife Corridor, connecting resource development projects in the Slave Geological Province to the Arctic coast in the North and Yellowknife in the South; the intention is to facilitate the development of a central Arctic transportation corridor for both Nunavut and the Northwest Territories, beginning with funding for the Grays Bay Road and Port Project;"

This nation-building project is close to shovel ready and would require a total commitment of \$34 million from Canada over the next four years in order to complete the permitting and engineering process. Best of all, the Inuit owned Nunavut Resources Corporation, partnered with the Government of Nunavut, would build and own the road and port, which could also serve the Royal Canadian Navy as a refueling location, as well as a safe landing area for storage and resupply needs in the region while collecting long term lease payments from the mining company.

Colleagues, mining operations face huge transportation, climate and logistical barriers. It is estimated by the MAC that northern mines cost between 170 to 280% more than mines in southern Canada depending on remoteness because of climate and lack of infrastructure. This infrastructure should have been built when Canada was being built, but the projects stopped in the Arctic because of our small population and political representation. Now we can make these investments, along with those investments needed in our urban centres.

Let's not leave northern Canada out again when we are building our nation. Between Nunavut, Northwest Territories and Yukon, we comprise 40% of the land mass of Canada.

Projects such as the Gray's Bay Road and Port would bring stability and certainty to a region whose high operating costs and lack of infrastructure currently act as barriers to investment and private development.

Canada could show its support for the mining sector, where investment in exploration has virtually dried up, by renewing the Mineral Exploration Tax Credit and enhancing it from 15 to

30 percent for 3 years. This could act as a stimulus for a sector that is finding it difficult to attract investors in today's economy at very little cost to the treasury.

Another way to support development in Canada is by modernizing and updating the Guidelines on Canadian Exploration Expenses (CEE). Due to our tightly-regulated system, companies expend millions of dollars on Aboriginal and environmental consultation every year. However, these expenses are not included in the CEE.

... High costs of living and doing business in the north are reasons why the promise made by the Liberals in their platform in the last election to increase the Northern Residents' Tax Deduction was a welcome one. It is a measure that would impact every territorial resident who files a tax return. The Northern Residents' Tax Deduction has not been adjusted for inflation since 2008. The government has promised to increase the amount of the deduction to 33% to a maximum of \$22 per day. I will hope this eagerly awaited and equitable measure will be implemented in time for the coming tax filing season and will be watching for it in next month's budget. This will benefit all people who live north of 60, where living costs are the highest in Canada.

Honourable senators, the Speech from the Throne touched on many areas of import to the people of the North and I hope that it signals a continued commitment by the Government of Canada to improve the lives of northerners.

Thank you.

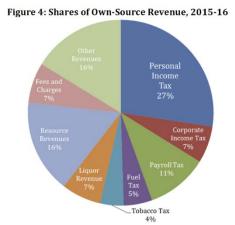
Text of his full speech can be found here.

#### **NWT Tax Options Primer**

Those wanting to learn more about how the NWT Government taxes not only people, but our minerals industry, check out their recent report: <u>Northwest Territories Revenue Options</u>. Here you can learn that, while other jurisdictions have similar tax structures, the NWT and Nunavut are the only Canadian jurisdictions that levy property

taxes at significant levels. Mines in similar areas (remote hinterland) in provinces would not pay property taxes. Furthermore, you will learn that the GNWT applies a fuel tax on off-road fuel consumption which mines do not pay in other jurisdictions (page 42). You can also get a good description of how royalties are set on page 41.

The context for the paper is that the Government of the Northwest Territories (GNWT) is on an unsustainable fiscal path. Over the medium term GNWT revenues are declining while expenditure pressures continue to mount. As a result, operating surpluses are quickly



shrinking at the same time the GNWT needs operating surpluses to pay for infrastructure investments to address a \$3 billion and growing infrastructure deficit. Borrowing is not an option because of the federally-imposed \$1.3 billion borrowing limit and the need to service this debt. The choices are: increase revenues, reduce expenditures, or a combination of both.

The Revenue Options paper examines the revenues the GNWT collects and provides options to generate additional revenues. All of the options presented have been considered in previous fiscal strategies but after due consideration the NWT tax system has remained relatively unchanged, usually because of concerns about the effect of increasing the tax burden on individuals and business and the resulting impact on the cost of living and on the NWT economy. If decision-makers chose to support specific revenue-raising options, further analysis would be required to ensure that decision-makers are provided with the information necessary to make a measured and balanced approach to increasing revenues that is consistent with the GNWT's long-term vision and goals.

It's a great paper by GNWT to describe all the taxes that they collect that they then share with the public through health care, social assistance, education, transportation, etc.

Download the paper here.

#### National Awards recognize Darrell Beaulieu, Bjorkman family

On March 7, northern Aboriginal business man, and one time claim staker and Yellowknives

Dene Chief, Darrell Beaulieu was called to the stage to accept his Skookum Jim Award from the national Prospectors & Developers Association of Canada.

Recipients of this award have demonstrated exceptional achievement and/or service in a Canadian Aboriginal-run service business for the Canadian mining industry or a Canadian Aboriginal exploration or mining company, or have made a significant individual contribution to the mining industry.

Amongst his many achievements, Darrell was a key player in organizing the Northern Aboriginal Business Association; a new association formed to reflect the growth and participation of Aboriginal businesses in the NWT. He built the foundations for a new mineral industry enterprise, a 100%-owned Aboriginal exploration and mining company. Denendeh Exploration and Mining Company—officially shortened to DEMCo—was launched in 2013.

The Chamber of Mines was proud to be able to nominate Darrell for the award.

As part of the award, the PDAC produced a video of Darrell and his work. Watch the video here: <a href="https://vimeo.com/158503158">https://vimeo.com/158503158</a> or click on the thumbnail of Darrell's image.





At the same awards banquet, a family of prospectors, the Bjorkman family, also received a Special Recognition Award. From time to time, the PDAC presents a Special Achievement Award that recognizes exceptional contributions to the mineral industry. They received the award for their multi-generational dedication to geology, prospecting and diversity.

The Bjorkman family's influence reaches further than prospecting. As volunteers with the charitable organization, PDAC Mining Matters, they have contributed to Mining Rocks Earth Science Camps sharing their knowledge and passion for prospecting and geology with Aboriginal youth in northern Ontario communities.

This also touched our hearts, as we have had considerable help from the Bjorkman's for our recent prospector training programs. Watch their awards video story <a href="here">here</a>. Congratulations Darrell and the Bjorkmans!

#### North Arrow launches grassroots exploration at Redemption, NWT

North Arrow Minerals Inc. (TSXV-NAR) has begun ground geophysical surveys and drilling at the Redemption Diamond Project in the Northwest Territories. The Redemption Diamond

Project is located in the Lac de Gras region of the Northwest Territories, approximately 32 km southwest, and 47 km west of the Ekati and Diavik diamond mines, respectively. Ground geophysical surveys will be completed by the end of March and drilling is expected to continue through to the end of April, 2016. Drilling is focused on the discovery of a kimberlite bedrock source to the South Coppermine indicator mineral train.

North Arrow is exploring the Redemption property under an option agreement with Arctic Star Exploration Corp. (TSXV-ADD), under which North Arrow can earn a 55% interest by incurring \$5 million in exploration expenditures prior to July 1, 2017.



#### Some Commodity Musings - Uranium, Lithium and Cobalt

Recent articles have reminded me of how world events change the demand for certain commodities, and 3 come to mined (pun intended!): lithium, cobalt and uranium.

- Lithium (and cobalt) the recent unveiling of the Tesla 3 electric car by founder Elon Musk is bringing that vehicle's price into the realm of mere mortals, and will lead to significant increase in their production. Considering they are powered by lithium ion batteries, it is logical that the lithium oxide market demand will increase significantly too. But these batteries also require cobalt, so watch the lithium and cobalt explorers and miners who will be trying to fill that market demand.
- Uranium A recent article on uranium (<u>A Closer Look at Uranium</u> ... by Chris Berry) suggests that recent developments may present an opportunity in the commodity sector. The article reminds us that 66 reactors are under construction and another 173

are planned, reflecting the growing demand for quick and significant clean power. The author observes that the recent Paris COP21 agreement to move towards carbon-free sources of energy is a catalyst for cleaner sources of energy, and nuclear stands alone as the single scalable source of base load electricity.

All this to say that markets are ever changing, and it's the explorers and developers who are tasked with finding the raw materials for that market. Keep your ears on for such developments.

#### Saskatchewan uranium a good example for NWT future

A recent story on Saskatchewan's continue uranium success caught our eye. The story was published on mining.com and is titled: "How Saskatchewan remade uranium mining: String of high-grade high-tonnage discoveries re-establishes Canadian province as the world's richest uranium jurisdiction".

The story tells us that, well, "it ain't over until ... until a very long time". What we mean by that is that we can never assume that we have explored and found everything there is to find in a jurisdiction. Many would say that Saskatchewan's time in the sun for uranium discovery is over, after over 60 years of exploration and mining. Similarly, there are people who naively believe that we have found all the diamonds there are to find in the NWT. To that we (and Saskatchewan) say Hogwash!

The proof is in the pudding they say, and it's certainly evident in this story about Saskatchewan, and the new and rich uranium discoveries that are being made there.

Why is it happening?

Well, it's a testament to our human ingenuity to develop new scientific theories that help us understand mineral deposits better along with new technologies that let us "see" deeper into the rocks and earth below us.

But it also speaks to what is possible when supportive governments – public and Aboriginal – provide the certainty and address the costs of investing and operating in Saskatchewan. Under Premier Brad Wall's steadying hand the province has seen a resource resurgence that has made their investment attractiveness first place in Canada, and number two in the world according to the most recent Fraser Institute Survey. Cheap power and roads reach many remote regions too, and the geology ain't bad either.

So what can we learn from this? Saskatchewan's lesson is this:

- The NWT, with even more geological variety and less known geoscience, has even more potential to make rich discoveries for many years to come;
- Reducing costs with investment into roads and power will make more of our deposits economic to mine; and
- Investment certainty from supportive public and Aboriginal governments will bring the billions of dollars that we need to create opportunities and benefits for Northerners.

With the priorities under the NWT's 18<sup>th</sup> Assembly, we're starting on the right path!

#### **Applications Open for NWT Mining Incentive Program**

## The Northwest Territories Mining Incentive Program



#### About the Program:

The Northwest Territories (NWT) Mining Incentive Program (MIP) provides funding to prospectors and exploration companies who propose new exploration projects or are already carrying out NWT mineral exploration work. The MIP is intended to stimulate and sustain mineral exploration activities throughout the NWT and reduce the risk associated with grass roots mineral exploration - exploration that is vital to a healthy, sustained, and productive mining industry.

# 2016 MIP Funding and Application Deadline:

Funding is available under the Prospector Mining Incentive Program and the Corporate Mining Incentive Program. The application deadline for both programs is April 15<sup>th</sup>, 2016. Eligible expenses are those incurred during the period April 1<sup>st</sup>, 2016 to March 31<sup>st</sup>, 2017.

Prospector Mining Incentive Program: Prospectors licensed to operate in the NWT can apply for up to \$15,000 in funding.

Corporate Mining Incentive Program: Mineral exploration companies licensed to operate in the NWT can apply for up to \$100,000 in funding (up to 50% of eligible expenses).

#### MIP Contact Information:

<u>Email</u>: NTGS@gov.nt.ca <u>Phone</u>: 867- 767-9211 ext. 63216

Fax: 867 -873-2652

Website: www.nwtgeoscience.ca/mining-incentive-program



#### **Diavik posts 2015 Sustainable Development Report**

Diavik has released its 2015 SD Report. The following is taken from President Marc Cameron's message.

Along with its introduction and operations update, this report includes information on our work in the areas of economic prosperity, training, social well-being, and health, safety, and environment.

In all we do, every member of our team of over 1,100 people strives to work safely, to ensure the safety of their co-workers, and to bring safety home to their families and their communities.

In terms of operations, 2015 was a challenging year for Diavik. We, like producers of other commodities, saw a significant decline in the pricing of our product. Fortunately, the work done by our team over the previous several years, positioned Diavik to remain profitable during market volatility and downward pricing.

But, it was also a year of successes. Our A21 construction team kept the expansion project on schedule and on budget. Development of the A21 ore body represents a major expansion for us. Our team is managing this US \$350 million project and adding to our sustainability. And, unlike many in the resource sector, we're hiring, thanks to this project.

Besides A21, our geology team added to our reserves, and in so doing, we can aim for consistent production past 2023. This is excellent news for all our team, and indeed for all our partners, including communities, businesses, and governments. The Diavik Foxfire—our largest gem-quality rough diamond ever—was also an exciting discovery, in 2015.

In terms of our work to protect the environment, our water licence was renewed, which was a major accomplishment.



As well, our environment team received national recognitions for wildlife and waste rock research.

Our partnerships with local communities remain strong. Through our community contributions, we continue our support for northerners and for local organizations whose vision, like ours, is a stronger, healthier north. I am very proud of the donations and sponsorships we make and equally proud of the donations generated by employee-driven initiatives. We also recognize the value of education as the building block for strong communities, and last year, our cumulative contribution to scholarships surpassed \$3 million.

Time and again Diavik is proving itself as a leader in sustainable development. To learn more, I encourage you to review the pages that follow, and connect with us through Facebook and Twitter.

Above all, thanks to every member of our team for ensuring we operate safely, efficiently, and respectfully.

Download the report <u>here</u>.

#### Alberta's Obed Coal Mine spill effects negligible in NWT

The NWT Government (GNWT) has provided an update regarding the Obed Mine Spill that took place in 2013. On March 24, a scientific paper was released, <u>Initial Environmental Impacts of the Obed Mountain Coal Mine Process Water Spill into the Athabasca River (Alberta, Canada)</u>.

From that paper: On October 31, 2013, a catastrophic release of approximately 670,000 m3 of coal process water occurred as the result of the failure of the wall of a post-processing settling pond at the Obed Mountain Mine near Hinton, Alberta. A highly turbid plume entered the Athabasca River approximately 20 km from the mine, markedly altering the chemical composition of the Athabasca River as it flowed downstream. The released plume traveled approximately 1100 km downstream to the Peace-Athabasca Delta in approximately four weeks, and was tracked both visually and using real-time measures of river water turbidity within the Athabasca River.

The paper further states that "A small (1.5NTU) increase in turbidity was noted in the Rivière des Rochers on December 7. This increase in turbidity within the Rivière des Rochers is imposed upon an otherwise steady decrease in turbidity within the river. We therefore attribute this increase to the presence of the plume and evidence for it reaching and exiting Lake Athabasca."

In response to the release of this paper, the GNWT has re-examined the data collected through its monitoring of the Slave River. This re-examination confirmed that the effects of the Obed release could not be detected in the water quality samples collected from the Slave River at Fort Smith following the spill incident.

Additional information is posted on the GNWT-ENR website <u>here</u>.

#### **Canadian Mining Hall of Fame Annual Awards take on New Venue**

Due to overwhelming demand, the next group of inductees into the Canadian Mining Hall of Fame will be celebrated at a new venue for the first time in 29 years. On January 12, 2017, the Mining Hall of Fame's Annual awards evening will officially move to the Metro Toronto Convention Centre.

Established in 1988, the Mining Hall of Fame (CMHF) hosts the seminal annual event for the industry, attracting attendees from across the country and around the globe. "This is an exciting time for the Canadian Mining Hall of Fame and a new venue will provide us with a tremendous opportunity to respond to the intense demand for increased capacity," says Patricia Dillon, Mining Hall of Fame chairperson.

The transition to the Metro Toronto Convention Centre was a significant decision, and one not taken lightly by the board of directors. "Obviously there is substantial history attached to the original venue; however, we felt this was the best way to honour inductees and serve the attendees," says Dillon.

Induction in the Canadian Mining Hall of Fame is the premier recognition of individuals' lifetime achievement and contribution to the sector. "There is no shortage of pride in this industry and support for the leaders of this great sector has never been higher," added Dillon. The 2017 inductees and tickets sales will be announced in October 2016.

#### Scotiabank – The Funds Look for a Bottom in Commodity Prices

- WTI oil at US\$26 in mid-February was the bottom for this cycle.
- Zinc & copper prices rally from 'over-sold' levels in January.
- Alberta Oil Sands New Technology will lower costs and boost competitiveness.

#### Some **highlights**:

Scotiabank's Commodity Price Index edged down in February by -0.3% m/m (-25.0% yr/yr) — the fourth consecutive monthly decline — but will rally significantly in March. Commodity prices

have rebounded across a broad front since mid-February amid some easing in concern over the outlook for China's economy. Remarks by Premier Li Keqiang and a state-planning official at the 'National People's Congress', indicating that China will not endure a 'hard landing' in 2016, have comforted markets. China's monetary policy has been eased further. A 3.8% decline in the U.S. dollar trade-weighted from the high on January 20th has also contributed to stronger commodity prices, as has the Fed's decision to delay a second hike in the Fed funds rate — on concern over the impact on the United States of lacklustre global growth and early-2016 financial market volatility.

Equally important, hedge &investment funds appear to be looking for reasons to bid commodity prices higher, after the rout of recent years. The Scotiabank Commodity Price Index is

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Scotiabank

**Commodity Price Index** 

currently at more than a decade low. '2016 should be a transition year', as huge capital spending cutbacks in global oil & gas and mining as well as ongoing growth in China's demand (albeit slow) set the stage for a strong rally by decade end.

The Metal & Mineral Index is also looking up (+1.4% m/m in February), with a further gain likely in March. LME zinc prices were very 'over-sold' in early 2016 and have rallied back from a low of only US\$0.66 per pound on January 12 to US\$0.81 in late March. Both zinc 'concentrates' and 'refined' metal are in 'deficit' — that is, world consumption exceeds supply. However, observers believe there is an overhang of metal stocks held off exchanges in finance deals. Once these stocks are worked down (likely by late 2016), zinc prices will soar. 'Concentrate' supplies could fall to critically low levels later this year, triggering smelter output cuts in China and further tightening already limited global 'refined' metal supplies. Smelter treatment charges have already turned in favour of miners this year.

Global zinc demand should climb by about 3.6% in 2016, up from only 1.5% last year. Strong world auto sales & production, strength in infrastructure spending in China and India and a recovery in European construction activity will lift demand. In contrast, mine production will drop by 3% this year alongside Glencore production cuts in Australia, Peru and Kazakhstan (500,000 tonnes), intended to shore up market conditions, and the impact of recent closures due to mine depletion (Century in Australia & Lisheen in Ireland). These cuts will more than offset capacity expansion at Antamina in Peru, start-up of the Guo Jian Gou mine in China and phase-

in of Nevsun's Bisha project in Eritrea. While the Glencore cuts are expected to end in 2017, the outlook for mine expansion is quite limited from 2018-20. Only MMG's Dugald River will come on stream in 2018. Much stronger zinc prices over the balance of this decade (US\$1.25 in 2017, US\$1.55 in 2018 and US\$1.70 in 2019) should revitalize junior mining projects in Canada (e.g. Prairie Zinc).

Ferrous metal prices have also edged up recently in Asian markets. After retreating as low as US\$37.70 per tonne in late 2015, spot iron ore prices (62% Fe fines) delivered to northern China (the international bellwether) spiked to US\$62.60 on March 7 (US\$55.50 on March 24). The price improvement reflects a restocking of steel and iron ore after the Chinese New Year holiday and ahead of the peak construction season in April & May. Interestingly, 'green shoots' in China's property market, a positive development for steel rebar demand, have also supported iron ore prices in recent weeks, though it is a little early to expect a big rebound in China's housing construction. Many iron ore projects in Labrador & northern Quebec have been curtailed, but Canadian producers with pellet plants are faring relatively well (IOC & ArcelorMittal's Mount Wright). Baffinland's Mary River Project in Nunavut is moving ahead, underpinned by the willingness of European steel mills to pay premiums for the world-class richness of its ore (67.5% Fe & 70% LUMP content compared with 62% Fe in Western Australia).

Download the entire newsletter here or click on the report thumbnail.

#### **Calendar of Events**

- **Nunavut Mining Symposium,** *Balancing Our Investment*, April 4-7, 2016, Iqaluit, NU. To learn more, visit: <a href="http://www.nunavutminingsymposium.ca/">http://www.nunavutminingsymposium.ca/</a>.
- NAPEG's 2016 Professional Development Conference, "Concept to Reality and Beyond" will address topics such as the Colville Lake Solar/Diesel Hybrid System, Wastewater Treatment and Disposal, Mackenzie Valley Fibre Link Project, Climate Change and Professional Practice, Inuvik Satellite Farm, Diavik Wind Farm, and much more. May 12-13, 2016, Explorer Hotel, Yellowknife, NT. Contact: <a href="mailto:mkennedy@napeg.nt.ca">mkennedy@napeg.nt.ca</a>.
- Mining & Communities, Solutions 2016, June 5-8, 2016, UBC Campus, Vancouver, BC. The conference will explore the relationships between mining operations and mining communities as well as the approaches that mining companies take to develop engagement with the communities and the host governments. To learn more click <a href="here">here</a>. There is still time to submit an abstract if you would like to make a presentation at this conference. Submit your abstracts to <a href="miningandcommunities@infomine.com">miningandcommunities@infomine.com</a>. Early bird registration in effect online until April 25, 2016.

#### **Welcome New Members!**

On behalf of all of our members, we would like to welcome the following new members to the Chamber of Mines. We encourage your support of their businesses. Please join us in a warm welcome to:

- Geotech Ekutak Ltd. provides exploratory drilling services to the mining exploration industry, primarily in the Kitikmeot Region of Nunavut. Contact Jason Olivier at <u>jason.olivier@geotechdrilling.com</u> and visit: <u>www.geotechdrilling.com</u>.
- Imperial Oil Ltd. is a leading supplier of lubricants to the mining industry in the north. Under the brand of Mobil Industrial Lubricants, we aim to provide high quality lubricants backed by our Global technical resources to help customers improve their safety, environmental care and productivity. Contact Mining Sector Specialist Greg Peters at <a href="mailto:Gregory.b.peters@exxonmobil.com">Gregory.b.peters@exxonmobil.com</a>. Visit <a href="mailto:www.mobil.ca">www.mobil.ca</a>.
- Kitikmeot Cementation Mining & Development Ltd. is a underground mining and
  contracting and engineering firm providing quality services at the Diavik diamond mine
  in the NWT and at TMAC Resources' Hope Bay gold mine in Nunavut. Contact Chief
  Operating Officer John Stevenson at <a href="mailto:stevenson@qiniq.com">stevenson@qiniq.com</a> and visit the website at:
  <a href="mailto:www.kitikmeotcorp.ca">www.kitikmeotcorp.ca</a> and <a href="mailto:www.cementation.ca">www.cementation.ca</a>. (COOL WEBSITE!!)
- **Kitikmeot Corporation** (KC) is 100% Inuit owned by the Kitikmeot Inuit Association (KIA) and is one of the three Regional Development Corporations within Nunavut. KC serves as the business arm of the KIA and is entrusted to pursue opportunities that build an economic base in the Kitikmeot region. KC is the proud owner and joint venture partner for over 20 companies that participate in a wide range of key sectors within Canada's northern economy. KC contributes to the KIA through an annual dividend that can be used for important social, cultural and training programs. Through the creation and management of new business enterprises, KC increases opportunities for beneficiaries of the Nunavut Land Claim to participate and play a key role in the current and future development of our region. Contact Christy Sinclair, Director of Business Relations at christy@northwestel.net, and visit www.kitikmeotcorp.ca.
- NorthByNorth: At North by North, solutions are what it's about. Whether it's developing
  a plan, designing a workshop, customizing hardware, or providing advice, we are a
  solutions oriented consulting and services firm designed to assist with our clients' needs
  whether it be environmental advisory services, telecommunications services, staffing
  advisory services, or strategic planning. For more information email Marc Lange at
  marc.lange@northbynorth.ca and visit: www.northbynorth.ca.
- North of Sixty K-9 Detection Services Ltd. is a northern based company providing drug and alcohol K9 detection services to the exploration and mining industry as well as policy development. N.O.S. K9 provides an avenue for clients to exhibit due diligence in ensuring a safe, healthy work environment which in turn protects assets and operations. Contact Mark Hicks at <a href="mark@nosk9.ca">mark@nosk9.ca</a> and visit their website at: <a href="www.nosk9.ca">www.nosk9.ca</a>.

#### Member News Releases this past month

Click on the news release headlines which are live links for news releases issued by our member companies this past month.

- 5 April 2016, Avalon Completes Pilot Plant Processing of Bulk Sample from Separation Rapids Lithium Project, Kenora, Ontario
- 5 April 2016, North Arrow Defines Multiple Kimberlite Indicator Mineral Trains at the Mel Diamond Project, Nunavut
- 4 April 2016, North Arrow Completes Drilling at Pikoo, Saskatchewan
- 1 April 2016, Kaizen Discovery arranges C\$2.5 million in exploration financing for the Pinaya Copper-Gold Project in Peru
- 1 April 2016, Kaizen Discovery appoints industry exploration veteran Eric Finlayson as new interim Chief Executive Officer
- 31 March 2016, Canadian Zinc Reports Results of 2016 Preliminary Feasibility Study Prairie Creek Mine, NWT
- 31 March 2016, Peregrine Provides Botswana Exploration Program Update
- 31 March 2016, Stornoway Announces Funding Of Third Tranche Of Stream Financing And New Management Appointments
- 30 March 2016, Canadian Zinc Reports Financial Results For 2015
- 30 March 2016, Stornoway Announces Updated Renard Mine Plan and Mineral Reserve Estimate
- 29 March 2016, Avalon Completes Non-Brokered Private Placement for Gross Proceeds of \$775,000
- 29 March 2016, Canterra Provides Update on the Buffalo Hills Project, Alberta
- 24 March 2016, Federal Budget invests in mining essentials: Mining Association of Canada welcomes investment in key areas
- 24 March 2016, PDAC welcomes measures to support Canada's mineral exploration and development sector
- 23 March 2016, Stornoway Announces FY2015 Results
- 23 March 2016, Dominion Diamond Corporation's Fiscal 2016 Fourth Quarter and Year-End Results to be released Wednesday, April 13, 2016
- 22 March 2016, North Arrow Drilling Underway at Redemption, NWT
- 18 March 2016, TMAC Resources Completes Private Placement of Flow-Through Shares
- 18 March 2016, Fortune Minerals announces extension of warrants
- 17 March 2016, Kennady Diamonds Discovers Third Kimberlite at Faraday
- 14 March 2016, Mountain Province Updates Gahcho Kué Diamond Mine Development





#### **Mines & Promising Northwest Territories Mine Projects**

The following table describes a number of leading mineral development projects in the NWT.

Project Name	Owner(s)	Commodity	Description	Status
Ekati Mine	<u>Dominion</u>	Diamonds	Canada's first and largest diamond	News Release, February 22, 2016: Dominion
	<u>Diamond</u>		mine, 310 km. NE of Yellowknife.	Diamond Corporation Announces
	Corporation, and		Open pit and underground. Mine life	Appointment of New Director, David Smith.
	Dr. Stewart		to 2020. Workforce in 2014	News Release, February 23: Dominion reports
	Blusson		approximately 1,500.	fiscal 2016 Q4 and Year-End Sales:
				<ul> <li>Sales:</li> <li>Fourth quarter diamond sales1 were</li> </ul>
				\$178.1 million (\$240.6 million in Q4 2015)
				o Full year diamond sales2 were \$720.6
				million (\$915.7 million in FY2015).
				Ekati Production:
				<ul> <li>Excellent performance in the fourth</li> </ul>
				quarter resulted in 42% higher carat
				production versus Q4 2015.
				During the quarter, tonnage processed
				was on forecast and the recovered grade was on par with or above modelled grade
				for all ore sources, which reflects the
				positive impact of the additional recovery
				resulting from the diamond liberation
				initiative.
				Development:
				o The first ore at the Misery Main pipe has
				now been mined.
				<ul> <li>The first ore at the Pigeon pipe was mined at the end of November.</li> </ul>
				The Lynx pre-stripping began on schedule
				in December.
				o Exploratory drilling beneath the bottom of
				the completed Fox open pit to better
				understand the Fox Deep resource has
				now commenced.
				Ekati Fiscal 2017 Mine Plan
				o During fiscal 2017 the Company plans to
				produce 5.5 million carats from the processing of 3.9 million tonnes of ore
				(fiscal 2016: 3.7 million carats from the
				processing of 3.6 million tonnes).
				<ul> <li>The Company expects to process high</li> </ul>
				value ore from the Koala Underground,
				Misery Main, and Pigeon pipes as well as
				material from the Misery satellite pipes.
				Given the available sources of ore feed,
				the Company does not anticipate processing any low value Coarse Ore
				Rejects ("COR") to fill the Ekati processing
				plant in fiscal 2017.
Ekati Jay Project	<u>Dominion</u>	Diamonds	The Ekati Jay project is in	February 1, 2016: Mackenzie Valley Review
	Diamond		Environmental Assessment. Ekati	Board recommended to the NWT Minister of
	Corporation, and		mine life currently ends in 2020, but if	Lands that the Jay Project be approved
	Archon Minerals		mining of the Jay pipe is approved,	subject to implementation of the measures
	Ltd.		mining could be extended 10 yrs.	described in its Report, which are necessary
				to prevent significant adverse impacts on the environment and mitigate the causes of
				public concern.
Diavik Mine	Rio Tinto &	Diamonds	Canada's largest producer of	DDI News Release, March 8, 2016: Dominion
	<u>Dominion</u>		diamonds, 300 km NE of Yellowknife.	Diamond Corporation Reports Updated
	Diamonds		Mine life through 2023. Became all	Reserve and Resource Statement for the
			underground mine in 2012. Work to	Diavik Diamond Mine. A-21 is in development
			develop new A21 open pit has begun	as an open pit and is on track to commence

			and will cost US\$350m over 4 years. Workforce approximately 1,000. To Dec 31, 2013, the mine produced approximately 84 M carats of diamonds from the processing of approximately 22 M tonnes of kimberlite.	ore production in the second half of 2018. Proven and probable reserves at Dec 31, 2014 were 18.7 million tonnes at 2.8 carats/tonne for total of 52.8 million carats. The A-21 workforce will peak at approximately 200 people. February 23 news release: Jay Pipe Update: The Company expects to complete the Jay Feasibility Study by May 2016, one month later than previously expected. Once the Study is complete, the Company will provide updated Mineral Resource and Mineral Reserve estimates for the Jay kimberlite deposit.
Snap Lake Mine (Closed, on care & maintenance)	De Beers	Diamonds	Canada's first all underground diamond mine. 220 kilometres NE of Yellowknife. Mine life to 2028. Workforce approximately 750.	Due to low diamond prices, De Beers put the Snap Lake mine on care and maintenance in December 2014.
Cantung Mine (Closed, on care & maintenance)	North American Tungsten	Tungsten, copper	Cantung is in the mountains of western NWT, ~300 km by road NE of Watson Lake, Yukon.  North American Tungsten (NATC) filed for Court protection under the CCAA on June 9, 2015.  In accordance with the Operating Plan, the mill at the Cantung mine site was shut down on October 26, 2015, and transition of the Cantung mine to care and maintenance is expected to be completed on or about November 18, 2015.	Nov 19 GNWT News Release: NWT Government purchases Mactung assets of Cantung to ensure Federal Government Nov 19 NATC news release: NATC Announces Extension of Stay of Proceedings under the Companies' Creditors Arrangement Act. On November 17, 2015, the Supreme Court of British Columbia made an order approving the sale of the Company's Mactung property to the Government of the Northwest Territories. The Government of Canada will fund the Company's environmental care and maintenance activities at the Cantung mine site.
Gahcho Kué	De Beers & Mountain Province	Diamonds	Proposed open-pit diamond mine approximately 180 km ENE of Yellowknife, NWT. Estimated mine jobs: 400. Mine life increased from 11-12 years in 2014 Feasibility Study. First production on schedule for Q3 2016. Peak construction workforce 700.	In March, media reported that De Beers Canada says 96 former Snap Lake mine employees have now been transferred to Gahcho Kué. About 40 of those people, including two managers, live in the NWT, according to De Beers. News release, March 14, 2016: Mountain Province Updates Gahcho Kué Diamond Mine Development  Overall project more than 87 percent complete On plan for first production in H2 2016 Appointment of Mine General Manager
Kennady North	Kennady Diamonds Inc.	Diamonds	Kennady Diamonds controls 100% of Kennady North project comprising 13 leases and claims immediately to north and west of 4 leases controlled by the Gahcho Kué Joint Venture (see above). Kennady Diamonds aims to identify a resource along the Kelvin – Faraday kimberlite corridor of between a 12 and 15 million tonnes at a grade of between 2 and 2.5 carats per tonne and also to identify new kimberlites outside of the corridor. The Kelvin – Faraday corridor is a target for further exploration. The tonnage estimate is based on the drilling completed to date. The potential quantity is conceptual in nature as there has been insufficient drilling to define a	Mar 17 News Release: Kennady Diamonds announced that exploration drilling at the Kennady North project has resulted in the discovery of a third kimberlite body at the high-grade Faraday kimberlite cluster. Following the completion of ice-based infill drilling at the Faraday 1 kimberlite, the core rig was moved to a geophysical target approximately 80 meters to the southwest where indications of the presence of volcaniclastic kimberlite were discovered during the winter of 2015. Three exploration drill holes have been completed at the Faraday 3 discovery within the past week with the latest hole intersecting more than 55 meters of kimberlite.  KDI also announced that the Kelvin North Lobe bulk sampling program is progressing well with 13 of 26 planned large-diameter

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Nechalacho	Avalon Advanced	Rare earth	mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.  Proposed underground mine 100km	holes completed and over 300 tonnes of kimberlite recovered to date. The Company's target is to recover approximately 500 tonnes, which is expected to result in the recovery of diamonds weighing more than 1,000 carats. The diamond parcel will be used for revenue modeling of the Kelvin North Lobe.  Kennady Diamonds expects to spend \$25 million on exploration this year, a significant portion of all estimated spending in the NWT.  News Release, February 26, 2016: Avalon
Necrador	Materials Inc.	metals	SE of Yellowknife. Estimated mine jobs: 200. The Company remains optimistic that rare earth demand will recover sufficiently in 2015 to attract Project financing and allow construction work to begin by summer 2015.	Announces Voting Results of Annual and Special Meeting including Approval of Name Change to Avalon Advanced Materials Inc. News Release February 10, 2016: Avalon's Nechalacho Rare Earths Project to remain inactive in 2016, while the Company focuses on Lithium and Tin in southern Canada. Avalon Rare Metals Project work in calendar 2015 consisted mainly of concluding the ongoing metallurgical research, disposal of process waste materials and storage of bulk samples for future use.
NICO	Fortune Minerals Ltd.	Cobalt- gold- bismuth- copper	Proposed open pit and underground mine located 50 km NE of Wha Ti. Estimated mine jobs: 150. Requires access to highway to Wha Ti, still to be constructed.	Jan 8, 2016 News Release: Fortune Minerals produces premium battery-grade cobalt sulphate sample from NICO to support off-take discussions
Prairie Creek	Canadian Zinc Corporation	Zinc-lead- silver	Proposed underground mine 120 km W of Ft. Simpson. Estimated mine jobs: 220 All permits now in place to construct and operate the mine. Preliminary Feasibility Study completed in early 2016 supports longer ,17 year mine life. The company's proposal to construct a new airstrip and all-weather road is undergoing environmental assessment.	News Release, Mar 30, 2016: Canadian Zinc Reports Financial Results For 2015  • Underground Exploration increases Resources  • Two MOUs signed for Concentrate Sales  • Prairie Creek Updated Preliminary Feasibility Completed  News Release, Mar 31, 2016: Canadian Zinc Reports results of 2016 preliminary feasibility study for Prairie Creek Mine, NWT  • New Mineral Reserve Supports Longer 17 Year Mine Life  The updated 2016 PFS based on optimization work completed over the past three years, including the 2015 underground exploration program at Prairie Creek which increased total Measured and Indicated Resource tonnages by 32%, indicates a Base Case pretax Net Present Value ("NPV") of \$509 million using an 8% discount rate, with an Internal Rate of Return ("IRR") of 32% and a post-tax NPV of \$302 million, with a post-tax IRR of 26%.
Yellowknife Gold	Tyhee Corp	Gold	Proposed open pit and underground mine of 2 deposits (Ormsby and Nicholas Lake) about 90 km NE of Yellowknife. Estimated 4,000 tpd. Est. mine jobs: 238 Tyhee has informed the Mackenzie Valley Land & Water Board that they have closed their camp, awaiting an opportunity to raise more money and a bit of a turnaround in the market	News Release Dec 11: Tyhee Gold: RMB Further Extends Loan Maturity Date to January 29, 2016. Capital Raising Efforts Ongoing
Pine Point	Tamerlane Ventures	Lead-zinc	Company proposes underground mine E of Hay River, NWT using	News release March 28, 2014: Tamerlane receives positive NI 43-101 updated summary

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			freeze technology for water	technical report for Pine Point. Company is in
			management. Est mine jobs: 225	receivership.
Indin Lake	Nighthawk Gold	Gold	Nighthawk controls over 90% of the prospective Indin Lake Greenstone Belt in this historic gold camp with a total ground position now comprising 930 sqkm, approximately 220 km north of Yellowknife, NT. The Indin Lake Greenstone Belt is one of Canada's most underexplored gold camps. The property contains 14 known gold deposits and showings, 3 are historic mine (eg Colomac)	News release February 25, 2016: Nighthawk Gold Corp. Announces Proposed Acquisition of Superior Copper Corporation Feb 25: New corporate presentation posted.
Courageous Lake	Seabridge Resources	Gold	Proposed open pit mine 240 km NE of Yellowknife. 6.5 M oz proven and probable reserves. (Positive PFS July 2012).  The FAT deposit is one of Canada's largest undeveloped gold projects. Gold resources of 8.0 million ounces in the measured and indicated categories plus an additional 3.4 million ounces in the inferred category.	Seabridge is currently focusing its work on their KSM mine development in British Columbia.
Selwyn	Selwyn Chihong Mining Ltd.	Zinc, lead	Proposed underground mine in Yukon on NWT border and access is through NWT. Agreements signed with NWT (Sahtu) Aboriginal land corporations. The proposed Selwyn Project is an open pit zinc-lead mine with a projected mine life of more than 10 years. The mine is being designed to process 35,000 tonnes per day (tpd) of ore which, after processing, is expected to result in 2,500 tpd of zinc and 600 tpd of lead concentrate. Once processed, the concentrate would be trucked to the Port of Stewart for export. Selwyn Chihong estimates the proposed mine will create approximately 1500 jobs during construction and approximately 750 during operation.	Selwyn Chihong Mining's proposed upgrade of a road to its lead-zinc mining project in Yukon's Selwyn Mountains will undergo an environmental assessment.  The Howard's Pass Access Road was first developed in the 1970s, and runs 79 km's in the NWT from the Nahanni Range Road to the N.W.TYukon border. It goes through two national parks, the Dehcho region's Nahanni National Park Reserve and the Sahtu region's Naats'ihch'oh National Park Reserve.  Parks Canada has referred the 79km Howard's Pass Access Road (HPAR) to Environmental Assessment under the MVEIRB, which accepted the referral in July 2015.



Canadian Zinc's 2016 preliminary feasibility study suggests Prairie Creek could have a 17 year mine life.

#### **Mines & Promising Nunavut Mine Projects**

The following table describes a number of leading mineral development projects in Nunavut.

Project	Owner(s)	Commodity	Description	Status
Meadowbank Gold Mine	Agnico Eagle Mines	Gold	In operation since 2010. Open pit mine located in the Kivalliq Region, 300 km west of Hudson Bay and 70 km N of Baker Lake. Mine jobs: 775 Exploring potential satellite deposit, Amaruq, 50km from mine site.	News Release, Feb. 10: Agnico Eagle Reports Fourth Quarter and Full Year 2015 Results – Strong Operational Performance Yields Record Annual Production; Updated Amaruq Mineral Resources  • Gold resources increased by 67% at Amaruq - Inferred mineral resources at Amaruq now total 3.3 million ounces (16.9 million tonnes grading 6.05 grams per tonne ("g/t") gold). The 2016 Phase 1 drill program (approximately 75,000 metres) is now underway with a focus on expanding and upgrading mineral resources and outlining a second open pit deposit
Mary River Iron Mine	Baffinland Iron Mines	Iron	In operation since September 2014; Open pit mine located 936 km N of Iqaluit. Mine jobs: 602 Production from Early Revenue Phase (ERP) began September 8, 2014. Company has proposed a Phase 2 project with increased production and shipping. AANDC Minister has approved application for exemption from NPC negative conformity determination, July 14, 2015.	Project is undergoing a new Environmental Assessment for the proposed expansion of mining and shipping to help offset downwards spiraling iron ore prices.  Baffinland expect to submit the EIS (Environmental Impact Statement) for Phase 2 of the Project in September 2016. This submission is delayed from April 2016, to allow Baffinland to present a rail alternative with the road transport proposal and provide and assess the most effective means of transporting ore from Milne Port along the northern shipping route.
Doris North/ Hope Bay	TMAC Resources	Gold	Proposed gold mine 130 km S of Cambridge Bay; covers the majority of the Hope Bay Greenstone Belt. Estimated mine jobs: 485 Plans to begin production by the end of 2016.	News Release: February 26, 2016: TMAC Provides Highlights of Financial and Operating Results for the Fourth Quarter of 2015  News Release: February 25, 2016: TMAC Provides Summary of Exploration and Drilling Results at Hope Bay Project for 2015  News Release: February 10, 2016: TMAC Resources announces that it has made its first draw in the amount of U\$\$50 million under the credit agreement (the "Credit Agreement") entered into with a syndicate of lenders including Sprott Resource Lending Partnership (as Agent) and Morgan Stanley Capital Group Inc., in July 2015 with respect to the U\$\$120 million senior secured term loan facility (the "Debt Facility").
Meliadine	Agnico Eagle Mines	Gold	Proposed open pit and underground gold mine, 25 km NE of Rankin Inlet. Estimated construction jobs: 1,000 Estimated mine jobs: 700 IIBA signed June 2015. Initial capital cost is estimated to be \$911m; initial production life of 9 years. At December 31, 2015, the Meliadine property hosted 3.4 million ounces of proven and probable mineral reserves (14.5 million tonnes of ore grading 7.32 g/t gold), 3.31 million ounces of measured and indicated mineral resources (20.78 million tonnes of ore grading 4.95 g/t gold), and 3.55	News Release, Feb. 10: Agnico Eagle Reports Fourth Quarter and Full Year 2015 Results. In 2015, capital expenditures at Meliadine were approximately \$67 million with a focus on additional ramp development, permitting, camp operation and completion of an updated NI 43-101 technical study. In 2015, approximately 2,084 metres of underground development were completed, with the ramp now extending to a vertical depth of approximately 300 metres below the surface.  The timing of future capital expenditures on the Meliadine project beyond 2016 and the determination of whether to build a mine at

			million ounces of inferred mineral resources (14.71 million tonnes of ore grading 7.51 g/t gold). In addition, there are numerous other known gold occurrences in the 80-kilometre-long greenstone belt that require further evaluation.	Meliadine are subject to approval by Agnico Eagle's Board of Directors which will be based on prevailing market conditions and outcomes of the various potential scenarios being evaluated.
<u>Kiggavik</u>	AREVA Resources	Uranium	Proposed uranium mine 80 km W of Baker Lake. Estimated Construction jobs: 750 Estimated mine jobs: 600	May 8, 2015: NIRB recommends project not proceed because company did not provide project start date; awaiting Ministerial response.
Back River	Sabina Gold & Silver Corp.	Gold	Approximately 60KM from Hackett River; adjacent to the Wishbone Greenstone belt. Consists of the George and Goose Lake deposits and holds significant gold resources. Estimated construction jobs: 1,600 Estimated mine jobs: 900	March 11, 2016 News Release: TMAC Resources to Complete Private Placement of Flow-Through Shares. TMAC is completing a private placement of up to 827,206 flow- through common shares at a price of \$10.88 per Flow-Through Common Share for gross proceeds of up to \$9,000,000.
Hackett River	Glencore	Zinc, Silver, Copper, Lead	Proposed open pit mine. One of largest undeveloped VMS massive sulphide deposits in the world. 104 km SSW of Bathurst Inlet. Estimated construction jobs: 800 Estimated mine jobs: 500	PFS initiated in September, 2012. No activity reported in 2015.
Izok Corridor Project (with High Lake & Hood River deposits)	MMG Resources Inc.	Copper, Zinc, Gold, Silver	High Lake is 1710 hectare, copperzinc-silver-gold property, 190 km ESE of Kugluktuk.Izok is high-grade zinc-copper-lead-silver deposit, 255 km SW of Kugluktuk. Estimated construction jobs: 1,140 Estimated mine jobs: 710	MMG examining alternative designs to reduce costs, add value, and improve economic viability of the project. Company stated publicly that project needs infrastructure assistance to become a mine.
Chidliak	Peregrine Diamonds Ltd.	Diamonds	Located 120 kilometres NE of Iqaluit, the capital of Nunavut, and 180 km S of Pangnirtung. 71 kimberlites have been discovered to date with 8 being potentially economic. In 2015, company announced a 8.57 million carat Inferred Resource for the CH-6 kimberlite and completion of the bulk sampling component of its ongoing Resource Development Program. Approximately 1,200 m of new core to be drilled at CH-6 and CH-7 in summer, 2015. PEA expected Q2, 2016.	News Release, March 8, 2016: Peregrine Announces CH-7 Independent Diamond Valuation Results Average Base Model Price Is US\$114 Per Carat. 5.33 Carat Diamond Valued at US\$3,106 per Carat Peregrine Diamonds Ltd. (TSX:PGD) is pleased to announce the results of an independent diamond valuation for an aggregate 735.75 carat parcel of commercial-size (+1.18 mm square mesh) diamonds recovered from five geological units of the CH-7 kimberlite pipe at the Company's 100 percent owned Chidliak Diamond Project, Nunavut, Canada. The current average price was US\$100 per carat, and ranged from US\$73 to US\$154 per carat across parcels from the five geological units represented. The modelled average price ranged from a low of US\$94 per carat to a high of US\$155 per carat, with a base modelled price of US\$114 per carat. The eight highest value diamonds ranged in size from 1.35 carats to 5.33 carats, weighed 21.58 carats in total, and had a current average price valuation of US\$1,619 per carat.
Angilak	Kivalliq Energy Corp.	Uranium	340,268 acre property located SW of Baker Lake; Hosts the high-grade Lac 50 Trend deposit	News Release, January 21, 2016, Kivalliq Appoints Yeung as CFO and Dare as Corporate Secretary
Qilalugak	North Arrow Minerals /	Diamonds	7 km from tidewater; 9 km from Repulse Bay, Melville Peninsula; 7,143	News release June 9: North Arrow Reports Diamond Valuation Results From The Qilalugaq Project. The parcel of 383.55

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	Stornoway Diamonds		hectares of contiguous mineral claims. Largest kimberlite in Nunavut.	carats of diamonds greater than +1DTC (~1 mm) was valued at \$13,795 or \$36 per carat and a modelled range of possible values was also produced with a "possible low" model price of \$43 per carat and a "possible high" model price of \$92 per carat.
Committee Bay Gold Project	Auryn Resources (purchased North Country Gold Corp.)	Gold	Committee Gold Bay Project Highlights:  • High grade gold endowment  • Existing exploration infrastructure  • 217,600 hectares with district scale discovery opportunities	February 22 News Release: Auryn provides corporate update. Auryn's ongoing analysis of both the 2015 summer work program and comprehensive review of historical data has led to the identification of a number of large scale multi-kilometer long targets at Committee Bay that will provide the focus of the upcoming 2016 work program.
Coppermine	Kaizen Discovery / Tundra Copper	Copper	Early stage, district-scale exploration play located 24 km SW of Kugluktuk; Total holdings approximately 3,500 km <sup>2</sup>	NIRB screening decision issued July 7, 2015; Proposal may proceed without a Part 5/6 NLCA review.

#### Dike 'R Us!

We northern miners seem to have mastered dikes to allow mining safely in our northern "land of lakes". Here is Diavik in NWT to the left, Meadowbank in Nunavut to the right.





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#### **Project Maps**

