

Northern Mining News

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From the Executive Director ...

We’re celebrating an anniversary this year, with 25 years since diamonds were discovered in the NWT. What a time it’s been, with our diamond mines taking the NWT to a global leadership position, not only in production value, but in creating community benefits. And one of our early diamond explorers, Randy Turner, was acknowledged with an award from NAPEG. Check it out!

Some nice project updates as construction continues on our two newest mines, and several advanced projects continue to report encouraging results.

Spring is upon us, and brings our annual Mine Rescue Competition and Miners’ Picnic. If you’re in Yellowknife, come on out for free BBQ and to watch our finest mine rescue teams in action.

Happy reading! ... Editor

Our Mission: To provide leadership on, and advocate for, responsible and sustainable mineral exploration and development in the NWT and Nunavut.

25 years of diamonds – cause for celebration!

This year marks the 25th anniversary of the discovery of diamonds in our own Northwest Territories, and what progress we have made!

All too often it seems we are so busy focused on the task at hand that we forget to celebrate our successes. Twenty-five years of diamonds marks a good time to measure our progress. It's also a good time to ask ourselves, where would we be had there never been a diamond rush? And what can we all do to ensure future generations have similar opportunity to benefit from our abundant resources?

I was reminded of this when the Honourable Navdeep Singh Bains, Canada's Minister of Science, Innovation & Economic Development, recently visited Yellowknife. He stressed three themes:

- The importance of innovation, and in particular social innovation;
- The sharing of best practices; and
- His government's focus on growing the economy.

From that perspective, I realized just how many northern successes we have achieved with diamonds, successes he might share as examples of best practices with the rest of Canada.

Happy
25th
Anniversary!

Three diamond mines emerged from the great NWT diamond rush, with a fourth now under construction. Exploration is still underway. Our NWT mines catapulted Canada to third place globally in diamond value, adding to Canada's exports.

Technological innovation was used to discover the elusive diamond deposits and to construct the mines. Diavik's dike technology won engineering awards. We generate power with high efficiency diesel systems and Diavik is the first mine in Canada to use wind turbines.

But social innovation is important too, and as Minister Bains observed, benefits to people are what counts. Our diamond mines have made major advances in social innovation, particularly with Aboriginal communities in the NWT and western Nunavut. Since construction began on our first mine, Ekati, our diamond mines have collectively created:

- Over 22,000 person years of northern mine employment, half of which is Aboriginal;
- \$11 billion in northern business, \$5 billion with Aboriginal businesses;
- Over 1,100 northerners trained through our unique (and now copied) Mine Training Society;
- Over \$100 million to communities through benefit and participation agreements, scholarships, and donations; and
- Significant payments to Federal, Territorial and Aboriginal governments in taxes and resource royalties.

This success is quite unprecedented in Canada. Few jurisdictions rival the NWT in benefiting Aboriginal communities, governments, businesses and individuals from mining development.

While industry would love to take full credit for this success, it has been very collaborative, resulting from corporate commitment, government policy and facilitation, and strong support and input from Aboriginal governments and people. Minister Bains' own CanNor agency also played a role in this success.

These strong collaborative efforts to develop our mines have achieved precisely what Prime Minister Trudeau is seeking when he writes in his Ministers' Mandate Letters: "We made a commitment to invest in growing our economy, strengthening the middle class, and helping those working hard to join it."

That's precisely why we northerners have reason to celebrate. Our mines have done that.

And it's why we alerted Minister Bains to this significant northern diamond mining innovation. We suspect that most Canadians are not aware of our mining successes, and that there is much they can learn from the North. We hope the Minister helps spread the message.

But just as importantly, we northerners should take time to celebrate our success, before we put our heads down again to plan the next 25 years, to building that same success for our grandchildren.

So let's celebrate! (And here's to the next 25 – diamond anniversary, here we come!)

NWT diamond benefits vs Saskatchewan uranium – how do we compare?

We are very proud and thankful of the benefits that our diamond mines have brought to the North.

- Over 22,000 person years in northern Aboriginal employment, with half of that Aboriginal is unprecedented in our territory.
- Over \$11 billion in northern business spending with over \$5 billion of that with Aboriginal businesses is breaking new ground for us.
- Over \$100 million to communities in IBA payments, scholarships, donations

But how do we stack up with other jurisdictions? What is our yardstick?

Saskatchewan has been mining uranium for many years now, and they have also been working to maximize opportunities to their northern and Aboriginal communities. Here's a little comparison:

2014	Saskatchewan Uranium	NWT Diamonds
Wages	\$ 98.7 million	\$ 150 million
Northern Purchasing	\$ 420 million	\$ 653 million
	Saskatchewan (since 1991)	NWT (since 1996)
Spending to date	\$ 6.2 billion	\$ 11.3 billion

We have much to be proud of!

Sources: [2014 Northern Benefits Summary](#), Government of Saskatchewan, Saskatchewan Surface Lease Agreements [Measuring Success 2014](#), with figures updated for 2014 by NWT & Nunavut Chamber of Mines

Diavik reaches 100 million carat production milestone

Rio Tinto, the operator of the Diavik Diamond Mine in Canada, has announced a major milestone of producing 100 million carats of rough diamonds since the mine commenced in 2003.

Rio Tinto Diamonds, Salt & Uranium managing director Simon Trott said “We are delighted to reach this milestone and I am enormously proud of the teams who have helped make this happen safely and responsibly in some of the harshest operating conditions in the world.”

The Diavik Diamond Mine, located on an island in a remote subarctic lake, is Canada’s largest diamond mine. The mine produces predominantly gem quality diamonds destined for high end jewellery in all major consumer markets around the world.

“Strong and respectful partnerships are at the heart of the way we work at Diavik and I would like to thank all of our investors, our community, business and government partners, and our workforce for their support over the past 13 years,” said Diavik Diamond Mine president and chief operating officer, Marc Cameron. “This production milestone is especially gratifying given our strong safety record, our focus on ethics and the environment, and an unwavering commitment to delivering substantial and lasting benefits to all of our stakeholders.”

Right from the beginning local communities have been widely consulted about the operation and impact of the Diavik Diamond Mine. This engagement has led to the development of considerable employment, training and capacity building opportunities.



Diavik’s 100 millionth carat produced weighs 12.1 carats (Courtesy Diavik Diamond Mine)

Approximately half of the mine's 1,100 employees live in Canada's north and one quarter of Diavik's workforce is Aboriginal. Since 2003, C\$6.8 billion has been spent on goods and services to support the mine, of which over 70 per cent is with local firms many of which are Aboriginal-owned.

In 2014, the development of a fourth pipe at Diavik, known as A21, was approved. Development of the A21 pipe, which was part of the original mine plan, is estimated to cost US\$350 million over four years and is an important source of incremental production. Production from A21 is expected to commence in 2018.

NWT's Gahcho Kué mine on track – construction over 90% complete

Construction of the NWT's newest diamond mine, Gahcho Kue is reportedly over 90% completed, according to the latest [corporate presentation](#) from Mountain Province.

- World's largest and richest new diamond mine
- Partnered with De Beers
- Best in class - projected highest margin diamond mine in production
- Project +90 percent complete
- Fully funded to production
- Additional \$85M cash in cost-overrun account

Mining of the ore body began in Q1 2016, and the completion of mechanical is expected in Q2, 2016. This would allow commissioning of the processing plant in Q3, and first diamond production that same quarter.

Mountain Province has set out a Vision to be what they call a tier 1 asset, with +\$20 Billion in situ value and 20 year plus Life-Of-Mine. Currently the reserve will support open pit mining for 12 years, but there is potential to go underground at some point in the future.



Environmental approval of Ekati's Jay diamond project welcomed

Environmental approval of the Ekati Mine Jay Pipe project is welcome, and is helping ensure one of the largest contributors to the NWT economy can add another 10 plus years of value to the NWT.

On May 19, the NWT Government's (GNWT) Minister of Lands, the Honourable Robert C. McLeod accepted the recommendations of the Mackenzie Valley Environmental Impact Review

Board that the Jay Project be approved, subject to the measures described in the Report of Environmental Assessment. The approval now allows Dominion Diamond to prepare to file water licence and land use permit applications, beginning the final step in the environmental approval of the Jay project.

Gary Vivian, President of the NWT & Nunavut Chamber of Mines stated, “We are very pleased that the Review Board and the Minister have approved the project to proceed to permitting. It helps add to the certainty we need to attract future mining investments. I know we are all hopeful for a positive feasibility study to move the Jay forward.”

He further added, “Interestingly, this year marks the 25th anniversary of the diamond discoveries that would become the Ekati mine, and that would carry us to a global leadership position. I can’t think of a greater way to celebrate it than with the extension of Ekati operations by another 10 to 11 years. Many northerners will be pleased to see this approval too, for after all, the NWT is a mining jurisdiction. Increasingly, both public and Aboriginal governments are counting on revenues from the mines, and our residents are counting on continued jobs and business benefits. We are now looking forward to a positive Budget from our Legislative Assembly, one that will help us rejuvenate our exploration industry.”

The Ekati mine began operations in 1998 as Canada’s and the NWT’s first diamond mine. It is also the largest diamond mine, employing approximately 1,500 workers mining a number of separate diamond deposits. The ‘Jay’ diamond deposit is the most significant undeveloped deposit at the Ekati Diamond Mine due to its large size and high grade. Jay is located beneath Lac du Sauvage, a moderate sized lake north of Lac de Gras, and is approximately 1.2 km from the shoreline. The Jay pipe is approximately 7 km to the northeast of the Misery Pit and related infrastructure, and 30km to the southeast of the main Ekati mine infrastructure.

Dominion Diamond Corporation Provides Jay Project Feasibility Update

On May 31, Dominion Diamond Corporation provided an update on the progress of their Jay pipe feasibility study (“Jay FS”), announcing it can maintain continuous production at Ekati without starting major construction at Jay this year, and as a result will adjust the Jay Project schedule to reflect this change.

The initial design basis for the Jay FS had assumed the commencement of major construction this year. Changes to the Ekati mine plan have, however, made feasible the delivery of a continuous ore supply to the Ekati processing plant that allows further optimization of the Jay Project. These changes include the availability of Sable ore, deepening of the Koala underground, and the continued successful trial of a lower throughput in the processing plant as a tool to increase recovery. Furthermore, delaying the use of the Misery Pit as a water management facility would allow more time for mining below the currently planned open pit.

The Company is completing the Jay FS based on a revised development schedule. The new schedule assumes that the construction of an all-season access road to the shoreline of Lac du Sauvage would occur in calendar year 2017, followed by construction of the water retention dike and associated infrastructure in 2018 to 2020, with dike instrumentation, dewatering and the start of pre-stripping in 2021, and mining and processing of Jay kimberlite by late 2022.

Brendan Bell, Chief Executive Officer, stated: “We are very pleased with the progress of the Jay Feasibility Study. The changes we have made to the Ekati mine plan will allow us to maintain continuous feed to the Ekati processing plant, even with an extended timeline for commencing construction. We are also excited about the possibility of additional mining below the currently planned Misery open pit. The extra time will allow us to further advance Jay project permitting and to make aggressive efforts to reduce costs at the Ekati Mine. We are completing the Feasibility Study and an updated mine plan based on this revised schedule and look forward to releasing the results shortly.”

Dominion Diamond Reports Fiscal 2017 Q1 Sales and Ekati Production

On May 25, Dominion Diamond Corporation reported the following Ekati Diamond Mine and Diavik Diamond Mine first fiscal quarter 2017 (February through April) sales and Ekati Diamond Mine production results. Unless otherwise specified, all financial information is presented in U.S. dollars.

Highlights

- Sales:
 - First quarter diamond sales were \$178.3 million (\$187.7 million in Q1 2016).
- Ekati Production:
 - During Q1 fiscal 2017, the Ekati Diamond Mine recovered 1.1 million carats from 1.0 million tonnes of ore processed (Q1 2016 – 0.8 million carats recovered from 0.9 million tonnes processed).
 - During the quarter, tonnage processed was 6% ahead of plan although recovered grade was below modelled grade for Misery and Pigeon ore due to dilution of initial material processed.
 - Subsequent to quarter end, Misery Main commercial production was declared, ahead of plan.

Sales: Ekati and Diavik Rough Diamond Sales

The Company recorded total first quarter sales of \$178.3 million (\$187.7 million in Q1 fiscal 2016). Two rough diamond sales were held during the quarter. After lowering prices by 5% in the Company’s January sale, in line with the market, prices quickly recovered and ended the first quarter on average approximately 8% higher than they started the fiscal year. The Company plans to hold three rough diamond sales in the second fiscal quarter of 2017.

Q1 FY 2017 Summary Sales in millions of US dollars	Three months ended Apr 30, 2016	Three months ended Apr 30, 2015
Ekati Rough (100% basis)	\$105.1	\$127.4
Diavik Rough (40% basis)	\$ 73.1	\$60.3
Total Sales	\$ 178.3	\$187.7
Carats Sold (000s)		
Ekati Rough (100% basis)	1,545	710
Diavik Rough (40% basis)	1,055	544
Total Carats Sold	2,600	1,254

The Diamond Market

Market conditions in the rough diamond market during the first quarter improved significantly as inventories were replenished by manufacturers in response to a positive retail season at the end of 2015. Consequently the downward pressures on prices faced last year were reversed which bodes well for more stable market conditions in fiscal 2017. The U.S. jewelry market was at the forefront of demand growth during the period and, despite the impact of uncertain economic growth on sentiment, sales in mainland China remained reasonably steady, conversely the Hong Kong and Macau markets faced considerable headwinds. Other major retail markets were mixed with some more resilient in local currency terms but adversely impacted by the strong U.S. Dollar.

Ekati Production

- The first quarter continued the positive momentum from the fourth quarter performing better than expected on tonnage which resulted from strong performance from both underground and open pit operations.
- Carat production in the first quarter was 34% higher versus Q1 2016. During the period, the Ekati Diamond Mine recovered 1.1 million carats from 1.0 million tonnes of ore processed (0.8 million carats from 0.9 million tonnes in Q1 2016).
- Ore mined from the Pigeon and Misery Main pipes totaled 1.0 million tonnes.
- Approximately 0.7 million tonnes of Pigeon ore remained in stockpiles at the end of the first quarter and is expected to be processed throughout the rest of fiscal 2017, permitting greater flexibility in ore blend.
- During the quarter the Company continued to process significant amounts of low value Misery Satellites material.
- Commercial production for Misery Main was declared in May ahead of plan. This initial Misery Main ore will be lower grade as a result of dilution from the mining of preceding benches.

Read the full release [here](#).

TMAC's Hope Bay Path to Production Continues on Track and on Budget

In a recent [update](#), TMAC Resources CEO Dr. Catharine Farrow stated, "We are pleased with our progress to advance the Hope Bay Project to production late in 2016. During the first quarter, we made excellent progress on the underground development at Doris and on our ore stockpile, completed foundation work required in advance of Mill Building erection, and continued our work with Gekko Systems of Australia to execute on the procurement, fabrication and factory testing of the Processing Plant for shipment and installation during the second half of 2016. We remain on track and on budget for both initiating the commissioning of the processing plant and the stockpiling of over 100,000 tonnes of high-grade (approximately 15 g/t) ore we plan to mine by the end of 2016."

First Quarter 2016 Highlights

- Mining and mine development productivity and ore production were on target. Mining and mine development continued in the first quarter of 2016 with 58,100 tonnes of the

planned 59,200 tonnes having been mined. Productivity averaged 0.4 metres per man-shift, exceeding the estimates of metres per man-shift published in the May 28, 2015 Prefeasibility Study (the "PFS"). Ore production was 12,800 tonnes at an estimated 13.3 grams of gold per tonne.

- Taking into account ore mined in late 2015 and ore mined by the previous operator, based on the PFS estimates for the material mined, the stockpile is estimated to contain 34,000 tonnes of ore at a grade of 13.6 grams of gold per tonne, or 14,900 ounces of gold of which 14,000 ounces of gold are recoverable at the estimated recovery rate of 94%.
- Manufacture of the processing plant (the "Processing Plant") by Gekko Systems Pty of Ballarat, Australia for delivery in 2016 was 84% complete at March 31, 2016, and is on budget and on schedule for delivery in the 2016 sealift.
- Construction of the building that will house the Processing Plant (the "Mill Building") progressed with the foundations for the main walls and reclaim walls being completed. The Mill Building steel is on site and erection commenced in late April 2016.
- As part of the Nunavut Impact Review Board ("NIRB") and Nunavut Water Board regulatory review process of the application to amend the Doris permits, including the Doris Project Certificate and the Nunavut Water Board Doris Water License (the "Doris Permit Amendments"), TMAC received technical comments from various Federal and Territorial government agencies and the Kitikmeot Inuit Association (collectively the "Reviewing Parties"). Responses to these comments were completed by TMAC and filed. A public hearing was held under the NIRB process with the Reviewing Parties and the general public from April 12 to 14, 2016. All outstanding issues were resolved, the file was closed and TMAC now awaits NIRB's recommendation to the Minister of Indigenous and Northern Affairs Canada ("INAC"). Once the NIRB process is completed, the Nunavut Water Board final review process will commence and includes a public hearing and approval from the Minister of INAC.

Read the full release [here](#).

TerraX finding more new mineralization in Yellowknife project

TerraX Minerals Inc. continues to provide some exciting results, specifically assay results from a 19 hole drill program totalling 784 meters at the Hebert-Brent Zone on the Yellowknife City Gold Project ("YCG"), immediately north of Yellowknife in the NWT. All holes were very shallow (average 41 meters depth) testing interpreted shallow dip, plunge, and strike extensions of the mineralized zones exposed on surface.

The Hebert-Brent Zone was originally discovered in the summer of 2015 and was channel sampled along exposed zones of mineralization (11.0 m @ 7.55 g/t Au, news release August 11, 2015), and was subsequently tested with 6 drill holes (10.26 m @ 3.61 g/t Au, news release November 18, 2015). The zone has particular interest to TerraX as it demonstrates that the YCG has sulphide replacement style mineralization with little or no quartz veining, a deposit type that can produce large deposits.

The drilling reported here tested several potential extensions to the surface mineralization. Six holes (TCG16-34, 040, 043, 044, 052 and 053) totalling 242 meters tested mineralization along strike and to the south of the surface mineralization. All these holes hit sulphide replacement gold zones over a strike length of 125 m. Highlights include:

- 8.00 m @ 3.21 g/t Au, including 3.00 m @ 7.09 g/t Au in hole TCG16-052
- 1.85 m @ 15.08 g/t Au in hole TCG16-040
- 7.10 m @ 3.61 g/t Au, including 1.04 m @ 12.75 g/t Au in hole TCG16-034

Based on this drilling, we believe that the main Hebert-Brent zone and the Hebert-Brent South Zone have potential along a projected southerly dip. Due to the limited meterage budgeted for this program and time constraints, drilling was terminated before the southern dip potential of both zones could be tested.

Read more [here](#).

Canadian Zinc feasibility update includes initial 17 year mine life

In mid-May, Canadian Zinc released an update on its **Prefeasibility Study** (PFS) indicates average annual production of approximately 60,000 tonnes of zinc concentrate and 55,000 tonnes of lead concentrate, containing approximately 86 million pounds of zinc (in both zinc and lead concentrates), 82 million pounds of lead (in both lead and zinc concentrates) and 1.7 million ounces of silver over an initial mine life of 17 years.

The 2016 PFS indicates average annual earnings before interest, taxes, depreciation and amortization (“EBITDA”) of \$90 million per year and cumulative EBITDA earnings of \$1.4 billion, using Base Case metal price forecasts of US\$1.00 per pound for both zinc and lead and US\$19.00 per ounce for silver. The Base Case pre-tax Net Present Value (“NPV”) at 8% discount rate of \$509 million, with an Internal Rate of Return (“IRR”) of 32%; the post-tax NPV is \$302 million, with a post-tax IRR of 26%. The Pre-production Capital Cost, including the new all season road, is estimated at \$244 million, including contingency, with payback of three years from first year of revenue.

In its conclusions AMC considers the Prairie Creek Project to be viable based on the Mineral Reserves, mine plan, production and economic parameters set out in the PFS and recommends that Canadian Zinc proceeds with the development of the Prairie Creek Project.

The base case economic model indicates a robust project at consensus forecasts for the long term prices of lead and zinc and AMC considers that there is excellent potential for additional project optimization, enhanced economics and further extending the projected mine life.

MOUs Signed for Concentrate Production

On March 3, Canadian Zinc announced it had signed MOUs with Korea Zinc and Boliden for the sale of zinc and lead concentrates to be produced at Canadian Zinc’s 100% owned Prairie Creek Mine. These offtake arrangements with two of the pre-eminent smelting companies in the world, confirm the marketability of Prairie Creek’s zinc and lead concentrates, represent a major step forward in the development of the Prairie Creek Mine and move Canadian Zinc closer to production.

These sale agreements will represent all of the planned production of zinc concentrate and about half of the planned production of lead concentrate for the first five years of operation at the Prairie Creek Mine. It is expected that shipments will be made from the Port of Vancouver with the exact shipping schedule and lot sizes in each delivery to be mutually agreed within the project's shipping season.

Prairie Creek Permitting Update

In April 2014, the Company submitted an application to the Mackenzie Valley Land and Water Board and to Parks Canada for Land Use Permits to permit the possible future upgrade of the current winter access road to all season use. The application is now undergoing environmental assessment before the Mackenzie Valley Review Board.

On April 11, 2016, Canadian Zinc submitted an Addendum to its Developer's Assessment Report and on May 11, 2016 the Company submitted its responses to Information Requests. A Technical Session is scheduled to be held in Yellowknife beginning June 13, 2016 and concluding June 16, 2016.

Incorporation of an all season road for future operations has significant financial implications, both in additional capital cost but also in potential savings and lower finance costs. The all season road will reduce energy costs and also enable the consideration of more environmentally friendly alternative energy sources. Local gas fields in the area may be producing LNG in the near future, which may provide an opportunity to reduce reliance on diesel fuel. An all season road would also have environmental and safety benefits, in that spreading out the trucking schedule over the full year would avoid high or congested traffic in winter months, therefore lower the risk of any accidents or spills.

The Company anticipates the environmental assessment process for this all season road application will take most of 2016 to complete.

Peregrine Announces Maiden Inferred Mineral Resource for CH-7 Kimberlite

15.62 Million Carats Now Classified as Inferred Mineral Resource at Chidliak

Peregrine Diamonds Ltd. recently [announced](#) a maiden Inferred Mineral Resource estimate for the CH-7 kimberlite pipe at the Company's 100 percent owned Chidliak Diamond Project, Nunavut. Key elements of the announcement are:

- An Inferred Mineral Resource of 4.23 million carats of diamonds in 4.99 million tonnes of CH-7 kimberlite, to a depth of 240 metres
- Overall average grade of 0.85 carats per tonne
- A base model average diamond price of US\$114 per carat with a modelled price range between US\$94 and US\$155 per carat as determined by WWW International Diamond Consultants ("WWW") in February 2016

The CH-7 kimberlite was discovered in July 2009, has a surface area of approximately one hectare. CH-7 is located some 15 kilometres southeast of the CH-6 kimberlite for which the Company released an updated Inferred Mineral Resource estimate of 11.39 million carats of diamond in 4.46 million tonnes, with an average grade of 2.45 carats per tonne, in the top 260

metres on April 7th, 2016. The 2014 and 2015 resource development program for the CH- 7 kimberlite was comprised of 1,968 metres of core drilling in 11 holes, 585 metres of narrow-diameter reverse circulation (“RC”) drilling in 36 surficial delineation holes, 1,212 metres of large-diameter RC drilling in six holes that extracted 814 dry tonnes of kimberlite, and the collection of 3,585 kg of microdiamond samples, together with requisite geological logging and data collection. Key results for the CH-7 pipe include diamond grades for large diameter drill samples (stated at a commercial grade bottom cut-off of 1.18 mm) ranging from 0.76 to 1.31 carats per tonne for major geological units (see January 12, 2016 news release), and a base model average diamond price of US\$114 per carat, ranging up to a high model average price of US\$155 per carat for 735.75 carats valued by WWW (see March 8, 2016 news release).

Read the full release [here](#).

Sabina Gold & Silver Reports Encouraging Metallurgical Results at Back River

Sabina Gold & Silver Corp has announced a positive preliminary metallurgical optimization test results on its 100%-owned Back River gold project in Nunavut.

After release of the Back River Initial Project Feasibility Study in September of last year, Sabina identified several metallurgical optimization opportunities that could have a positive economic impact on the Back River project. The two opportunities with the greatest potential impact are coarser grinding as part of the CIP circuit contemplated in the feasibility study, and revisiting flotation with the addition of regrinding concentrates to 50 micron before leaching.

Sabina has completed the initial scoping test work for the flotation and grinding of concentrates followed by leaching with very encouraging preliminary results.

"These results are the first of many optimization studies underway on the Project," said Bruce McLeod, President & CEO "These test results continue to demonstrate the optionality of Back River. This work could not only positively impact the economics of the initial production scenario, but could also generate compelling alternatives for future satellite production, at George for example. We are very encouraged and look forward to continuing work on the flow sheet"

Four representative composites were created, one for each of the Llama, Goose, Umwelt open pit and Umwelt underground deposits. The results from this first round of test work showed promising results. Recoveries for three of four composites (Umwelt open pit, Umwelt underground and Llama, representing approximately 71% of the reserves in the feasibility study) showed a potential increase in gold recoveries of approximately 2-3%. The Goose composite showed a potential reduction of approximately 3-4% in gold recovery. If further studies support the preliminary test work, this could result in an overall increase of 25,000 ounces of gold produced over the current life of mine.

Initial desktop studies have also indicated that changing to a flotation circuit could have positive impacts on both CAPEX and OPEX. Operating costs would largely be impacted by a potential reduction in installed power, and a reduction in reagent consumption. Additional benefits could include a reduction in GHG emissions due to reduced power and transportation requirements.

A flotation optimization test work program to further define the impacts to the project has been initiated.

Permitting

During the week of April 25-30, the Company attended its final public hearings on the environmental assessment of the Project in Cambridge Bay, Nunavut. The Nunavut Impact Review Board is reviewing all submissions from those hearings and advised that they will make a final project recommendation to the Minister of Indigenous and Northern Affairs Canada on or about June 15, 2016. A positive recommendation would be a significant milestone in the permitting/environmental assessment process and enable the transition into the licensing phase.

Read the full release [here](#).

Auryn Resources Starts up Exploration at Committee Bay Gold Project

Auryn Resources Inc. has announced the initiation of the spring mobilization and exploration program at the Committee Bay gold project (“Committee Bay”) located in Nunavut, Canada. The spring mobilization is well underway to stage fuel and exploration supplies in support of the upcoming belt wide summer exploration program.

Shawn Wallace President and CEO stated: “With the recently completed financing, the company is in an excellent position to deliver significant value to shareholders as we embark on a \$10 million dollar discovery based exploration program on our Committee Bay Asset.”

Auryn is conducting 6,000 line kilometres of high-resolution airborne electro-magnetic & magnetic geophysical surveys over the Three Bluffs and Anuri corridor target areas of the belt (Figure 1). These geophysical surveys are designed to advance multiple high-grade targets to drill stage for 2016 and 2017. In addition, Auryn is conducting 800 line kilometres of ground-based magnetic surveys over areas in the vicinity of the Three Bluffs deposit with the aim of delivering new drill targets that could expand upon the deposit along strike and at depth.

The focus of the summer program is to make a second major discovery, continue our innovative exploration approach belt wide and to further delineate the most prospective drill targets identified to date. The exploration program will be comprised of approximately 10,000 metres of rotary air blast (“RAB”) drilling utilizing a light weight mobile drill in the SW part of the belt, 5,000 square kilometres of aerial drone imagery and a till sampling program consisting of 6,000 samples across the central and northeast regions of the belt (Figure 3).

The RAB drill program will test the continuation at depth and along strike of high-grade mineralization at West Plains and will also target the largest gold-in-till anomalies within the 20 kilometre long gold bearing Anuri corridor. Read the full release [here](#).



Qikittani Inuit provide full disclosure of Mary River IIBA

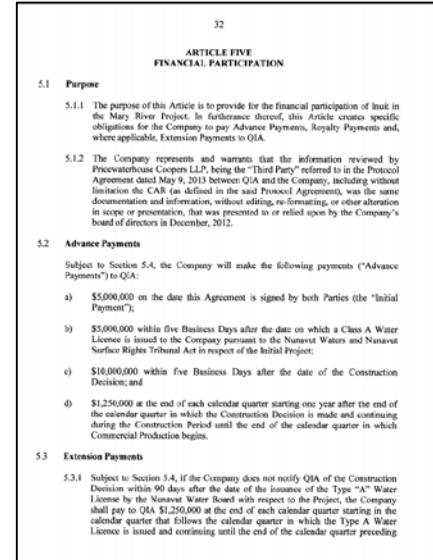
To Promote Transparency, Board Votes for Full Disclosure of Article 5, Mary River IIBA

The Qikittani Inuit Association's (QIA) Board of Directors passed a resolution today in the interest of transparency between QIA and its members, that the full provisions of Article 5 of the Mary River Inuit Impact and Benefit Agreement (IIBA) be publicly released and made available for viewing by the public.

The Article 5 of the IIBA for Mary River between QIA and Baffinland Iron Mines Corporation dated September 6, 2013, sets out the financial amounts and rates. "The Board of Directors strongly believes in transparency between QIA and all of the Beneficiaries, it is crucial for Beneficiaries to have access to information from their organization to be well informed," said P.J. Akeegok, President of QIA.

The full text of the Mary River IIBA including all provisions of Article 5 is now available on QIA's website for viewing. Download the complete IIBA [here](#) or click on the thumbnail.

For further information on the Mary River IIBA, please contact QIA or visit QIA's website at www.qia.ca.



Diamond explorer Randy Turner honoured with NAPEG Award of Merit

Professional Geologist Randy Turner recently received NAPEG's Award of Merit in Geoscience in recognition of his significant contribution to the mineral exploration and mining industry of the North. Randy has demonstrated leadership in scientific and geoscience work in the exploration of diamonds in the Northwest Territories, contributing to the economy of the NWT. NAPEG is the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists.

With over 42 years of experience in Canadian and international mineral exploration, business and finance, Randy's northern exploration is most notable for diamonds in the NWT. Randy's career achievements include forming the initial Winspear Diamonds Inc. in 1991. He assembled a corporate and technical team to explore for minerals and focused on the NWT. As usual, his timing was impeccable given the discovery of diamonds in the NWT in 1991. He embarked on a massive staking program, assembling two million acres in Lac de Gras by late 1992, making Winspear one of the first explorers for diamonds in the NWT and acquiring a key land package that would contain the NWT's third producing diamond mine, Snap Lake. Many of these tenures continue to be maintained and explored by Randy's current company, Canterra Minerals Corporation.

Winspear discovered its first kimberlite in 1994 and another in the spring of 1995. Both contained diamonds, but the pipes were small and the focus shifted to an indicator mineral train traced to Snap Lake, 30 km from the initial discoveries. The highly diamondiferous Snap Lake dyke system was discovered in 1996 to 1997.

Winspear completed a prefeasibility study in the spring of 2000. Randy guided Winspear from the discovery of the Snap Lake diamond deposit in northern Canada through to its sale to De Beers Canada, which went on to develop Snap Lake into Canada's first completely underground diamond mine. The mine officially opened in 2008, but was placed on care and maintenance in late 2015.

Randy has been and remains a leader in the junior diamond exploration sector and is committed to searching for the next diamond mine in the NWT, and elsewhere in Canada. He advanced a significant dataset of diamond related information, enabling Canterra to narrow down its search for diamonds in the southern Slave.

Randy has been a Director for the Association for Mineral Exploration British Columbia (2001-2009) and Chair for the annual Roundup Conference (2004-2008). He is a member and past Director of the NWT & Nunavut Chamber of Mines. He has been a Director on the Britannia Mine Museum, Mineral Deposits Research Unit (UBC), as well as involved in multiple charities, including Ronald McDonald House, BC Cancer Society and the Union Gospel Mission.

Randy and the Snap Lake discovery team were awarded the Hugo Dummett Diamond Award (2007) for excellence in diamond exploration and development, the AMEBC BC Gold Pan Award (2009) and the AMEBC Frank Woodside Award (2007). Randy has led and successfully financed many junior exploration companies, including Silver Quest Resources Ltd., Diamondex Resources and Independence Gold Corp.



NAPEG Committee member Gary Vivian (right) presents the award to Randy Turner.

Northern Youth Abroad receives Nunavut Mining Symposium proceeds

Fundraising efforts helped

Northern Youth Abroad was the recipient charity for the proceeds from the Nunavut Mining Symposium fundraising initiative during this year's gala event in Iqaluit. The organization has received support from the Symposium for many years which goes toward supporting youth from across Nunavut. In 2016, Northern Youth Abroad will engage more than 50 participants from across NWT and Nunavut as they take part in programs that provide the opportunity to travel, gain self-confidence and independence, and take part in inter-cultural learning and sharing.

Northern Youth Abroad programming has significant impacts on Nunavummiut youth demonstrated through high school graduation rates much higher than the Territorial average, as well as a track record of alumni going on to pursue post-secondary education and both career and personal success. This is especially noteworthy based on the organization's

commitment to choosing participants who are seen to have the most to gain by participation and by taking chances in selecting those who face a number of barriers to success.

Attention Nunavummiut: Introduction to Prospecting course

The Government of Nunavut has announced upcoming prospecting courses.

Do you want to learn how to identify different rocks and minerals like iron and gold?

Then you should attend the free Introduction to Prospecting course, which will be offered in seven communities by geologists from the Department of Economic Development and Transportation:

- Arviat – June 13-18
- Taloyoak – June 13-18
- Pond Inlet – July 11-16
- Clyde River – July 18-23
- Grise Fiord – August 8-13
- Resolute Bay – August 15-20
- Kimmirut – September 5-10

You can learn prospecting skills and techniques, and find out more about the mineral and mining industry in Nunavut.

For more information, call 1-888-975-5999 or email minerals@gov.nu.ca, or you can sign up for the course at your hamlet office.

Notes from the field: *Mining Matters* Sahtu Schools Tour

In March, NWT government staff organized a “Mining Matters” tour of several schools in the communities of the Sahtu region of the NWT. Janice Williams from PDAC’s Mining Matters team was supported by Frank Pope and Valerie Gordon from Industry, Tourism & Investment in sharing exciting information on mining and minerals in the communities of Deline, Fort Good Hope, Tulita and Norman Wells.

In three schools the team worked 90 minute sessions in the morning with an additional 90 minute session in the afternoon. This worked very well and they were able to cover everything they had planned. In one school they went 180 minutes right through one morning which worked equally well.

Frank Pope introduced the team in each school, explained why we were there what we hoped to achieve, and what we anticipated the students would gain from our presentations. Students were introduced to rocks and minerals as well as a small selection of fossils and oil samples from the region. The presentations also allowed them to explore the importance of rock and minerals in their everyday lives.

Student learned that many career opportunities are available in minerals and mining, such as geologist, driller, mine engineer, welder, or minerals processor. Many other jobs at a mine site are not hands on mining at all, but are in support of the mining operation, environmental

monitoring, and landscaping or camp support staff such as housekeeper or cook. A mining operation can have as many as 500 people working in it, a mine site is like a small town, and many people are needed to run this camp/town.

As a means to getting students' interests they also went through an exercise showing that 90% of the components which are required to build a snowmobile come from the ground, oil and minerals, such as oil to make the windshield, lead for the battery, zinc for spark plugs and various metals for the frame and skis, all minerals from the earth.

Presentations took place utilizing three "break out work stations" Frank told "Stories from the North" through various artifacts - geological, anthropological and tools of the trade from years gone by. These collected over the years working for the GNWT in the oil, gas and minerals sector, and as an annual visitor to the Mackenzie Mountains.

Valerie explained the difference between Rocks and Minerals and Product Matching using real samples items made from rock, minerals and metals. They also looked at maps of the geology and mining locations in the Territory. Students were able to practice observation skills to draw conclusions what properties about the minerals presented made them suitable for the product exemplified.

Janice presented the "Rock Cycle and Mineral Identification" Students explored the movement of Earth materials through the various stages of the rock cycle and were able to understand the time frame during which the processes occur and the variety of rock types that can be found in their community and Territory.



Janice Williams of Mining Matters engaging with students from "Ehtseo Ayha School" in Deline

Extension activities related to the Rock Cycle included:

- Looking inside rocks with the Mining Matters Rockscope 2.0
- Making sense of igneous rocks
- Making sense of sedimentary rocks
- Making sense of metamorphic rocks

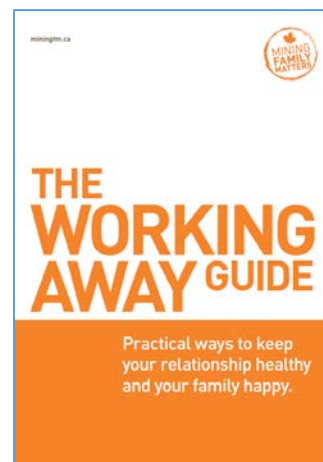
The "Sahtu Schools Minerals Information Tour" was accepted by the students and teaching staff in a way far more readily than organizers could ever have imagined. It was an excellent eye opening experience for the team as well as the students. We certainly will recommend this type of program continue in future years. Mining Matters and in particular Janice Williams and her enthusiasm was a valuable asset to the overall success of the initiative. Val moved from Program Advisor to "Teacher" and program presenter overnight and was a valuable person to have along on the trip. Frank filled in where he could carrying bags of rock samples.

Mining Family Matters in Canada

Mining Family Matters is an online support network empowering Canadian families in mining and oil & gas. The organization began in Australia, founded by moms Alicia Ranford and Lainie Anderson in 2010. Alicia came up with the idea of a support website after her own young children struggled to cope with their dad's fly-in, fly-out roster – and she realized other families might benefit greatly by knowing they're not alone during tough times. When the Australian website began to attract increasing enquires from Canadian families, miningfm.ca was born.

Mining Family Matters also produces an inexpensive guidebook that companies can purchase to support the mental wellbeing of their workers and families. It's designed to keep relationships strong and families happy. To discover more information on this resource visit <http://www.miningfm.ca/contact-us-3/working-away-guide.html>.

It's been two years since *Mining Family Matters* in Canada was launched. The free support website www.miningfm.ca has attracted more than 17,000 visitors since PDAC in March 2014.



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.

- 2 June 2016, [Seeking Alpha - Fortune Minerals Could Make Investors a Fortune](#)
- 2 June 2016, [Canadian Zinc President speaks to BNN on optimistic future of Prairie Creek project](#)
- 31 May 2016, [Dominion Diamond Corporation Provides Update on Jay Project Feasibility Study](#)
- 31 May 2016, [Kennady Diamonds Completes 2016 Winter Drilling Program](#)
- 31 May 2016, [North Arrow Confirms New Diamondiferous Kimberites at Pikoo, Saskatchewan](#)
- 27 May 2016, [Bruce Cleaver Appointed as CEO of De Beers Group](#)
- 27 May 2016, [Nighthawk Gold Corp. Completes Acquisition of Superior Copper Corporation](#)
- 25 May 2016, [Avalon continues to advance metallurgical work on the Separation Rapids Lithium Project, Kenora, Ontario](#)
- 25 May 2016, [Sabina Gold & Silver Reports Encouraging Metallurgical Optimization Results at Back River Gold Project, Canada](#)
- 25 May 2016, [Dominion Diamond Corporation Reports Fiscal 2017 First Quarter Sales and Ekati Production Results](#)
- 25 May 2016, [Dominion Diamond Corporation's Fiscal 2017 First Quarter Results to be released Wednesday, June 8, 2016](#)
- 24 May 2016, [De Beers Rough Diamond Sales for Cycle 4, 2016](#)
- 24 May 2016, [Canadian Zinc Announces New Nominees to Board of Directors](#)
- 20 May 2016, [Detailed Mary River Mine Inuit Impact and Benefit Agreement released by QIA](#)
- 20 May 2016, [Sabina Closes \\$32 Million Bought Deal Financing: Enables Continued Funding for Advancement of Back River Gold Project](#)
- 19 May 2016, [TerraX Drills 8.00 m @ 3.21 g/t Au and 1.85 m @ 15.08 g/t Au at Hebert-Brent Zone, Yellowknife City Gold](#)

- 19 May 2016, [Dominion Diamond Corporation Reports Approval of Jay Project Environmental Assessment](#)
- 18 May 2016, [Canalaska Enters into C\\$20.4 Million Option with De Beers for Diamond Exploration in the Western Athabasca](#)
- 17 May 2016, [Peregrine announces commencement of 2016 drill program in Botswana](#)
- 17 May 2016, [Canadian Zinc reports financial results for first quarter of 2016 and operations update](#)
- 17 May 2016, [Kennady Diamonds Further Advances Kennady North Project](#)
- 17 May 2016, [Rio Tinto announces 100 million carats milestone at the Diavik Diamond Mine](#)
- 16 May 2016, [Namibia and De Beers Sign Milestone 10-Year Rough Diamond Sales Agreement](#)
- 13 May 2016, [TMAC'S Hope Bay path to production continues on track and on budget](#)
- 13 May 2016, [Canadian Zinc files technical report on 2016 prefeasibility study update for the Prairie Creek mine](#)
- 13 May 2016, [TerraX closes final tranches of non-brokered private placements for \\$1,021,400; increases non-flow-through financing to \\$2,112,250](#)
- 11 May 2016, [Stornoway Announces FY2016 First Quarter Results](#)
- 11 May 2016, [MMG releases 2015 Sustainability Report](#)
- 10 May 2016, [North Arrow Concludes Spring Drilling at Redemption](#)
- 9 May 2016, [TerraX closes second tranche of non-brokered private placements for \\$1,253,850](#)
- 6 May 2016, [Kaizen Discovery draws C\\$1.3 million on loan facility with majority shareholder HPX TechCo](#)
- 5 May 2016, [Stornoway Intersects Kimberlite At Adamantin Project](#)
- 5 May 2016, [Peregrine Announces Maiden Inferred Mineral Resource of 4.23 Million Carats in 5 Million Tonnes for the Top 240 Metres of the CH-7 Kimberlite](#)
- 5 May 2016, [Auryn Resources Commences Spring Mobilization and Exploration Programs at the Committee Bay Gold Project](#)
- 4 May 2016, [TerraX drills new gold zone at Homer Lake, Yellowknife City Gold; results include 15.91 m @ 1.78 g/t Au and 14.9 g/t Ag, including 2.70 m @ 5.51 g/t Au and 53.6 g/t Ag](#)
- 3 May 2016, [De Beers' Investment in Skills Training for the Local Workforce and Social Projects Up 13% in 2015](#)
- 3 May 2016, [Sabina Gold & Silver Corp. Announces C\\$30 Million Bought Deal Financing](#)
- 3 May 2016, [Waste Heat Put to Good Use at the Gahcho Kué Project](#)
- 2 May 2016, [North Arrow Sells Two Canadian Lithium Assets](#)
- 2 May 2016, [Canterra Provides Update on South Slave Properties](#)



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A very interesting Aboriginal perspective of mining

(By Mike Nitsiza, Courtesy Aboriginal Business Quarterly Magazine, Spring 2016)



FROM THE LAND

NEW WAYS FOR A NEW YEAR

Mining isn't so scary when you understand what's going on

When our people talk about hunting caribou we all get excited right away for dry meat, it's the traditional food that helped sustain the Tlicho since time began. But it's not as good unless you have a little fat or grease to put on it.

Traditionally people had to make their own fat when they were fortunate enough to catch fresh caribou on the land. After the meat was all cut up, our people would take the bones that were left and use tools to smash them up into many smaller pieces.

Then they would gather up the pieces of bone and put them into a big pot full of water over their campfire. They would boil off the water and then fill the pot again – you have to boil caribou bones twice to get all of the good fat to come out.

Once there was a good layer of fat on top, our people would scoop it off and save it to have later with their dry meat. They would also eat the soup – the left over liquid and bits of meat in the pot. Finally they would take the bones and bury them in a hole on the ground. They would do that out of respect for the Creator and our land so that the animal would be born again.

Mining, processing ore in particular, is really the same process when you understand what's going on.

The mining company collects up the ore from among all of the other country rock and crushes it into tiny pieces.

Then they put it into a big container and add water or some other liquids. They mix it all up which makes the minerals come out of the ore and separate from the bits of rock.

They scoop off the valuable minerals to use to make life better and they take the left over waste rock and return it to the land responsibly in a way that allows new plants to grow and animals to safely return to using the area.

So you see, people who are harvesting caribou have a lot more in common with mining companies than they ever realized. There are similarities like that bridge our two worlds related to trapping as well, but that's another story. ■

Michel "Mike" Nitsiza
is a Tlicho elder born and raised on the land around Whati who uses his traditional knowledge to help people better understand mining.

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Mine Rescue Competition and Miner's Picnic coming!

59th Annual Mine Rescue Competition, June 11th, 2016

Mine rescue is a critically important part of any mine safety program. When something goes wrong in a mine, the mine rescue team's training allows them to deal with any situation.

In this family-friendly event, spectators can watch teams from across Canada showcase their skills and learn from one another, while competing for the Overall Surface and Overall Underground Trophies.

Join the WSCC in supporting this annual event.

The Chamber of Mines also invites the public to enjoy the Miner's Picnic, a family event and free BBQ.

When: Saturday, June 11th, 2016

Where: Yellowknife Multiplex/Fieldhouse Parking Lot (41 Kam Lake Road)

The Competitors

There are seven teams from five mines participating in this year's event.

Surface teams

- Diavik Diamond Mine – Rio Tinto;
- Ekati Diamond Mine – Dominion Diamond Corporation;
- Gahcho Kué Diamond Mine – De Beers Canada Inc.; and
- Meadowbank Gold Mine – Agnico Eagle Mines Ltd.

Underground teams

- Diavik Diamond Mine – Rio Tinto;
- Ekati Diamond Mine – Dominion Diamond Corporation; and
- Hope Bay Gold Mine – TMAC Resources Inc.

Contact Information

Lex Lovatt, Mine Rescue Coordinator, Workers' Safety and Compensation Commission, Tel: (867) 920-3849





Mining Week

Semaine de l'exploitation minière

June 11 to 17

Du 11 au 17 juin

Mining is a cornerstone of the NWT economy and a rich and diverse part of the territory's history. Celebrate mining's role in the NWT's past, present and future with free events held in the Yellowknife area.

Le secteur minier est un des piliers de l'économie ténnoise et symbolise l'histoire riche et diversifiée du territoire. Des activités gratuites sont proposées pendant cette semaine dans la région de Yellowknife, afin de souligner l'importance de ce secteur hier, aujourd'hui et demain pour les TNO.

SCHEDULE OF EVENTS

HORAIRE DES ACTIVITÉS

<p>Saturday, June 11</p> <p>8am to 3pm 59th Annual Mine Rescue Competition Hosted by Workers' Safety and Compensation Commission Yellowknife Multiplex Arena parking lot</p> <p>12pm to 3pm Miners' Picnic Hosted by NWT & Nunavut Chamber of Mines Yellowknife Multiplex Arena parking lot</p> <p>2pm to 4pm Prelude Nature Trail Guided Geology Hike Prelude Lake Territorial Park, Ingraham Trail (Highway 4)</p> <p>Tuesday, June 14</p> <p>5pm to 7pm Discover Prospecting! Yellowknife Farmers Market, Somba K'e Civic Plaza</p> <p>Wednesday, June 15</p> <p>12pm to 1pm Urban Geology Walking Tour Yellowknife City Hall</p> <p>Thursday, June 16</p> <p>7pm to 9 pm Prospectors Trail Guided Geology Hike Prospectors Cabin, Fred Henne Territorial Park</p>	<p>Samedi 11 juin</p> <p>De 8 h à 15 h 59^e Concours annuel de sauvetage minier organisé par la Commission de la sécurité au travail et de l'indemnisation des travailleurs Stationnement de l'aréna Multiplex de Yellowknife</p> <p>De midi à 15 h Pique-nique des mineurs organisé par la Chambre des mines des TNO et du Nunavut Stationnement de l'aréna Multiplex de Yellowknife</p> <p>De 14 h à 16 h Randonnée géologique guidée sur le sentier d'interprétation du lac Prelude Parc territorial du lac Prelude, Ingraham Trail (route 4)</p> <p>Mardi 14 juin</p> <p>De 17 h à 19 h Découvrez la prospection! Marché fermier de Yellowknife, esplanade municipale Somba K'e</p> <p>Mercredi 15 juin</p> <p>De midi à 13 h Excursion pédestre sur le thème de la géologie urbaine Hôtel de ville de Yellowknife</p> <p>Jeudi 16 juin</p> <p>De 19 h à 21 h Randonnée géologique guidée sur le sentier du prospecteur Cabine du prospecteur, parc territorial Fred Henne</p>
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Government of Northwest Territories / Gouvernement des Territoires du Nord-Ouest

Scotiabank – Disruptions, Sentiment Drive Crude Higher; Metals Take Breather

- Oil prices received support from a host of unplanned supply outages, which rose to an estimated 3.3 Mbpd in May as wildfires around Fort McMurray and attacks on Nigerian infrastructure took their toll.
- Metals eased from recent highs after spikes in the price of iron ore proved short-lived.

Some highlights:

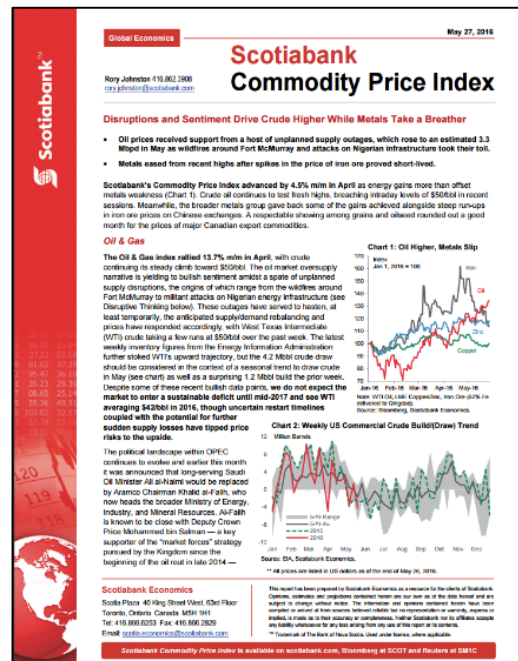
Scotiabank’s Commodity Price Index advanced by 4.5% m/m in April as energy gains more than offset metals weakness (Chart 1). Crude oil continues to test fresh highs, breaching intraday levels of \$50/bbl in recent sessions. Meanwhile, the broader metals group gave back some of the gains achieved alongside steep run-ups in iron ore prices on Chinese exchanges. A respectable showing among grains and oilseed rounded out a good month for the prices of major Canadian export commodities.

The Metals & Minerals index contracted by 0.3% m/m in April as some of the speculative fervor on Chinese commodity exchanges, detailed in last month’s report, began to dissipate. **Iron ore** (62% Fe delivered to Qingdao), the primary driver of the recent bull run in metals, has eased significantly from its late-April peak, shedding more than \$20/t (almost 30%) by late-May. The base metal complex has followed suit, with all major metals losing ground relative to late-April/ early-May highs.

Copper will likely experience continued headwinds through the summer on the back of weaker demand prospects and a sluggish supply response. More than 750 kt of annualized supply was idled in 2015 in response to low prices, according to Wood Mackenzie, but producers are looking far more resilient in 2016 and curtailments this year are unlikely to exceed 150 kt. Import demand in China slipped in April from March after frenzied buying bid up copper prices but also pushed up inventory levels on the Shanghai Futures Exchange.

While **zinc** also lost ground over the past month, it continues to display the strongest fundamentals within the base metals group and prices remain 26% higher than mid-January levels at \$1883/t (\$0.85/lb). An ongoing concentrates supply deficit has eaten into refined metal inventories, which are down 24% since late February on the LME (an almost seven-year low) and 9% since early April on the Shanghai Futures Exchange. In the face of mine depletion and production cuts, prices are expected to grind upward until idled mine capacity can be enticed back onto the market.

Download the entire newsletter [here](#) or click on the report thumbnail.



Welcome New Members!

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

- **Lynden Air Cargo** has been providing L-100 Hercules aircraft service to the north for 20 years. Lynden Air Cargo has the equipment and the expertise to move your cargo to remote locations throughout Alaska, Canada and destinations around the world. Contact Jim Davis, Vice-President of Marketing and Sales at jdavis@lynden.com and visit: www.lac.lynden.com.

Calendar of Events

- **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 [here](#). There is still time to submit an abstract if you would like to make a presentation at this conference. Submit your abstracts to miningandcommunities@infomine.com.
- **NWT Mining Week**, June 11-17, 2016, Yellowknife. Mining Week recognizes the value of mining to the NWT. A highlight is the Annual Mine Rescue Competition on June 11, and the free Miners Picnic BBQ the same day. This year, both events will be held at the larger Yellowknife Multiplex Arena parking lot.
- **Arctic Energy and Emerging Technologies Conference & Tradeshow**, June 13-15, 2016 in Inuvik, NWT. This new show replaces the decade long, successful Inuvik Petroleum Show. This new event will bring together people from government and industry to learn, network and promote various sources of energy and emerging technologies as it relates to our Arctic living environment. To learn more visit: www.inuvikarcticenergy.com/
- **44th Annual Geoscience Forum**, November 15-17, 2016, Yellowknife, NT. Join us at the largest mining and petroleum conference and tradeshow in the Northwest Territories. The joint initiative of the NWT & Nunavut Chamber of Mines and the Government of the NWT's Department of Industry Tourism & Investment attracts hundreds of delegates and exhibitors excited to share their knowledge, to learn from others, and to show off their wares. For more information visit www.geoscienceforum.com and contact conference@miningnorth.com.

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	Dominion Diamond Corporation , and Dr. Stewart Blusson	Diamonds	Canada's first and largest diamond mine, 310 km. NE of Yellowknife. Open pit and underground. Mine life to 2020. Workforce in 2014 approximately 1,500.	News Release, May 25, 2016: Dominion Diamond Corporation's Fiscal 2017 First Quarter Results to be released Wednesday, June 8, 2016 News Release, May 25, 2016: Dominion Diamond Corporation Reports Fiscal 2017 First Quarter Sales and Ekati Production Results
Ekati Jay Project	Dominion Diamond Corporation , and Archon Minerals Ltd.	Diamonds	The Ekati Jay project is in Environmental Assessment. Ekati mine life currently ends in 2020, but if mining of the Jay pipe is approved, mining could be extended 10 yrs.	May 19 News Release: Dominion Diamond Corporation Reports Approval of Jay Project Environmental Assessment May 31, News Release: Dominion Diamond Corporation Provides Update on Jay Project Feasibility Study
Diavik Mine	Rio Tinto & Dominion Diamonds	Diamonds	Canada's largest producer of diamonds, 300 km NE of Yellowknife. Mine life through 2023. Became all underground mine in 2012. 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. Work to develop new A21 open pit has begun and will cost US\$350m over 4 years. A-21 is on track to commence ore production in the second half of 2018. The A-21 workforce will peak at approximately 200 people. 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.	DDI News Release, April 13, 2016 o Diavik diamonds recovered in calendar 2015 of 6.4 million carats were 9% lower than the original calendar 2015 plan of 7.0 million carats, due to a combination of ore availability issues resulting from lower mining rates from A-154N, lower grades from A-418, and availability of the process plant in the fourth calendar quarter.
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 2015.
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. 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.	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.

NWT & Nunavut Chamber of Mines – Northern Mining News

			First production on schedule for Q3 2016. Peak construction workforce 700.	<p>News release, March 14, 2016: Mountain Province Updates Gahcho Kué Diamond Mine Development</p> <ul style="list-style-type: none"> • Overall project more than 87 percent complete • On plan for first production in H2 2016 • Appointment of Mine General Manager
Prairie Creek	Canadian Zinc Corporation	Zinc-lead-silver	<p>Proposed underground mine 120 km W of Ft. Simpson. Estimated mine jobs: 220</p> <p>All permits now in place to construct and operate the mine. Preliminary Feasibility Study completed in early 2016 supports longer, 17-year mine life.</p> <p>The company's proposal to construct a new airstrip and all-weather road is undergoing environmental assessment.</p>	<p>News Release, May 13, 2016: Canadian Zinc Files Technical Report on 2016 Prefeasibility Study Update for the Prairie Creek Mine.</p> <p>News Release, May 17, 2016: Canadian Zinc reports financial results for first quarter of 2016 and operations update. An Update to the Pre-Feasibility Study indicates average annual production of approximately 60,000 tonnes of zinc concentrate and 55,000 tonnes of lead concentrate, containing approximately 86 million pounds of zinc (in both zinc and lead concentrates), 82 million pounds of lead (in both lead and zinc concentrates) and 1.7 million ounces of silver over an initial mine life of 17 years.</p> <p>News Release, May 24: Canadian Zinc Announces New Nominees to Board of Directors.</p>
Kennady North	Kennady Diamonds Inc.	Diamonds	<p>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 mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.</p>	<p>News Release, May 31, 2016: Kennady Diamonds Completes 2016 Winter Drilling Program</p> <ul style="list-style-type: none"> • Four diamonds identified in core during logging • Faraday 1 and 3 traced onto land <p>News Release, May 16: Kennady Diamonds Further Advances Kennady North Project</p> <ul style="list-style-type: none"> • Faraday 1 and 3 Drilling Continues to Deliver Excellent Results • Kimberlite defined over a Strike of more than 200 meters
NICO	Fortune Minerals Ltd.	Cobalt-gold-bismuth-copper	<p>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.</p>	<p>News Release, April 11: Fortune Minerals Announces Permitting Underway for Public Highway to Whati. Key Highlights</p> <ul style="list-style-type: none"> • Public highway to the community of Whati advancing • Tesla Motors announced 325,000 pre-production orders for its Model 3 car validating electric vehicle growth and positively impacting cobalt demand • Discussions for off-take and NICO project financing ongoing • Fortune completes second tranche of \$1 million private placement <p>News Release, April 18: Key Highlights:</p> <ul style="list-style-type: none"> • David Ramsay appointed to Fortune's board of directors

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				<ul style="list-style-type: none"> • Public highway to the community of Whati advancing • Tesla validates EV demand, positively impacting cobalt market
Nechalacho	Avalon Advanced Materials Inc.	Rare earth metals	<p>Proposed underground mine 100km 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.</p>	<p>News Release, February 26, 2016: Avalon 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.</p>
Indin Lake	Nighthawk Gold	Gold	<p>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)</p>	<p>News release February 25, 2016: Nighthawk Gold Corp. Announces Proposed Acquisition of Superior Copper Corporation Feb 25: New corporate presentation posted.</p>
Courageous Lake	Seabridge Resources	Gold	<p>Proposed open pit mine 240 km NE of Yellowknife. 6.5 Moz 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.</p>	<p>Seabridge is currently focusing its work on their KSM mine development in British Columbia.</p>
Selwyn (Howards's Pass Project)	Selwyn Chihong Mining Ltd.	Zinc, lead	<p>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.</p>	<p>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. 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. 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 NWT-Yukon 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. Yukon media reported in Feb 2016 that Selwyn Chihong has decided to slow their project down due to the current low zinc prices, and will not to take the project to the permitting stage this year. According to External Affairs VP Maurice Albert, SC has opted for a traditional drilling program and hopefully add another ten years to the mine life.</p>

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. Construction of the Amaruq Exploration Access Road commenced in the first quarter of 2016. Road construction is ongoing with nine kilometres completed to date of the expected total length of 62 kilometres. On April 19, the Nunavut Impact Review Board submitted its EIS report to the Minister of INAC concluding that the Vault Pit Expansion Project should proceed.	News Release, April 28, 2016: Agnico Eagle Reports First Quarter 2016 Operating and Financial Results - Continued Strong Operational Performance - Amaruq, El Barqueno and Barsele Drill Programs Yield Positive Results. At Amaruq, the 2016 drill program began at the end of January. Drilling to the end of March has totalled 18,836 metres (84 holes) using up to eight rigs, part of an initial 75,000-metre drill program. The goals of the 2016 exploration program are to infill and expand the known mineral resource areas and to test other favourable targets with a focus on delineating a second source of open pit ore. News Release, April 29: Agnico Eagle Announces Election of Directors
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.
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.	May 12, 2016 News Release: TMAC's Hope Bay Path to Production Continues on Track and on Budget
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 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	News Release, April 28, 2016: Meliadine Type A Water License Permit Expected by the End of the Second Quarter of 2016. The capital budget for 2016 is \$96 million, with activities focused on further underground development (approximately 3,700 metres), detailed engineering and procurement, construction of essential surface infrastructure and the acquisition of a used camp facility. The goal of the 2016 capital program is to ensure that the project remains on track for a potential 2020 production start-up, which is approximately a one year delay from previous expectations.

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			greenstone belt that require further evaluation.	
Kiggavik	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	May 20 News Release: Sabina Closes \$32 Million Bought Deal Financing: Enables Continued Funding for Advancement of Back River Gold Project May 25 News Release: Sabina Gold & Silver Reports Encouraging Metallurgical Optimization Results at Back River Gold Project.
Izok Corridor Project (with High Lake & Hood River deposits)	MMG Resources Inc.	Copper, Zinc, Gold, Silver	High Lake is 1710 hectare, copper-zinc-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. PEA expected Q2, 2016.	News Release, May 5, 2016: Peregrine Announces Maiden Inferred Mineral Resource of 4.23 Million Carats in 5 Million Tonnes for the Top 240 Metres of the Ch-7 Kimberlite
Angilik	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 / Stornoway Diamonds	Diamonds	7 km from tidewater; 9 km from Repulse Bay, Melville Peninsula; 7,143 hectares of contiguous mineral claims. Largest kimberlite in Nunavut.	News release June 9: North Arrow Reports Diamond Valuation Results From The Qilalugaq Project. The parcel of 383.55 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: <ul style="list-style-type: none"> • 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.
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.
Coppermine	Kaizen Discovery / Tundra Copper	Copper	Early stage, district-scale exploration play located 24 km SW of Kugluktuk; Total holdings approximately 3,500 km ²	NIRB screening decision issued July 7, 2015; Proposal may proceed without a Part 5/6 NLCA review.

Project Maps

