

Northern Mining News

Volume 13, No. 2

February 2019

In this February 2019 issue:

Mining revenues strong in Northwest Territories and pass \$1 billion in Nunavut.....	2
Agnico Eagle pours first gold at Meliadine; Amaruq production on target too	3
Hope Bay gold mine in Nunavut achieves record Q4 production	5
Baffinland Iron Mine provides IIBA Report highlights	6
Minerals industry will participate in creation of new NWT Mineral Resources Act.....	7
New Tlicho road in NWT will benefit minerals industry, says Chamber.....	8
Funding announced for NWT's Slave Province access corridor and geoscience	9
Nighthawk provides Indin Lake exploration review and 2019 outlook	10
For sale! Mactung deposit and Cantung Mine – buyers sought.....	11
Rio Tinto Diavik mine announces scholarship for women.....	12
Mountain Province begins Kennady North winter exploration program	12
Osisko Metals intersects 18.66% zinc + lead over 20.73 metres at Pine Point	14
NorZinc files post-EA report for all season road, commences final permitting.....	14
PDAC awards for Avalon executive and Chidliak discovery team.....	15
De Beers group consolidates its mining assets in South Africa and Canada	17
All three territories gain ground in annual Fraser mining companies survey	17
2019 NWT Diamond mine ice road on track.....	18
Exploration & Development news briefs	19
Welcome new members!.....	21
Member news releases this past month	22
Members Corporate Presentations	22
Calendar of Events	22
Application deadline approaching for NWT Mineral Incentive Program!	23
MiningNorthWorks! – Who, what, when, where, why about northern mining.....	24
Mines & promising Northwest Territories mine projects.....	25
Mines & promising Nunavut mine projects.....	28
Project maps	30

From the Executive Director ...

Latest stats from NRCan show mineral production is up in NWT and reveals Nunavut production passed \$1 billion for first time! Congratulations too to Agnico Eagle for pouring their first gold bar at Meliadine signaling commercial production is close.

Canada and the NWT announced some new funding for the Slave Province access corridor and geoscience. Let's hope it's the start of much more investment to see construction in 5 years.

The 2018 Fraser Institute *Annual Survey of Mining Companies* shows improved rankings for and both territories. Certainly reason for optimism but we'd add a cautionary note that there's still lots of work to do to reduce high operating costs and raise exploration investment in the North.

Happy reading! ... Editor

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



Mining revenues strong in Northwest Territories and pass \$1 billion in Nunavut

Mineral production continues to be strong at over \$2 billion in the Northwest Territories, and with production growth has surpassed \$1 billion for two consecutive years in Nunavut according to recently released statistics posted by Natural Resources Canada.

Preliminary estimates for 2018 show that the total value of NWT mining production is \$2.111 billion, up slightly by \$6 million (0.3%) from \$2.105 billion in 2017. Of this:

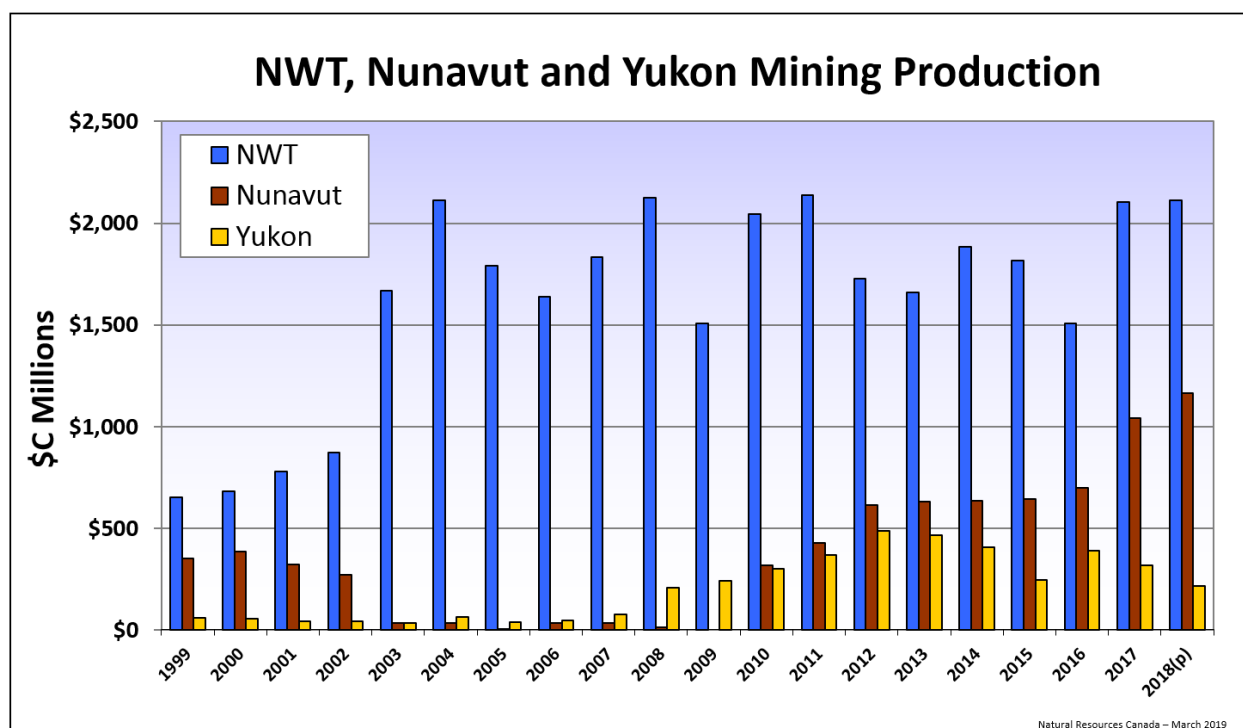
- Diamond production accounts for nearly the entire value (99.4%) at \$2.097 billion, up slightly by \$6 million (0.3%) from \$2.091 billion; and
- With no other minerals produced in the NWT, sand, gravel, and stone production value accounts for the remaining \$13 million.

In Nunavut, the total value of mining production for 2018 is estimated at \$1.164 billion, up \$125 million (12%) from \$1.039 billion in 2017. Of this:

- Gold production value is \$595 million, up \$16 million (3%) from \$579 million in 2017;
- Silver production value is \$5.1 million, down \$0.9 million (15%) from 6.1 million last year; and
- Iron ore is projected at \$564 million, up \$110 million (24%) from \$454 million last year.

In Canada, preliminary estimates for 2018 production are \$47.007 billion, an increase of \$1.937 billion (4%) from \$45.070 billion in 2017.

“These are great numbers, in that they also reflect strong employment, business and taxation investments and benefits for the North and for Canada,” said Chamber of Mines President Gary Vivian. “The statistics in both NWT and Nunavut reinforce why the mineral industry is the largest private sector contributor to both their economies.” He added, “In Nunavut, mining



continues to grow, from zero production just a few years ago to more than one billion dollars in each of the last two years. We expect this to grow further next year as a new Nunavut gold mine goes into production. In the NWT, on the other hand, we are conscious that diamond production is maturing and we need a rejuvenation of exploration to make new mining discoveries to sustain the current tremendous levels and benefits.”

The NWT has three mines producing diamonds: Ekati, Diavik and Gahcho Kué. Nunavut currently has three mines – one in each of the territory’s regions – producing gold and iron: Meadowbank, Mary River and Hope Bay, and a fourth mine is preparing to begin commercial production.

See detailed charts of the NWT and Nunavut data compiled from Natural Resources Canada’s data found [here](#).

Commodity	2018(p)	2017	Difference	% change
Northwest Territories (\$ millions)				
Diamonds	\$2,097	\$2,091	\$6	0.3%
Sand, Gravel, Stone	\$13	\$13	\$0	0.6%
Total NWT	\$2,111	\$2,105	\$6	0.3%
Nunavut (\$ millions)				
Gold	\$595	\$579	\$16	2.8%
Silver	\$5	\$6	-\$1	-15.0%
Iron	\$564	\$454	\$110	24.1%
Total Nunavut	\$1,164	\$1,039	\$125	12.0%
Canada (\$ millions)				
Total Canada	\$47,007	\$45,070	\$1,937	4.3%

Agnico Eagle pours first gold at Meliadine; Amaruq production on target too

On February 21, Agnico Eagle Mines (AEM) celebrated a milestone at its Meliadine gold project, with an inaugural gold pour! This first brick signals AEM’s newest mine is close to start of commercial production. Visit the [Eagle Blog](#) for more including video of the first gold pour!

For northern employees and communities that surround the remote mining site in the Kivalliq region of Nunavut, the celebration marks the culmination of a journey that began over 12 years ago and turns hopes for increased economic and social prosperity in Canada’s North into a reality, the company said.

The high-grade Meliadine gold project has 3.7 million ounces of gold in proven and probable reserves (16.1 million tonnes at 7.12 g/t) and a large mineral resource as of December 31, 2017. Reserves are contained in the Tiriganiaq and Wesmeg deposits, and resources in Tiriganiaq, Wesmeg plus another five nearby deposits within a large land package covering an 80-km-long greenstone belt. The 111,358-hectare property is located near the western shore of Hudson

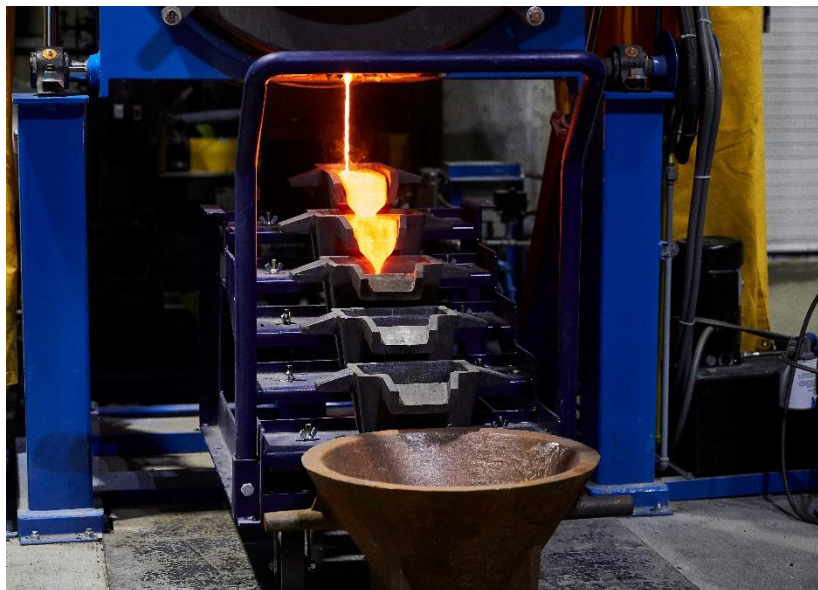


Agnico Eagle employees celebrate first gold brick at Meliadine. Agnico Eagle photo

Bay in the Kivalliq region of Nunavut, about 25 km north of Rankin Inlet and 290 km southeast of the company's Meadowbank mine.

Amaruq, AEM's other new Nunavut project, is expected to begin production later this year. Ore will be trucked 64 km. southeast over a company built road to the Meadowbank mine for processing.

AEM's [Q4 2018 report](#) confirmed Meliadine is ahead of schedule and under budget with production now expected early in Q2 2019 (compared to previous guidance of late in the second quarter of 2019). Open pit mining had commenced at Amaruq at the Whale Tail pit, commissioning of the long-haul truck fleet was underway, and production was on track for start-up in Q3 2019.



Pouring of the first gold brick at the Meliadine project signals mine is now advancing to commercial production.

Hope Bay gold mine in Nunavut achieves record Q4 production

TMAC Resources Inc. reported its operating and financial results for the fourth quarter and full year for 2018. The company achieved record gold production of 34,080 ounces during the fourth quarter. Gold sales of 31,380 ounces at an AISC(1) of US\$1,112/oz during the fourth quarter produced record revenues of \$51.4 million at cost of sales of \$44.3 million, resulting in a profit from mining operations of \$7.1 million. The net loss totaled \$13.5 million, or \$0.12 per share on a basic and fully diluted basis and Adjusted EBITDA totaled \$15.7 million.

“TMAC is pleased to report record performance in the fourth quarter and a very significant annual improvement from 2017. For the 2018 year we approximately tripled mine production, doubled Plant throughput and increased recoveries from 65% to 79% for the full year and 82% for the fourth quarter,” said Jason Neal, President and Chief Executive Officer of TMAC.

“Importantly, we are exploring the Hope Bay Belt again with at least \$20 million in expenditures to extend Doris, ready Madrid North for development, increase Boston reserves and resources and begin evaluating the most prospective and proximate to infrastructure of our more than 90 identified regional targets. By the end of 2019 we expect to publish a revised prefeasibility study for the development of Hope Bay which will incorporate the ongoing evaluation of the best risk-adjusted plan for generating stakeholder value,” he added.

The total gold production for the year was 110,970 ounces. A total of 32,750 ounces were poured during the fourth quarter, bringing the total ounces poured for the year to 111,050 ounces. [See the release for details](#) as well as information on:

- Processing plant: fourth quarter and January performance
- Processing plant: gravity concentrator upgrades and additions
- Doris mine: fourth quarter and January performance
- Madrid-Boston project permitting progress
- Mineral reserves and resources – December 31, 2018
- Financial results
- 2019 outlook
- Balance sheet

Also, in February, TMAC updated its [Hope Bay mineral reserves and mineral resources estimate](#).



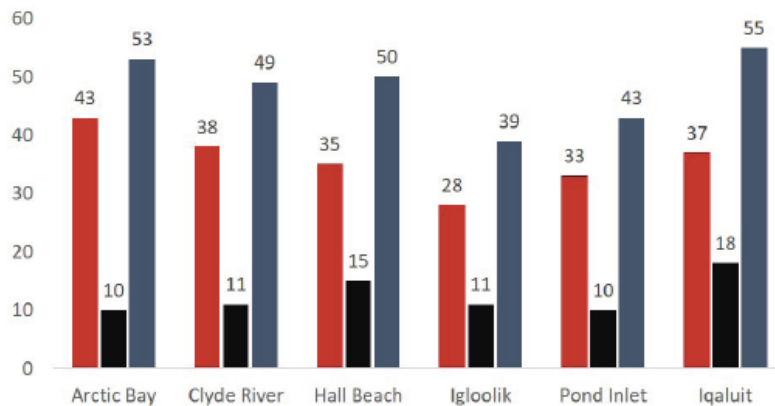
Doris North high grade gold, Hope Bay Mine, Nunavut.

Baffinland Iron Mine provides IIBA Report highlights

Q4 2018 IIBA Report

Highlights from October 1 – December 31, 2018

Inuit employed at the Mary River Project



\$3.2 million

paid to Inuit employees in Q4

29%



increase in total wages paid to Inuit women

Baffinland and QIA signed the amended



IIBA

Over 10,000 training hours for Inuit

10,000



Transport

to airports confirmed in Arctic Bay, Hall Beach, Igloolik and Pond Inlet with Inuit Firms



23 graduates



from the Work Ready Program

18 Inuit graduates from the Heavy Equipment Operator Program were hired by Baffinland



Want to **learn** more?

Email:

communityquestions@baffinland.com

Visit:

www.baffinland.com



YouTube



Baffinland

Minerals industry will participate in creation of new NWT Mineral Resources Act

Bill 34, the Mineral Resources Act (MRA) for the Northwest Territories (NWT) received second reading in the NWT Legislative Assembly in February and will now proceed to public consultation. This is a critically important bill for the future of the NWT's minerals industry.

The NWT & Nunavut Chamber of Mines will participate in the public consultations on Bill 34, representing the interests and needs of:

- Northern residents and businesses who want to ensure the MRA lays a strong foundation for the minerals industry and the important benefits it creates for the NWT
- Companies and individuals who are already working under the current mining regulations, and need their investments respected by the MRA
- New investors the NWT needs to attract in order to sustain and grow its minerals industry.

Today, more than ever before, actions are needed to foster the NWT's minerals industry. Our diamond mines continue to create significant benefits, with nearly 60,000 person years of jobs created to date, \$20 billion in expenditures, and billions of dollars in taxes and royalties to public and Indigenous governments. Our modern mines have provided unprecedented benefits to more communities, more businesses, and more Indigenous residents than ever in our history. For a variety of reasons, these benefits are at risk. For the Chamber's release, including tables, click [here](#).

Our mines are maturing and their ability to maintain strong benefits is slowing. Mine closures will reduce northern jobs, business, taxes, and the NWT economy overall.

Mineral exploration investment is needed to create new mines, which provides a renewable minerals industry. However, exploration investment is currently unhealthy, and for the twelfth year in a row, remains the lowest of all three territories.

More land than ever in our history has been closed to exploration, and without access to land and healthy investment, exploration cannot occur, and new mines cannot be found.

"It is critically important that the Mineral Resources Act is designed to help keep investment strong," said Gary Vivian, President of the Chamber. "We urge the Standing Committee, and those who appear before it, to insist that this legislation be crafted to make the NWT a more attractive jurisdiction for responsible, sustainable and beneficial exploration and mining investment. If it does not do that, we will have damaged the very foundation that supports the minerals industry and the continued strong mining benefits it generates for the territory. We northerners have much at stake in getting this right."

The Chamber encourages the public to read the very helpful GNWT information packages prepared by the GNWT to help understand what the Mineral Resources Act is meant to accomplish and the basics of how that could look in practice, and the reasons why these policies were chosen. The online series is available here: [Understanding the Proposed Mineral Resources Act](#).

New Tlicho road in NWT will benefit minerals industry, says Chamber

The awarding of the contract to construct the Tlicho All-Season Road, announced by the Government of the Northwest Territories, is a significant step in advancing the territory's transportation infrastructure and will benefit the minerals industry. [View the Chamber's release.](#)

The Tlicho Road will be a new 97-kilometre long, two-lane gravel highway to provide year-round access to the community of Whati from Highway 3 south of Behchoko. Construction of the road is expected to begin later this year and be completed in early 2022.

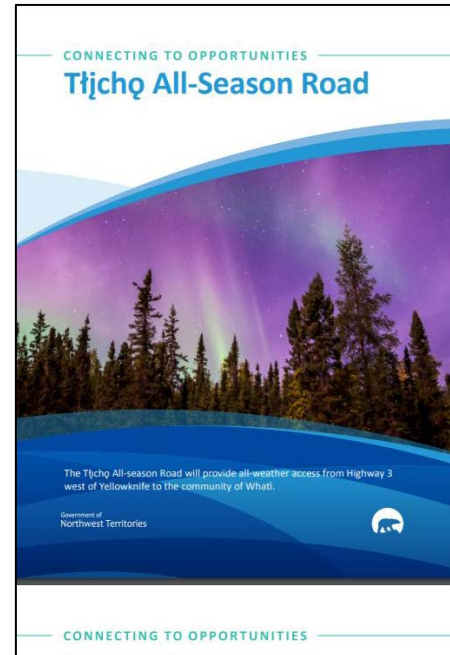
Under the agreement, the North Star Infrastructure GP (North Star) consortium will finance, design, build, operate and maintain the Tlicho Road under a Private-Public Partnership (P3) structure with the GNWT for a total contract value of \$411.8 million over a 28-year period. Infrastructure Canada is providing 25% of the \$213.8 million construction cost. North Star is a consortium consisting of Kiewit Canada Development Corp. and the Tlicho Government, together with Design-Build partners Peter Kiewit Sons ULC, Hatch Corporation, and Thurber Engineering Ltd. The Tlicho Government has invested approximately \$16 million to purchase a 20% equity interest in North Star.

"This new road, which includes Indigenous participation from the Tlicho Government, is great news for our industry and a positive step forward in addressing the infrastructure deficit in the Northwest Territories", commented Gary Vivian, President of the NWT & Nunavut Chamber of Mines. "It's very encouraging to see the Tlicho Road driving forward and is the kind of development we applaud and hope to see more of", he said. "Improved year-round road access will open up vast areas of prospective geology to lower cost exploration and it will improve the economic viability of the NICO and Indin Lake projects. A strong minerals industry is essential to sustain the economy of the NWT and bring jobs and business benefits to the North", he added.

All-season road access is a key factor for Fortune Minerals Limited to enable development of its NICO cobalt-gold-bismuth-copper property located 50 kilometres north of Whati. [See Fortune's release.](#)

As part of its proposed NICO development, Fortune plans to construct a spur road to connect with the Tlicho Road in order to enable concentrates produced from the mine to be transported south for processing to value added products.

The Tlicho Road will result in improved winter road access for Nighthawk Gold, which is focused on advancing a large land package in the Indin Lake Belt west of Wekweeti. The project includes the former Colomac gold mine that ceased production in 1997 and several satellite deposits.



North Star includes Indigenous participation with Tlicho Government equity interest. Construction is also required to procure a portion of project resources and labour from First Nations and local NWT businesses.

The NWT is comprised of 13% of the Canadian landmass and is underlain by prospective geology with significant mineral endowment but is also constrained by one of the largest infrastructure deficits. Government applications have been made for additional federal funding for highway and hydropower projects to help advance the NWT's economy, and to provide access to lower cost, green power needed to support development.

Funding announced for NWT's Slave Province access corridor and geoscience

On March 4, during the PDAC conference, the Federal and NWT governments announced initial funding for an access corridor and for increased geoscience in the NWT portion of the Slave Geological Province (SGP). NWT Minister Wally Schumann and Federal Parliamentary Secretary to the Minister of NRCan, Paul Lefebvre announced funding towards the planning of an all-season access corridor into the SGP as well as aerial geophysical surveys of the region. The surveys will lead to the development of mapping products used by mineral exploration companies to target their activity.

For the Development of the SGP Access Corridor:

- Canada is investing \$2.7M and the GNWT is investing \$678K for this two year project.
- Funding will go towards planning the development of an all-season access corridor into the Slave Geological Province (SGP).
- Existing mines are reached via a winter road and the immediate priority for the GNWT is to replace the southernmost section of the current winter road with an all-season gravel road.
- An all-season road could significantly improve the economics of many operating and potential resource projects by facilitating year-round access, as well as increasing the operating season of the winter road by at least 30 days.
- The scope of the project includes updating economic and mineral potential studies, initiating consultation with Indigenous groups, undertaking wildlife and vegetation studies along the proposed alignment and identifying gravel sources for future construction.
- As a result of the project, the GNWT will have further advanced planning and engineering work on the southernmost 179 kilometre section of the proposed road with the goal of beginning construction within five years.

For the Exploration Development Initiative

- CanNor is investing \$2.4M, the GNWT is investing \$280K, and industry partners are investing \$749K for this project.
- Funding will go towards the capturing and analysis of a high-resolution airborne geophysical survey aimed at furthering resource development in the SGP.
- The program will target underexplored areas for their economic potential, at a scale that can potentially indicate the presence of previously undiscovered mineral deposits.

- As a result of the project, mineral explorations will have access to publicly-available mapping products which will lead to renewed multi-commodity mineral exploration in the territory—ultimately contributing to economic growth.
- Previous similar work funded by CanNor led to the staking of numerous mining claims and exploration drilling programs by both major mining and junior mineral exploration companies in the SGP demonstrating that the area remains viable for diamond-bearing kimberlite discoveries.

The SGP represents an area in the eastern NWT and northwestern Nunavut covering approximately 190,000 square kilometres. The geological area is rich in mineral deposits, being recognized as having significant potential for gold, base metals, and diamond production.

Nighthawk provides Indin Lake exploration review and 2019 outlook

Nighthawk Gold Corp. is pleased to provide a [summary of exploration](#) work completed to date within its Indin Lake Gold Property, including its flagship Colomac Gold Project, and provide an outlook for 2019 milestones.

"The consolidation of the Indin Lake Gold Property and the acquisition of Colomac, were the two key milestones that enabled us to deliver on the vast potential of this undeveloped camp. We are fortunate to have had the resources necessary to continue the process that we started in 2009 into 2019. Each year of activity has delivered new and exciting successes that we have built upon," said Michael Byron, President and CEO. "We've advanced Colomac from a small little-known former producer, to a multi-million-ounce deposit with a new high-grade storyline, with the potential to deliver much more. We firmly believe that as Colomac grows so will the credibility of the gold camp that it resides in, and we are strategically positioned to reap the benefits. 2019 will again see us expand on all exploration fronts, committed to delivering on our vision for developing Canada's next gold camp."

Colomac is a large mineralized system, with current inferred resources of 50.31 Mt at an average grade of 1.62 grams per tonne gold. Approximately 50% of the sill has been explored to date leaving room for additional resource expansion opportunities. Regional targets provide upside for the camp – there are at least 7 priority satellite prospects that have the potential to provide high-grade feed opportunities to augment any future production scenario at Colomac.

Nighthawk has received its land use permits and water licences approving its exploration activities over the next five years, expiring in February 2024, and which are extendible up to February 2026. The permits cover all claims and mining leases within the company's 100% owned Indin Lake Gold Property. Exploration activities are expected to commence mid-March, with a minimum 25,000 metre drill program split relatively evenly between Colomac and its high-level regional targets.

Nighthawk's goals and objectives moving forward include:

Colomac

- Target of +3Mozs of resources with the completion of the 2019 drill program
- Domaining of high-grade zones for subsequent resource estimates and elevating them to the indicated resource category

- Metallurgical test-work on additional areas within the sill to assess potential variabilities and overall expected recoveries as well as generate a sound statistical framework for the heap leach opportunity
- Complete an internal scoping study to assist with future exploration activities, and provide the base work for any future PEA

Regional targets

- Maiden resource estimate for the Damoti Lake Gold Deposit
- Drill high-priority regional targets to advance them up the value chain
- Continue regional exploration and prospecting work to identify new targets and prioritize existing targets to drill-ready status

At Colomac, in addition to 85,178 metres of historical drilling, the company drilled a total of 56,216 metres between 2012 and 2017 resulting in the June 2018, NI 43-101 updated resource estimate outlining 50.31 million tonnes at an average grade of 1.62 gpt Au for a total of 2.6 million ounces of inferred resources.

For more details on the Indin Lake exploration results, see the company's [February 19 release](#).

For sale! Mactung deposit and Cantung Mine – buyers sought

With the Tungsten market returning to form and a forecast of strong future growth, the governments of the NWT and Canada are seeking a buyer for the Cantung mine and Mactung deposit, according to a [GNWT release](#).

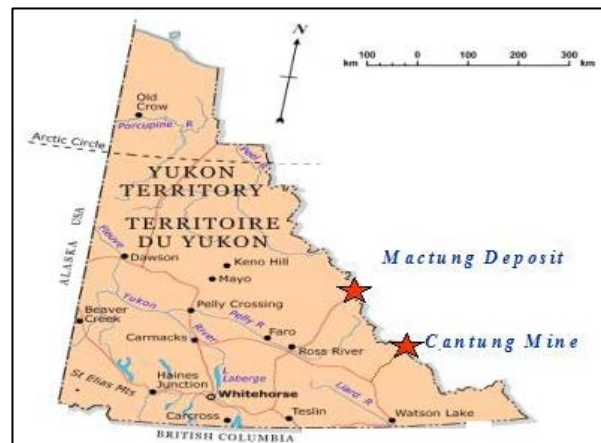
The joint sales approach is designed to maximize benefits to NWT residents by combining the significant resources of the GNWT-owned Mactung deposit with the infrastructure already in-place at the Cantung mine site - currently under the care and maintenance of the federal government.

Cantung and Mactung include 113 Mineral Claims and 38 Mineral Leases straddling the border of the Northwest Territories and Yukon. The Department of Industry, Tourism and Investment has maintained all of these in good standing.

The GNWT took possession of the Mactung Tungsten deposit in 2015 with the expressed intent of selling it when markets recovered.

To enhance its marketability, abandoned waste and hazardous materials were removed from the Mactung site last summer.

The NWT Geological Survey has also completed field studies to increase geological information and understanding of the deposit for potential buyers.



Incentivizing responsible development to make the most of the NWT's mineral potential is part of the GNWT's mandate handed down by the 18th Legislative Assembly.

Rio Tinto Diavik mine announces scholarship for women

Rio Tinto Diavik Mine announced Yellowknife Community Foundation funding with a new scholarship for northern women in sciences, technology, engineering and math (STEM).



Rio Tinto Diavik Mine announced Yellowknife Community Foundation funding with a new scholarship for northern women in sciences, technology, engineering and math (STEM). Bronwyn Watters, president of YKCF, accepted the funding at the annual YKCF fundraising gala February 9. Front row from the left, Winter Bailey, Bronwyn Watters, Kenna Snow, Lindsey Dempsey, Angela Big and Tara Marchiori. In the back row from the left, Moira Gustafson, Cara Benoit, Amber Robertson, Mellisa Mercredi and Laura Tremblay-Davey. Trudy Hause photo courtesy of YKCF

Mountain Province begins Kennady North winter exploration program

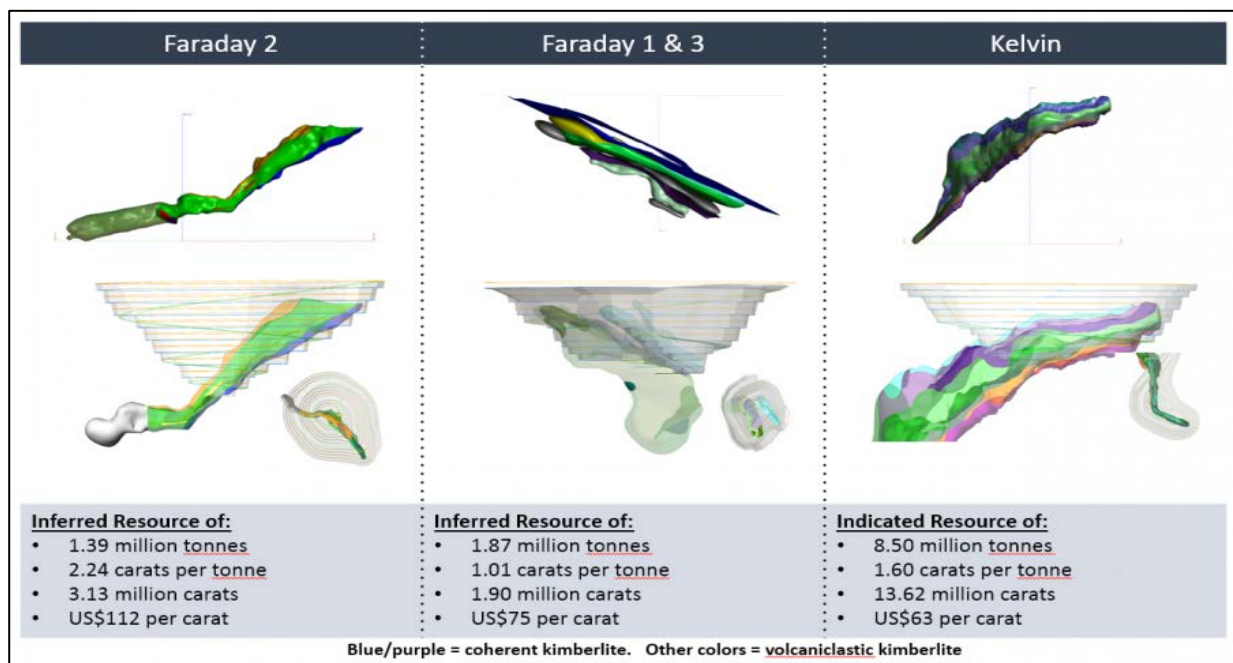
Mountain Province Diamonds Inc. announced [winter exploration program](#) at its Kennady North Project has begun. The Kennady North Project encompasses 67,164 hectares of prospective claims and leases that are directly adjacent to the Gahcho Kué Mine and are 100%-held by the company. The winter program will focus on drill-testing several combined indicator and geophysical targets located west and southwest of the Hearne kimberlite, which is part of the Gahcho Kué Mine. The drilling program plans for 2,000 meters of drilling to test the exploration targets.

In the latter half of 2018, the company compiled all the in-house data acquired since the start of the Kennady North Project into a user-friendly GIS format. Proprietary data relevant to the Kennady North Project was also acquired from GGL Resources Inc. through a lease and one-time cash payment. The combined database was then linked to a recently-completed glacial mapping and sampling program that incorporated a LIDAR survey of the project area. The resulting product was a glacial till ranking scheme that could be combined with geophysical data to generate target areas for follow-up sampling and drilling. Several of these target areas are the focus of exploration in 2019.

"In addition to the successful advancement of the Kelvin and Faraday Kimberlites, we are very pleased to have completed the compilation of all the regional exploration data into a consolidated database which will provide the basis for all future work on our wholly owned properties near the GK Mine. We have also augmented our database with new interpretations of the surficial geology in order to prioritize all historical, as well as newly acquired data," said Tom McCandless, vice president of exploration.

The company has also completed the caustic fusion recovery of microdiamonds from core recovered in drilling programs conducted on Faraday 2 in 2017 and 2018. The drilling programs extended the Faraday 2 kimberlite by over 150 metres to the northwest. Geologic modeling of this northwest extension has confirmed that lithologies identified in the upper portion of Faraday 2 are also present in the extension. The microdiamond results generated 10.4 carats of commercial-sized diamonds and are summarized in the release.

Drill core from the northwest extension was shipped to SRC (Saskatoon, SK) for caustic fusion recovery of microdiamonds. SRC has conducted all of the caustic fusion analyses for the Kennady North Project and is an ISO/IEC 17025 accredited laboratory for caustic fusion analyses.



Kennady North's Faraday and Kelvin pipes. Image credit: Mountain Province Diamonds

Osisko Metals intersects 18.66% zinc + lead over 20.73 metres at Pine Point

Osisko Metals Incorporated [announced assay results](#) from 14 drill holes completed in the W-85 area within the North Zone at Pine Point.

Highlights include drill hole W85-18-PP-005 that intersected 12.17% zinc and 6.49% lead over 20.73 metres, hole W85-18-PP-011 that intersected 9.09% zinc and 7.65% lead over 37.62 metres and hole W85-18-PP-001 that intersected 3.24% zinc and 8.32% lead over 60.37 metres.

“We are still receiving assay results from the 2018 and 2019 definition drilling campaign, totalling over 40,000 meters of additional drilling completed after the cut-off date for the December 2018 MRE. These results will be incorporated into the next MRE planned for 2019. The drilling reported today continues to confirm mineralization and improve the drill spacing needed to bring Inferred Mineral Resource into the indicated category,” said Jeff Hussey, President & CEO.

The newly modelled W-85 and YBM pits are collectively known as the W85 deposit. The western W-85 pit currently measures 250 by 150 metres and the eastern YBM pit currently measures 200 by 100 metres. The two pits occur within the North Zone and are located 20 kilometres west of the electrical sub-station within 400 metres of the end of a main haul road. Reported in the 2018 NI43-101 Inferred MRE for the North Zone are 13.1 million tonnes of 4.26% zinc and 1.87% lead.

NorZinc files post-EA report for all season road, commences final permitting

NorZinc Ltd. announce start of the last stage of the permitting process for its All Season Road access to the Prairie Creek Mine, filed a post-environmental assessment information package with the Mackenzie Valley Land and Water Board (MVLWB) and Parks Canada.

The filing of the Information Package follows receipt of a positive recommendation for the All Season Road from the Mackenzie Valley Environmental Impact Review Board on September 12, 2017 and subsequent acceptance of this recommendation by the Responsible Ministers on October 9, 2018.

The Information Package includes an Updated Project Description, that describes the entire All Season Road Project, with a detailed description of Project components – comprising drawings, maps and supporting documentation including draft management and monitoring plans, profile drawings along the entire road alignment, updated general arrangement plans for major bridges and other crossings, as well as lists of studies undertaken to date and commitments, security estimates for reclamation, suggested conditions of the Land Use Permits, and a Project schedule.

Once the regulators have determined that the content of the Information Package completely satisfies their initial requirements, the company has been advised to expect a process timeline of approximately 7 months, subject to review schedules, and the possible need for further information or additional public reviews. This process timeline maintains the schedule announced in August 2018, enabling road construction to commence Q1 2020.

Process

In order to recommence the water licensing and land use permitting process of the All Season Road, the MVLWB and PC required the submission of this information package. Filing of the Information Package commences the final process leading to the issuance of All Season Road permits. During this process, there will be a technical workshop, comments from various reviewers and responses from NorZinc, a possible public hearing, distribution of draft All Season Road permits for comment, and lastly issue of final All Season Road permits by the MVLWB and Parks Canada.

Indigenous Support

Following the recent signing of the Traditional Land Use Agreement with the Nah?a Dehé Dene Band (“NDDB”), NorZinc also reports it is making progress on two other Indigenous Agreements relating to the All Season Road. Discussion with the Liidlii Kue First Nation (“LKFN”) regarding a Road Benefit Agreement and with the NDDB and LKFN on an Environmental Management Agreement are well advanced, as are draft agreements. [View release](#).

PDAC awards for Avalon executive and Chidliak discovery team

There was a strong northern presence at the annual Prospectors and Developers Association of Canada awards ceremony in Toronto earlier this month.

For his contribution to building awareness of Indigenous issues, his support of geoscience education in Canada, and his exploration success, Don Bubar, Avalon Advanced Materials president and CEO, received the [PDAC Distinguished Service Award](#). He has been President and CEO of Avalon Advanced Materials since 1995, working to develop three advanced stage projects across Canada, including the Nechalacho project in the NWT, with the potential to provide critical metals and minerals for new technology applications.

This award recognizes an individual who has achieved one or more of the following: made a substantial contribution to mineral exploration and mining development over several years; given considerable time and effort to PDAC; made outstanding contributions to the mineral industry in the field of finance, geology, geophysics, geochemistry research, or a related activity.

During Don Bubar’s 40-year career as a geoscientist he has contributed to successful exploration in Canada and been a leading advocate for geoscience education. But his most enduring legacy may be his role in forging a better, more productive relationship between Indigenous groups and the minerals industry. As founder and head of the PDAC’s Aboriginal Affairs committee, Don recognized the urgent need to bring the two groups together in dialogue about how exploration and mine development could support local communities through training, jobs, and business development.

Don graduated from McGill University with a B.Sc. in geology in 1977 and completed his M.Sc. at Queen’s University in 1981. He



*Avalon Advanced Minerals
President and CEO Don Bubar.
PDAC photo*

worked as an exploration manager for Aur Resources from 1984 to 1994 where, as Vice-President of Exploration, he helped guide the discovery of the Louvicourt copper-zinc mine near Val d'Or, Québec.

Nunavut's Chidliak diamond discovery team recognized

For the discovery of the Chidliak diamond district on Baffin Island, Nunavut, the discovery team received the [PDAC Bill Dennis Award](#).

Peregrine discovered the first kimberlites in the Chidliak diamond district of southern Baffin Island, Nunavut in 2008. By the time De Beers Canada acquired the junior a decade later, 74 kimberlites had been discovered and a positive preliminary economic assessment (PEA) had been released showing that two of the kimberlites could support an operation producing 16.7 million carats over a 13-year mine life.

In the early 2000s, BHP Billiton focused its efforts on southern Baffin Island as a prospective area for diamond exploration. Although most age-dating information suggested that the basement geology was not ideal to host economic diamond deposits, exploration manager Geoff Woad was sceptical of the studies and felt strongly that BHP should target the region. Looking to leverage its diamond exploration spending, BHP formed a strategic alliance with Peregrine to explore Baffin Island for diamonds and metals. After conducting a jointly-funded regional sampling program in 2005, enough kimberlite indicator minerals (KIMs) were recovered to justify a follow-up program.

In 2006, Peregrine took responsibility for sole funding, operating and property acquisition, leaving BHP with certain back-in rights. After a successful 2006 follow-up program the first claims were acquired in early 2007. The field program confirmed high diamond potential on the property. Chairman Eric Friedland kept the funding taps flowing during this period, while President Brooke Clements prioritized the project over all others in the junior's stable during the tough equity markets of 2008.

By 2008, glacial till sampling had sufficiently outlined a target area where Peregrine initiated the first airborne geophysical survey. The diligent field crew combined geophysical interpretation and prospecting to identify the first three kimberlites at Chidliak on a real-time basis. The first kimberlite yielded a two carat gem quality diamond that same year.

Encouraged by the finds in 2008, BHP exercised its back-in rights to acquire a joint-venture interest and funded exploration programs for the next three years resulting in a rapid pace of kimberlite discovery. When BHP decided to exit the diamond business in 2011, Peregrine purchased their entire 51% interest in the project for \$9 million. Peregrine also purchased BHP's 2% retained royalty.

Persistent, methodical exploration paid off and by 2016 Peregrine had discovered a total of 74 kimberlites, the majority of which are diamondiferous. Today, it is now well-established that the Chidliak kimberlite field is hosted by old Archean terrain, confirming Woad's early suspicions about the basement geology. Peregrine was able to hone in on the most prospective of the kimberlites and included two of them in a PEA released in mid-2018. The PEA outlines an

open pit mine with a capital cost of \$521 million, including a \$95 million access road from Iqaluit, with an after-tax NPV of \$669 million and an IRR of 31.2%.

In September 2018, De Beers Canada acquired Peregrine and all of its Canadian projects in a friendly deal priced at 24 cents per share, or \$107 million. De Beers is planning to apply the “FutureSmart” approach to mining at Chidliak using innovative techniques developed by its parent Anglo American to shrink mining’s footprint and lower energy costs.

De Beers group consolidates its mining assets in South Africa and Canada

De Beers Group announced an initiative to consolidate its mining assets in South Africa and Canada into one business called De Beers Group Managed Operations.

De Beers Group Managed Operations will focus on Venetia Mine, Gahcho Kué Mine and De Beers Marine under one leadership team. The restructuring was necessitated by the company’s reduced mining footprint in South Africa and Canada due to the closures of Snap Lake and Voorspoed Mines, along with the imminent closure of Victor Mine during May 2019.

Nompumelelo (Mpumi) Zikalala will be appointed to the new role of Managing Director for De Beers Group Managed Operations, based in Johannesburg. She will be supported by Allan Rodel in the newly created role of Head of Operations, and a management team based in Johannesburg, but with additional support services in Canada.

Mpumi is an accomplished leader with more than 18 years’ experience in the mining industry. She began her career as an Ore Processing Engineer at the Cullinan Diamond Mine in 2001 and has held numerous roles as General Manager for De Beers Kimberley Mines and Voorspoed Mine, and as Senior Vice-President for De Beers Sightholder Sales South Africa.

Mpumi’s role will replace those currently held by Phillip Barton, CEO, DBCM, and Kim Truter, CEO, De Beers Canada, who will both leave the organization to focus on new opportunities.

All three territories gain ground in annual Fraser mining companies survey

In its [annual mining company survey](#), the Fraser Institute reports all three of Canada’s territories improved their global rankings.

The Northwest Territories improved from 21st last year in overall attractiveness to 10th this year and Nunavut improved its rank from 26th to 15th. Yukon rose from 13th to 9th.

The Fraser Institute Annual Survey of Mining Companies, 2018, rates 83 jurisdictions around the world based on their geologic attractiveness for minerals and metals and the extent to which government policies encourage or deter exploration and investment. This year, the state of Nevada ranks as the most attractive jurisdiction in the world for mining investment, followed by Western Australia, Saskatchewan (3rd) and Quebec (4th).



The institute received 291 responses for the survey, providing data to evaluate 83 jurisdictions. Some 91 jurisdictions were evaluated in 2017, 104 in 2016, 109 in 2015, and 122 in 2014.

The survey is an attempt to assess how mineral endowments and public policy factors such as taxation and regulatory uncertainty affect exploration investment. The survey was circulated electronically to approximately 2,600 individuals. Survey responses have been tallied to rank provinces, states, and countries according to the extent that public policy factors encourage or discourage mining investment.

The number of jurisdictions include varies due to commodity prices and sectoral factors. A [survey executive summary](#) is also available.

2019 NWT Diamond mine ice road on track

The winter road project is progressing on schedule with over half of the projected freight being successfully delivered to Joint Venture partner mine sites.



Exploration & Development news briefs

Aston Bay Holdings announced the [appointment of Elaine Ellingham](#), M.Sc., MBA, PGeo, to the company's Advisory Board. Ms. Ellingham is a geologist with over 35 years' experience with major and junior mining companies in exploration, business development, investor relations and senior executive roles. She spent eight years with the Toronto Stock Exchange serving in various capacities and has held directorships over the past ten years for several junior explorers through to mid-tier producers, where she has been a major contributor to strategic direction including hands-on with management in several situations. This included serving as a Director of Richmond Mines for eight years, six as lead director, as well as stepping in as interim CEO in 2014, and through to its recent take-over by Alamos Gold. She is currently a Director of the Prospectors and Developers Association and a member of the Ontario Securities Commissions' Small and Medium Enterprises Advisory Committee. She is currently an active director on the boards of Alamos Gold, Aurania Resources, and Almaden Minerals.

Auryn Resources Inc. has received [results from the machine learning targeting](#) exercise for the Committee Bay high-grade gold project in Nunavut. The machine learning technology is provided by Computational Geosciences Inc. (CGI) and their proprietary VNet segmentation deep learning algorithm.

Highlights:

- total of twelve new targets were generated, including:
- Two targets overlapping with Auryn's geologist derived targets, adjacent to the Aiviq and Kalulik discoveries.
- Two targets creating east and west extensions of the Three Bluffs deposit.
- Multiple targets hidden beneath shallow lakes and glacial-fluvial cover.
- A third structure has been identified (in addition to the Three Bluffs structure and Aiviq and Kalulik structure) with 15 kilometers of strike length.

Auryn also announced the [appointment of Jeffrey Mason](#) to its Board of Directors. Mr. Mason is a corporate and financial professional with over 25 years of experience serving public companies in the mining and mineral exploration industry. He is a Chartered Professional Accountant, holds an Institute of Corporate Directors designation, and has extensive experience in exploration, development, construction and operation of precious and base metals projects in the Americas, Asia and Africa.

Evrin Resources Corp. [announced surface sampling results](#) from the company's two-year exploration alliance with a wholly owned subsidiary of Newmont Mining Corporation. The Alliance is focused on a 23,250 square kilometre prospective land package along the border of the Yukon and Northwest Territories, Canada, to search

for world-class gold deposits and has resulted in the acquisition of the Astro gold project.

Exploration Highlights

- The Astro Project includes a 9.5 kilometre-long trend of soil and rock chip gold anomalism with significant gold results from limited surface sampling of gossans at the Radio and Microwave prospects. Chip sampling at the Radio prospect returned 11.6 grams per tonne ("g/t") gold over 18.0 metres including 32.1 g/t gold over 6.0 metres
- Chip sampling at the Microwave prospect returned 4.68 g/t gold over 7.5 metres including 6.73 g/t gold over 3.0 metres. Approximately 40 metres to the east is a second zone of mineralization grading 2.25 g/t gold over 11.0 metres
- The mineralized intersections at the Radio and Microwave prospects are open along strike in both directions

Evrin also announced it has granted 200,000 incentive [stock options](#) to employees under the terms of the company's stock option plan. The stock options are exercisable at a price of \$0.32 per share for a period of five years. The foregoing is subject to regulatory acceptance of the TSX Venture Exchange.

Evrin is a precious and base metals project generator, with early stage exploration projects and a database covering substantial areas of Mexico, western Canada and portions of southwestern United States.

Margaret Lake Diamonds [reports the company has applied for a Land Use Permit](#) at its Kiyuk Lake Gold Property located in southern Nunavut. Currently, Kiyuk Lake has a Type B water license that is valid until June 2022. The Type B license allows the company to access local water sources for camp and drilling use.

Upon receipt of the LUP, the company plans to construct an exploration camp in late March followed by up to 5,000 meters of diamond core drilling in spring 2019. Ground magnetic surveys to further define high priority drill targets are also being planned. The drill program will focus on expanding high-grade Rusty zone along strike and to depth as well as testing the highest priority drill targets.

The Kiyuk Lake land package consists of 70 contiguous mineral claims encompassing over 59,000 hectares and offers year-round accessibility to a 35-person base camp. Significant past exploration, beginning with Newmont Mining in 2008 and most recently Cache Exploration in 2017, has resulted in over 13,000 meters of core drilling and delineation of four mineralized zones and five additional high priority target areas that have yet to be drill tested. Mineralization has been traced across a 13-kilometer strike length and remain open in all directions. The main focus of exploration to date has been on the

high-grade Rusty zone. 2017 drilling within the Rusty zone returned broad intercepts of gold mineralization including:

- 8m of 26.48 g/t gold from 108m, including 2m of 92.76 g/t gold from 110m, in DDH KI17-001
- 38m of 1.16 g/t gold from 58m, including 8m of 3.98 g/t gold from 68m, in DDH KI17-002
- 122m of 1.82 g/t gold from 188m, including 15m of 3.34 g/t gold from 294m, in DDH KI17-004
- 249m of 1.6 g/t gold from 8.2m in DDH KI13-004 (no cut-off)

NxGold Ltd. provided [exploration activity guidance](#) for the first half of 2019. Meeting requests, applications and notices required for the execution of exploration activities throughout 2019 have been submitted to the appropriate regulatory bodies and organisations. The expectation is that in 2019 NxGold will be able to resolve the current inability to explore at its Kuulu project in Nunavut and at the same time will advance select targets at the Mt. Roe Gold Project in Australia.

The Kuulu Project has received a positive Nunavut Planning Commission (NPC) conformity decision, a positive Nunavut Impact Review Board (NIRB) decision and a Type B Water License from the Nunavut Water Board (NWB) for water use for camp and drilling purposes. In addition, a land use license from the Lands Department of the Kivalliq Inuit Association (KIA) is required for NxGold to undertake exploration activities on the Kuulu project area. This licence has not yet been obtained but the company continues to work with the KIA and the local community to obtain the necessary licence which has been granted the previous seven years on the same tenements. The underlying Earn-in Agreement with Meliadine Gold Ltd. (private) is in good standing and remains under force majeure until the company can access the ground under the Land Use License terms. The underlying Mineral Exploration Agreement with Nunavut Tunngavik Inc. also remains in good standing with rents paid up to date with expenditure requirements under force majeure due to the inability to undertake work.

Rover Metals Corp. will make a best effort basis to [raise a private placement](#) for gross proceeds of up to CAD\$1,250,000 at CAD0.08 per unit (the “\$0.08 Unit Financing”). The \$0.08 Unit Financing contemplates Rover Metals raising aggregate gross proceeds of up to CAD1,250,000 via the issuance of up to 15,625,000 units of Rover Metals (each a “Unit”). Each Unit of Rover Metals is at a price of \$0.08 per Unit and consists of one Rover Metals common share and one Rover Metals common share purchase warrant exercisable into one Rover Metals common share at \$0.15 for a period of 24 months following the date of issuance.

Sabina Gold & Silver Corp [announced budget plans and activities for 2019](#). Sabina is advancing its high grade, permitted project towards a production decision with measured initiatives within the company’s financial resources. The 2019 budget enables the company to

continue its two-pronged approach: completing project development activities that continue to reduce execution risk as well as continuing high value exploration. The 2019 budget totals approximately \$41 million in expenditures, including certain discretionary expenditures of \$6-8 million for earthworks programs at Goose. The discretionary spending will be assessed during the year and depending on prevailing market sentiment could be deferred resulting in a larger cash balance at the end of 2019.

The 2019 budget delivers:

1. Additional de-risking of mine construction by completion of:
 - Winter-ice-road construction and haulage of materials to Goose site from the port facility at Bathurst Inlet.
 - Detailed selection of process plant equipment and the major vendors’ suppliers.
 - Development of an engineering, procurement, and construction (EPC) contract for the process plant, including fixed pricing and performance guarantee. The EPC contract provides greater certainty of costs and schedule than the method of delivery proposed in the feasibility study.
 - Goose site construction, including earthworks to prepare the process plant site, pads and access roads
 - Detailed engineering to support initial mine development, bulk earthworks, process plant and tailings storage facility construction and completion of issued-for-construction drawings
 - Procurement of the process plant major equipment certified drawings and ~1.0 million litres of fuel for 2019 and some initial 2020 activities
 - A sea-lift of construction equipment to be delivered to the Port facility in the summer of 2019
2. An exploration program of ~8,000 meters commencing in the spring, focused on Nuvuyak, Hook and other targets primarily at Goose
3. Advancement of remaining minor licenses and authorizations.

Silver Range Resources has [received prospecting permits covering a large gold target](#) near the Meadowbank Mine in Nunavut. The Atlantis Project consists of two prospecting permits covering 31,778 hectares on the east half of NTS Sheet 66H14. The property covers 21 square kilometres of highly prospective Archean mafic volcanic rocks which were first identified on Geological Survey of Canada maps published in 2002. The property is 55 km north-northwest of Agnico Eagle’s Amaruq Deposit, currently being prepared for production. Amaruq in turn is 54 km north-northwest of the Third Portage and Vault Deposits.

The Meadowbank and Vault Deposits at the Meadowbank Mine are hosted in a mixed succession of Archean metavolcanics and metasedimentary rocks whereas the Amaruq Deposit is hosted in Archean mafic and ultramafic rocks. For the complex as a whole, Agnico Eagle declared

Proven and Probable Reserves as of December 31, 2017 of 24.771 Mt @ 3.40 g/t Au. In the early 1990's, Comaplex Resources Ltd. discovered by prospecting the showings which became the Meadowbank, Vault and Amaruq Deposits. The company also announced a [2,750,000 private placement](#).

TerraX Minerals Inc. [announced a land use permit](#) has been issued by the Mackenzie Valley Land and Water Board approving TerraX's exploration plan on all the land holdings of its Yellowknife City Gold property. The new LUP replaces two smaller LUPs and provides for water usage required in exploration drilling. The new permit is effective until January 2024, extendible to 2026, and covers all of TerraX's claims and leases, providing complete flexibility in planning and carrying out long term exploration plans on the entire 70 kilometer length of the YCG property. President and CEO David Suda stated: "This new land use permit is much better than the two previous permits that TerraX has worked under as it allows the company to drill anywhere on its 783 square kilometer property. We are also looking forward to results from the historical core assays from 5 holes ahead of our refined 2019 drill targeting which we will complete and announce in the coming weeks."

In anticipation of the summer drill season, TerraX is formulating a drill plan to be carried out under the new LUP. Historical core recovered by TerraX (press release Jan 14, 2019) has recently been catalogued and a select portion of the core has been logged and sampled. Information from this program will help inform final drill plans for the summer of 2019. Under the LUP permit

conditions, TerraX is capable of drilling up to 20,000 meters of core during the summer/fall season.

The technical information contained in this news release has been approved by Joseph Campbell, the Chief Executive Officer of TerraX, who is a Qualified Person as defined in "National Instrument 43-101, Standards of Disclosure for Mineral Projects."

Western Atlas Resources [announced the definition of a second set of drill targets](#), in both existing and new target areas thus significantly expanding the prospecting areas of interest targeted by the company at its Meadowbank Gold Project.

Drill Targets Highlights:

- These additional drill targets were defined in the North East part of Block B at the company's Meadowbank Project ("Target B2"), as well as within the recently announced Target B1 (please see the company's press release dated January 23, 2019)
- Early indications show that Western Atlas' Meadowbank gold project-Block B hosts similar geological settings as the Meadowbank gold producing mine and Amaruq deposit
- Target B1 is located approximately 35 km and 85 km south of the Agnico Eagle's Meadowbank gold producing mine and Amaruq deposit and has been defined along same geological formations such as banded iron formation (BIF) and shear zones with current total strike lengths of 15 km and 6 km, respectively

Welcome new members!

Please join us in welcoming the newest Chamber of Mines members!

- **Carrefour Nunavut**, based in Iqaluit, Nunavut, is an education, employment/HR and training provider. Contact Executive Director, Valerie Helen Gagnon direction@carrefournunavut.ca (867 979 2800 ext 202) and www.carrefournunavut.ca.
- **Evrin Resources** is an exploration company based in Vancouver, British Columbia. Contact President and CEO, Paddy Nicol paddy@evrimresources.com (604 248 8648). Evrim's northern project is Astro, an alliance with Newmont Mining, and is in the Sahtu region. Website is www.evrinresources.com.
- **HCC Group**, based in Saskatoon, Saskatchewan provides services in the mining, civil, and mechanical construction sectors. The company has worked on many projects in remote locations all over the world. Contact President and CEO, Ken Hamilton khamilton@hcc.ca (306 652 4168). Website is www.hcc.ca.
- **Sirius Wilderness Medicine**, based in Ste-Adele, Quebec, provides wilderness first aid and wilderness first responder programs. Sirius has instructors across Canada with programs adapted for camp staff, trip leaders, and other programs. Contact Director of Projects Yannick Sisle, ysisla@siriusmed.com (514 509 2112) and www.siriusmed.com.

Member news releases this past month

- 4 March 2019 [Osisko Metals intersects 18.66% zinc + lead over 20.73 metres at Pine Point](#)
- 4 March 2019 [Nighthawk Provides review of Indin Lake exploration activities and outlook for 2019](#)
- 4 March 2019 [Rover Metals announces private placement financing](#)
- 27 February 2019 [Meliadine pours first gold](#)
- 27 February 2019 [TerraX receives land use permit from MVLWB for drilling program](#)
- 27 February 2019 [Mountain Province Diamonds begins Kennady North winter exploration program](#)
- 27 February 2019 [Silver Range Resources Ltd. announces private placement](#)
- 25 February 2019 [Aston Bay announces appointment of Elaine Ellingham to advisory board](#)
- 22 February 2019 [Sabina announces 2019 budget to focus on de-risking activities and exploration on the Back River Gold project in Nunavut](#)
- 21 February 2019 [TMAC reports record Q4 gold production](#)
- 21 February 2019 [TMAC reports updated mineral reserves & mineral resources estimate, Hope Bay](#)
- 20 February 2019 [Western Atlas defines additional drill targets, expands prospecting targets areas at its Meadowbank Gold Project](#)
- 20 February 2019 [NorZinc files post-EA report for all season road commences final permit process](#)
- 19 February 2019 [Nighthawk makes additional high-grade discoveries at Indin Lake Gold property](#)
- 19 February 2019 [NxGold provides exploration update](#)
- 19 February 2019 [New targets identified through machine learning at Auryn's Committee Bay project](#)
- 18 February 2019 [Evrin grants stock options](#)
- 15 February 2019, [Northwest Territories Government signs contract to construct Tliche road](#)
- 15 February 2019 [Auryn appoints Jeffrey Mason to its board of directors](#)
- 14 February 2019 [Agnico Eagle reports fourth quarter and full year 2018 results](#)
- 7 February 2019 [Silver Range stakes Atlantis property near Meadowbank Mine](#)

Members Corporate Presentations

- [North Arrow Minerals, March 2019](#)
- [Osisko Metals, March 2019](#)
- [Avalon Advanced Materials, February 2019](#)
- [Sabina, January 2019](#)

Calendar of Events

- [NAPEG Professional Development Symposium](#), *Succeeding in an Uncertain Environment*, March 14-15, 2019; the Explorer Hotel, Yellowknife, NT. To learn more, click [here](#), register [here](#).
- [Nunavut Mining Symposium](#), *Rocks, Roads & Resources*, April 1-4, 2019; Iqaluit, NU. To learn more click [here](#).
- [CIM 2019 Convention & EXPO](#), *The Changing Face of Mining*, is a line-up of expertly-led short courses, 3 full days of technical presentations and a world-renowned trade show. This year's convention is from April 28-May 1, and will focus on information, intelligence and innovation. Learn more and register [here](#).

Application deadline approaching for NWT Mineral Incentive Program!

The Government of the Northwest Territories Mining Incentive Program provides funding to prospectors and exploration companies who propose new exploration projects or are already carrying out NWT mineral exploration work.

Funding is available under the Prospector Mining Incentive Program and the Corporate Mining Incentive Program.

The 2019-2020 **application deadline** for both programs is **April 26, 2019**. Eligible expenses are those incurred during the period April 1, 2019 to March 31, 2020.

The MIP is an initiative of the Northwest Territories Mineral Development Strategy and was developed in response to the findings of the stakeholders' engagement panel. Visit the [Northwest Territories Geological Survey MIP site](#) for more details.



Chamber of Mines' Social Media

Follow via live Twitter and Facebook links.



Northern Mining News is written and published by the
NWT & Nunavut Chamber of Mines
for free distribution electronically to
those interested in the northern minerals industry.
Subscribe on our website.


For further information contact us at:
103-5102 50 Ave, Yellowknife, NT X1A 3S8
Email: info@miningnorth.com
Website: www.miningnorth.com



MiningNorthWorks! – Who, what, when, where, why about northern mining,

To learn more about all things mining, check out our new [MiningNorthWorks!](http://www.miningnorthworks.com) public awareness program (www.miningnorthworks.com).

Please pass it on to associates, staff, neighbours and friends!

EXPLORE FOR YOUR CAREER





ERIC TUNGILIK

ASSISTANT SURVEYOR
MARY RIVER IRON MINE, NUNAVUT


Eric Tungilik, a graduate of Baffinland Iron Mine's Work Ready Program, joined Baffinland in 2016 as a GeoTech.

He now plays an important mine operations role as an assistant surveyor. Eric's goal is to eventually become a lead surveyor. He continues to develop his skills. At the mine site, he has completed emergency rescue team training and digital mapping training. His favourite parts of the job are learning new things every rotation, the positive atmosphere around the camp, and the two-weeks off he gets to spend with his family. With his love for mining, continued interest in training, and a strong work ethic, Eric continues to advance his career at Baffinland. The job responsibilities include surveying ore stockpiles, run of mine, and waste rock, and laying out blast holes.

Interested in learning more about this mining career or the over 100 careers in the North's minerals industry?
VISIT MININGNORTHWORKS.COM

"If you are still in high school, the first step is to finish school. If you are finished school, talk with people and learn more about Baffinland. It's a good place to work."

NWT & Nunavut Chamber of Mines:
MININGNORTHWORKS.COM



Mines & promising Northwest Territories mine projects

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

Project Name	Owner(s)	Commodity	Description	Status
Ekati Mine	Dominion Diamond Mines , and Dr. Stewart Blusson	Diamonds	Canada's first and largest diamond mine, 310 km. NE of Yellowknife. Open pit and underground. Mine life potentially to 2041. Workforce in 2017, 1,734. The Ekati mine consists of two joint ventures, the core zone joint venture and the buffer zone joint venture, in which the company has interests of 88.9% and 72.0%, respectively. Reserves at 31 January 2017 were 68.9 million tonnes at 1.5 carats per tonne for 105.4 million carats. Inferred mineral resources were 20.6 million tonnes at 1.0 carats per tonne for 19.8 million carats. Additionally, Fox Deep indicated and inferred resources of 51.0 million tonnes at 0.4 carats per tonne for 18.7 million carats.	Media release, 13 December 2018 Dominion Diamond Mines announces the recovery of the largest diamond ever found in North America at Diavik
Diavik Mine	Rio Tinto (operator) & Dominion Diamond Mines	Diamonds	Canada's largest producer of diamonds, 300 km NE of Yellowknife. Mine life to 2025. Became all underground mine in 2012. Workforce in 2017, 1,233. New A21 open pit development will cost US\$350m over 4 years. A21 commence ore production in the first half 2018. Reserves at Dec 31, 2017 were 15.1 million tonnes at 2.8 carats/tonne for total of 42.5 million carats.	Media release, 1 October 2018 Diavik Stars of the Arctic dazzle in rough diamond tender
Gahcho Kué Mine	De Beers Canada (51% and operator) and Mountain Province (49%)	Diamonds	Located approximately 280 km NE of Yellowknife, NWT. Open pit mine with life of 12 years. Mine reached commercial operation in Q1 2017. Workforce in 2017, 483. Plan is for three open pits to mine 5034, Hearne and Tuzo ore bodies producing average of 4.5 million carats/year. Hearne began production in April 2018. Reserves at 31 March 2014 (production commenced Q3 2016) were 35.4 million tonnes at 1.6 carats per tonne for 55.5 million carats.	Media release, 31 January 2019 Mountain Province announces 60 carat rough diamond included in February sale Media release, 15 January 2019 Mountain Province fourth quarter and full year 2018 production and sale results
Prairie Creek	NorZinc (formerly 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. Feasibility Study completed in 2017 supports 15-year mine life. Subject to completion of financing, and 2.5-year construction phase, production proposed for mid-2020. In 2017, the Mackenzie Valley Environmental Impact Review Board recommended approval of the proposed all season road.	Media release 20 February 2019 NorZinc files post-EA report for all season road commences final permit issuance process

			Over the past eight years Canadian Zinc has successfully completed numerous environmental assessments related to exploration and development of the Prairie Creek Mine. Canadian Zinc has obtained all the significant regulatory permits and social licences required to complete construction and development and undertake mining and milling at Prairie Creek, including construction and use of a winter access road to the mine site.	
NICO	Fortune Minerals Ltd.	Cobalt-gold-bismuth-copper	Proposed open pit and underground mine located 50 km NE of Whati. Estimated mine jobs: 150. Mine life, 20 years. In March 2018, The Mackenzie Valley Environmental Impact Review Board has recommended that the Tlicho all-season road be approved. The approval is subject to measures designed to mitigate potential environmental, social, and cultural impacts. The Government of the Northwest Territories, Department of Transportation and Tlicho Government received this conditional approval on March 29, 2018, enabling construction of the 97-kilometre Tlicho Road to connect the community of Whati to the territorial highway system.	Media release February 15, 2019, Northwest Territories Government signs contract to construct Tlicho Road
Kennady North	Mountain Province Diamonds	Diamonds	Kennady North project comprises 13 leases and claims immediately to north and west of 4 leases controlled by the Gahcho Kué Joint Venture (see above). Project aims to identify a resource along the Kelvin – Faraday kimberlite corridor of between 12 and 15 million tonnes at a grade of between 2 and 2.5 carats per tonne and to identify new kimberlites outside of the corridor. The Kelvin – Faraday corridor is a target for further exploration. Potential quantity is conceptual as there has been insufficient drilling to define a mineral resource and it is uncertain if further exploration will result in target being delineated as a mineral resource.	Media release 27 February 2019 Mountain Province Diamonds begins Kennady North winter exploration program
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 sq km, 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 mines (eg Colomac)	Media release 4 March 2019 Nighthawk provides review of its Indin Lake exploration activities and outlook for 2019 Media release 19 February 2019 Nighthawk makes additional high-grade discoveries at Indin Lake Gold property

Pine Point	Osisko Metals	Lead-zinc	Proposed open pit mine east of Hay River, NT. 10 open pits mined sequentially with 321 jobs. PEA quotes 13-year mine life. Osisko Metals has begun active exploration to advance the project. The objective of the 2018 drill program is to upgrade approximately 50 million tonnes of unclassified near-surface historical resources (Cominco Ltd.) to NI43-101 Inferred Mineral Resources as quickly as possible in areas amenable to open pit mining. The 2018 program consists of approximately 700 drill holes (323 now completed) within the Main Trend, a 20- kilometre long, portion of the PPMC that is located on the south shore of Great Slave Lake in the NWT, near infrastructure and paved highway access and with 100km of haulage roads already in place.	Media release 4 March 2019 Osisko Metals intersects 18.66% zinc + lead Over 20.73 metres at Pine Point
Courageous Lake	Seabridge Gold Inc.	Gold	Proposed open pit mine 240 km NE of Yellowknife. 6.5 M oz proven and probable reserves in 91.0 million tonnes at 2 g/t (2016 Annual Report). Positive PFS July 2012. The FAT deposit is one of Canada's largest undeveloped gold projects. Seabridge is currently focusing on their KSM mine and other BC projects.	Media release, 14 November 2018 Seabridge files third quarter report and financial statements and MD&A Media release, 9 November 2018 Seabridge Gold secures \$14 million private placement
Selwyn (Howard's Pass Project)	Selwyn Chihong Mining Ltd.	Zinc, lead	Proposed base metal mine in Yukon on NWT border and access is through NWT. Agreements signed with NWT (Sahtu) Indigenous land corporations. The project will process multiple open pit mines over an approximate 10+ year mine life and includes a mineral processing plant, tailing management facility and the required on-site infrastructure. The mine is being designed to process 38,500 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, which 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. 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 HPAR was developed in the 1970s and runs from the Nahanni Range Road to the NWT-Yukon border. Passing through 2 national parks. 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 10 years to the mine life.
Nechalacho	Avalon Advanced Materials Inc.	Rare earth metals	Proposed underground mine 100km SE of Yellowknife. Estimated mine jobs: 200. The company remains optimistic that rare earth demand will recover sufficiently to advance the project.	Media release, 30 January 2019 Avalon attracts development partner to Nechalacho rare earth elements project

Mines & promising Nunavut mine projects

The following table describes 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 AEM announced they will develop Amaruq satellite deposit, 50km from mine site and add 6 years to mine life, beginning in 2019. Construction of the Amaruq Exploration Access Road commenced in first quarter 2016. Road construction is ongoing with nine kms completed to date of expected total length of 64kms.	Media release 14 February 2019 Agnico Eagle reports fourth quarter and full year 2018 results
Mary River Iron Mine	Baffinland Iron Mines Corporation	Iron	In operation since September 2014; Open pit mine 936 km N of Iqaluit. Mine jobs: 602 Production from Early Revenue Phase (ERP) began September 8, 2014. The 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 2015.	Media release, 16 December 2018 Incident at Mary River Mine Media release, 6 December 2018 Baffinland Iron Mines holding Christmas feasts in the North Baffin Region
Hope Bay (Mine began commercial production May 15, 2017)	TMAC Resources Inc.	Gold	Gold mine 130 km S of Cambridge Bay. TMAC's property covers the majority of the Hope Bay Greenstone Belt. Workforce in 2016: 335 First gold poured in first quarter 2017 and achieved commercial production in second quarter 2017.	Media release 21 February 2019 TMAC reports record Q4 gold production; 1,800 tpd throughput, 2,310 tpd mine production Media release 21 February 2019 TMAC reports updated mineral reserves & mineral resources estimate, Hope Bay, Nunavut
Meliadine	Agnico Eagle Mines Ltd.	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 estimate \$911m; mine life 14 years. On February 15, 2017: Agnico Eagle approved Meliadine and Amaruq projects for development with production beginning in 2019. The high-grade Meliadine gold project has 3.4 million ounces of gold in proven and probable reserves* (14.5 million tonnes at .32 g/t) and a large mineral resource.	Eagle Blog 27 February 2019 Meliadine pours first gold The Meliadine project was approved for development on February 16, 2017 and is now under construction.
Back River	Sabina Gold & Silver Corp.	Gold	Approximately 60km from Hackett River; adjacent to the Wishbone Greenstone belt. Consists of George and Goose Lake deposits and holds significant gold resources. Estimated construction jobs: 1,600 Estimated mine jobs: 900 Sabina's Feasibility Study on its 100% owned Back River Gold Project presents a project designed on a fit-for purpose basis, with the potential	Media release 22 February 2019 Sabina Gold & Silver announces 2019 budget to focus on de-risking activities and exploration on the Back River Gold project in Nunavut

			to produce ~200,000 ounces a year for ~11 years with a rapid payback of 2.9 years (at a US\$1,150 gold price and a 0.80 exchange rate). Initial CAPEX of \$415 million. EA complete	
Kiggavik	AREVA Resources Canada Inc.	Uranium	Proposed uranium mine 80 km W of Baker Lake. Estimated Construction jobs: 750 Estimated mine jobs: 600	25 July 2016, INAC, on behalf of responsible ministers for authorizing if Kiggavik Project should or should not proceed, accept NIRB's determination it not proceed at this time.
Izok Corridor Project (with High Lake & Hood River deposits)	MMG Ltd.	Copper, Zinc, Gold, Silver	High Lake is 1,710-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	Nunavut Government announced that the Grays Bay Port and Road project did not qualify for federal Transport Corridor funding. Company stated publicly that project needs Grays Bay Road and Port project infrastructure to become a mine.
Chidliak	De Beers	Diamonds	Located 120kms NE of Iqaluit, Nunavut, and 180 km S of Pangnirtung. 74 kimberlites discovered with 8 potentially economic on 317,213-hectare site. Positive Phase One PEA, updated May 2018 highlights: <ul style="list-style-type: none"> •After-tax payback of 2.2 years •Life of mine 13 years •Resource at CH-6 and CH-7 exceeds 22 million carats •Pre-production capital requirement ~\$455m, incl \$95m for access road from Iqaluit, \$55m in contingency •Pre-tax NPV(7.5) of \$1069 million and a pre-tax IRR of 38.6% •After-tax NPV(7.5) of \$679 million and an after-tax IRR of 31.1% •Average LOM strip ratio of 6.6:1 (average across the combined CH-6 and CH-7 open pits); Mining to a depth of 300 mbs at CH-6 	Media release, 13 September 2018 Peregrine Diamonds announces completion of plan of arrangement
Angilak	ValOre Metals Corp. (formerly Kivalliq Energy)	Uranium	340,268-acre property located SW of Baker Lake; Hosts the high-grade Lac 50 Trend deposit	Media release, 14 December 2018 ValOre defines new gold in till target areas and extends geophysical coverage to 110 km on Baffin Island, Nunavut Media release, 3 December 2018 ValOre announces rights offering
Qilalugaq	North Arrow Minerals	Diamonds	7 km from tidewater; 9 km from Repulse Bay, Melville Peninsula; 7,143 hectares of contiguous mineral claims. Largest kimberlite in Nunavut.	Media release, 15 January 2019 North Arrow updates Naujaat Diamond Project, Nunavut
Committee Bay Gold Project	Auryn Resources (purchased North Country Gold Corp.)	Gold	<ul style="list-style-type: none"> • High grade gold endowment • Existing exploration infrastructure • 217,600 hectares with district scale discovery opportunities 	Media release, 30 January 2019 Auryn Applies Machine Learning for Targeting High-Grade Gold at Committee Bay

Project maps

