

# Northern Mining News

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## From the Executive Director ...

Major milestone for TMAC as it has successfully completed environmental permitting which paves the way for construction of new mining operations on its Madrid North, Madrid South, and Boston deposits at Hope Bay, Nunavut.

Both Fortune Minerals and NorZinc announced completion very important agreements; Fortune the socio-economic agreement with the NWT government, and NorZinc the partnership with the Nah?a Dehé Dene for Prairie Creek all season road. And great to see Avalon's partnership news on development work on its Nechalacho project.

Additionally, we're pleased to see initial funding for NWT hydropower. The Chamber is all for a Taltson-Snare hydropower link which would provide new, more affordable, reliable and greener power for northern residents, businesses and industry.

All of these positives reflect our efforts, in partnership with governments and communities, to keep our industry as a key contributor to the economy. The outcome, underpinned by the highest environmental and operational standards in the world, is jobs and business benefits for the North; it's people it's communities, it's companies, and it's governments.

Last, but not least of course, I'd like to congratulate Alex Buchan on his new role at TMAC. It is great to see a local resident appointed vice president. Alex is a long term Chamber board member, and is a major champion for our industry. Well deserved Alex!

**Happy reading! ... Editor**

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



## **TMAC completes Madrid and Boston projects' water licences**

TMAC Resources has received approval of type A water licences for the Madrid and Boston projects. On January 14, the Minister of Intergovernmental and Northern Affairs and Internal Trade approved the two licences as recommended by the Nunavut Water Board on December 7, 2018. This approval is the final step in the environmental permitting process and enables mine construction and operations and sets the closure bonding requirements.

“Receipt of these two water licences completes permitting for the Madrid and Boston projects and provides substantial development flexibility to TMAC,” said Jason Neal, TMAC president and chief executive officer.

“While 2018 has largely been about ongoing ramp up and implementing significant improvements to the Doris operations, in 2019 we balance optimization of established operations with the initial steps of broader development of the Hope Bay Belt. We are looking forward to initiating development at Madrid North with the potential for first ore to the Doris plant and the commencement of underground development,” he added.

The amended licence provides for the expansion of the existing Doris camp, expansion of the tailings impoundment area from 2.5 million tonnes to 18 million tonnes for Madrid tailings and the construction and operation of mines at Madrid North and Madrid South. The new licence for Boston provides development alternatives beyond our established plans, permitting the construction and operation of a fully independent mine site including a new 5.1 million tonne tailings facility and ore processing plant, allowing TMAC flexibility to evaluate options for what we expect will be a growing ore resource as we begin investing in exploration at Boston. Accomplishing this final step in permitting allows for the development scenario described in the



*In combination, the licences allow for the development and operation of three new gold mines at Madrid North, Madrid South and Boston, including a 55-kilometre all-weather road connecting all four mines on the Hope Bay property. Pictured is the Doris Mine. TMAC image*

2015 Pre-feasibility Study while significantly increasing water use thresholds for daily production and processing rates. The permitting strategy has also secured permissions to operate alternative wind power generation, expansion of TMAC's port and includes surface mining of crown pillars at Madrid and Boston, like what is being executed at the Doris mine.

[Click here](#) to view the release. For TMAC's January 22 release outlining drilling at Doris, where the company highlights activity that continues to return high grade gold results, and provides details on the company's exploration strategy click [here](#).

### **Mineral industry welcomes NWT hydropower funding**

The NWT & Nunavut Chamber of Mines fully supports the forward looking actions announced today by the governments of Canada and the Northwest Territories (NWT) to grow access to safe, reliable, affordable, carbon-free hydropower.

Today's announcement by Canada's Minister responsible for Northern Affairs, Dominic Leblanc, the Premier of the NWT, the Honourable Bob McLeod, and the Minister for Infrastructure and Trade and Industry, Minister Wally Schumann will fund start-up work including engineering and Indigenous engagement. It marks a necessary first step on the path to seeing the Taltson hydropower system expanded by 60 megawatts and linked to the Snare hydropower system, the territory's other stranded power grid, and eventually to southern Canada. Successful completion of the Taltson-Snare link would provide new, more affordable and reliable power for Northern residents and businesses.

"Historically, government relied on the economic power of the mining industry to build all of the NWT's hydropower capabilities," said Gary Vivian, President of the Chamber. "However, hydropower growth has not kept up with growing demands, and today our mines and many communities must rely on diesel power. A completed Taltson-Snare hydropower link with cheaper power would help mining developments in our territory. Today's announcement is a small step on that path, and we look forward to seeing the Taltson link completed and providing much needed and essential renewable power for our residents, businesses and our industry."

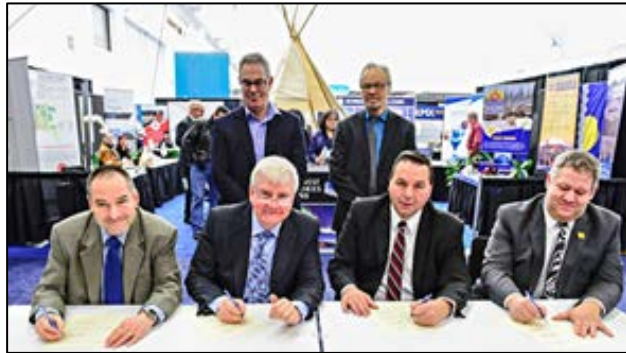
By providing a clean alternative, Taltson power would reduce one of the industry's largest costs – fossil fuels – and help to make the NWT's minerals industry internationally competitive. In helping industry reduce their diesel power needs, Taltson power would also help meet investors' growing desire for low carbon footprint projects. Taltson hydropower would also reduce the carbon footprint of the territory, helping it meet Canada's greenhouse gas reduction goals. The Chamber looks forward to governments' continued funding of the Taltson hydroelectricity expansion project to a timely completion, with affordable, green power flowing to industry, business and community customers. View the [Chamber's release](#).

In other news, the Chamber met with the City of Yellowknife council and mayor on January 7, to discuss the declining minerals industry, greener hydropower opportunities, and their strategic planning, and on January 15 followed up with [this letter with presentation attached](#).

## **Fortune signs socio-economic agreement with GNWT for NICO**

Fortune Minerals Limited has entered into a Socio-economic agreement with the Government of the Northwest Territories for the proposed NICO cobalt-bolt-bismuth-copper project in Canada.

The agreement formalizes GNWT and Fortune objectives to maximize northern and Indigenous employment, training, business opportunities, and education to benefit residents of the Northwest Territories. The agreement also establishes measures to identify and mitigate socio-economic impacts arising from development of the mine and related facilities in Tlicho Territory, located approximately 160 km northwest of the City of Yellowknife. The NICO project is a primary cobalt asset that also contains more than a million ounces of gold and approximately 12% of global bismuth reserves. It is one of the few deposits situated outside of the Congo that can be developed to support near-term accelerating demand for cobalt in lithium-ion batteries needed to power electric vehicles, portable electronic devices, and stationary cells to store energy during periods of lower demand to make electricity use more efficient.



*Fortune's Glen Koropchuk and Robin Goad, left, and ITI Minister Wally Schumann and Health Minister Glen Abernethy sign the socioeconomic agreement at Roundup in Vancouver. Photo courtesy Ryan McLeod/NNSL*

The socio-economic agreement was signed at AME Cordilleran Roundup — a leading global exploration and mining conference in Vancouver — by Robin Goad, President and CEO of Fortune, Wally Schumann, Minister of Industry, Tourism and Investment, and Glen Abernethy, Minister of Health.

With the signing of the socio-economic agreement for the NICO project, there are now five active socio-economic agreements in the NWT: Ekati Diamond Mine (Dominion Diamonds); Diavik Diamond Mine (Rio Tinto); Gahcho Kue (De Beers/Mountain Province); NICO project (Fortune Minerals); Snap Lake (De Beers – on care and maintenance since December 2015).

Robin Goad, President and Chief Executive Officer of Fortune said, "Formalizing our contribution to the livelihoods and quality of life of residents of the communities in which we operate is a key objective of our Company. The NICO project will contribute energy- and eco-metals to support the growing green economy and enable the Northwest Territories to further capitalize on its significant mineral resource endowment."

Wally Schumann, Minister of Industry, Tourism and Investment for the Northwest Territories commented, "The Government of the Northwest Territories continues to work hard to improve the investment climate and support the responsible development of the NWT's natural resources. The NICO Project is important for our territory's future and I am happy to see this milestone reached with Fortune Minerals."

View release [here](#).



## **Avalon attracts development partner to Nechalacho rare earth elements project**

Avalon Advanced Materials has attracted a new partner in private Australian company, Cheetah Resources Pty Ltd. to participate in the development of the rare earth resources at its Nechalacho project, reports Avalon in its January 30 [media release](#).

The project is located at Thor Lake near Yellowknife, NWT.

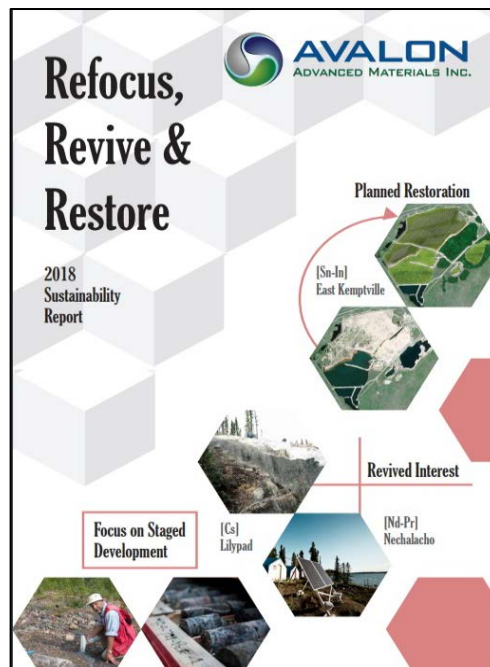
Avalon and Cheetah have signed a binding terms sheet under which Cheetah will acquire ownership of the near surface resources in the T-Zone and Tardiff Zones for a total cash consideration of C\$5 million while Avalon will retain ownership of the resources in the Basal Zone that was the subject of its 2013 feasibility study. Avalon will continue to manage work programs on the property and retain its 3% NSR type royalty. The formal agreement is expected to be completed within the next 60 days following which a new work program will be initiated focusing on the T-Zone rare earth resources.

Cheetah is focused on the small-scale development of rare earth resources enriched in the “magnet rare earths”, neodymium and praseodymium, presently in short supply and high demand for clean technology applications notably electric vehicles.

Such an opportunity was recently recognized by Avalon in the T-Zone and Tardiff Zones that appears to be well-suited for very low cost, pilot-scale development utilizing ore-sorting technology.

This model also has the important benefit of having minimal environmental impacts. Cheetah is interested in pursuing this opportunity collaboratively with Avalon. Once in operation, the partners will have the opportunity to begin to evaluate by-product opportunities from the T-Zone, notably lithium, and the future growth potential from the other mineralized zones on the Property.

“We are delighted to have attracted a like-minded partner in Cheetah to the rare earth opportunity at Thor Lake. The agreement structure will allow Avalon to resume its long term development aspirations for the Nechalacho project and secure a source of non-dilutive working capital to continue to advance our other near term development aspirations for the East Kemptville Tin and Separation Rapids Lithium Projects,” said Avalon President and CEO, Don Bubar.



*Click thumbnail for Avalon's 2018 sustainable development report.*

## **60 Carat yellow rough diamond included in Mountain Province's February sale**

Mountain Province Diamonds will include an exceptional quality 60.59-carat fancy vivid yellow rough diamond in its February sale.

"The discovery of this diamond demonstrates our ability to produce very large, high quality, fancy coloured diamonds. We are thrilled to be able to include it in our upcoming sale and present our customers with the opportunity to bid for this important piece of the mine's history," said Reid Mackie, Vice President Diamond Marketing.

Also included in the sale will be more than 50 other large, high quality white and fancy coloured rough diamonds. Viewings will take place February 11-21 at the offices of Bonas-Couzyn in Antwerp, Belgium.

### **Q4 and 2018 results**

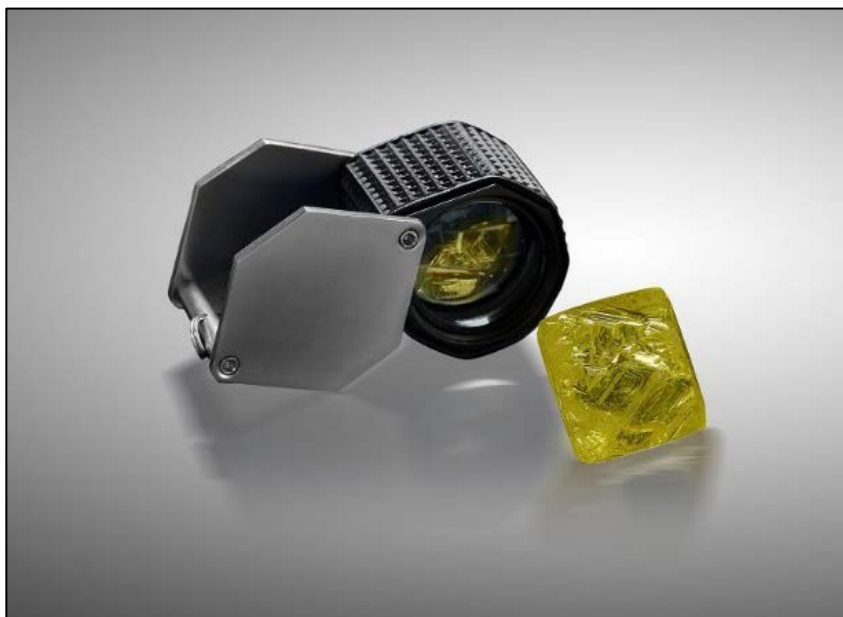
Mountain Province's Gahcho Kué Mine, located at the edge of Canada's Arctic Circle, is the world's largest and richest new diamond mine and since the start of production in late 2016 has established itself as a regular producer of exceptional, gem quality, large diamonds. In 2018, Mountain Province sold more than 400 individual diamonds larger than 10.8 carats.

In Q4 2018, 1.54 million carats were recovered at an average grade of 2.06 carats per tonne. Full year 2018, 6.9 million carats at an average grade of 2.17 carats per tonne, 17% higher than total carats recovered in 2017.

In Q4 2018, the company sold 822,548 carats at an average value of \$USD 65 per carat (\$CAD 86 per carat) for total proceeds of \$USD 53.6 million (\$CAD 70.5 million).

For the full year 2018, the company sold 3,252,491 carats at an average value of \$USD 74 per carat (\$CAD 96 per carat) for total proceeds of \$USD 240 million (\$CAD 311 million). *All figures reported on a 100% basis unless otherwise stated.*

[View release.](#)



*The diamond was recovered at the company's Gahcho Kué Mine in October 2018. Mountain Province photo*

## **NorZinc signs agreement with Nah?a Dehé Dene for Prairie Creek road**

NorZinc Ltd. has signed a Traditional Land Use Agreement with the Nah?a Dehé Dene Band for the construction and operation of the all season road to connect the company's high grade zinc/lead/silver Prairie Creek Mine to the Liard Highway in the Northwest Territories of Canada.

The Nah?a Dehé Dene Band of Nahanni Butte is the nearest community to the Prairie Creek Mine ("the Mine"), located approximately 90km southeast of the mine site. The mine site and route of the ASR are within NDDB's Traditional Territory. The intent of the TLUA is to confirm NDDB's support for the ASR and deliver benefits for the NDDB, supplemental to the existing Impact Benefits Agreement signed with NDDB in 2011 that supported the Mine development itself.

At the time of the original IBA, access to the proposed Mine was planned to be by winter road. Subsequently it was concluded that an all season road would provide significantly improved operational efficiencies and better economic confidence for the Mine. The Company recognized that the ASR may have additional potential impacts and effects on the NDDB, compared to a winter-only road, and recognition of this is established within the TLUA. The TLUA combined with the IBA provides assurance the Prairie Creek Mine has strong local Aboriginal support as the ASR moves through the final phase of permitting.

"NorZinc is very pleased to sign this important land use agreement", said NorZinc's CEO, Don MacDonald. "We are very grateful to the Nah?a Dehé Dene Band for their collaborative support which has made possible this very positive step toward the development of the Prairie Creek Mine. It is so important that the All Season Road has the support of the local Aboriginal communities, and that those who live closest to the access road particularly will benefit from its operation."



*NorZinc and Nah?a Dehé Dene Band of Nahanni Butte signing ceremony at Roundup Conference, Vancouver. Minister Wally Schumann speaking. (Photo by Krystal Pidborochynski)*

### ***Signing ceremony***

The community signing ceremony for the Agreement took place in Nahanni Butte on January 15, 2019. The ceremony had the participation of NDDDB Chief and Council, NDDDB's band members, and directors and officers of NorZinc. A formal ceremony is planned [occurred] in Vancouver during the AME Roundup 2019 conference at the end of January.

"In signing this agreement, we have further enhanced a mutually beneficial relationship with Nah?a Dehe Dene Band, based on respect, and which will enable the community to participate in the future economic benefits of the All Season Road," added Don MacDonald.

At the signing ceremony Chief Darrell Betsaka, Chief of NDDDB said: "In this Agreement, NorZinc and the Nah?a Dehe Dene Band acknowledge their mutual intentions that the All Season Road will be developed and operated in a manner that respects the land, the environment and cultures of Aboriginal and non-Aboriginal peoples of the North."

"The Agreement will supplement our existing IBA and mean further jobs, training and education, business opportunities and financial benefits for our people for many years to come and will facilitate access to our traditional territory", added Chief Betsaka.

### ***Traditional land use agreement***

Similar to the IBA, in the TLUA NorZinc has agreed to maximize NDDDB Members employment and give advantages to support the success of NDDDB businesses.

Under this agreement, NorZinc recognizes and respects NDDDB's asserted rights and interests in their traditional land and in return, NDDDB acknowledges NorZinc's interest in the development and future operation of the Prairie Creek Mine. The Agreement delivers a framework such that training, employment and business contracts are available to NDDDB and to assure the mutual benefit to both parties. The TLUA and the IBA strengthen the relationship between NDDDB and NorZinc.

NDDDB and NorZinc have agreed to establish a committee to oversee implementation of the Agreement, and to support NDDDB liaison roles to gain employment and business capacity for the benefit of NDDDB Members and NDDDB Businesses. The company has also agreed to make annual contributions to an educational fund to encourage NDDDB Members to reach their career aspiration goals with higher education.

### ***Other Indigenous agreements***

In addition to the TLUA, the company is negotiating a Road Benefit Agreement with the Lídlii Ku'e' First Nation of Fort Simpson, NWT. Fort Simpson is the largest community within the Dehcho Region, located about 185 kilometres east of the mine site.

Earlier in 2018, NorZinc entered in to a Process Agreement with NDDDB and LKFN, which provides for the negotiation of a three party Environmental Management Agreement relating to the ASR. This EMA is in an advanced stage of negotiations and will provide for Dene communities' review, participation and oversight of environmental monitoring of the ASR during permitting, design, construction, operation and closure phases, and the implementation of the mitigation measures contained in the Environmental Assessment. [View release.](#)



## **Osisko Metals updates Pine Point**

Osisko Metals announced assay results from the latest 7 drill holes completed in the East Mill Zone within the Pine Point Mining Camp.

Drill hole EM-18-PP-151 intersected 8.07% Zinc and 6.80% Lead over 12.74 metres within the modeled K-32 pit boundaries. Drill hole EM-18-PP-392 intersected 10.90% Zinc and 4.28% Lead over 6.00 metres at the west edge of the modeled K-32 pit boundary, and hole EM-18-PP-182 intersected 11.78% Zinc and 6.01% Lead over 4.35 metres in an area 130 metres to the south of the currently modeled pit boundary, near historical Cominco drilling.

The pit number refers to modeled resources pits included in the recently filed NI43-101 Technical Report filed on SEDAR. For the company's Pine Point amended technical report, [click here](#).

"The drilling reported today continues to expand and confirm Pine Point's high grade, near surface mineralization," said Jeff Hussey, President & CEO of Osisko Metals.

All intersections are within flat lying tabular-style deposits and all intercepts are located above 30 metre depths. Highlights are listed below in Table 1 and details are provided in Tables 2 & 3.

"It is also worth pointing out that the high grade, large tonnage, near surface mineralization at Pine Point is unique among its peer group, as nearly 90% of zinc mine production globally is sourced from underground mines, underscoring the rarity of open pit zinc assets like Pine Point. Furthermore, with low cost hydro-electric power available on site and a rail head located within 60km, Osisko Metals is well positioned to rapidly advance Pine Point."

Osisko announced its maiden resource for Pine Point in December 2018 and is still receiving assay results from the 2018 drilling campaign. See the full release [here](#).

In other news, Osisko announced a [summary of 2018 highlights and an exploration outlook](#).



*Historical drill core stored at former Pine Point Mine.*

## **Agnico Eagle sites leaders in social and environmental performance**

Fifteen years ago, Canada's mining industry set the global standard for sustainable mining practices.

As the first miners in the world to develop an externally-verified performance system – the Towards Sustainable Mining (TSM) initiative of the Mining Association of Canada – the industry has continued to promote best practices in environmental protection, energy efficiency, community engagement, safety and transparency.

Now, those standards and practices have spread beyond Canada's borders to Argentina, Finland, Spain, Botswana and the Philippines. Agnico Eagle has played a key role in TSM's rapid acceptance and expansion, ensuring its global mine sites in Mexico, Finland and Canada adhere to its standards for responsible mining.

In 2018, all six Agnico Eagle sites that undertook a TSM external audit (prior year-2017) were honoured with a TSM Leadership Award. Each site achieved Level A's or better in all key



*Senior Environmental Technician Jamie Kataluk, employed at Agnico Eagle's Meadowbank mine, collects a water sample. Agnico Eagle photo*

performance indicators (community, biodiversity, energy and GHGs, tailings management, health and safety) with the auditors also confirming each site had a Crisis Management Program in place and protocols for Preventing Child and Forced Labour.

"We are honoured to receive this recognition, but the real pride is in helping to improve the economic conditions and opportunities of the people and communities that surround our operations, now and in the future," said Louise Grondin, Senior VP Environment, Sustainable Development and People

TSM external audits are performed every three years and are a condition of membership in the Mining Association of Canada. 2018 TSM recipients include:

- Agnico Eagle, La India
- Agnico Eagle, Goldex
- Agnico Eagle, Kittila
- Agnico Eagle, Meadowbank
- Agnico Eagle, Pinos Altos
- Agnico Eagle, LaRonde
- Dominion Diamond Mines
- IAMGOLD, Essakane

## TerraX Recovers 16,000 meters of historical core

TerraX Minerals Inc. is pleased to announce that in cooperation with The Geological Survey of the NWT and The Giant Mine Remediation Project, TerraX was able to [recover 16,000 meters of historical drill core](#). In a preliminary review of the core TerraX geologists have identified visible gold and are currently logging and splitting the favorable sections of core for assaying.

David Suda, President and CEO stated: “Acquiring core with visible gold provides an exciting and unexpected jumpstart to the advancement of key targets that will provide investors an early look at assay results in the first half of 2019. We have effectively gained a full season of drilling for a fraction of the normal cost.”

Mr. Suda further stated “The core is from 3 of 4 identified targets that TerraX plans to drill next, although highly encouraging the strongest or largest targets still remain to be tested in our next drill program”

The core material is from holes drilled on TerraX property [Figure 1](#) Historical drill logs related to the recovered core indicate that several holes showed significant gold intersections. Core [Photo 2](#) The logging and re-sampling of this core to confirm historical reports is a top priority for TerraX Q1 of 2019. Since the acquisition, TerraX has identified core from holes drilled on the northern extension of the Giant mine gold structure which sits on TerraX land. These holes are significant to the development of high priority exploration targets [Figure 2](#)

TerraX will continue to sort, log and resample core to strategically identify the best core for assay in winter 2019.

Click [here](#) for TerraX’s January corporate presentation.



*Visible gold in core to be assayed. TerraX photo*

## Sabina reports exploration results and expansion of Nuvuyak

***Nuvuyak Drill hole 18GSE559W1 returns 12.41 g/t Au over 8.70 meters and Drill hole 18GSE559 returns 8.17 g/t Au over 13.00 meters***

Sabina announced final exploration results from 2018, including the down plunge expansion of the Nuvuyak discovery at Sabina’s 100% owned Back River gold project in Nunavut.

In 2018, the company completed 22,500 m of diamond drilling including 16,500 m of drilling during the summer exploration program. The summer program largely focussed on the new high-grade discovery at Nuvuyak as well as advancing additional high priority targets for the Goose Property which includes the Llama Extension (see press release Sept 18, 2018), Hook, Umwelt, and Echo zones.



Summer program results are highlighted by the rapid expansion of the Nuvuyak discovery where a strong down plunge extension of approximately 50 m is confirmed by new results (hole 18GSE559 returning 8.17 g/t over 13.00 m and drill hole wedge cut 18GSE559W1 returning 12.41 g/t over 8.70 m (see Table 1)).

Hole 18GSE559 intersected 50 m down plunge of the discovery hole 18GSE545. This hole, was used as a parent hole for a subsequent wedge cut (hole 18GSE559W1) which started at a depth of 435 m down hole 18GSE559. This hole also intersected mineralized iron formation 80 m up dip of the parent hole along the same section within a portion of the anticline hinge.

Sabina initially drill tested the Nuvuyak target in the spring of this year intersecting key exploration elements that led to the development of a geological vectoring model (see press release June 5, 2018). This model was tested in early summer drilling and resulted in the discovery of the Nuvuyak deposit (hole 18GSE545 returning 11.58 g/t over 39.50 m - see news release August 20, 2018). With the conclusion of the summer drill program, the Nuvuyak target has been tested over a total target length of approximately 200 meters along strike. The target remains open and untested in all directions with strong geologic control shown through current drilling intersections (see Figure 2, Nuvuyak – Hinge long section).

The Sabina geological team has hypothesized that an interconnected large-scale mineralization trend or a number of related trends exists at the Goose Property extending from the southern Goose Main zone to the northern Llama zone. The Nuvuyak discovery adds credence to this theory. Significant portions of the Goose Property are largely unexplored and Sabina plans to continue with targeting of these areas in future exploration programs.

“Sabina has successfully completed a number of de-risking activities during 2018 as we push towards project development while concurrently demonstrating, through exploration success that Back River is a world class gold project within an emerging district. Our success in making a new discovery at the Nuvuyak target, high grade optimization drilling at Umwelt Vault, confirming a sizable extension at Llama and demonstrating the Boulder property as an area for potential new discoveries, are significant developments in 2018. This work continues to unlock a much larger picture in terms of resource and district potential and overall mine life extension,” said Bruce McLeod, president and CEO.

During 2019, Sabina will follow up on the successful 2018 exploration programs. We are in the final stage of designing and budgeting a program of field mapping, rock sampling, till sampling, geophysics and diamond drilling at Back River. This work is designed to expand existing resources and advance and delineate exploration targets towards the discovery of new mineralization that has the potential to favorably impact project economics.

It is expected that a 6,000 m spring drilling program will commence in early March with an additional follow up program during the summer months. This year’s drilling will focus on following up on the significant 2018 results at Nuvuyak along with testing a number of targets that include the up plunge trending Hook zone and higher grade areas of the Llama extension structure.



## **North Arrow updates Naujaat Diamond Project, Nunavut**

### ***Reports microdiamond results from Q1-4 Kimberlite, supports Naujaat community access trail***

In January, North Arrow Minerals provided an [update on its Naujaat diamond project](#), Nunavut, including new microdiamond recoveries from the Q1-4 kimberlite diamond deposit, located nine kilometres from the coastal community of Naujaat.

The microdiamond results reported in this release are for samples collected as part of the 2017 bulk sampling and delineation drill programs, details of which were reported in a North Arrow news release dated September 12, 2017. Microdiamond sampling focused on evaluating representative material from each kimberlite unit between surface and approximately 300m below surface. Results reported in January include samples from three of the five Q1-4 model units (A61, A88, and A48b) and compare well with previous microdiamond recoveries from the kimberlite.

The Green unit, which was first identified during the 2017 program, has since been recognized in several historic drill holes and, although of minor volumetric importance, is clearly distinct from the other major units in Q1-4. The GLOB unit is a globular segregationary kimberlite of uncertain affiliation that may be distinct from, or part of, the A48a kimberlite unit. A selection of microdiamond samples from A48a have undergone caustic fusion and final diamond recoveries are presently underway.

North Arrow continues to focus on planning efforts for collection of a 10,000 tonne bulk sample from Q1-4.

North Arrow supports a recent application submitted by the Hamlet of Naujaat for a permit to construct a community access trail extending 14.8 km northeast of the community. The proposed access trail will pass approximately 1.5 km southeast of Q1-4 and could be used during further evaluation of the deposit, including collection of the 10,000 tonne bulk sample.

### **Mel update**

Also in January, North Arrow [updated its Mel Diamond project](#), Nunavut, including the first microdiamond recoveries from kimberlite ML8 (Lower) and initial kimberlite indicator mineral (KIM) results from 2018 till samples. Highlights of this update include:

- Kimberlite ML8 (Lower) is significantly diamondiferous, returning 8 diamonds greater than the 0.106 mm sieve size, including one diamond greater than the 0.85 mm sieve size, from caustic fusion processing of 24 kg of drill core;
- Caustic fusion processing of an additional 79.5 kg from the kimberlite ML8 surface showing (ML8 (Upper)) returned 13 diamonds greater than the 0.106 mm sieve size including one diamond greater than the 0.85 mm sieve size;
- New kimberlite indicator mineral (KIM) targets have been highlighted by preliminary results received for 144 of 447 till samples from the 2018 field program;
- KIM sorting of the remaining 303 till samples is ongoing.

## Exploration & development news briefs (see [Chamber website](#) for more information)

**Auryn Resources Inc.** has implemented an [artificial intelligence program](#) to assist in the targeting of high-grade gold mineralization at Committee Bay. Auryn is teaming up with Computational Geosciences Inc. (CGI) to employ their proprietary VNet segmentation deep learning algorithm. The CGI machine learning platform will generate additional targets across the ‘Three Bluffs playing field’ – a 1600 square kilometer area which includes the Three Bluffs Deposit and the 20 km shear zone hosting the Aiviq and Kallulik targets where significant gold mineralization has been encountered. The platform will process the vast amount of data (collected through extensive surface geochemical sampling, geological mapping, geophysical surveys, and drilling) from work Auryn and prior explorers have completed on the project.

**Dunnedin Ventures Inc.** announced [diamond recovery results from kimberlite pipe KH10-11](#) and plans to advance its diamond assets at its 100% owned Kahuna Diamond Project in Nunavut. Highlights include:

- Kimberlite pipe KH10-11 is confirmed to be diamondiferous but low grade
- Dunnedin’s advisor Chuck Fipke recommends focusing pipe exploration efforts on the Josephine Target Area (“JTA”) during 2019 and is prioritizing targets for drilling
- The company reports significant extensions to the strike length of its high-grade diamond dikes
- Industry-leading kimberlite dike experts have been retained to advise on the expansion of the existing high-grade diamond resources and the advancement of other proven diamondiferous dikes
- K10-11 Kimberlite Pipe & Focus of Future Kimberlite Pipe Exploration

**TerraX Minerals Inc.** announced that [2018 exploration programs](#) delivered concrete advancement of targets at the Yellowknife City Gold (YCG) project. While continuing to deliver high grade surface results, TerraX compiled and enhanced all data sets to achieve a clearer understanding of the deposits. Analysis and review of the entire district by a panel of internal and external global experts has identified new targets and further defined existing ones.

Barney Deformation Corridor (BDC), Crestaurum and Sam Otto are the top three targets which will be the focus for expansion of gold deposits. Homer screened as a new high potential target and will be the focus of confirmation drilling. All four targets lie within 5km of each other in the Northbelt Core focus area of the project. Figure 3 These data driven targets are the highest potential and highest confidence targets that were the result of the comprehensive work completed by our expert panel.

- BDC Figure 4 (Barney Deformation Corridor) is an extension of the Giant gold system with 3 parallel north/south structures over 1km of strike intersecting with Crestaurum. It features abundant high-grade rock samples on surface. There has been very little drilling

over most of this shear zone at the intersection with Crestaurum making this a strong new target.

- Crestaurum Figure 5 continues to be a top priority target. Previous drill success together with strong vectors from surface data including magnetics and geochemistry have identified two parallel structures to the north that are new and largely untested.
- Sam Otto Figure 6 remains a prospective bulk tonnage target with total strike length of 2.5km continuous mineralization. Drilling will focus on further defining the extension of mineralization.
- Homer Figure 7 is a 2km long and nearly 1km wide target with confirmed strong mineralization on surface. Pathfinder elements and felsic intrusions related to gold mineralization are contributing vectors that make this a very exciting target. This is one of TerraX’s largest mineralized zones, and there is potential for economic gold bearing shears.

**Rover Metals Corp.** announced the company’s technical team has [identified its drill targets](#) for the Cabin Lake Gold Project (the “Property”) based on a combination of (i) its interpretation of historic workings and (ii) the recently completed geophysical and geochemical program performed in Q3 and Q4 of 2018. Judson Culter, CEO at Rover Metals, states: “The 2018 magnetic survey and soil sampling program results have identified new gold anomalous zones and expanded on the known gold mineralized zones. Within these zones we have identified the best drill targets for converting the historic drill results into current NI 43-101 resource standards. The new targets were developed from the re-interpretation of the historic work programs completed to date, which included over 7,500 meters of diamond drill data purchased from North Arrow Minerals – a legacy asset from exploration drilling completed by Aber Resources (Grenville Thomas) in the late 1980’s.”

**Western Atlas Resources** announced [the definition of its first set of drill targets](#), at its Meadowbank Gold Project. The Meadowbank Project, located in Nunavut, Canada, is fully permitted for exploration (inclusive of drilling). Western Atlas has compiled and enhanced the 2017 and 2018 exploration program data sets, which include geological and geochemical results, data from the high-resolution aeromagnetic survey, helicopter-borne VTEM and ground IP survey conducted over specific targets located in Block A, B and C. The analysis and review of these databases by external independent experts including Ellis Geophysical Consulting Inc. and Walcott Peter E. Walcott Associates Ltd. has helped define these drill targets. Western Atlas, subject to funds availability, expects to start drilling the Targets this year and is currently working on the definition of additional drill targets within other prospective areas of Block A, B, and C.

The 2018 exploration program included the:

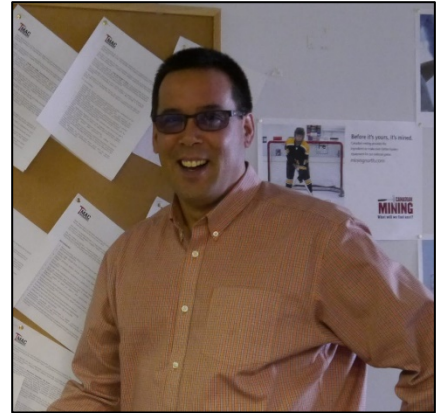
- Completion of over 1,500 line-kms of helicopter-borne VTEM (survey was carried out by Geotech Ltd.)
- Completion of over 32 line-kms of ground IP survey over specific targets located in Block B (survey was carried out by Peter E. Walcott & Associates Ltd.)
- Completion of a detailed mapping and sampling program
- Completion of an Electromagnetic Anomaly Picking (EM) and AIIP processing report (by Geotech Ltd.)

### TMAC Promotes Local

Congratulations are in order for our Chamber director, Alex Buchan, of Cambridge Bay.

Alex is now vice president of corporate social responsibility for TMAC Resources Inc., which operates the Hope Bay gold mine 125 kilometres southwest of Cambridge Bay.

*(Photo courtesy of Alex Buchan)*



*Dunnedin's Kahuna exploration camp, located near Rankin Inlet. Click [here](#) for the company's 2019 year-end president's letter. Dunnedin photo*

## Calendar of events

**Arctic Indigenous Investment Conference**, February 12-14, 2019, Whitehorse, Yukon. Register at: [www.yfncc.ca/AIIC2019](http://www.yfncc.ca/AIIC2019).

**PDAC 2019 convention**, March 3-6, 2019, at the Metro Toronto Convention Centre.

**NAPEG Professional Development Symposium**, “Succeeding in an Uncertain Environment”, March 14-15, 2019; The Explorer Hotel, Yellowknife, NT. To learn more, click [here](#) and register [here](#).

**Nunavut Mining Symposium**, “Rocks, Roads & Resources”, April 1-4, 2019; Iqaluit, NU. To learn more click [here](#).

## Welcome new members!

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

- **Carrefour Nunavut**, based in Iqaluit, is an education, employment/HR and training provider. Company contact is Executive Director Valerie Helen Gagnon and email is [direction@carrefournunavut.ca](mailto:direction@carrefournunavut.ca) and their web site is [www.carrefournunavut.ca](http://www.carrefournunavut.ca). Contact number is 867 979 2800 ext 202.
- **Mining Industry Human Resources Council**, based in Kanata, Ontario, is a non-profit association which focuses on education, employment/HR training. Their web site is [www.mihir.ca](http://www.mihir.ca) and contact is Manager, Employment Initiatives Priya Pandit [ppandit@mihir.ca](mailto:ppandit@mihir.ca), 613 270 9696 ext 63.
- **Nuqsana Alantra**, based in Sussex Corner, New Brunswick, manufactures and supplies modular buildings and mobile office trailers to a variety of gold, zinc, copper, potash, and iron ore mines. Company contact is President Marcus de Winter at [marcus@alantraleasing.com](mailto:marcus@alantraleasing.com), 1 800 456 1800. Website: [www.alantraleasing.com](http://www.alantraleasing.com).
- **Qikiqtaaluk Environmental Inc.**, based in Iqaluit, is an engineering/environmental services company focusing on environmental projects and waste management. Company contact is Director Jennifer Godin [jgodin@qenv.ca](mailto:jgodin@qenv.ca) 1 866 634 6367. Their web site is [www.qenv.ca](http://www.qenv.ca).
- **Rimini Exploration and Consulting**, based in Cochenour, Ontario, is a consulting company providing project management and exploration services as well as land management and community relations services. Contact President/Owner Terry Bursey, at [terry@riminiexploration.com](mailto:terry@riminiexploration.com) 807 728 2122.
- **Solstice Gold Corp**, based in Vancouver, British Columbia, is a gold exploration company. Their web site is [www.solsticegold.com](http://www.solsticegold.com) and contact is President Marty Tunney at [mtunney@solsticegold.com](mailto:mtunney@solsticegold.com) 604 622 5040.



## Member news releases this past month

- 31 January 2019 [Mountain Province announces 60 carat rough diamond included in February sale](#)
- 30 January 2019 [Fortune announces socio-economic agreement completed with the GNWT](#)
- 30 January 2019 [Avalon attracts development partner to Nechalacho rare earth elements project](#)
- 29 January 2019 [Osisko Metals intersects 14.87% zinc+lead over 12.74m at Pine Point, grants options](#)
- 28 January 2019 [Osisko Metals files amended and restated Pine Point project technical report](#)
- 24 January 2019 [North Arrow reports microdiamond and till sampling results Mel Diamond Project](#)
- 22 January 2019 [Agnico Eagle sites recognized as leaders in social and environmental performance](#)
- 22 January 2019 [Doris BTD drilling continues to return high grade gold results; exploration strategy](#)
- 21 January 2019 [Osisko Metals files Pine Point Project technical report](#)
- 21 January 2019 [Rover showcases 3D video of exploration model for Cabin Lake Gold Project](#)
- 16 January 2019 [NorZinc signs agreement with Nah?a Dehé Dene Band for Prairie Creek road](#)
- 16 January 2019 [Rover Metals announces exploration targets at Cabin lake gold project](#)
- 15 January 2019 [North Arrow updates Naujaat Diamond Project, Nunavut](#)
- 15 January 2019 [Osisko Metals provides outlook for 2019](#)
- 15 January 2019 [TMAC completes water licences for Madrid and Boston projects](#)
- 15 January 2019 [Mountain Province fourth quarter and full year 2018 production and sale results](#)
- 14 January 2019 [TerraX recovers 16,000 meters of historical core](#)
- 11 January 2019 [Member's Corporate Presentation: TerraX Minerals January 2019](#)
- 10 January 2019 [Nighthawk reports 14.7m 6.9gpt gold uncut, including 4.2m 15.3gpt gold at Damoti](#)
- 10 January 2019 [Dunnedin Ventures – year-end 2018 president's letter](#)
- 8 January 2019 [TerraX Minerals announces 2019 drill targets](#)
- 7 January 2019 [Sabina reports 2018 exploration results and continued expansion of Nuvuyak](#)

## Chamber of Mines' Social Media

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## MiningNorthWorks!

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# 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?

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**"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
<a href="#">Ekati Mine</a>	<a href="#">Dominion Diamond Mines</a> , 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
<a href="#">Diavik Mine</a>	<a href="#">Rio Tinto</a> (operator) & <a href="#">Dominion Diamond Mines</a>	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
<a href="#">Gahcho Kué Mine</a>	<a href="#">De Beers Canada</a> (51% and operator) and <a href="#">Mountain Province</a> (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
<a href="#">Prairie Creek</a>	<a href="#">NorZinc</a> (formerly <a href="#">Canadian Zinc Corporation</a> )	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, 16 January 2019 NorZinc signs agreement with Nah'a Dehé Dene Band for Prairie Creek all season road

			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 minesite.	
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, 30 January 2019 Fortune announces socio-economic agreement completed with the GNWT
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, 13 April 2018 Mountain Province completes business combination with Kennady Diamonds
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, 20 December 2018 Nighthawk updates approved all-season road build in NWT



Pine Point	Osisko Metals	Lead-zinc	<p>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.</p>	<p>Media release, 29 January 2019 Osisko Metals intersects 14.87% zinc+lead over 12.74m at Pine Point, grants options</p> <p>Media release, 28 January 2019 Osisko Metals files amended and restated Pine Point project technical report</p> <p>Media release, 21 January 2019 Osisko Metals files Pine Point Project technical report</p> <p>Media release, 15 January 2019 Osisko Metals provides outlook for 2019</p>
Courageous Lake	Seabridge Gold Inc.	Gold	<p>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.</p>	<p>Media release, 14 November 2018 Seabridge files third quarter report and financial statements and MD&amp;A</p> <p>Media release, 9 November 2018 Seabridge Gold secures \$14 million private placement</p>
Selwyn (Howard's Pass Project)	Selwyn Chihong Mining Ltd.	Zinc, lead	<p>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.</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.</p> <p>The HPAR was developed in the 1970s and runs from the Nahanni Range Road to the NWT-Yukon border. Passing through 2 national parks.</p> <p>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.</p>
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 to advance the project.</p>	<p>Media release, 30 January 2019 Avalon attracts development partner to Nechalacho rare earth elements project</p>

## Mines & promising Nunavut mine projects

The following table describes leading mineral development projects in Nunavut.

Project	Owner(s)	Commodity	Description	Status
<a href="#">Meadowbank Gold Mine</a>	<a href="#">Agnico Eagle Mines</a>	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 minesite 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, 22 January 2019 Agnico Eagle sites recognized as leaders in social and environmental performance
<a href="#">Mary River Iron Mine</a>	<a href="#">Baffinland Iron Mines Corporation</a>	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
<a href="#">Hope Bay</a> (Mine began commercial production May 15, 2017)	<a href="#">TMAC Resources Inc.</a>	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, 22 January 2019 Doris BTM drilling continues to return high grade gold results; exploration strategy  Media release, 15 January 2019 TMAC completes permitting - approval of water licences for Madrid and Boston projects
<a href="#">Meliadine</a>	<a href="#">Agnico Eagle Mines Ltd.</a>	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.	Media release, 24 October 2018 Agnico Eagle reports Q3 results; production guidance Increased for 2018 and 2019; Nunavut development projects continue to advance as planned; drilling extends Amaruq mineralization at depth  <b>The Meliadine project was approved for development on February 16, 2017 and is now under construction.</b>
<a href="#">Back River</a>	<a href="#">Sabina Gold &amp; Silver Corp.</a>	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, 10 January 2019 Nighthawk reports 14.75m 6.91gpt gold uncut, including 4.25m 15.28gpt gold at Damoti  Media release, 7 January 2019 Sabina reports 2018 exploration results and continued expansion of Nuvuyak discovery

			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"> <li>•After-tax payback of 2.2 years</li> <li>•Life of mine 13 years</li> <li>•Resource at CH-6 and CH-7 exceeds 22 million carats</li> <li>•Pre-production capital requirement ~\$455m, incl \$95m for access road from Iqaluit, \$55m in contingency</li> <li>•Pre-tax NPV(7.5) of \$1069 million and a pre-tax IRR of 38.6%</li> <li>•After-tax NPV(7.5) of \$679 million and an after-tax IRR of 31.1%</li> <li>•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</li> </ul>	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"> <li>• High grade gold endowment</li> <li>• Existing exploration infrastructure</li> <li>• 217,600 hectares with district scale discovery opportunities</li> </ul>	Media release, 13 November 2018 Auryn drills gold-bearing hydrothermal system at Committee Bay

## Project maps

