

# Northern Mining News

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## From the Editor ...

The Chamber of Mines was very encouraged by the meeting held with NWT government leaders at Roundup in Vancouver. It was an opportunity to reinforce the need for action to turn around exploration investment in the territory. The latest figures from NRCan show that the NWT decline is continuing, while Nunavut is rising. Mineral resources is the North's largest private sector employer and accounts for 35 per cent of the territorial GDP. Impact Economics has provided a stellar economic analysis of the NWT, *Investigation of the Underlying Challenges in the NWT Economy*, (in the article on page 2) which highlights the importance of a strong minerals industry, and why it needs support.

Congratulations to Det'on Cho Nahanni Corporation, which will oversee mining operations at Cheetah's first NWT rare earths project. This is a milestone for Indigenous involvement in mining. In other Indigenous news, the Gwich'in and Inuvialuit announced innovative mineral development strategies. Great to see such tangible Indigenous support for the minerals industry. We're hoping to see more similar strategies in future!

The Chamber has partnered in a new initiative to be launched at PDAC, called *Invest Canada North* to help market investment in northern Canada. Come join us at the March 1-2 event.

Happy reading! ... Editor

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

## Chamber of Mines encouraged by meetings with NWT Government

### *Discussed exploration investment, state of the economy, new government mandate*

Board members of the NWT & Nunavut Chamber of Mines met with the Premier of the Government of the Northwest Territories (GNWT) and two of her Ministers, responsible for the minerals industry, infrastructure, land and environment, during the annual Roundup Minerals Conference in Vancouver.

Among the issues discussed with Premier Caroline Cochrane and Ministers Katrina Nokleby and Shane Thompson was the importance of renewing exploration and development investment in the NWT. The most [recent statistics released by Natural Resources Canada](#) show a significant decline in NWT investment that must be corrected to sustain the NWT's strong minerals industry, the largest private sector contributor to the NWT's economy.

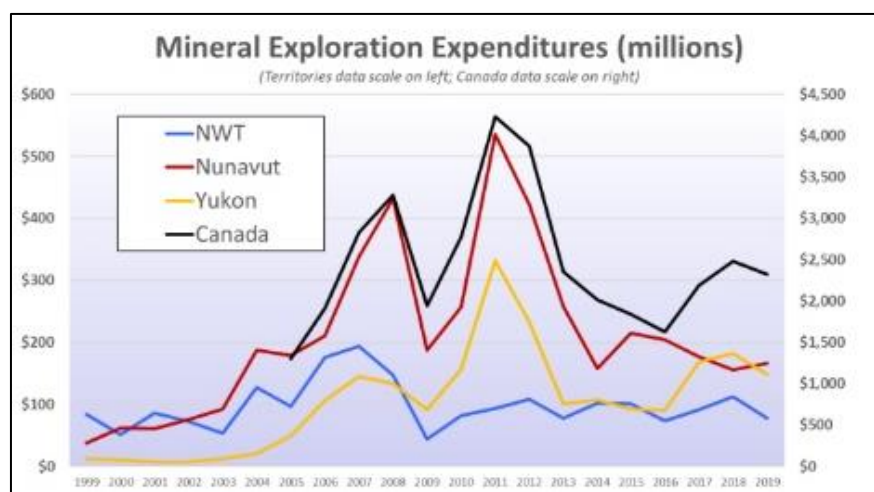
Now is an opportune time to launch action plans for economic improvement with the newly-elected government currently developing a path forward through its Mandate. The Chamber strongly urged the Premier and Ministers to use the economic analysis, observations and recommendations made in the recent report

[Investigation of the Underlying Challenges in the NWT Economy](#), (Impact Economics, 2019) to inform the development of economic improvement plans.

“This is an excellent report that spells out the issues faced by public and Indigenous governments, as well as industry,” says Ken Armstrong, President of the Chamber. “In addition to providing an economic overview of the NWT, the report also speaks to the vision required for the territory to secure long-term, sustainable growth and development. That vision includes responsible mining investment.”

The Chamber also reinforced the good efforts by the GNWT to advance power and road infrastructure, to repatriate federal resource legislation, and to renew the Mineral Development Strategy. Topics recommended for future detailed discussion were the creation of mining regulations to accompany the new mining act, ways to increase lands available for exploration and mining, and consideration of an exploration tax credit to allow the north to better compete with southern jurisdictions.

“We were very encouraged by the Premier and her Ministers' recognition of the importance of a strong minerals industry to the current economy, and on actions needed to sustain and grow it,” added Armstrong.



Exploration spending continues to decline in the NWT.  
[Click here for all the data in chart form.](#)

## **Cheetah Resources contracts Det'on Cho company as rare earths miner**

*Courtesy Northern News Services, January 22 (edited for length)*

Det'on Cho Nahanni Corporation, an Indigenous construction company, will oversee mining operations of the NWT's first rare earths project planned to begin this summer, reported Northern News Services in January.

Cheetah Resources Corporation, planning a three-year demonstration mining project at the Nechalacho site at Thor Lake about 100 km southeast of Yellowknife signed the contract with Det'on Cho Nahanni Construction Company in an official signing ceremony at the AME Roundup Conference in Vancouver on January 22.

"Det'on Cho Nahanni Corporation will control the mining operations at site and be the miner of record under the contract with Cheetah Resources," it was reported. This likely is the first time in the NWT and Canada that all mining operations will be contracted to an Indigenous firm. Cheetah, an Australian-based company, announced its work plan for the three-year project in December and is hoping to move construction equipment to the site by ice road as soon as March in order to be prepared for work by summer.

The Mackenzie Land and Water Board assigned two land use permits and a water licence for the project late last year, with the understanding that there would be some amendments. The Yellowknives Dene First Nation approved the project in January. "Subject to the approval by the MVLWB of the existing land use permits and water licence, mining is expected to begin this year," NNSL added. "Average employment at site during the three-year demonstration project is expected to be 25."

The rare earths project promises to be the first of its kind in the NWT as it will use sensor-based ore sorting technology to extract rare earths. This technology removes the requirement for



*Pictured at the signing ceremony (left to right front row) Paul Gruner President and CEO of Det'on Cho Development Corporation, Kenny Ruptash Vice President of Det'on Cho Nahanni and Principal of Nahanni Construction, Yellowknives Dene First Nation Chief Ernest Betsina, Evan Cranston Director of Vital Metals Ltd. (Cheetah's parent company), David Connelly, representative of Cheetah Resources Corporation, and Yellowknife Mayor Rebecca Alty, and (left to right back row) Shane Thompson GNWT Minister of Lands, and Katrina Nokleby Minister of Industry Tourism and Investment.*

traditional chemical reagents, process water and tailings facilities typically used in ore beneficiation.

Members of the Yellowknives Dene First Nation were present for the event and included Ndilo Chief Ernest Betsina, YKDFN councillor Jessica Deleary, Bobby Drygeese, Det'on Cho chair and Lena Black, a Det'on Cho Corp. board member and band councillor.

Betsina said that his First Nations government aims for a “balanced” approach that will allow Dene to participate in the economic development of the region while protecting the water, land and traditional practices in the area.

“The Yellowknives Dene First Nation believes in a balanced approach to development, we recognize the need for economic prosperity, while at the same time protecting our land, water and wildlife in order to maintain our traditional activities,” he stated, noting that the project sets a “new benchmark for Indigenous participation” in major mining projects.

Evan Cranston, director of Vital Metals Ltd., the parent company of Cheetah said the company is looking to ensure there are “social and economic benefits” from the project for Yellowknives Dene. He said that by hiring the Indigenous company, it is hoped that it can benefit those living on traditional Chief Drygeese Territory.

Katrina Nokleby, Minister of Industry, Tourism and Investment, said the signing is positive for “Indigenous resource leadership” adding the contract “marks a step forward in our territory’s push for Indigenous resource leadership. I want to congratulate the Yellowknives’ Det'on Cho Corporation for characteristically taking the lead on a big idea and commend Cheetah Resources for their commitment to placing Indigenous peoples at this project’s core.”

### **Mountain Province Diamonds announces production and sale results**

Mountain Province Diamonds Inc. [announced production and sales results](#) for the fourth quarter ended December 31, 2019 from the Gahcho Kué Diamond Mine.

#### ***Q4 and FY 2019 highlights***

(all figures reported on a 100% basis unless otherwise stated)

- 11,089,408 total tonnes mined during the quarter, a 2% decrease on comparable period (Q4 2018: 11,365,990). 43,224,827 total tonnes mined during FY 2019, a 4% increase from comparable period (FY 2018: 41,444,057).
- 890,886 ore tonnes mined during the quarter, a 33% increase on comparable period (Q4 2018: 670,707). 3,247,324 ore tonnes mined during FY 2019, a 12% increase from comparable period (FY 2018: 2,908,184).
- 936,903 ore tonnes treated during the quarter, a 25% increase on comparable period (Q4 2018: 751,448). 3,580,551 ore tonnes treated during FY 2019, a 12% increase from comparable period (FY 2018: 3,194,360).
- 1,977,438 carats recovered during the quarter at an average grade of 2.11 carats per tonne, 28% higher than comparable quarter (Q4 2018: 1,545,786 carats at 2.06).





*Gahcho Kué mine site plan and infrastructure. Mountain Province image*

6,820,631 carats recovered during FY 2019 at an average grade of 1.90 carats per tonne, 2% slightly lower than comparable period (FY 2018: 6,936,894).

#### **Q4 and FY 2019 diamond sales**

In Q4 2019, 771,799 carats were sold at an average value of \$84 per carat (US\$64 per carat) for total proceeds of \$65.0 million (US\$49.2 million) in comparison to 822,548 carats sold at an average value of \$86 per carat (US\$65 per carat) for total proceeds of \$70.5 million (US\$53.6 million) in Q4 2018.

During FY 2019, 3,284,520 carats were sold at an average value of \$84 per carat (US\$63 per carat) for total proceeds of \$276.3 million (US\$208.2 million) in comparison to 3,252,491 carats sold at an average value of \$96 per carat (US\$74 per carat) for total proceeds of \$311 million (US\$240 million) in FY 2018.

#### **Q4 and FY 2019 summary**

Q4 and FY 2019 production results were better than the company's expectations, with recovered carats for FY 2019 coming in higher than the revised guidance of 6.7 – 6.8 million carats, attributable to the strong operational performance in Q4 2019.

The plant treated 936,903 tonnes and recovered 1.98 million carats in Q4 2019, 25% and 28% higher than was achieved in Q4 2018 respectively. During FY 2019, the plant treated a record 3.58 million tonnes of ore, 12% higher than was achieved in FY 2018, demonstrating that the plant modifications of the past 12 months have been successful, and the plant throughput capacity has significantly increased.

All figures are expressed in Canadian dollars unless otherwise noted.

See [Mountain Province Diamonds' February 2020 presentation](#).

Also in January, the company announced it [delisted from the NASDAQ stock exchange](#).

## TMAC announces Q4 2019 operating results

TMAC Resources Inc. [reports fourth quarter results](#) for production and operating metrics.

### ***Fourth quarter 2019 production summary***

- Production: 24,650 ounces of gold produced
- Sales: 24,650 ounces of gold sold
- Mining: 1,560 tonnes per day (“tpd”), with a grade of 7.0 g/t Au
- Processing: 1,440 tpd, with a feed grade of 7.1 g/t Au, and 82% recovery
- Doris underground development metres: 2,080 metres

Jason Neal, President and Chief Executive Officer of TMAC, stated, “In the fourth quarter we produced 24,650 ounces of gold, which was the low end of our expectations. As previously disclosed, available grade in the fourth quarter was negatively impacted by the deferral of mining the BTD East Limb due to rehabilitation work, which has been the most significant driver of the fourth quarter being weak. While December recovery achieved was 85% on 11.3 g/t Au, plant throughput in December was poor at 1,140 tonnes per day largely due to unplanned power generator maintenance, which required us to run only one of two concentrator lines for 14 days. The improvement in December recoveries included the initial benefits of the scavenger column project. Low throughput in December brought down average throughput for the quarter and put the lowest weighting on our best month for plant recovery.”

Jason Neal continued, “The improved development rates achieved in the third quarter were sustained in the fourth quarter. Our mining rate for the fourth quarter was 1,560 tpd at 7.0 g/t Au, which included 1,240 tonnes from Doris at 7.6 g/t Au and 29,100 tonnes at 5.0 g/t Au from surface mining the Madrid North Naartok East crown pillar. By the end of the fourth quarter, we were mining in the high-grade Doris BTD East Limb, which will contribute to first quarter production and available plant feed in 2020.”

### ***Quarterly production results***

	<b>Q4 2019</b>	<b>Q4 2018</b>	<b>2019</b>	<b>2018</b>
Gold Production (oz)	24,650	34,080	139,510	110,970
Plant Throughput (tpd)	1,440	1,800	1,620	1,270
Feed Grade (g/t Au)	7.1	7.8	9.0	9.4
Recovery (%)	82	82	2	79
Mine Production (tpd) <sup>(1)</sup>	1,560 <sup>(3)</sup>	2,310 <sup>(2)</sup>	1,440 <sup>(3)</sup>	1,300 <sup>(2)</sup>
Mined Grade (g/t Au) <sup>(1)</sup>	7.0 <sup>(3)</sup>	7.4 <sup>(2)</sup>	9.3 <sup>(3)</sup>	8.1 <sup>(2)</sup>
Development Metres (m) <sup>(4)</sup>	2,080	1,620	7,720	6,470

See [release](#) for fine print notes.

## **TMAC announces strategic review process – potential sale, merger possible**

On January 20, TMAC Resources Inc. [announced a strategic process](#) to explore, review and evaluate a broad range of potential alternatives focused on maximizing shareholder value, including a potential sale or merger of the company, joint venture of the Hope Bay mine, introduction of a new significant strategic shareholder or various long-term financing alternatives.

“With the support of Resource Capital Funds and Newmont Corporation, representing 58.5% of our shares outstanding, we have initiated a strategic process to explore potential alternatives to maximize shareholder value, potentially enhance trading liquidity and generate the financial strength which will allow Hope Bay to achieve its potential. Alignment with our largest shareholders is a key consideration in the timing of this process. Additionally, a transaction in early 2020 would provide an advantage in planning and procurement for the 2020 sealift, which may include additional purchases to support investment that TMAC may not otherwise make itself at this time,” said Jason Neal, TMAC President and Chief Executive Officer.

“Maximizing value for our stakeholders, including but not limited to our shareholders, employees and the people of the Kitikmeot region, is not possible without maximizing the value of Hope Bay. We have been making operational performance improvements since construction was completed, although we have not yet reached our targets. We have recently initiated development of the second underground mine at Madrid North, and with respect to the production expansion of Hope Bay, we are advancing our prefeasibility study which is expected to be completed this quarter. Work on the feasibility study would follow immediately thereafter. Ultimately however, the value of Hope Bay may be greater in the context of a multi-asset portfolio and/or a stronger balance sheet, which is the driving force behind our strategic review process,” he added.

TMAC has engaged CIBC Capital Markets and BMO Capital Markets as financial advisors.

TMAC announces a further step in Board renewal in accepting the resignation of Frank Davis, who has been a Director since March 2013. TMAC would like to thank Mr. Davis for his contributions and long service to the company.

The company has not made any decisions related to strategic alternatives at this time, and there can be no assurance that the evaluation of strategic alternatives will result in any transaction or change in strategy. The Company does not intend to comment further unless and until the Board of Directors of the Company has approved a specific course of action or the Company has determined further disclosure is appropriate or necessary.



*The Hope Bay gold mine is a stone's throw from the Arctic Ocean, in the near distance.*

## Nighthawk drilling at Colomac indicates widening of deposit

Nighthawk Gold Corp. reports [drill results from seven holes](#) (2,676 metres) recently completed within high-grade Zone 3.5 and the southern area of Zone 3.0, at the Colomac gold project.

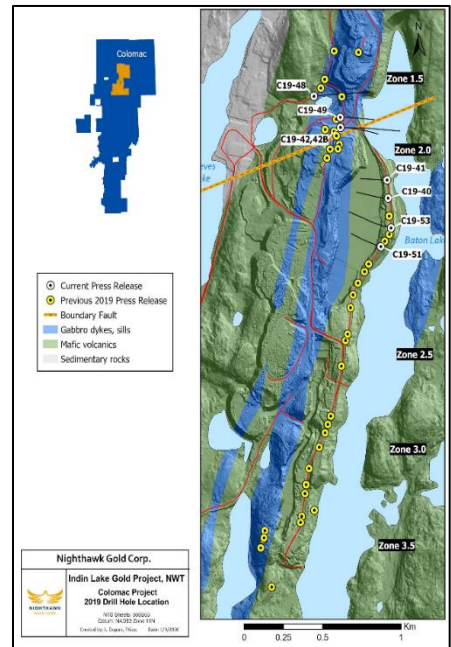
Zone 3.5 is located within the southern portion of the Colomac Main sill and represents one of the better-defined higher-grade areas. Current drilling focused on expansion and infill drilling in areas within Zone 3.5's down-plunge extension to the north and testing the underexplored southern region of Zone 3.0 located immediately north of Zone 3.5. Results to-date have confirmed that the mineralized sill shows a distinct widening to depth at Zone 3.5, and that a similar expansion of the deposit's host rock (the mineralized top of the sill) to depth may exist for upwards of 3.5 kilometres of strike to the north.

"Previous drilling confirmed that the well mineralized stratigraphic top of the sill (which faces east) at Zone 1.5 and the northern part of Zone 2.0 resembles a wedge form that widens significantly to depth. Recent drilling has now confirmed that the top of the sill also appears to broaden exponentially to depth at Zone 3.5.

"Additional drilling over the 3.5 kilometres of sill that separates these two areas is expected to continue to confirm a universal widening of the mineralized portion of the intrusion to depth. Should this hold true, Colomac may become a much larger gold deposit and a stronger prospect for resource development with accelerated growth potential, as some areas have already shown expansions at depth to upwards of 3 times its near-surface true width," said Dr. Michael Byron, President and Chief Executive Officer said.

### Zone 3.5

- Drilling at Zone 3.5 continues to deliver both higher-grade intercepts similar to those reported in the Company's 2012 and 2018 programs and broad regions of continuous mineralization that show a distinctive widening of the mineralized portion of the Colomac Main sill to depth.
- C19-50 was drilled below previously reported holes C18-12 and C18-12B (see press release dated September 11, 2018), and intersected 105.00 metres (45 metre true width) of 1.35 gpt Au, including 34.50 metres of 2.38 gpt Au, and including 12.75 metres of 3.23 gpt Au, extending mineralization an additional 60 metres to depth (Figures 1, 2 in release).
- C19-27 was intended to be drilled beneath mineralization reported in hole C18-09 (see press release dated September 11, 2018), however due to topographical constraints the hole had to be moved to the east which resulted in a shallower intercept than intended and intersected 71.50 metres (36 metre true width) of 1.33 gpt Au, including 10.00



*The Colomac gold project is located within the company's Indin Lake property. Nighthawk image*



metres of 2.06 gpt Au, and including 3.75 metres of 4.59 gpt Au; and a lower intercept of 17.50 metres of 2.26 gpt Au, including 4.50 metres of 4.50 gpt Au (Figures 1, 3).

- Previously drilled hole C18-09 established an 80-metre true width to the mineralized portion of the sill at a vertical depth of 450 metres, while hole C19-50 recorded a 45-metre true width intersection at 270 metres vertical depth. The documented increase in width with depth is consistent with what was observed at Zones 1.5 and 2.0, suggesting that a significant thickening of the mineralized top of the sill may occur to depth along the 3.5-kilometre-long section of the intrusion that separates the two areas.

### **Zone 3.0**

- Hole C19-44 infilled a gap in drilling below historical near-surface holes and above previously drilled Nighthawk holes, intersecting 30.65 metres of 1.81 gpt Au, including 16.95 metres of 2.33 gpt Au, and including 5.85 metres of 3.64 gpt Au (Figures 1, 4 in release).
- Additional drilling along the sill will help confirm that the wedge-shaped panel of mineralization that spans Zone 1.5 and the northern part of Zone 2.0 (see press release dated December 3, 2019), can be extended along strike and that a general widening to depth may reflect the morphology of the sill over its entire length. A significant expansion of the sill's mineralized host to depth would provide ample opportunity for accelerated resource growth.

Previously in January, Nighthawk reported [drilling at Colomac continues to encounter a widening of the mineralized portion of the sill along strike and to depth](#). The release included assay results for eight drillholes (4,011 metres) completed on Zones 1.5 and 2.0 of the Colomac Main Sill, part of the Colomac gold project centrally located within its Indin Lake gold property. Click [here](#) for Nighthawk's release on retaining JDS Energy & Mining to conduct engineering studies at Colomac and is proceeding with share consolidation and [here](#) for the share consolidation completed release. In other news, the company reported an agreement to [purchase royalties pertaining to assets in the Indin Lake property](#).

### **Sabina Gold & Silver announces 2020 exploration budget**

#### ***Drilling to focus on high grade underground corridor at Umwelt and Umwelt Vault***

Sabina Gold & Silver Corp announce plans for the upcoming 2020 [spring exploration program](#) at its 100% owned Back River Gold project in Nunavut.

“We are pleased to be fully funded for the planned 2020 Winter exploration program with our recently completed flow-through financing,” said Bruce McLeod, President & CEO “The drill program will target a 600m down plunge portion of the Umwelt underground where high grade Au ounces are projected along a favourable secondary structural setting between the currently defined high grade Vault zone and the limits of the planned Umwelt open pit. The high grade corridor represents an exciting opportunity to optimize the underground mine plan with additional high grade ounces that could positively impact the gold production profile of the Back River Gold Project. Drilling is expected to start in early March of 2020.”

### **2020 Back River Exploration Budget**

The priority focus for exploration advancement at Back River during 2020 is a 6,500 meter spring drilling program that will target expansion and definition of the high grade corridor at the Umwelt underground with a focus on the up plunge portion of the deposit that extends from the current limits of the Vault zone towards the lower limits of the Umwelt open pit. This drilling would encompass approximately 10 holes up plunge to the pit as well as an optional 2-3 holes within the Vault zone and other structural targets within the Umwelt gold system.

Additional exploration work for 2020 will include continued exploration modelling of the Nuvuyak discovery, Llama Extension zone and an extensive project wide target pipeline. A planned airborne geophysical survey and summer field work program will follow up new results and the advancement of target concepts in support of new discovery potential.

### **Osisko Metals delivers milestone year and outlines objectives for H1 2020**

Osisko Metals Incorporated [announced a summary of 2019 highlights](#) and a H1 2020 corporate plan and exploration outlook.

“2019 was another banner year for Osisko Metals with the release of the updated 52 million tonne Mineral Resource Estimate for Pine Point, confirming Pine Point as the most exciting zinc project in North America. We also released a maiden MRE for our portfolio of assets in the Bathurst Mining Camp by unlocking potential and breathing new life into this prolific mining camp. We would like to thank all our stakeholders and shareholders as we continue to grow and advance our projects,” said Jeff Hussey, President and CEO.

Robert Wares, Executive Chairman, comments: “Continuing on the 2019 milestones, particularly the updated Mineral Resource Estimate, the forthcoming year will be an exciting one for the Company, focusing on camp-wide exploration at Pine Point. Drill rigs are now testing multiple near-surface targets identified in the 2019 airborne gravity survey. Discoveries are made at the drill bit and with an aggressive exploration plan, 2020 will be an exciting year for Osisko Metals and its shareholders.”

### **2019 Highlights**

- On November 13th, the Company released a NI43-101 near-surface Inferred Mineral Resource Estimate (“MRE”) of 52.4 million tonnes grading 4.64% zinc and 1.83% lead (6.47% ZnEq) that contains 5.3 billion pounds of zinc and 2.1 billion pounds of lead in situ. This is a 36% increase over the previous 2018 MRE at a similar grade. Over 90% of the quoted resource base is pit-constrained.
- On December 19th, the Company announced the purchase of the pre-existing 3% NSR royalty payable to Karst on the Pine Point Project. With the concurrent sale of a 1.5% royalty to Osisko Gold Royalties, the total encumbrance on the project was decreased by 50%.
- On September 30th, Collaboration Agreements between Osisko Metals and the Deninu Kue First Nation and the Northwest Territory Metis Nation were signed. The parties entered into the agreements in order to promote a cooperative and mutually

respectful relationship governing the proposed exploration and development activities in the area of

Pine Point. Following the signing of these agreements, Osisko Metals was able to increase its mineral claim holding at Pine Point by over 100%.

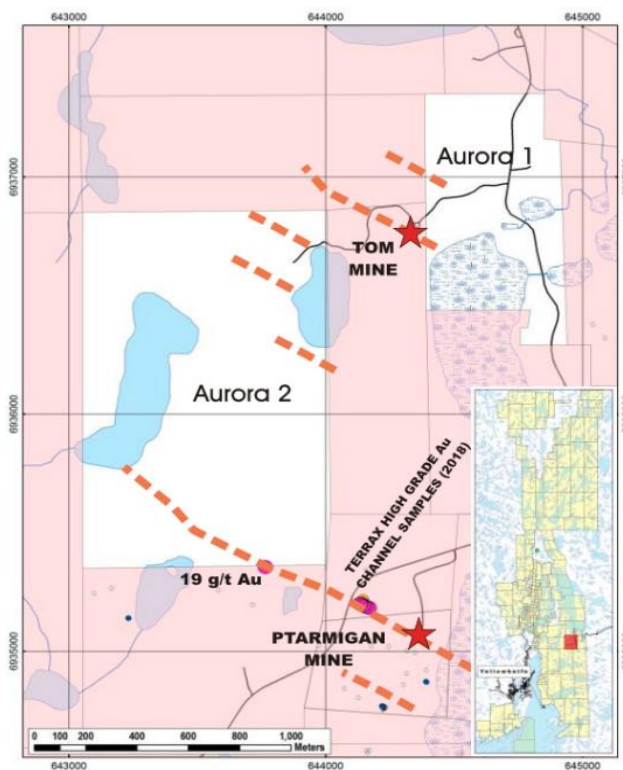
- On February 20th, Osisko Metals published a maiden MRE for the BMC project outlining 1.96Mt grading 9.00% ZnEq in the Indicated category and 3.85Mt grading 7.96% ZnEq in the Inferred category. Significant brownfield exploration potential exists at the Titan Zone where drill holes have intersected 75 metres of mineralization that is located 500 meters below the resource boundary.

Osisko Metals Incorporated announced the board of directors has appointed Robert Wares as Chief Executive Officer of the company and Jeff Hussey as Chief Operating Officer. Wares will also maintain his role as Chairman and Hussey will continue to serve as President of the company. Also, the company announced a royalty sale on Pine Point. [See the release.](#)

### TerraX announces start of 2020 drilling program at Yellowknife gold project

TerraX Minerals Inc. announced start of a [10,000 meter drilling program](#) at the company's wholly owned Yellowknife gold project in the Northwest Territories. This first phase of drilling will start at the Sam Otto gold deposit due to better access during the winter and will focus on expanding the current NI 43-101 inferred mineral resource estimate of 735,000 ounces of gold for the project.

David Suda, President and CEO, stated, "We are excited to start the drilling program at Sam Otto, one of the main gold deposits identified to date on the Property. The Sam Otto gold zone which is approximately 12 kilometres from Yellowknife, has already been defined in two main areas over a strike length of almost two kilometres. Drilling results to date have confirmed the potential to quickly and efficiently add quality gold ounces." The 10,000 metre drilling program at Sam Otto will consist of approximately 40 drill holes planned along strike, to expand the known mineralization corridor and test the open gap between Sam Otto Main and Sam Otto South. The corridor being drilled is over a strike length of approximately 1500 meters, with hole spacing on average of 100 meters to a depth of 250 metres. The winter program at Sam Otto will utilize 2 rigs, and will be completed by April 2020.



*TerraX has acquired claims associated with past gold producers, the Ptarmigan and Tom mines.  
TerraX illustration*

Additional holes may be planned subject to the success of this ongoing program. The Company also plans a second drilling program at the Crestaurum high grade gold deposit for the summer of 2020.

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

In other TerraX news, the company announced on January 30 that it had [acquired claims connected to past gold producers – the Ptarmigan and Tom gold mines](#), in the Yellowknife gold camp.

The acquisition of two large claims, Aurora 1 and 2, are readily accessible by paved road from Yellowknife. The Aurora claims tie up ground containing strike extensions of the Ptarmigan and Tom Mines (collectively 120k oz Au produced at an average grade of 10 g/t Au) which were acquired by TerraX in 2018.

### **North Arrow reports microdiamond results, \$3.5M LDG exploration budget**

North Arrow Minerals Inc. reported a [\\$3.5 million exploration program](#) for 2020 and microdiamond results from the Anchor kimberlite on the LDG joint venture diamond project, a prospective 147,200 hectare joint venture property located just south of the Diavik Diamond Mine in the Northwest Territories.

As reported on July 8, 2019, the Anchor kimberlite was discovered as part of the 2019 summer exploration drilling program and represents the first new kimberlite discovered by the LDG joint venture. Kimberlite was encountered in 6 of 7 drill holes that tested the Anchor target area and is described as a dark grey to black, fine grained, macrocryst-poor, monticellite to carbonate coherent kimberlite. Caustic fusion results of drill core samples have been received and are summarized in the table in the full release.

The presence of microdiamonds in this fine grained kimberlite is encouraging and a kimberlite indicator mineral (KIM) characterization study is underway to compare the Anchor kimberlite mantle sample with the distribution of KIMs in the local till sample database to aid in identifying additional drill targets in the area. This work is part of a full review of the project database that is presently underway, including results from LIDAR surveying, ground geophysical surveys, prospecting, till suitability mapping, geophysical anomaly checking and till sampling.

North Arrow also reports the joint venture has approved a 2020 program with a budget of \$3.5 million, designed to continue with systematic exploration of the project including at least 2,000m of drilling to test new targets.

The program is expected to commence in late February or early March 2020 with ground geophysical surveys followed by exploration drilling in late spring or summer. The 2020 exploration program is being fully funded by joint venture partner Dominion Diamond Mines, after which it is expected North Arrow will retain an approximate 18% interest in the project.



## **Geological map updated for the mineral-rich Slave Geological Province**

An [updated bedrock geology map and database](#) will aid explorers and academic researchers investigating the mineral-rich Slave Geological Province.

The updated map, resulting from several years of data collection and analysis, has been published by the Northwest Territories Geological Survey (NTGS) in partnership with the Canada-Nunavut Geoscience Office. Dr. Mike Stubley, a former Government of Northwest Territories employee and highly-experienced geologist, led the work. The updated map is based on Dr. Stubley's original map published by the NTGS in 2005.

Underlying eastern Northwest Territories and western Nunavut, the Slave Geological Province is well known for its excellent mineral potential and long and prosperous history of mining. Among other geological elements, the updated map contains improved information on rock types favorable for mineral exploration and the location of known kimberlite bodies. Kimberlite is a rare and unique rock type, and some kimberlite bodies contain diamonds.

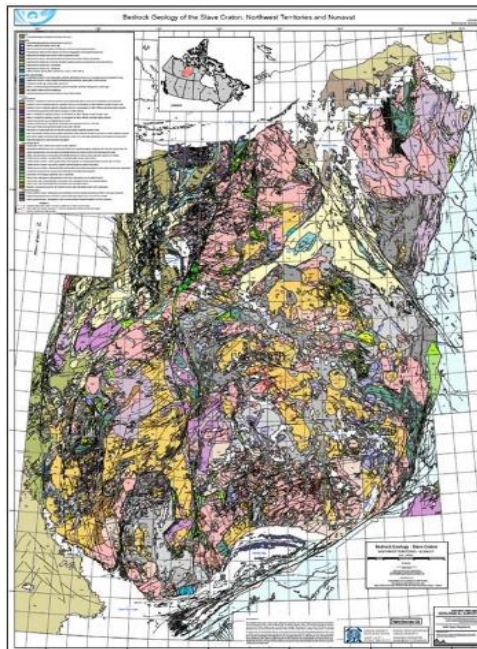
The significance of the project extends beyond mineral exploration and academic research. The updated map has already been used in assessing potential routes for the proposed Slave Geological Province all-season road.

The NTGS is a science-mandated division of the Department of Industry, Tourism and Investment. The research conducted by the division enables government, residents and investors to make informed decisions and advance the knowledge economy.

“The Slave Geological Province is an economic breadbasket for the Northwest Territories. Mining and exploration regularly contribute more than 20% of total economic activity in the territory, and the vast majority of that takes place in the mineral-rich Slave Province. With renewed data, industry and academics alike can work to better understand the geology and mineral potential of this region and advance the territory's economy.” Katrina Nokleby, Minister of Industry, Tourism and Investment

### **Quick facts**

- The NWT's three active diamond mines (Ekati, Diavik and Gahcho Kué) are all located within the Slave Geological Province.
- Data for the updated map was contributed by a number of companies including Diamondex Resources Ltd., Strongbow Exploration Inc., GGL Diamond Corp., Kennady Diamonds, Aurora Geosciences, TMAC Resources, MMG Resources, BNT Gold Resources, North Arrow Minerals, and Miramar Mining Corp.



*Click image to enlarge map. Courtesy GNWT*

## **Innovative NWT Indigenous mineral development strategies released**

Investors at the AME Roundup and beyond will have a better understanding of the opportunities, investment climate and path to working with two Indigenous Governments thanks to new mineral development strategies released by the Gwich'in Tribal Council (GTC) and the Inuvialuit Regional Corporation (IRC).

Click titles or thumbnails for the full strategies which include:

- [A Guide to Mineral Opportunities in the Gwich'in Settlement area](#)
- [Roadmap to Mineral Exploration & Development in the Inuvialuit Settlement Region](#)

The release of the strategies was welcomed this morning at the AME Roundup – an event at which Northwest Territories Indigenous governments and organizations have been playing a growing and significant role.

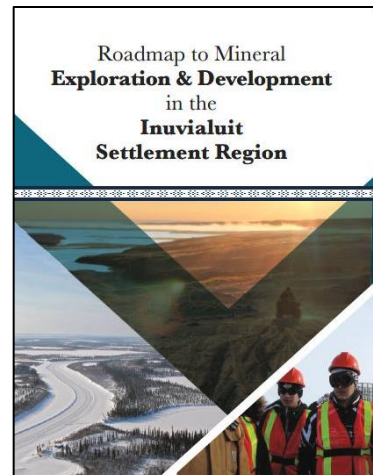
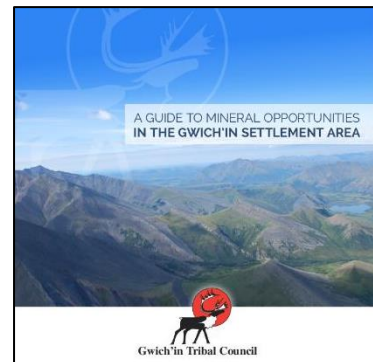
The regional strategies, developed with funding from the Department of Industry, Tourism and Investment under the Mineral Development Strategy, were formally unveiled by GTC Grand Chief/President Bobbie Jo Greenland-Morgan and IRC Chair and CEO Duane Ningaqsiq Smith.

Each strategy outlines existing geological data, maps and information, a comprehensive history of the areas and an outline of local organizations, groups and authorities. A goal of regional mineral development strategies is to provide a clear vision and direction for mineral explorers, investors and others in the industry to guide comprehensive, respectful and sustainable mining practices.

“These strategies are integral to our work to attract investment in the Northwest Territories mineral industry. Our partnership with Indigenous Governments continues to grow through our joint presence at events such as AME Roundup and the release of regional mineral development strategies. We are at the table together, and investors have a clear picture of that,” said Katrina Nokleby, Minister of Industry, Tourism and Investment.

“The Gwich'in must control what happens on our lands – we want to be true partners in any projects undertaken, from concept to close out. The strategy was developed with the input of leadership and people in the Gwich'in communities. We hope this will lead to strong partnerships and economic opportunities that can benefit both the Gwich'in and the Northwest Territories,” said Bobbie Jo Greenland-Morgan, Grand Chief/President, Gwich'in Tribal Council.

“With the production of the draft Roadmap to Mineral Exploration and Development in the Inuvialuit Settlement Region (ISR) Inuvialuit Regional Corporation (IRC) outlines its priorities to support responsible mineral development in the Region. IRC continues to work in partnership with the Government of the Northwest Territories and Government of Canada to promote



potential opportunities in mineral exploration in the North,” said IRC Chair and CEO Duane Smith.

Click [here for the GNWT release](#).

### Now here’s a good idea! Evrim launches innovative communications

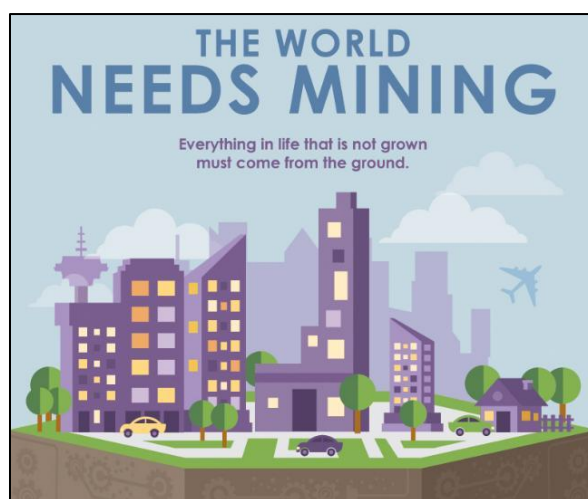
This year, Evrim Resources is doing something new, and frankly not something they are required to do as an exploration company.

They have launched a weekly blog to promote conversations around the exploration and mining sectors, with the goal to reintroduce mainstream society to thoughtful, constructive, and realistic discussions on the impact of this giant and crucial industry.

On their first post, Evrim brings your attention to the key role of metals in our daily lives – click on the infographic.

Evrin invites everyone to “Join the conversation.” Have you thought of the influence that the mining industry has in your life? Does this change any perceptions you have about our role in society? Have you participated in any conversations related to this topic in the past?

We need more CEO’s speaking up proudly about the minerals industry. Thumbs up to Paddy Nicol, Evrim’s President & CEO for stepping outside the box.



### Calendar of events

- **Northern Lights 2020**, is a high-profile business and cultural showcase of Nunavut, Nunavik, and Labrador/Nunatsiavut hosted by the Baffin Regional Chamber of Commerce and the Labrador North Chamber of Commerce. It will be held at the Shaw Centre in Ottawa, February 5 - 8, 2020. The four-day event is expected to attract 200 exhibitors and 1,200 delegates. For the schedule, click [here](#). [#NL2020Ottawa](#)
- **PDAC 2020**, the world’s premier mineral exploration and mining convention will host 1,100 exhibitors, 2,500 investors and 25,000 attendees from over 100 countries, in Toronto, March 1-4. PDAC includes technical sessions, short courses and networking events. Click [here](#) to register. [@the\\_PDAC](#)
- **Invest Canada North PDAC** – watch for this new PDAC 2020 event (March 1-4 in Toronto), which connects global investors with the competitive advantages and opportunities in Canada’s North. [@InvestCANorth](#)
- **Nunavut Mining Symposium** will be held in Iqaluit from March 30 to April 2, 2020. [Registration](#) is now open! Stay tuned for schedule updates on the website and the release of a custom app this year! [#NuMS20](#)



## Member news releases

- 30 January 2020 [Mountain Province Diamonds](#) announces voluntary delisting from NASDAQ
- 30 January 2020 [TerraX](#) acquires strike extensions of past producing gold mines, Ptarmigan and Tom
- 29 January 2020 [Seabridge Gold](#) strengthens commitment to meeting environmental and social demands
- 28 January 2020 [Osisko Metals](#) announces corporate changes and execution of royalty sale on Pine Point
- 23 January 2020 [Mountain Province](#) announces production and sale results
- 20 January 2020 [TerraX](#) announces start of 2020 drilling program at Yellowknife Gold Project
- 20 January 2020 [Nighthawk](#) drilling at Colomac continues to encounter a widening of the mineralized portion of the sill along strike and to depth
- 20 January 2020 [TMAC](#) announces strategic review process
- 20 January 2020 [TMAC](#) announces Q4 2019 operating results
- 17 January 2020 [Osisko Metals](#) delivers milestone year and outlines objectives for H1 2020
- 16 January 2020 [Olivut Resources Ltd.](#) exploration update
- 15 January 2020 [North Arrow](#) reports microdiamond results, \$3.5M exploration 2020 budget approved
- 15 January 2020 [Nighthawk](#) to purchase royalties for certain regional assets at Indin Lake gold property
- 14 January 2020 [Silver Range Resources Ltd.](#) provides corporate update
- 13 January 2020 [Nighthawk](#) announces completion of share consolidation
- 8 January 2020 [Nighthawk](#) retains conduct engineering studies at Colomac
- 7 January 2020 [Nighthawk](#) drilling at Colomac indicates widening of deposit
- 6 January 2020 [Blue Star Gold Corp.](#) announces management changes
- 6 January 2020 [Aston Bay Holdings](#) announces terms for non-brokered private placement
- 6 January 2020 [Sabina Gold & Silver](#) announces 2020 exploration budget



The graphic features a background image of a large diamond being held by a hand, with a mining truck and a landscape in the background. The text is overlaid on this image. In the top right corner, it says 'PDAC 2020' and 'MARCH 1-4'. On the left, there is a logo for 'INVEST CANADA NORTH' with a red arrow pointing up and the text 'SAVE THE DATE' below it. The bottom section contains a map of Canada with the northern regions highlighted in red, and a paragraph of text describing the event.

**INVEST CANADA NORTH** connects global investors with the competitive advantages and opportunities in Canada's North, Yukon, Northwest Territories and Nunavut, at one of the world's biggest annual mining conferences, the PDAC Convention.

Our unique initiatives showcase each region, through keynote presentations, panels and special sessions, highlighting the leaders in exploration, development and production, as well as the mining ecosystem that is supported by significant geological potential, strong geopolitical stability and progressive Indigenous and community partnerships.



Check out Baffinland Iron Mines' new website for these and more stunning images.

<http://www.baffinland.com/>



## Welcome new members

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

- **Butland Communications**, located in St. Johns, NL, is a consulting and research firm providing community engagement and strategic planning services to businesses working in mineral development. Contact Principal Consultant Marilyn Butland, [marilyn@butlandcom.com](mailto:marilyn@butlandcom.com); 709 746 0432.
- **Equinox Industries**, located in Winnipeg, MB, is a product supplier company. Products include polyethylene and fibreglass tanks, ATV/vehicle trailers, cargo/passenger sleds and rescue sleds. Contact Territory Account Manager, Dan Parisien [dan@eqnx.biz](mailto:dan@eqnx.biz); 204 633 7564.
- **Great Slave Drilling and Exploration Ltd.**, is located in Hay River, NT. With drilling and exploration work, the company offers environmental, medical and rental services. Contact Controller Jennifer Grandguillot [jen@greatslavedrilling.com](mailto:jen@greatslavedrilling.com); 867 875 2922.
- **Great White North Technology Consulting Ltd.**, located in Timmins, ON, is a managed IT service provider company which offers consulting, project delivery, cybersecurity, backups, and other technology solutions. Contact Chief Executive Officer, Paul Brunet [salesteam@greatwhitenorth.com](mailto:salesteam@greatwhitenorth.com); 1 866 268 4216.
- **Midnight Petroleum Ltd.**, located in Yellowknife, NT, is a fuel and lubricant supply company for mines Northwest Territories. Contact Branch Manager, Jeremy Richard [jeremy@midnightpetro.ca](mailto:jeremy@midnightpetro.ca); 867 873 6211.



At work in the maintenance shop at Agnico Eagle's Amaruq site. Exploration work led to discovery of the Amaruq deposit which extends Meadowbank mine life by seven years. The new deposit highlights the importance of exploration work – by extending mine life, northern employment and business opportunities are also extended.

[Click here for Agnico Eagle operations' photos.](#) Agnico Eagle photo



## Exploration & development news briefs

**Auryn Resources Inc.** announced it has arranged a CAD \$10 million non-brokered private placement. The placement will consist of approximately 6.3 million common shares (the “Shares”) priced at CAD\$1.60 per Share to be issued to accredited investors in Canada and overseas.

In conjunction with the equity placement, the Company has agreed with the lender under a September 2019 bridge loan (see September 13, 2019 news release) to amend the loan to add mutual conversion rights of the loan into common shares. The loan terms will provide the lender with a convertibility right into common shares, on the \$3 million that has been advanced to-date, at the placement price of \$1.60, however, the lender may be required to convert if the Company’s shares trade on the TSX at a price of \$2.50 or more for any five consecutive trading days prior to the loan’s maturity date. The lender has also agreed to reduce the interest rate of the loan to 5% per annum. The completion of the placement and loan amendment are subject to execution of agreements, TSX and NYSE approvals and other customary closing conditions.

The company intends to use the net proceeds from the placement to fund continued surface exploration at its Sombrero and Curibaya projects located in southern Peru and for general working capital.

**Blue Star Gold Corp.** announced effective January 1, 2020, the company has engaged two new management professionals. Andrea Yuan has been appointed the Interim Chief Financial Officer for an initial term of 4 months, ending April 30, 2020. Ms. Yuan replaces Zara Kanji, who has stepped down as CFO of the Company to focus on her professional business of value-added operational and accounting consulting services for individuals, private and public companies. Ms. Yuan is a Chartered Professional Accountant in British Columbia and a Certified Public Accountant in New Hampshire. For Blue Star’s second management change, Jan Urata is the Company’s new Corporate Secretary, taking over from Blue Star’s corporate counsel, Mike Stewart.

**Olivut Resources Ltd.** provided an exploration update for the Seahorse project, located in the northern, Inuvialuit region of the Northwest Territories.

As previously reported, the field portion of the 2019 drill program on the Seahorse project ended in late September. Encouraging results from this program warrant additional work.

Six holes were drilled to test certain regional geophysical targets that had been confirmed and further delineated by a detailed helimag program that was conducted during April and May 2019. The six holes were drilled to a maximum depth of 316’ using a reverse circulation, heli portable drill.

Each of the holes intersected varying depths of extremely fine-grained clays that do not appear to be derived from the dolomite country rock that is exposed proximal to the targets. Down hole drilling conditions were exceptionally challenging in the holes, as was the recovery of drill sample material, due primarily to the nature of the intersected clays. Samples were collected from each of the holes and sent for analysis to Saskatchewan Research Council.

Preliminary visual inspection of the down hole material, as well as further microscopic examination of many of samples collected, could not specifically identify with certainty the host rock from which the clay material is derived. However, whole rock and multi-element geoanalytical results have returned complex chemistry that warrants further work.

Initial results reflect anomalous, elevated levels of numerous heavy and light rare earth elements relative to levels of the same elements found in till samples obtained in the general region. These levels are generally higher than, or consistent with, levels of rare earths detected in clays found to occur over certain kimberlites identified in some locations of the world. Sulphides, including pyrite and sphalerite, as well as other mafic minerals were easily identified in many downhole samples. None of these findings can be explained by the exposed country dolomitic rocks.

Additional sample material has recently been sent to Saskatchewan Research Council for heavy mineral analysis. The Seahorse Project area underwent periods of extreme warming and laterization that destroyed silicate indicator minerals as evidenced from regional till sampling results. However, some opaque oxide indicator minerals and diamonds survive this type of weathering. Given the anomalous drill hole geochemical results, this work constitutes the obvious next cost effective step.

In addition to the drilling program described above, limited regional prospecting was conducted. A large gossan zone was identified on the property that appears to have a strike length of approximately eight kilometres. Very limited sampling was conducted due to budget and fuel constraints. Some of these samples returned trace amounts of gold which may be significant given the limited number of samples collected. The linear gossan zone occurs within the dolomite country rock and likely represents a sulphide bearing fault zone.

While analyses have been ongoing, a great deal of time has been spent further reviewing the geophysical and geological information considering these new anomalous results. This region has been subjected to no known previous detailed exploration work.

The Company considers the Seahorse project to have the potential to host diamondiferous kimberlite bodies of

significant size and perhaps other mineral deposits, based on a combination of: 2019 program results as described above; favourable diamond stability indicator minerals found regionally and locally, including 18 macro diamonds found in regional samples to the west and northwest; specific geophysical targets; regional and local faults that would favour kimberlite emplacement; occurrence of diamondiferous kimberlites to the north and southeast, as well as other geochemical data in the area. Due to its remoteness, the project area must be supplied by small aircraft and helicopter. Olivut is the Operator pursuant to the terms of the previously announced option agreement with Talmora Diamond Inc. to earn 50%. On December 7, 2019 Olivut informed Talmora that \$1,295,256 had been spent on the Seahorse Project to October 31, 2019. Olivut must decide whether to exercise its option by July 6, 2020. The Company will report further details once they are available.

Numerous targets are drill ready on the HOAM Project and a detailed helimag program is proposed for additional regional geophysical anomalies in order to finalize the drill priority list. Completion of this work program is contingent on the raising of funds.

Olivut is a diamond exploration company with a 100% mineral interest in the HOAM Project and an option to earn 50% interest in the Seahorse Project, both projects being located in Canada's Northwest Territories. Please visit [www.olivut.com](http://www.olivut.com) for detailed corporate and project information.


**Seabridge Gold** Chairman and CEO Rudi Fronk announced Seabridge has [expanded the responsibilities and scope of its environmental and permitting team](#) in response to the growing importance and complexity of earning and maintaining the social licence to build and operate mining projects in Canada. Key members of the management team have been promoted to expanded roles reflecting the wider scope of work required to meet new and evolving demands. "A decade ago, the emphasis in our industry was on being successful with environmental permitting. Now, the mandate in this area is much larger and we are recognizing this fact by appointing Brent Murphy as Senior Vice President of Environmental Affairs. Reporting to him will be Elizabeth Fillatre Miller who assumes the new position of Vice President of Environment and Social Responsibility. Jessy Chaplin takes on the job of Director of Permitting and Compliance. Our aim is to continue to be a leader in our responsiveness to the environmental and the social needs of our Indigenous partners and stakeholders," said Fronk.

Brent Murphy is a former exploration geologist who holds an M.Sc. in Geology from Acadia University. As a former permitting advisor to the federal and territorial governments, Mr. Murphy has extensive experience in aboriginal, public and government engagement in support of the social acceptance of resource extraction projects. Elizabeth Fillatre Miller is a Registered Professional Biologist who holds a Master of Science degree.

### Chamber of Mines' Social Media

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**NWT & NUNAVUT  
CHAMBER OF MINES**

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## 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 ULC</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 2018, 1,625. 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, 22 March 2019 Canadian Championship Dog Derby and Dominion Diamond announce race schedule
<a href="#">Diavik Mine</a>	<a href="#">Rio Tinto</a> (operator) & <a href="#">Dominion Diamond Mine ULC</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 2018, 1,113. New A21 open pit development budgeted at US\$350m over 4 years. A21 grand opening celebrated August 2018. Reserves at Dec 31, 2018 were 11.5 million tonnes at 2.4 carats/tonne for total of 27.4 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 Inc</a> (51% and operator) and <a href="#">Mountain Province Diamonds Inc.</a> (49%)	Diamonds	Located 280 km NE of Yellowknife, NWT. Open pit mine with life of 12 years. Mine reached commercial operation in Q1 2017. Workforce in 2018, 527. Plan is for three open pits to mine 5034, Hearne and Tuzo ore bodies producing average of 4.5 million carats/year. Mining started with 5034 orebody and production from Hearne began in April 2018. Reserves at December 31, 2018 (production commenced Q3 2016) were 31.1 million tonnes at 1.54 carats per tonne for 47.9 million carats. Initial mine plan extends to fiscal year 2028.	Media release 30 January 2020 Mountain Province Diamonds announces voluntary delisting from NASDAQ Media release 23 January 2020 Mountain Province Diamonds announces fourth quarter and full year 2019 production and sale results and provides Q4 conference call details
<a href="#">Prairie Creek</a>	<a href="#">NorZinc Ltd.</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	Media release 2 December 2019 Peter Portka appointed chief financial officer of NorZinc Media release 25 November 2019 NorZinc receives final major permits for Prairie Creek Mine Media release 19 November 2019 NorZinc announces shareholder approval of previously announced RCP Royalty Media release 14 November 2019 All season road permits for NorZinc's Prairie Creek Mine

			<p>Board recommended approval of the proposed all season road.</p> <p>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.</p>	<p>granted by Mackenzie Valley Land and Water Board</p> <p>Media release 18 November 2019 NorZinc welcomes Gary Sugar and Stephen Flewelling to its board of directors</p> <p>Media release 7 November 2019 NorZinc provides results for third quarter 2019</p>
NICO	Fortune Minerals Limited.	Cobalt-gold-bismuth-copper	<p>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.</p>	<p>Media release 21 November 2019 Fortune Minerals signs access agreement with Tlicho Government for NICO project access road</p> <p>Media release 19 November 2019 Fortune Minerals closes flow-through private placement</p>
Kennady North	Mountain Province Diamonds Inc.	Diamonds	<p>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.</p>	<p>Media release 17 October 2019 Mountain Province Diamonds announces third quarter 2019 production and sale results, provides Q3 conference call details</p>
Indin Lake	Nighthawk Gold Corp	Gold	<p>Nighthawk controls over 90% of the prospective Indin Lake Greenstone Belt in this historic gold camp with a total ground position now comprising 930 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)</p>	<p>Media release 20 January 2020 Nighthawk drilling at Colomac continues to encounter a widening of the mineralized portion of the sill along strike and to depth</p> <p>Media release 15 January 2020 Nighthawk to purchase royalties for certain regional assets at Indin Lake gold property</p> <p>Media release 13 January 2020 Nighthawk announces completion of share consolidation</p>

## NWT & Nunavut Chamber of Mines – Northern Mining News

				<p>Media release 8 January 2020 Nighthawk Retains JDS Energy &amp; Mining to conduct engineering studies at Colomac and is proceeding with share consolidation</p> <p>Media release 7 January 2020 Nighthawk drilling at Colomac indicates widening of deposit</p>
Pine Point	Osisko Metals Incorporated	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.</p>	<p>Media release 28 January 2020 Osisko Metals announces corporate changes and execution of royalty sale on Pine Point</p> <p>Media release 17 January 2020 Osisko Metals delivers milestone year and outlines objectives for H1 2020</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 29 January 2020 Seabridge Gold strengthens commitment to meeting environmental and social demands</p>
Selwyn Project (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. 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.</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 October 2019 Avalon receives final payment from Cheetah Resources for acquisition of [some of the] Nechalacho resources</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 Mine Ltd.</a>	Gold	In operation since 2010. Produced its three millionth ounce gold in 2018. Open pit mine located in the Kivalliq Region, 300 km west of Hudson Bay and 70 km N of Baker Lake. Mine jobs: 1,311 PYs 50km from Meadowbank mine site Amaruq project adds 7 years to mine life; commercial production achieved September 2019.	18 November 2019 Baker Lake Council thanks Agnico Eagle Mines  Media release 7 October 2019 Agnico Eagle achieves commercial production at the Amaruq satellite deposit
<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: 1,411 PYs 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 17 April 2019 Baffinland employees ratify a partnership agreement with the International Union of Operating Engineers – Local 793  Media release 16 April 2019 Baffinland supports successful technical meetings for phase 2 permitting process
<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 2018: 516 PYs First gold poured in first quarter 2017 and achieved commercial production in second quarter 2017.	Media release 20 January 2020 TMAC announces strategic review process  Media release 20 January 2020 TMAC announces Q4 2019 operating results
<a href="#">Meliadine Gold Mine</a> (commercial production May 14, 2019)	<a href="#">Agnico Eagle Mines Ltd.</a>	Gold	Meliadine mine declared commercial production on May 14, 2019. 25 km NE of Rankin Inlet. Estimated construction jobs: 1,000 Mine jobs: 1,099 PYs IIBA signed June 2015. Total capital cost ~\$830m, below \$900m forecast; mine life ~15 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 (by Dec 2018 figures) 3.75 million ounces of gold in proven and probable reserves (16.7 million tonnes at 6.97 g/t) and a large mineral resource.	Media release 23 October 2019 Agnico Eagle reports third quarter results
<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 6 January 2020 Sabina Gold & Silver announces 2020 exploration budget

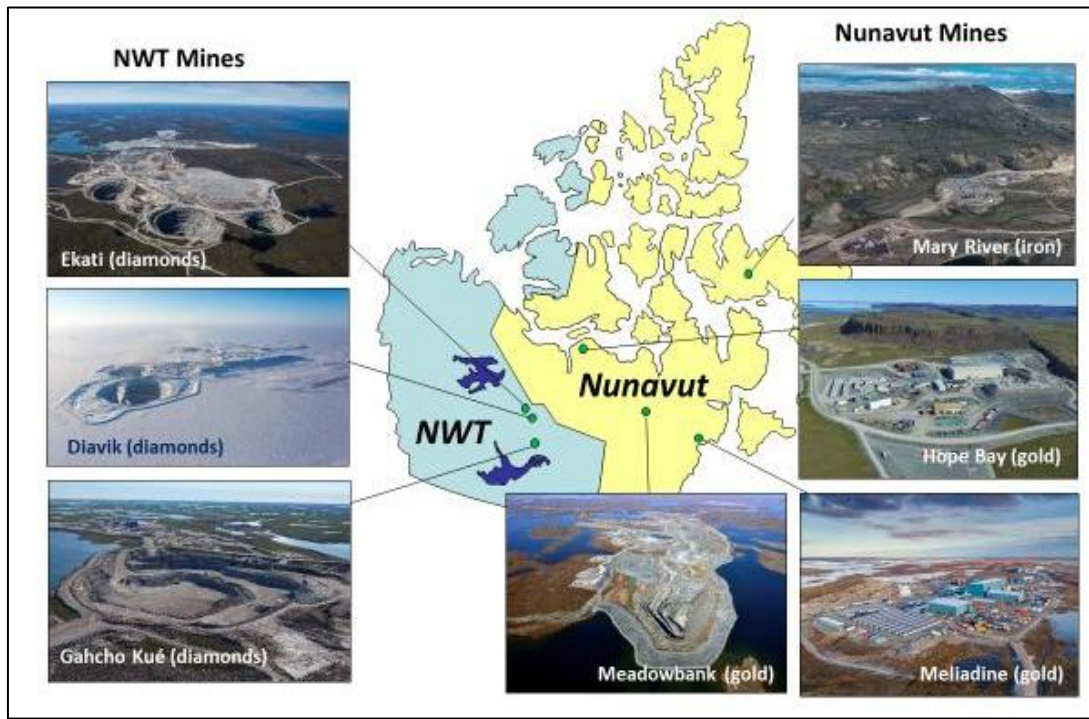


			to produce ~200,000 ounces a year for ~11 years with a rapid payback of 2.9 years (at a US\$1,150 gold price and a 0.80 exchange rate). Initial CAPEX of \$415 million. EA complete	
<a href="#">Kiggavik</a>	<a href="#">Orano Canada Inc.</a>	Uranium	Proposed uranium mine 80 km W of Baker Lake. Estimated 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.
<a href="#">Chidliak</a>	<a href="#">De Beers Group</a>	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 4 July 2019 New kimberlite discoveries may add to future of Gahcho Kué Mine
<a href="#">Naujaat Diamond Project</a>	<a href="#">North Arrow Minerals</a>	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, 3 September 2019 North Arrow closes sale of Loki Diamond Project royalty for \$266,000  Media release 7 August 2019 North Arrow to raise \$266,000 selling Loki royalty; completes till sampling program
<a href="#">Committee Bay Gold Project</a>	<a href="#">Auryn Resources Inc.</a> (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 25 October 2019 Auryn drills gold-bearing hydrothermal system at Committee Bay



Project maps

*The northern mining industry's 7 operating mines*



*We are surrounded by even more potential*

