Chamber of Mines News Briefs – October 31 – November 3, 2014

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NUNAVUT NEWS

Nunavut MLA wants answers on Baffin caribou decline

Multi-stakeholder meetings scheduled for next week in Iqaluit

Nunatsiaq News - October 31, 2014

THOMAS ROHNER

Recent surveys on the declining Baffin caribou population clearly demonstrate a need for new management measures, South Baffin MLA David Joanasie said in the Nunavut legislature Oct. 24.

And while the Government of Nunavut might not have a plan yet, it appears stakeholders in the Baffin region and elsewhere will get a chance to meet and discuss what to do about the troubling caribou decline at meetings in Iqaluit next week.

Joanasie asked Environment Minister Johnny Mike — who indicated in May that his department was working with co-management partners including hunters and trappers organizations and regional wildlife organizations to develop a Baffin caribou management plan — for an update on the recommendations from that initiative.

“The research that has been conducted and the studies that have been conducted on the number of caribou is still ongoing,” Mike replied during question period.

The Department of Environment has not released the full results of an aerial survey done earlier this year, but results released last year from a 2012 survey suggest Baffin caribou numbers have plummeted by 95 per cent to fewer than 2,000 animals.

Drikus Gissing, director of wildlife management for Nunavut’s environment department, told Nunatsiaq News in May that, “the numbers in North Baffin are so low, it’s like there’s almost none there.”

Gissing did add, however, that the decline is not from over-hunting but is likely part of a natural boom-bust population cycle.

Joanasie told Nunatsiaq News outside the legislative chambers that scarcity of caribou is a serious concern for hunters in South Baffin as well.

“There’s concerns about the future of the caribou population, for sure,” Joanasie said.

In the assembly, Joanasie pressed Mike on specific options being considered by his department and other stakeholders — such as quotas, relocating caribou from outside Baffin or culling caribou predators such as wolves — but Mike offered no details, saying the review process is still unfolding.

Various stakeholders, including the Nunavut Wildlife Management Board, the Qikiqtaaluk Wildlife Management Board, along with Baffin hunting and trapping organizations, will get a chance to discuss issues and options going forward at meetings scheduled for Nov. 3 and Nov. 4 in Iqaluit.

“After the meeting has been concluded, we will have a better understanding of the management issues and of the direction we may need to undertake in managing our caribou population,” Mike said.

Consultations on the dwindling caribou population began in January, when representatives from Nunavut Tunngavik Inc., the GN, the Nunavut Wildlife Management Board, and the Qikiqtaaluk Wildlife Board met in Iqaluit for the Baffin Island Community Caribou Consultation.

Mike said that the elders’ advisory committee, consulted earlier this spring on this issue, will also be present at the meeting next week in Iqaluit.

“I don’t know if this is what the communities want,” Joanasie told Nunatsiaq News, “but it could be that a total allowable harvest is identified for the Baffin Island caribou population, basically to set a quota, that might be a route we have to go.”

NWT NEWS

Caribou out of reach for Yellowknives

Fall hunt cancelled; hunter blames climate change for Bathurst herd's change in migration route

Yellowknifer – October 31, 2014

Daron Letts

The cancellation of the fall caribou season will put a strain on Dene families, but advocating a hunt would not have been safe, according to Dettah hunter Bobby Drygeese.

Chief Edward Sangris and the Yellowknives Dene First Nation band council called off the hunt on Oct. 16 because caribou are currently nowhere near Yellowknife and the mild weather makes long-distance travel by land and water too risky.

"We were all ready to go but they just weren't coming down to where it was feasible to harvest," said Sangris.

"Due to the unavailability of the caribou and the distance and the weather, it's too late in the season - and of course you've got to use float planes and it's already freezing up there in the bay, so we decided we had to cancel it."

The Tlicho Government had already cancelled its fall hunt, which usually involves between 50 and 60 hunters. That decision was made after several failed attempts last month by scouts to find enough caribou from the Bluenose-East caribou herd.

Bathurst caribou, whose traditional winter range covers the region surrounding Yellowknife, was seen last week approximately 300 kilometres northeast of the city as they passed near Ekati Diamond Mine, according to Drygeese. This is close to 100 kilometres further away than usual.

In recent years, caribou could be found by mid-September in the area around Mackay Lake and Lockhart Lake, a little more than 200 kilometres northeast of the city, he said.

Drygeese, who operates the B. Dene Adventures tour company and culture camp, has led European tourists on excursions to view caribou in years past. In fall 2011, he brought a group of Swedish tourists to photograph the caribou a little more than 60 kilometres north of Yellowknife, just past Gordon Lake.

"Because of climate change, I think, it's getting warmer and they're just staying a little bit further North later and later," he said. "Last year, they were around Mackay Lake in the first week of October and even then it was still warm in October and then we got that cold snap right away later in October. The weather is getting kind of crazier nowadays for people to go hunting."

The average temperature around Yellowknife in October 2013 was above 4 C, according to Environment Canada. This month, the average has been above 2 C.

Frozen caribou will be missed in many households this winter, said Drygeese. Meat from one animal can provide protein for a family of four for a month or more.

"It's hard on people. A lot of people are subsistence hunters. They rely on food from the land," he said.

"Once it's not there it gets pretty lean. You have to find some way to find money to buy food and the food costs lots."

The Yellowknives Dene hope to hold a winter hunt in late December, said Sangris.

The GNWT suspended resident, commercial and outfitted harvesting of the Bathurst herd in 2010 and established a limited bull-focused aboriginal harvest of 300 caribou in December of that year, with tags evenly split between Tlicho and Yellowknives hunters.

The restrictions remain in place, but caribou population numbers remain in decline.

The Bathurst Caribou Herd numbered around 350,000 animals in the mid-1990s, but recent population surveys indicate a rapid decline throughout the past decade, from 186,000 animals in 2003 to 32,000 in 2009. The population seemed to have stabilized at 35,000 in 2012, but overviews of the herd's calving grounds conducted in June indicate their numbers are declining again and could be as low as 15,000 by 2015.

The next population survey for the Bathurst and Bluenose-East herds is scheduled for next year.

The Yellowknives Dene will meet with the environment minister and other aboriginal governments on Nov. 7 to discuss the health of the herds.

Alternative energies sought

Territorial government deserts Taltson grid expansion plan, pulls researchers together for second energy planning session in two years

Yellowknifer – October 31, 2014

Randi Beers

After the territorial government desertion of the Taltson dam expansion project, renewable energy is set to be a hot topic at an energy conference next week in Yellowknife and Dettah.

The event marks the second time the government has brought thinkers together to form an energy action plan in two years.

The Taltson dam expansion project was a pillar of the former energy action plan, which Finance Minister Michael Miltenberger announced in late September his department would be forced to abandon because a feasibility study came back with a price of $1.2 billion, a number almost double what the government had anticipated.

This realization, coupled with the government's Sept. 26 announcement it would kick in $20 million to Northwest Territories Power Corporation (NTPC) in order to avoid a 13 per cent rate hike, is why the government is bringing energy groups back to the drawing board.

"(NTPC) recognizes the current way of operating is no longer sustainable," said Miltenberger in an Oct. 20 minister's statement.

"Rates have reached their limit of affordability. What occurred this past summer, while an environmental anomaly, has been a catalyst that has initiated serious discussion on potentially game-changing direction and focus."

He then indicated the government is willing to consider any sustainable option that "would not increase the cost of power to the customer."

The Department of Industry, Tourism and Investment is bringing in researchers with experience in innovative energy projects to the discussion, such as the Carlton University research team tasked with designing the self-sustaining Canadian High Arctic Research Station in Cambridge Bay.

For the research station, the team has developed a "utility in a box" energy solution, which provides solid waste treatment, sewage treatment, electricity, heat and grid stability for an estimated 17 cents per kilowatt hour.

Each of these individual multi-purpose energy generators have the capacity to provide electricity to approximately 150 people.

Biomass also promises to be a hot topic, as the government has invited Axel Lambion, managing director of Lambion Energy Solutions, a German biomass energy company that has completed over 3,400 hundred biomass projects across the world.

Louis Azzolini, executive director of the Arctic Energy Alliance, will also be presenting at the event.

In an interview with Yellowknifer, he stressed energy conservation and efficiency as the most effective way for the territory to reduce energy costs, especially in the short term.

"Once you start dealing with your energy consumption and get a handle on that, the next progression, if you want to call it that, is asking what other ways we can (generate power,)" he said. "The analogy I would give is if your car ain't running, well, do you go out and change the engine or do you put air in the tires? Once you've checked the tires you can say, 'OK, maybe we need a new car."

He pointed to simple things homeowners can do, such as checking the pumps on home heating systems. Some heating systems have dual pumps and leaving just one pump on for the entire year can tack as much as $5,000 to heating bills, he explained.

Craig Scott, executive director of Ecology North, also pointed to the importance of energy conservation in creating an energy plan.

His organization will also participate in the discussion and he plans to renew his call for the territorial government to adopt a carbon tax.

"It has made a huge difference in British Columbia," he said.

"And we would like to encourage the (NWT) to think about using it."

Scott imagines a carbon tax would add a few cents to gas at the pump, and those extra pennies would be funneled into a government account that would fund other energy efficient initiatives.

The discussion will be held over two days and the government is hosting a public forum Nov. 3 at 7 p.m. at the Explorer Hotel and an invitation-only discussion session Nov. 4 at the Chief Drygeese Centre in Dettah.

RESOURCE DEVELOPMENT AND ENERGY NEWS

Mining News Nuggets

Northwest Territories

Mining News North of 60 – October 30, 2014

DIAMONDS – Kennady Diamonds Inc. Oct. 30 provided an update on the 2014 fall drill program at the company's Kennady North diamond project in Northwest Territories. "The Kelvin drill program continues to delivered excellent results. Exploration and delineation drilling has increased the strike of the Kelvin kimberlite pipe to over 600 meters and the volume continues to increase on strike to the north," said Kennady Diamonds CEO Patrick Evans. "Despite good progress, unfavorable weather conditions, principally dense fog, limited our ability to safely service the drill rigs by helicopter. Accordingly, the fall drill program was stopped temporarily this week while construction of the nearby Kelvin camp is completed. The Kelvin camp is expected to be commissioned by mid-November, following which drilling will recommence." The second of three northerly "fan" delineation drill holes (KDI-14-033b), which was drilled from the same collar and at the same azimuth as KDI-14-033a, but at an inclination of -80 degrees, appears to have drilled over the top of the Kelvin pipe intersecting a narrow seam of kimberlite at depth. Preliminary analysis of available exploration data indicates that the Kelvin pipe may be turning from north to northeast in the direction of the Faraday kimberlite, which is about 1,000 meters to the northeast. Exploration data will continue to be analyzed to ensure optimal positioning of the next "fan" delineation hole when drilling recommences in November. "We are very pleased with the wide intercepts at the Kelvin dyke/sheet holes drilled to the south of the Kelvin pipe," said Evans. "The Kelvin dyke/sheet structure strikes southwest from the Kelvin pipe over a distance of about one kilometer and dips gently to the northwest. Drilling to date indicates good continuity and the potential for substantial kimberlite tonnage." To date, about 16,600 meters has been drilled at the Kelvin kimberlite as part of the 2014 summer-fall drill program. Based on the continuing success, the company's target has now been increased to 18,000 meters. In addition, roughly 28.7 metric tons of kimberlite has been recovered from Kelvin and the company has now increased its target to 30 metric tons. Kennady North also announced that approximately 5 metric tons of kimberlite from Kelvin has been sent to the Geoanalytical Laboratories Diamond Services of the Saskatchewan Research Council for processing by caustic fusion. In addition, preparations are underway for a further 24 metric tons of Kelvin kimberlite to be sent to the SRC by the end of November for processing at the dense media separation plant. The diamond recovery results from these samples are expected by the end of the year.

GOLD – Nighthawk Gold Corp. Oct. 27 reported drill results from 15 holes recently completed on its Indin Lake gold property in Northwest Territories. This program was designed to grow the previously reported inferred resource estimate at the Goldcrest and Colomac Main gold deposits and to initiate drilling at the Cass gold deposit for the first time. The Cass deposit lies 20 kilometers (12.4 miles) to the southwest of the Colomac gold deposit. The 2014 program concluded successfully with the drilling of 13,647 total meters and the identification of several new expansion opportunities. At Cass, multiple intersections document significant near-surface mineralization and continuity of the mineralized zone to the west; hole CM14-02 intersected 51.00 meters of 2.25 grams per metric ton gold, including 9.00 meters of 4.72 g/t gold, hole CM14-04 intersected 4.40 meters of 38.90 g/t gold, and hole CM14-06B intersected 22.00 meters of 4.24 g/t gold. Other highlights of the program include: Mineralization extended more than 100 meters to the west at Cass; hole CM14-02 intersected 51.00 meters of 2.25 g/t gold, including 9.00 meters of 4.72 g/t gold; hole CM14-04, intersected 4.40 meters of 38.90 g/t gold; hole CM14-06, intersected 26.00 meters of 2.86 g/t gold, including 13.00 meters of 4.17 g/t gold and including 4.50 meters of 9.64 g/t gold, and 5.00 meters of 8.19 g/t gold; and hole CM14-06B, intersected

36.20 meters of 2.89 g/t gold, including 22.00 meters of 4.24 g/t gold and including 5.00 meters of 7.90 g/t gold. Nighthawk's latest drilling at Goldcrest produced its first documented higher grade shoots as defined by previously reported holes G14-04, 04B, 05 and 05B (Sept 25 news release). Those holes intersected the projected southern extension of the mineralized zone and returned high-grade values over long core lengths, confirming that the mineralization remains open and represents a primary candidate for resource expansion. Holes G14-06, 06B, 07, 07B, and 08 were 50-meter step outs from G14-05, collectively covering a 150-meter section of the 2.5-kilometer-long intrusion. With the exception of G14-07B, all holes intersected mineralization and tested the northern flank of the plunging high-grade zone defined by previously drilled holes G14-04 and 05. Hole G14-08, the northern most hole reported herein, shows significant increases in intersection lengths and gold grades, possibly indicating the existence of another high-grade shoot. Results are pending for subsequent holes that were drilled to test this prospect.

Preliminary geochemical analyses suggests that Goldcrest is a differentiated igneous intrusion, presumably co-magmatic with and identical to the Colomac sill. Both sills intruded a host mafic volcanic sequence and were subsequently folded with tops facing east. Better gold mineralization is preferentially localized within the more sodic and silica-rich upper portions of the sills. Because of the limited historical drilling at Goldcrest in comparison with Colomac Main, substantial opportunities for resource expansion exist. Given the success of this first drill program, Nighthawk remains focused on pursuing additional opportunities at Goldcrest as higher grade mineralization remains open to depth and along strike. Nighthawk President and CEO David Wiley commented, "The drilling at Cass has demonstrated substantial mineralized intersections with a favorable proximity to surface; adding to the significance is that these results were produced from a step-out of over 100 meters to the west of previous drilling. We also report additional results from Goldcrest and Colomac that continue to demonstrate broad zones of mineralization. We have now reported 8,068 meters of drilling from our 2014 program, and we expect to release additional results from the remaining 5,579 meters in the coming weeks."

Nunavut

URANIUM – Forum Uranium Corp. Oct. 28 reported results of exploration on the North Thelon project, Nunavut. Mapping, prospecting and sampling were completed this summer in selected areas of economic interest on its strategic landholdings on trend from AREVA's 133-million-pound Kiggavik uranium mine development project. In an Oct. 2, 2014 statement, AREVA Resources Canada Ltd. said it submitted a final environmental impact statement for its Kiggavik project to the Nunavut Impact Review Board. Located 80 kilometers (50 miles) west of Baker Lake, the Kiggavik project is a proposed mining and milling operation owned by AREVA (64.8 percent), JCU (Canada) Exploration Co. Ltd. (33.5 percent) and DAEWOO Corporation (1.7 percent). Forum focused on four areas of the North Thelon project this summer: BL-32 which is completely surrounded by Cameco Corp. claims and lies on strike with the prolific Andrew Lake fault that hosts two deposits and three showings; Judge which lies on the eastern extension of the Andrew Lake fault; Long Lake which hosts several historic showings; and Pyro South, an area along the AREVA boundary that also hosts historic uranium showings. A total of 25 basement and sandstone rock samples were collected and shipped to the Saskatchewan Research Council for geochemical analysis. A new showing at Long Lake returned outcrop and boulder geochemistry with values from 34-128 parts-per-million uranium, with associated elements of boron (up to 626 ppm), lead (219 ppm) and nickel (278 ppm) in 'dirty' metaquartzites, the same rock type that hosts the Kiggavik deposit. Values of up to 98 ppm uranium were returned from arkosic boulders in the BL-32 area. Forum Uranium continues to view this project as an important and strategic part of its portfolio due to its immediate proximity to AREVA's Kiggavik uranium project and Cameco's Turqavik and Aberdeen projects. AREVA has completed engineering, environmental and public engagement studies for the development of an 8 million-pounds-per-year (approx.) uranium mine that would require three to four years of construction, followed by about 14 years of operation. Cameco has intersected uranium with grades of up to 3.52 percent U_3O_8 over 10 meters along the Andrew Lake fault, which extends onto Forum ground both to the east and west.

Diamonds draw industry interest

Incentives, devolution mark 2014 mining activity in Far North territory

Mining News North of 60 – October 30, 2014

Rose Ragsdale

After ushering in devolution in concert with implementing the first phase of a well-reasoned mineral development strategy, the Northwest Territories is eager to attract new mineral resource investment in 2014 in hopes of building on an uptick in exploration activity in recent years.

"The Canadian North is the next frontier in mining and mineral development and nowhere is this more evident than in the NWT," said NWT Industry, Tourism, and Investment Minister David Ramsay.

Home to the third-richest diamond resources in the world and untold quantities of precious and base metals, the Far North jurisdiction currently hosts three operating diamond mines and the sole tungsten producer in the West. The territory also recently approved plans for a fourth diamond mine and is shepherding four more advanced mine projects through regulatory permitting.

"It's been an exciting season for us because on April 1, we took over management of mineral and oil and gas resources in the territory," said Pam Strand, director of Mineral Resources for the Government of Northwest Territories.

"Overall, we're seeing a consistent trend for exploration as well as a bit of a resurgence of interest in diamonds," Strand told Mining Explorers in a recent interview. "During the slow times, different projects were dropped and we have new companies coming in. They are also interested in gold. Some are public companies and some are private, and for the first time, we've got an aboriginal company based in Yellowknife – DemCo – working on a project."

Strand noted that one of the new diamond explorers, Canterra Minerals Corp., is led by Randy Turner, who as head of Diamondex discovered the NWT's Snap Lake Diamond Mine, now owned by De Beers.

"It will be interesting to see what comes out of these projects," Strand observed.

The Northwest Territories is expected to attract about C$71.5 million in exploration and deposit appraisal expenditures in 2014, down significantly from C$90 million in 2013 and the territory's recent peak level of C$108.7 million in 2012, according to Natural Resources Canada estimates.

Strand said she believes NRCan's estimate for 2014 is on the "conservative side," given the new interest in diamonds among explorers coming into the territory.

Another indicator of new interest in NWT exploration is a recent surge in the number of mining claims staked across the territory. Since April 1, 158 claims have been staked, compared with 177 claims for all of 2013 and 111 claims in 2012.

Diverse geology

Geoscientists have identified eight distinct and diverse geological provinces in the Northwest Territories - the Continental Shelf, Arctic Platform, Bear Province, Churchill Province, Cordilleran Orogen, Innuitian Orogen, Slave Province and the largest by landmass, the Interior Platform.

Since the early 1930s, the territory has produced more than C$60 billion in minerals across a range of commodities and minerals, including gold, diamonds and zinc. Those three products alone account for more than 85 percent of the value produced, according to the NWT & Nunavut Chamber of Mines, which is working to spread a strong pro-mineral development message throughout the mining industry.

"There is much more to the mineralization story with other key products, including tungsten, uranium, copper, silver and even radium. When the new mines currently in the approvals phase enter production, that list also will include bismuth, cobalt and rare earth metals, which are minerals found in only a few places worldwide," the chamber said in a recent statement.

"The Northwest Territories really is an emerging land of undiscovered opportunity," said Tom Hoefer, executive director of the Chamber of Mines.

Hoefer said recent exploration activity is due not to growing numbers of grassroots projects, which are suffering in the NWT as elsewhere in the world, but to sizable advanced projects like Gahcho Kué that are moving forward with some spending as their approval processes inch closer to completion.

"In essence, we are taking advantage of the downturn in the marketplace to improve the investment climate through the NWT Mineral Development Strategy, devolution, and regulatory improvement," he observed.

Enhancing economic development

The Northwest Territories is planning for a prosperous future by enhancing economic development through several new strategies – mineral development, economic opportunities, and energy action.

The government implemented a new Mining Incentive Program in 2014 that was oversubscribed by midyear, with strong interest shown by companies and prospectors in the Northwest Territories and across Canada.

The program was launched in June to provide funds to eligible prospectors and mining exploration companies that are already engaged in mining exploration projects or proposing new projects in the NWT. It aims to offset some of the financial risk associated with grassroots mineral exploration in the NWT.

Three prospectors and 11 companies made up the 14 applications that requested a total of over $1.02 million of funding support. The budget for the program is $400,000.

"The Mining Incentive Program helps our government support those with the energy, expertise and perseverance that this industry relies on to conduct mineral exploration in an environmentally sustainable way," Ramsay said. "I especially look forward to using this program to contribute to the success of northern and Aboriginal-owned businesses pursuing mining projects, so more northerners can enjoy the benefits of economic development and a healthy mining sector."

Administered by the Northwest Territories Geoscience Office, the incentive program awarded grants ranging from C$50,000 to C$80,000 to six exploration companies and split C$21,500 between two prospectors. The grantees were Proxima Diamonds (C$80,000 – diamonds); Songful Resources (C$65,000 – gold); DemCo (C$65,000 – multiple metals); Panarc Resources (C$64,544 – base metals, gold); TerraX Minerals (C$50,000 – gold); North Arrow Minerals (C$50,000 – diamonds); Lane Dewar (C$12,000 – gold), and Dave Nickerson (C$9,500 – gold).

Substantial mine development

Six companies have acquired the prerequisite permits, or are in the process of obtaining them, to bring mining projects into production in Northwest Territories.

The proposed Gahcho Kué diamond project received approval for a Type A Water License in late September and two other key permits in August, which paves the way for the project to proceed to construction and startup of operations in the third quarter of 2016. Gahcho Kué, a joint venture between De Beers Canada (51 percent) and Mountain Province Diamonds Inc. (49 percent), has probable reserves totaling 31.3 million metric tons grading 1.57 carats per metric ton for 49 million carats in the Tuzo, 5034 and Hearne kimberlites. A 2010 feasibility study demonstrated that an open-pit operation could produce an average of 4.5 million carats per year over an 11-year period, while employing nearly 700 workers during the peak of construction and roughly 400 mine workers once operational.

"As the world's largest and richest new diamond mine, Gahcho Kué will maintain Canada's position as a leading diamond producer," said Mountain Province CEO Patrick Evans. "Employment created by Gahcho Kué and revenues generated by the mine will contribute to growth and prosperity in the NWT."

The Gahcho Kué approvals were preceded by final regulatory approvals for the Prairie Creek zinc-lead-silver mine in the western NWT, and for the NICO gold-cobalt-bismuth-copper mine and concentrator in the central NWT.

An additional mining project proposal for the Nechalacho Rare Earth Elements Project, located at Thor Lake 100 kilometers (62 miles) southeast of Yellowknife, is also advancing through the regulatory phase.

Canadian Zinc Corp.'s Prairie Creek Project comprises a partially developed underground mine and plant that was constructed in the early 1980s. The plant was three months away from operations but was never put into use. In June 2012, Canadian Zinc Corp. released a pre-feasibility study projecting an 11-year mine life based on a measured and indicated mineral reserve estimate of 5.43 million metric tons of zinc, lead and silver with a mill rate of 1,000 tpd. Inferred resources encompass another 6.2 million metric tons of the three metals, which have the potential to double the life of the mine. The federal minister responsible for northern mining approved the project in September 2013. Near-term, Canadian Zinc intends to focus on pre-construction optimization activities with site construction potentially beginning in 2014. The company is currently seeking funding to bring the mine into production with the potential for first shipment of concentrate south in 2016.

The Nico gold-cobalt-bismuth-copper deposit of Fortune Minerals Ltd. is located 160 kilometers (100 miles) northwest of Yellowknife, and only 85 kilometers (53 miles) north of the major highway to the capital. Construction of an all-weather road is proposed to allow metal concentrates to be trucked to southern markets. A 2012 Front End Engineering and Design Study outlines pre-production capital costs estimated at C$441million for a vertically integrated project with a mine and mill in the Northwest Territories and a refinery planned for Saskatchewan. The study indicated life-of-mine average operating costs of mine at C$61.97 per metric ton of ore processed. The Tlicho and federal governments have given the go ahead for the NICO mine and mill with permitting and financing requiring completion prior to the commencement of mine construction. The proposed mine site boasts reserves of 33 million metric tons containing gold, cobalt, bismuth and copper with a projected mine life of 20 years. Fortune Minerals has begun site preparations for construction at NICO that is targeted to begin in 2014.

In April Avalon Rare Metals Inc. received a land use permit to start pre-construction at Nechalacho, which is contemplated as a 2,000-metric-ton-per-day underground mine and concentrator, with a hydrometallurgical secondary processing facility being proposed for the south side of the lake and a refinery located in Louisiana. Avalon completed a feasibility study in 2013 that confirmed strong economics with a 22.5 percent pre-tax internal rate of return and average annual revenues of C$645.8 million, with initial production projected for the second half of 2017.

Total capital requirements estimated for the feasibility study are C$1.575 billion and more than 200 new jobs are expected to be created in the NWT, mainly at the Nechalacho site.

Proceeds from a C$2 million financing funded a 2014 summer drilling program and other exploration work along with engineering, permitting and market development work for the project.

The Yellowknife Gold Project, Tyhee Gold Corp.'s flagship property, is located 90 kilometers (56 miles) north of Yellowknife and covers 12,635 hectares (31,221 acres) over five zones of gold mineralization. A feasibility study released in August 2012 estimated pre-production capital costs of C$193 million with an estimated mine life of about 15 years based on a production rate of 4,000 tpd at an average grade of 2.03 g/t gold. Proven and probable reserves are estimated at just over 1.3 million ounces of gold. The project owners are working to raise financing to advance the project through the approvals process.

Diamonds

In addition to the Gahcho Kué project, NWT's producing diamond mines and diamond exploration project invested substantial funds in exploration in 2014.

Dominion Diamonds Corp., which owns and operates the territory's largest producing diamond mines, reported exploration expense of C$6.8 million incurred during the second quarter of 2014, compared with C$3.1 million in the comparable quarter of the prior year. All of the spending went to work on the Jay kimberlite pipe within the Buffer Zone at the Ekati Diamond Mine located 310 kilometers (192 miles) northeast of Yellowknife, NT.

The proposed Jay Pipe Project is expected to enable the continued operation of the Ekati diamond mine, past its current projected mine life of five years. There is significant upside potential to extend the mine life if some or all of the mineralization in the Buffer zone is promoted to resource status. The Ekati mine's current annual production is estimated to exceed 7.5 million carats (1,500 kilograms, or 3,307 pounds) of diamonds.

Kennady Diamonds Inc. is exploring the Kennady North diamond project adjacent to the Gahcho Kué diamond mine project located 280 kilometers (174 miles) northeast of Yellowknife. The company conducted 2014 exploration, delineation and mini-bulk sample drilling. More than 129 meters of kimberlite was intersected in diagonal delineation drill hole KDI-14-058a at the far north of Kelvin kimberlite, the widest intersection drilled to date at Kelvin. In response to multiple encouraging intersections of kimberlite on the property this season, Kennady extended its 2014 target of 12,000 meters of drilling to 14,000 meters and its target for the bulk sample program to 28 metric tons. This is shallower than previously modeled and indicates the potential for additional tonnage at the high-grade Kelvin pipe," said Kennady Diamonds CEO Patrick Evans. Kennady Diamonds also reported the recovery of a high-quality 0.94 carat diamond found during logging of core from the Kelvin kimberlite.

Margaret Lake Diamonds Inc. is another junior exploring for diamonds in Northwest Territories. Its efforts are focused on the 23,199-hectare (57,325 acres) Margaret Lake property located 10 kilometers (six miles) from the Gahcho Kué diamond project and within a 90-kilometer by 40-kilometer (56 miles by 25 miles) diamond field that also contains the Snap Lake mine operated by De Beers. The Margaret Lake property contains several indicator anomalies based on previous work done in the 1990s, and a number of untested kimberlite-like EM and magnetic anomalies. Margaret Lake Diamonds is proceeding with a similar gravity survey and strategy.

Margaret Lake Diamonds Inc. and Canterra Minerals Corp. entered into an option agreement whereby Margaret Lake has been granted, subject to the acceptance of the TSX Venture Exchange, the right to acquire up to an aggregate 49 percent right, title and interest in and to Canterra's 26,000-hectare (64,246-acres) Marlin Property in the Northwest Territories. The property comprises 23 mineral claims covering an area of about 26,000 hectares and lies contiguous to the north and west of the Kennady North project and west of Margaret Lake's Margaret Lake Property. To earn its interest in the Marlin Property, Margaret Lake must make staged cash payments totaling $100,000, issue an aggregate of 600,000 common shares and incur $1.75 million in exploration expenditures over a three-year period. Canterra is the operator, and the initial exploration program which consists of basal till sampling is expected to commence immediately.

Canterra President and CEO Randy Turner, commented, "This option agreement with Margaret Lake Diamonds creates an opportunity between two companies that hold contiguous properties to the

Gahcho Kué and Kennady North projects and share a similar geological environment. With the proximal nature of our land packages, the synergies of data collection and analysis, plus the additional capital to advance the Marlin Property expeditiously, we are delighted with this partnership and look forward to a mutually successful outcome."

Paul Brockington, president and CEO of Margaret Lake, said, "We are pleased to enter into this option agreement with Canterra, as we now have ground under option that surrounds all the northern and western boundaries of the Kennady North property. We look forward to combining the knowledge base of our two management teams."

Under the terms of the option agreement, Margaret Lake has the right earn an initial 30 percent interest in the Marlin Property over a two-year period and an additional 19 percent interest in the Marlin property by the end of the third year.

North Arrow Minerals Inc. also completed an exploration drilling program this year at the Redemption Diamond Project in the Northwest Territories. The property is located in the Lac de Gras region, about 32 kilometers (19 miles) southwest of the Ekati Diamond Mines. A total of 799.8 meters of drilling tested seven targets located in the central part of the property near the up-ice termination of the South Coppermine kimberlite indicator mineral train. None of the drill holes definitively encountered a bedrock kimberlite source for the South Coppermine KIM train. Drill hole 14-RED23-08 (Az. 180 degrees; dip -60 degrees) tested a linear gravity low and encountered predominantly fresh to weakly altered granite that included a moderately to strongly fractured fault zone from 89.9 m to 99.7 m downhole. This fault zone contained intervals of dull green clay gouge, which have been collected for kimberlite indicator mineral analyses. North Arrow is exploring the Redemption property under an option agreement with Arctic Star Exploration Corp., in which the company can earn a 55 percent interest by incurring C$5 million in exploration expenditures prior to July 1, 2017.

Other exploration

Among other mining explorers in the Northwest Territories, three companies stood out in 2014.

North American Tungsten Mines Co. Ltd., which owns and operates the Cantung tungsten mine, believes there is good potential to expand resources on the property though the remaining established resources on the property are limited. Underground drilling continues, and the company is in the process of updating a technical report under NI 43-101 for the mine. N.A. Tungsten is also considering a project to extract significant quantities of tungsten concentrates from tailings accumulated in prior years. Favorable results of these projects could extend the Cantung mining operation for many years.

The company's 2014 underground diamond drilling program aimed to further define resources and develop an extended mine plan. A second underground diamond drill commenced drilling in June for a planned 13,000-foot drill program. Geophysical surveys were employed to supplement and guide the diamond drilling. A surface exploration drill program began in July 2014 to follow up on results from the company's 2013 summer drill program and to enable the exploration and evaluation of potential ore targets in the vicinity of the Cantung ore body. The company is also developing the Mactung tungsten project across the border in Yukon Territory.

Gold explorer TerraX Minerals Inc. is focused on the Yellowknife City Gold Project, which encompasses roughly 8,400 hectares (20,756 acres) of contiguous land immediately north of the City of Yellowknife and including TerraX's wholly-owned Northbelt property acquired in February 2013.

TerraX's field exploration in 2014 included mapping and prospecting and surveying over the contiguous Northbelt, Walsh Lake, U-Breccia and Ryan Lake properties that make up the project, followed by a drill program. The junior commenced its first drill program on the project in March. The 6,000-meter campaign tested three initial target areas; the Barney Shear, which is the extension of the Con/Giant shear system; the Crestaurum Zone, which is a high grade zone with nearly 200 historical drill intersections; and the Homer Lake base metal/precious metal target at the north end of the property.

TerraX Minerals Inc. also completed surface sampling results in a summer prospecting and mapping program. Combined with 2013 results, the company said some 718 grab, chip and channel samples collected during surface work led to the generation of more than 10 additional discoveries that could be quickly made ‘drill ready’ in the short term. Several of the new high-grade targets are oblique or high-angle veins that occur near the main Crestaurum and Barney structures, and they could be indicative of gold-bearing vein sets common to large mineralized systems.

Another explorer focused on gold in the NWT is Nighthawk Gold Corp., which mounted a 14,000-meter drill program in its Colomac gold project at the Indin Lake property located about 220 kilometers (136 miles) north of Yellowknife. The property covers 90 percent, or 930 square kilometers (229,791 acres) of the Indin Lake Greenstone Belt

2014 drilling, from which Nighthawk reported its first results Sept. 25, confirmed significant opportunities for expansion at Goldcrest and Colomac Main, two of a half-dozen gold deposits on the property. Two Goldcrest holes, which substantiate a north plunging mineralized shoot; hole G14-05 intersected 20.25 meters of 4.83 grams per metric ton gold, including 5.25 meters of 10.21 g/t gold and hole G14-04 intersected 19.60 meters of 4.19 g/t gold, including 7.90 meters of 7.85 g/t gold. At the Colomac Main deposit, hole C14-02 intersected 25.00 meters grading 2.38 g/t gold, including 8.75 meters of 4.98 g/t gold, effectively tracing Zone 2.0 mineralization down plunge of previously drilled higher grade shoots.

Goldcrest is a 2.5-kilometer (1.5 miles) long mineralized mafic sill similar to the Colomac intrusion located 400 meters to the east. As a primary candidate for resource expansion, Goldcrest hosts the highest average grade in the current resource estimate at 2.19 g/t gold; historic drilling was limited to a depth of 100 meters. Nighthawk’s recent drilling has produced the first documentation of a higher grade shoot at Goldcrest.

Nighthawk released an updated mineral resource estimate for the project in mid-2013 of 39.815 million metric tons grading 1.67 g/t (2.1 million ounces) gold.

Raising the bar at Kennady North

Drilling outlines larger than expected kimberlite at NWT diamond project

Mining News North of 60 – October 30, 2014

Shane Lasley

Since being spun-out of Mountain Province Diamonds Inc. in the summer of 2012, Kennady Diamonds Inc. has had a singular focus – find a next-generation Northwest Territories diamond mine at its Kennady North diamond project located 280 kilometers (174 miles) northeast of Yellowknife.

Receiving a highly prospective diamond property enveloping three sides of the Gahcho Kué diamond mine project and C$3 million in seed money in exchange for slightly more than 16 million common shares, Kennady Diamonds was off to a good start in meeting its goal.

“Kennady North is an exceptionally prospective diamond exploration project, located adjacent to the Gahcho Kué JV between De Beers Canada and Mountain Province Diamonds,” Kennady Diamonds President and CEO Patrick Evans explained at the time of the start-up. “Our priority is to define a resource along the Kelvin-Faraday kimberlite corridor which hosts three diamondiferous kimberlites.”

Two years later, the company has set a higher bar for this primary objective.

"Our vision is to define a Kelvin-Faraday resource of between 5 and 8 million tonnes (metric tons) with a grade of greater than 2 carats per tonne. We expect to be able to declare our maiden resource by the end of 2014," Evans said at the on-set of the 2014 summer drill program at Kennady North.

Confirming the potential

As the calendar turned to 2014, Kennady Diamonds was preparing for an upcoming 10,172-meter winter-spring drill program at Kennady North, a property that envelops the south, west and north of Gahcho Kué, a diamond project being developed by De Beers and Mountain Province Diamonds.

The winter program, which got started by the end of February, saw three drills focused on delineation and exploration drilling and a larger diameter rig collecting bulk samples from the Kelvin and Faraday kimberlites.

Kennady said the delineation drilling was successful in both confirming the resource model and adding to the potential tonnage at these kimberlites.

"Besides achieving our targets for both meters drilled and metric tons of kimberlite recovered, we are particular pleased with the results from delineation drilling at both the Kelvin and Faraday kimberlites. Kelvin delineation drill hole KDI-14-018 intersected kimberlite over 80 meters, with substantially all of the kimberlite to the north and beyond the current geological model. Also, delineation drilling at Faraday 3 resulted in the discovery of a kimberlite 'blow' with intercepts ranging up to 42 meters." Evans said upon conclusion of the spring exploration program. "These discoveries confirm the potential for substantial additional tonnage at the Kelvin and Faraday kimberlites, both of which have already returned exceptionally high sample grades."

The bulk sample portion of the early season program collected roughly 25 metric tons of kimberlite from Kelvin and another metric ton from Faraday. Both samples were shipped to the Saskatchewan Research Council for processing.

The 933-kilogram sample collected at Faraday yielded 4.76 carats of diamonds, or about 5.1 carats per metric ton. Of the diamonds recovered, 97 were larger than 0.85 millimeters, making them commercial grade. Besides the sample grade, Kennady said almost all the commercial size diamonds are described as transparent and either white-colorless or off-white. Approximately 75 percent have either no or only minor inclusions.

Results from the Kelvin bulk sample is expected before the end of 2014.

Raising the bar

With the goal of publishing a maiden resource by the end of the year, Kennady resumed its 2014 bulk sampling and delineation drilling at Kelvin and Faraday with a 5,000-meter summer program. Encouraging early returns from this drilling, however, caused the company to raise the bar on the scope of both its summer program and potential size of the resource being delineated.

"Delineation drilling at the north lobe of the Kelvin kimberlite pipe is exceeding expectations and initial exploration drilling at the Kelvin dyke is returning promising kimberlite intersects. Based on the results to date, we have revised our tonnage estimate for the Kelvin-Faraday kimberlite corridor from the previous 5 to 8 million tonnes to 7 to 10 million tonnes."

This declaration came on the heels of completing one hole that cut 183 meters of kimberlite outside of the geological model for Kelvin and a second that hit the Kelvin kimberlite pipe shallower than expected.

Further expansion to the north has given the company reason to believe the Kelvin-Faraday kimberlite corridor may be even larger than the 7 to 10 million metric tons.

Adding to the excitement of the 2014 summer program, a high-quality 0.94 carat diamond was spotted while core from the Kelvin kimberlite was being logged. The diamond measures 7.0 by 4.5 by 3.5

millimeters and is described as white-colorless, transparent, octahedral, distorted, twin with etched trigons. The diamond, which has no inclusions, was found at a break in the core from drill hole KDI-HQ14-030a at a depth of roughly 75 meters.

As drilling increased the breadth of the Kelvin kimberlite, Kennady increased the scope of the summer drill program. By mid-October, the company had more than tripled the drilling to 18,000 meters.

Kennady North also increased its summer Kelvin kimberlite bulk sample program to roughly 30 metric tons. This sample will add to the 25 metric tons collected early in 2014.

Given its explorations success thus far, Kennady plans to continue drilling into the winter months.

"We're now planning to build a 30 person camp at Kelvin so that we can continue drilling through the winter," explains Evans.

A C$5 million private placement financing to fund the extended program was completed on Oct. 1.

In addition to Kelvin and Faraday, the company is eager to drill a number of exploration targets at Kennady North, including the MZ and Doyle kimberlites. Getting to these outlying prospects, however, will have to wait until the Kelvin kimberlite is fully outlined.

"I'm hoping we'll be able to get to the other exploration targets this year, but we'll have to wait and see how it goes," Evans told Mining News on Oct. 1.

A maiden resource for Kennady North, originally slated for completion by the end of 2014, but with drills still seeking the full extent of the Kelvin kimberlite into the third quarter the estimate will likely not be ready until early in 2015.

Made in Canada

Rapaport – October 31, 2014

Avi Krawitz

RAPAPORT... The recent re-launch of the CanadaMark hallmark by Dominion Diamond Corporation is designed to enhance the company's status as Canada's primary diamond mining company. While CanadaMark is essentially a business-to-business (B2B) program that complements the brands of manufacturers and retailers, Dominion is hoping it will create a premium for its exclusively Canadian rough diamond production. "The CanadaMark program represents the company's commitment to category marketing of Canadian diamonds," Robert Gannicott, Dominion's chief executive officer, said in a May 2014 press release prior to the mark's unveiling at the JCK Las Vegas show in June.

Dominion acquired the CanadaMark as part of its 2013 acquisition of the Ekati mine from BHP Billiton, which initially developed the hallmark. "Through this program, [Dominion] aims to highlight the long-term environmental stewardship and social responsibility of the Canadian diamond mining industry, which ultimately will help achieve the highest prices for the company's diamond production," Gannicott added. As such, the company's direct revenue stream from the program is fairly modest. Currently, only 13 companies are approved CanadaMark manufacturers, while Dominion expects to double that amount by the end of the year.

The company estimates that close to 200,000 diamonds have been certified with the CanadaMark hallmark – including those issued by BHP Billiton when it ran the program in the past decade. James Pounds, Dominion's president, explained to Rapaport News that approved manufacturers pay a nominal annual fee to be a license holder. He added that the company will soon review its decision to waive a fee that was previously charged to issue each certificate. Still, the program is not about creating additional revenue for Dominion. Rather, the company believes that there are strong marketing opportunities for brands using CanadaMark diamonds that will in turn boost the value of its own rough production. The company is therefore careful to define the program as a hallmark – a certificate of origin, and not as a brand of its own.

Whereas brands such as the De Beers Forevermark program, for example, claim to guarantee the quality and authenticity of the associated diamond, CanadaMark simply verifies that the stone was mined in Canada. Dominion believes that, in itself, is enough to augment the branding of its manufacturing clients and associated wholesale and retail partners.

Pounds explains how it works: Manufacturers wishing to join the program undergo an initial verification procedure. Their operations are audited by an independent third party to make sure the applicable factory is equipped with individual tracking systems that ensure the CanadaMark-assigned diamonds are not mixed with other production.

The factory also needs to have the equipment in place to inscribe the CanadaMark logo and unique serial number onto the girdle of the stones. Therefore, Dominion is not involved with any grading or quality control of the CanadaMark diamond, but enables the systems to track the origin of the diamond throughout the pipeline – from the mine to the store. The manufacturer buys its rough from Dominion and receives an individual invoice number that verifies the mine from which the supply was recovered.

The manufacturer then assigns a tracking number to the individual stones as they are separated from other rough supply while undergoing the cutting and polishing process. Once polished, the manufacturer enters the invoice and tracking numbers into Dominion's system, along with the details and characteristics of the stone, after which a unique serial code is issued by the mining company. The manufacturer laser inscribes the code onto the girdle of the diamond and Dominion then issues the certificate.

Pounds notes that polished diamonds above 0.30 carats are commercially best suited for the CanadaMark, while quality standards are set to include I2 and better clarities and M and better colors. He added that Dominion accepts grading from all of the major laboratories. Therefore, Dominion relies on the quality control of its clients and the positive reputation that Canada's diamond industry enjoys. Pounds explains that the company's focus in the past few months since launching has been to educate its clients about what the CanadaMark stands for, and how it can help their businesses. An online B2B trading platform exclusively for CanadaMark diamonds is also being developed.

The second phase of its roll-out plan, Pounds says, will focus on educating consumers primarily in the U.S. and Canada about the hallmark. He added that efforts to bring more manufacturers and retailers on board would be helped by increasing end-consumer demand and interest in the program.

Much of that messaging will stress that Canadian diamonds are ethically sourced and produced according to socially responsible practices and in an environmentally friendly manner. Undoubtedly, more consumers are seeking such assurances. In that context, the hallmark has resurfaced at a time when the trade is considering broader guidelines for source verification and weighing the appropriate model for chain of custody.

Part of the discussion centers on whether factories should be subject to random post-production audits of their operations, or whether production can indeed be separated and monitored to verify its source of origin from start to finish. Many argue that it is more practical to periodically audit factories and companies to ensure that they adhere to certain standards, in which case the traceability of the diamond begins at the factory rather than the mine.

Skeptics, among them this column, claim that loopholes exist in such a system through which companies can easily adjust paperwork that leave the industry vulnerable to green washing – presenting a product or company as compliant to certain environmental or ethical standards when they are not. Rather, in order to give complete 100 percent assurance to consumers, a system is required that enables full traceability from mine to retail. This can only be achieved by separating diamonds through the production process.

Doing so is not only necessary for reliable source verification, but it also makes commercial sense given the premium that ethically sourced diamonds can, and should, garner. The CanadaMark suggests the same. “We see a good opportunity to build greater differentiation, which justifies a premium for CanadaMark polished over time,” Pounds stressed. “The hallmark resonates especially well with the millennial consumer who is looking for story, authenticity and ethical business practices.” Of course, Canada is not the only country that can offer such positive messaging. This column maintains that there is untapped diamond branding opportunity in Botswana. Perhaps the state-owned Okavango Diamond Company will consider developing a similar hallmark to enhance the value of its Botswana-produced diamonds. Namibia might be thinking along the same lines as it negotiates a new supply and marketing contract with De Beers.

Therefore, Dominion’s revitalization of the CanadaMark may well be a test case for the industry as it’s the only initiative currently using a certificate of mining origin to enhance the value of the product. Dominion believes its clients can gain a premium for their polished by latching onto the Canada story, and it can, in turn, gain higher prices for its rough.

Mining company diamond brands embrace a similar goal. As such, the industry will be monitoring how effective such category marketing can be, and Dominion’s ability to leverage the potential for diamonds that were made in Canada through its rejuvenated hallmark.

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This article is an excerpt from a market report that is sent to Rapaport members on a weekly basis. To subscribe, go to www.diamonds.net/weeklyreport/ or contact your local Rapaport office.

Low kimberlite discovery rate seen sparking diamond production crisis by turn of decade

MiningWeekly.com – October 31, 2014

Jade Davenport

The stability of the diamond sector has always been a slave to the fine balance between supply and demand. Over the last century, the industry has had to contend with various crises of oversupply, largely spurred by conflict, global economic instability and the vagaries of consumer demand. As a result, it has been at the mercy of drastic price troughs.

The most recent crisis, spurred by the 2008 global financial recession and a sharp fall in gem prices in 2011, is still fresh in the mind of the industry, although there are definite signs that the sector is beginning to recover with steady growth of consumer demand, and the stabilisation and steady increase of diamond prices.

De Beers’ recently published Diamond Insight Report 2014 reveals that global demand for diamond jewellery reached a record high of $79-billion in 2013. The report also states that demand is expected to continue to grow over the long term, driven by ongoing economic recovery in the US, as well as the growth of the middle classes in developing markets, such as China and India.

However, while recovery is expected to continue for the next four years, which will facilitate a more balanced market, there is growing consensus among analysts and industry stakeholders that a new spectre – that of waning production – now looms on the horizon and threatens to disrupt that recently restored balance by the close of the decade.

The Diamond Insight Report reveals that global rough diamond production has already begun to decline from a peak of 175-million carats in 2005 to 145-million carats in 2013. The report also states that the forecast reduction in supply from existing sources is not likely to be matched by new production coming on stream in the years ahead; diamond supply is expected to plateau in the second half of the decade before it is expected to decline from 2020.

Speaking at the Kimberley Diamond Symposium 2014 last month, junior miner Tsodilo Resources president and COO Michiel de Wit elaborated that, while there are several new projects set to come into production over the next few years – including the Grib mine, in Russia; the Botuobinskaya project, in Siberia; the Gahcho Kué, Renard and Jay mines, in Canada; as well as the Lace, Liqhobong, and Ghagoo mines, in Southern Africa – these projects are quite small and will only add some 17-million carats a year to global production.

"Cumulatively, these projects will not have a major effect on the steady decline on production of rough [diamonds], and the downward trend is forecast to accelerate over the next few years," warned De Wit.

He further emphasised that the widening gap between supply and demand is a reality, which "will not do the diamond industry any good, as it will open a feed for synthetics and recycling".

Downward Slump The looming production crisis can be attributed to the significantly low discovery rate of economically viable kimberlites since the turn of the century.

De Wit states that even new projects coming into production consist of kimberlites that were found decades ago.

Interestingly, since the discovery of the first diamondiferous kimberlite pipes in the Northern Cape in the 1870s, more than 8 000 kimberlites and lamproites have been discovered worldwide, 43% of which are directly attributable to De Beers' exploration efforts over the past five decades.

However, this significant number belies the difficulties associated with diamond prospecting, as only 15% of kimberlites have proven to be diamondiferous. More astonishing is that, of that vast number of discoveries, only 67 deposits have had a resource sufficient to justify the economics of establishing a mine with sustainable production, while only seven deposits are classed as Tier 1 deposits and account for 62% of rough production.

The heyday of diamond exploration was the period between the 1960s and early 1980s, which yielded the remarkable Tier 1 discoveries of the Orapa and Jwaneng mines, in Botswana, and Venetia, in South Africa. Meanwhile, though diamond prospecting has continued, although at a much-reduced rate since 2008, the rate and nature of economic kimberlite discoveries has declined substantially.

According to the Diamond Insight Report, the industry has spent almost $7-billion since 2000, with only meagre results to show for its efforts. Only one diamond deposit of significant size, Bunder, in India, was discovered during this period.

Moreover, the average size of kimberlites that contain diamonds has decreased significantly from just over 30 ha in the 1940s, to just 2 ha in the past decade.

"These statistics show not only that the number of discoveries has decreased significantly, but also that the sizes of more recently found kimberlites are substantially smaller than those found several decades ago, which even further reduces the already tight supply of rough [diamonds] for the future," states De Wit.

De Beers exploration head Charles Skinner believes that the decline in the diamond discovery rate is attributable to a decrease in exploration effectiveness over the last two decades, exacerbated by the fact that key prospective areas lie in countries that are deemed a political risk.

Skinner says finding an economically viable kimberlite is significantly more difficult than looking for other minerals. Key factors contributing to the decline in appetite include: the difficulty of retaining expertise, particularly operational competencies and in-house knowledge and science; rising costs, which results in longer lead times and less perseverance; and increasing prerequisite regulatory compliance and best practice, particularly in the US, the UK and the European Union.

Skinner adds that these factors, coupled with the recent cycle of depressed prices and a scarcity of venture capital for mineral exploration, have resulted in a prominent exit from diamond exploration by juniors and key majors.

Reiterating this sentiment, exploration and development company Incubex Minerals CEO John Bristow tells Mining Weekly that global diamond exploration is, currently, “pretty dismal”.

“There is little true exploration work being undertaken in Africa, particularly in Southern Africa, with most of the current projects seeking to evaluate or re-evaluate already known deposits.

“At this point in time, companies, particularly the majors, are just so protective of their balance sheets that they are unwilling to release the funds necessary to pursue green- or brownfield diamond exploration, and junior explorers and miners have been decimated.”

Greenfield diamond exploration is a difficult process and can be prohibitively expensive and lengthy. Typically, the work programme to undertake an initial indicative grade test on a kimberlite pipe of five to ten hectares might take a month and cost $1-million, while determining its potential economic viability might take up to 12 months and cost between $2-million and $4-million. Thereafter, the resource evaluation to deliver a conceptual study, which can take up to 18 months, can cost between $10-million and $35-million.

Illustrating this general sentiment is midtier miner Petra Diamonds technical director Jim Davidson, who tells Mining Weekly that, given the reality of the poor success rate of diamond exploration, Petra Diamonds does not allocate material resources to its exploration arm, spending only between $3-million and $5-million a year, against a total group revenue of $427-million last year. “At this point in time, we do not envisage any significant increases to this spend,” says Davidson.

This is despite Petra Diamonds’ success in its limited exploration programme, having discovered the KX36 kimberlite pipe in Botswana several years ago. Davidson elaborates that the kimberlite

is now close to being classified a ‘deposit’, although more work is required to prove the diamond grade and value.

Outlook With diamond exploration proving less successful, are there any other large economically viable kimberlite deposits left to discover? And will there be an upswing in prospecting activities in the near future, particularly in light of a looming production crisis? Fortunately, the understanding of the geological complexity of kimberlites has deepened over the past two decades, along with the required expertise, technologies and techniques to effectively target, discover and assess diamond deposits.

On that basis, there is a general consensus among geologists that there are parts of the globe that are still highly prospective and could yield large kimberlite discoveries.

Southern Africa, particularly parts of South Africa, Botswana and Lesotho, are still prospective, insists Bristow.

“There is still room for good junior mining development across all commodities, not just diamonds,” he says, adding that there are still parts of South Africa, namely the Northern Cape and the Bushveld Complex, where the geological setting is not entirely understood, and intensive and fairly detailed exploration could still yield important mineral discoveries.

Given that there are still highly prospective areas in Southern Africa, Bristow believes there could be a resurgence of diamond exploration in the future.

However, regarding South Africa, he notes that to unlock the untapped mineral potential of this unique and still highly prospective country, there is an urgent need to make the local mineral title application and compliance process more user-friendly for exploration and mining companies.

“We are at the bottom of the cycle and are beginning to see a change in the attitude towards cold exploration. The recent diamond symposium in Kimberley, which was surprisingly well attended by a range of industry, academic, manufacturing and supply company representatives, is certainly an indication that the horse hasn't entirely bolted from the stable, and the jockeys are starting to mount up again, ready for the next race of diamond exploration," Bristow avers.

While it cannot be argued that De Beers, the major player in Southern Africa for the last 126 years, has dropped the exploration baton entirely, the scale of its prospecting activities has reduced.

"Post 2006, De Beers completely refocused its exploration business to align [with] the reality of the future – where we need to be, what we need to do to be successful and how much it would cost, but in a manner that would ensure sustainability of the exploration business over the longer term," states Skinner.

The group is currently focusing its exploration activities on South Africa and Angola, which De Beers believes to be the most prospective countries in Southern Africa.

Revitalizing the future of mining

Devolution and development strategies pave way for success in the NWT

Mining News North of 60 – October 30, 3014

Minister David Ramsay

Special to Mining Explorers

The mining industry has been a pillar of the Northwest Territories' economy for more than 80 years. A strategic approach to manage resources in the territory is creating a new investment climate and opportunities for responsible resource development. In addition to being the largest private sector contributor to the NWT economy, the mining industry is also the largest private sector employer.

As new mining and exploration projects emerge, it is essential to keep environmental sustainability and social responsibility top of mind to ensure this industry continues to be an economic pillar long into the future.

A major milestone was reached this year when Devolution came into effect on April 1, 2014. The Government of the Northwest Territories gained responsibility for managing public land, water, and resources in the NWT. Decisions will now be made by a responsive government that can focus the needs of a single territory and its investors – resulting in faster response times to industry questions. This is key for the NWT to unlock its vast mineral and resource potential in a way that is in line with northern priorities.

The NWT currently has four producing mines, five advanced exploration projects, and more projects in the early, yet promising, stages of development. There is a wealth of mineral resources in the territory, including diamonds, gold, cobalt, bismuth, tungsten and rare earths, which have the capability to turn the NWT into an economic powerhouse.

The four operating mines in the NWT are: Ekati Diamond Mine, Diavik Diamond Mine, Snap Lake Diamond Mine, and the Cantung Tungsten Mine. In 2013, $1.67 billion worth of minerals and diamonds were produced by the NWT. The territory is the world's third largest producer of diamonds, by value.

Developing a solid framework in which to grow mineral and exploration development was essential. The Mineral Development Strategy, released in 2013, was the first step to building this framework and revitalizing the NWT mining industry. It focuses on five key areas: creating a competitive edge, establishing a new regulatory environment for the NWT, enhancing Aboriginal engagement and capacity, promoting sustainability, and enriching workforce development and public awareness.

A number of MDS recommendations are being advanced, including the NWT's first-ever Mining Incentive Program. This contribution program is tailored to the unique NWT operating environment, with the goal of maximizing return on investment through innovative and effective exploration.

The incentive program was launched in June 2014 and provides funds to eligible prospectors and mining exploration companies that are already engaged in mining exploration projects or proposing new projects in the NWT. It aims to offset some of the financial risk associated with grassroots mineral exploration. The NWT will now be able to compete better with other Canadian jurisdictions offering similar incentives that attract mineral exploration expenditures. The MIP celebrated a successful launch and was oversubscribed in its inaugural year.

The GNWT, poised for success in a post-devolution climate, is attracting new investments, developing long term plans and frameworks and supporting new, sustainable mineral exploration. The NWT is on track to create a legacy of positive benefits and a bright future across the territory for generations to come.

David Ramsay is minister of Industry, Tourism and Investment for the Government of the Northwest Territories.

Big projects dominate Nunavut field season

Gold, silver projects account for more than half of territory's exploration

Mining News North of 60 – October 30, 2014

Rose Ragsdale

Mineral exploration activity is holding its own in Nunavut this year, despite a tough funding environment and stiff competition from other attractive mining jurisdictions around the world.

Although the Far North territory has only one operating mine, Meadowbank, at least eight mineral projects are currently hurtling through development and the permitting process on their way to production. Of these, two projects – one gold and one iron – have project certificates, and six projects are progressing through the environmental assessment process.

Mineral exploration activity, meanwhile, is fairly robust, particularly in Nunavut's westernmost and central regions where companies continue to seek diamonds and a variety precious and base metals.

Nunavut is expected to attract about C$166.5 million in exploration and deposit appraisal expenditures in 2014, down significantly from C$313 million in 2013 and from the territory's 16-year average of C$220 million, according to Natural Resources Canada estimates.

Exploration and deposit appraisal expenditures are estimated to decrease in every sector, except for uranium where spending is expected to climb about 27 percent to C$22.6 million. Precious metals projects will attract about half the spending, with C$86 million invested primarily in gold and silver projects, while spending on base metals projects will total an estimated C$40.5 million. The remaining outlay will go to diamonds (C$10.5 million) and iron (C$6.6 million) projects.

In 2014, exploration and deposit appraisal spending in Nunavut is projected to decrease substantially, plummeting to C$166.5 million in total with corresponding declines in every sector, except uranium where expenditures are expected to jump to C$22.6 million.

Regional geologists recently summarized mineral exploration, deposit appraisal, development and related activities throughout 2013 and predicted that the territory's active exploration projects in 2014 across the territory will focus on gold, uranium, diamonds, copper, zinc, iron diamonds, rare earth elements and platinum group elements.

Gold projects

Perhaps the busiest explorer in 2014 is Agnico-Eagle Mines Ltd., which has undertaken new gold exploration programs at the 408-square-kilometer (157.5 square miles) Amaruq (formerly known as IVR) property located about 50 kilometers (31 miles) northwest of the Meadowbank Mine – Nunavut's only operating mine, and on the Greyhound Property, which the company optioned from Aura Silver. Greyhound is located about 35 kilometers (22 miles) south of Meadowbank.

"The new IVR (Amaruq) discovery has yielded some very exciting results for Agnico Eagle this summer," Sean Boyd, the company's president and CEO, said in late August. "We are particularly interested in the project because of its proximity to our Meadowbank mine and mill, which is currently our best cash flow generator," Boyd added.

In addition, the company is continuing to explore the Meliadine and Meadowbank properties. At Meliadine where Agnico Eagle is currently in the permitting phase for the development of a mine, the company anticipates spending C$45 million in 2014 on exploration and extension of an underground exploration ramp from which deep exploration and conversion drilling of the Tiriganiaq and Wesmeg/Normeg zones will occur. The company is targeting startup at Meliadine in 2018, and it could surpass Meadowbank as Agnico Eagle's largest gold producer.

In Kitikmeot, Nunavut's westernmost region, exploration in 2014 centered on gold and base metals projects.

TMAC Resources Inc. is exploring the 80-kilometer (50 miles) long and seven to 20 kilometers (4.5-12.4 miles) wide Hope Bay greenstone belt located in the northeast Slave Structural Province for gold.

The junior raised C$78 million in equity financing last spring, net proceeds of which will further advance exploration and other work at Hope Bay in 2014. Pending 2014 results, TMAC plans to conduct a pre-feasibility study by early 2015, which, when completed, will allow the company to consider equity and debt project-financing options.

"A large portion of the approved 2014 plan and budget will consist of surface drilling to upgrade the mineral resource estimates to higher classifications and to add to our global gold resource," TMAC President Catherine Farrow said in May.

Six diamond drill rigs are expected to complete a total of 57,000 meters at a cost of about C$28. Work is underway to re-open the Doris portal and ramp to facilitate future underground mapping, underground drilling and mine design. In addition, work has begun on environmental permitting of the Madrid and Boston trends for advanced exploration, engineering and project execution planning and will continue throughout 2014.

"We are very fortunate in having regulatory approvals in place that allow us to put Doris North into production and other permits that allow underground advanced exploration including bulk sampling at Boston and surface exploration drilling at Doris, Madrid and Boston," Farrow added.

Combined with the Doris North project certificate already in place, all necessary permits are secured to allow mining and milling to start at that deposit as early as the fourth quarter of 2015.

Sabina Gold & Silver Corp. continues to aggressively advance its Back River gold project in 2014. The company has initiated a feasibility study, and was expected to submit a draft Environmental Impact Statement to Nunavut regulators in early 2014. Sabina planned a C$19 million 2014 work program at Back River $19 million, including a modest drilling program following up on earlier discoveries.

The Back River gold project comprises six properties, Bath, Boot, Boulder, Del, George and Goose. In late July, Sabina reported completion of nearly 9,000 meters of infill definition and expansion drilling program at the Echo deposit, one of four deposits that comprise the Goose Property.

Sabina is also exploring the 79,000-hectare (195,209 acres) Wishbone Gold project located in the southeastern portion of the Wishbone greenstone belt that also hosts the Hackett River deposits. In addition to Hackett River, Sabina sold a substantial portion of Wishbone to Glencore Xstrata, but retained claims viewed as prospective for banded iron formation-hosted gold, analogous to the primary host rocks at the Back River project. Sabina also acquired additional claims to bring the property to its current size of roughly 79,000 hectares (195,209 acres).

A reconnaissance surface exploration program was carried out on three blocks of claims within the property in 2013, and included prospecting and geological mapping. Further mapping and follow-up of gold anomalies is planned for 2014.

The Itchen Lake gold project, which straddles the Nunavut-NWT border, is also being explored under a strategic alliance between Transition Metals Corp., newly merged with HTX Minerals Corp., and Nunavut Resources Corp. The alliance planned to follow up in 2014 on a modest C$1.0 million reconnaissance surface exploration program conducted a year earlier. More than 60 conductivity anomalies were identified in 2013, with some located along the same trends as known gold occurrences.

Base metals projects

To the south, Glencore Xstrata plc, a company formed in May 2013 from a merger of Glencore International plc and Xstrata plc, is exploring the Hackett River and Wishbone projects, from Sabina Gold & Silver Corp. in 2011.

Hackett River is considered one of the largest undeveloped VMS deposits in Canada, and possibly the world. With three main silver-rich zinc deposits, the property has a NI 43-101

resource estimate of 25 million metric tons of indicated resources grading 4.2 percent zinc, 0.6 percent lead, 0.5 percent copper, 130 grams per metric ton silver and 0.3 g/t gold, and 57 million metric tons of inferred resources grading 3.0 percent zinc, 0.5 percent lead, 0.4 percent copper, 100 g/t silver and 0.2 g/t gold.

Glencore has indicated that submission of a draft environmental impact statement to the Nunavut Impact Review Board will await the completion of a pre-feasibility study.

The Wishbone property spans the 115 kilometers (71 miles) length of the Hackett River greenstone belt, alternatively referred to as the Wishbone greenstone belt, and is comprised of 238 mineral claims with a combined area of almost 200,000 hectares (494,200 acres).

The property also encloses the Musk VMS deposit, discovered by Noranda Mining and Exploration Inc. in 1979, and owned by Glencore. Exploration on Wishbone in 2013 was limited to electromagnetic and gravity airborne geophysical surveys to expand the geophysical coverage of the property and to generate targets to follow up in future programs

MMG Resources Inc. continued work at on its High Lake and Izok Lake volcanogenic massive sulphide deposits, known collectively as the Izok Corridor Project, and the Hood zinc-copper project.

The 2014 program on the Izok Corridor project were anticipated to follow up on efforts in 2013 to prepare for regulatory review of the projects. Proposed plans includes a mine and mill at Izok Lake, a mine at High Lake, and a port at Grays Bay on the Coronation Gulf from which mineral concentrates would be shipped seasonally, all connected by a 325-kilometer (202 miles) all-weather road. Much of the work completed on the Izok Corridor project in 2013 was focused on engineering studies to assess design alternatives. The exploration program, which included geological mapping, prospecting, and ground and airborne geophysical surveys, concentrated on regional target identification along the proposed road route. No exploration results have been released.

The company originally planned to submit a revised project description with alternative engineering options to the Nunavut Impact Review Board in late 2013, but since has indicated that the submission will take place in the fourth quarter of 2014 at the earliest. MMG said the revision would be submitted after the completion of the 2014 exploration program which is intended to identify more mineral resources within the Izok Corridor. However, the company said it likely will need partners to finance construction of a road and port system that would make the Izok Corridor Project economically viable.

At the Storm copper-zinc-silver project, located on the northwest coast of Somerset Island, Aston Bay Holdings recently reported completion of a joint summer exploration program at the 139,633-hectare (345,033 acres) project conducted in conjunction with a subsidiary of Antofagasta plc. Outcomes from the program include new discoveries of copper-bearing frost heaved subcrop and float that increase the distance over which copper mineralization has been found at surface on the project.

“The presence of copper-bearing subcrop and float in new areas re-affirms our belief that mineralization on the property may be more extensive than what has been defined to date by drilling,” said Benjamin Cox, chief executive officer of Aston Bay.

The joint exploration program was conducted over a three-week period by technical professionals from Aston Bay, Antofagasta and consulting company APEX Geoscience Ltd. Work completed at Storm included geological mapping in the vicinity of the known mineralization as well as prospecting and soil sampling in areas where little or no mineralization had been previously identified. The strike length of surface mineralization was increased to 30 kilometers (18.6 miles) from the seven kilometers (4.34 miles) previously identified. Targeting for the prospecting and soil sampling was driven by results from a Versatile Time Domain Electromagnetic survey conducted in 2011 and previous soil sampling programs. Copper-bearing minerals, including malachite and chalcocite, were discovered in frost-heaved subcrop and float in several areas where no previous drilling or surface sampling had been conducted. Samples of the copper-bearing material were collected for assay and results will be released once obtained. The completion of the 2014 summer field program was an important milestone in progressing towards a proposed definitive agreement with Antofagasta, which the parties have agreed to complete by Dec. 1.

Iron and diamonds

Of the advanced mineral projects edging closer to production in Nunavut, the Mary River iron project is likely the closest to startup. For the past two years, the venture, spearheaded by Baffinland Iron Mines Corp., has headlined mining news coming from the Qikiqtani, the territory’s easternmost region.

Baffinland planned to focus work in 2014 on Deposit No. 5 at Mary River, including geophysical surveying and additional surface sampling. Construction of mine-related infrastructure and work on the mine site is underway and is expected to continue through 2014.

Located in northern Baffin Island, the iron mine project is expected to produce 3.5 million to 4.2 million metric tons of iron ore annually when it begins operation, potentially in 2015. The ore, which will require little or no processing will be shipped from Milne Inlet to markets in Europe.

On southern Baffin Island, Peregrine Diamonds Ltd. continued work in 2014 on its Chidliak diamond project, beginning in March with an exploration and diamond resource definition program. Chidliak is a 7,989-square-kilometer (3,087 acres) property comprised of Crown land and IOL (surface) parcels and located 120 kilometers (74 miles) northeast of Iqaluit, on the Hall Peninsula of Baffin Island. The primary objective of the 2014 program is to advance three to five kimberlites showing economic potential to the bulk sample stage and to commence logistical preparations for the 2015 bulk sampling program. The objective of the 2015 bulk sampling program will be to confirm sufficient diamond resources to enable commencement of a pre-feasibility study for Baffin Island’s first diamond mine. The approved budget for the 2014 program is C$7 million.

Peregrine planned to advance additional kimberlites to the bulk sample stage in 2014 by completing a program of core drilling on these pipes. In addition, thorough exploration will be focused on discovering new kimberlites with economic potential in a priority area that includes the CH-6, CH-7 and CH-44 kimberlites. The 2014 program was expected to be completed in September.

In May, Peregrine reported a maiden independent NI 43-101-compliant inferred mineral resource estimate for the top 250 meters of the CH-6 kimberlite pipe and additional tonnage as a target for further exploration. Key elements of the CH-6 estimates included an inferred mineral resource of 7.47 million carats of diamonds in 2.89 million metric tons of kimberlite to a depth of 250 meters, an estimated 2.60 million to 3.47 million metric tons of kimberlite classified as a target for further exploration and the kimberlite is open at depth.

In addition, Peregrine reported estimates for the CH-7 and CH-44 kimberlites. The CH-7 kimberlite tonnage estimate is between 2.75 million and 3.97 million metric tons from surface to a depth of 280 meters. The CH-44 tonnage estimate is between 1.16 and 2.05 million metric tons from surface to a depth of 230 meters. Both CH-7 and CH-44 are open at depth. The tonnage estimates that have been identified at CH-6, CH-7 and CH-44 are classified as targets for further exploration and are conceptual in nature.

Peregrine also said insufficient exploration has occurred to define a mineral resource on those targets, and it is uncertain if further exploration will result in the tonnage estimates being delineated as a mineral resource.

North Arrow Minerals Inc. also conducted a bulk sampling program at the Qilalugaq Diamond Project located near the hamlet of Repulse Bay (Naujaat), Nu. The intent of the program was to recover a diamond parcel of about 500 carats for the purpose of determining an initial value estimate for the diamonds in the Q1-4 kimberlite. North Arrow is funding the bulk sampling program as part of an 80/20 percent option agreement with Stornoway Diamond Corp. A total of 1,688 megabags of kimberlite have been collected from the 12.5-hectare (31 acres) Q1-4 kimberlite.

North Arrow also explored its Mel and Luxx diamond projects in 2014. The Mel project consists of five prospecting permits covering about 73,865 hectares (182,520 acres), and is part of an option agreement with Anglo Celtic Exploration Ltd., along with the Luxx project. At Mel, work included prospecting of targets identified from 2013 magnetic surveys and additional till sampling. At Luxx, follow-up to a substantial 2013 surveying and sampling program included additional till sampling and detailed prospecting of the highest priority target areas, as well as the acquisition of required permits for a spring 2015 drilling program.

Uranium

Uranium mining activity, while mainly in the early stages in Nunavut, advanced at an encouraging pace in 2013, but slowed significantly this year. The territory boasts vast potential for economic uranium deposits and at least 10 active uranium projects, most of which are located in the south-central Kivalliq region near Baker Lake. The area hosts a number of deposits similar to those found in the Athabasca Basin region of Saskatchewan.

Nunavut’s most advanced uranium project, Kiggavik, is inching closer toward potential development within a couple of years. The project, located about 80 kilometers, (50 miles) west of Baker Lake, is owned by Areva Resources Canada, one of Canada’s largest uranium producers.

Several other companies are targeting deposits and prospects clustered nearby, though little activity has been reported in 2014. The uranium explorers include Cameco at the Turqavik-Aberdeen claims, located some 85 kilometers (53 miles) west of Baker Lake, where exploration has focused on finding mineralization in the southern portion of the two claims similar to that found within deposits at Areva’s Kiggavik and Sissons properties to the east. Forum Uranium Corp. is exploring the North Thelon Project , which covers 50 kilometers (31 miles) of the eastern extension of the trend that hosts the Kiggavik deposits, and potentially hosts similar-style uranium deposits.

In February, Forum consolidated its North Thelon property interests by entering into a purchase and sales agreement with Agnico Eagle Mines Ltd. to acquire a 100 percent interest in Agnico Eagle's Judge Sissons and Schultz Lake claims. Sufficient work has been done by Forum to keep the claims in good standing with minimal expenditures for three years.

Another junior, Kivalliq Energy Corp., was the first company to explore for uranium on Inuit-owned lands in Nunavut, a move that could pay off handsomely for the company. Five years later, Kivalliq has identified the 340,268-acre Angilak property which is believed to host Canada's highest grade uranium resource outside Saskatchewan's Athabasca Basin. Angilak, located 225 kilometers (140 miles) south of Baker Lake has a 2.8-million-metric ton inferred resource grading 0.69 percent U_3O_8, totaling 43.3 million pounds.

Advancement of Angilak has evolved to focus on de-risking the project by evaluating potential extraction and processing options for the Lac 50 uranium deposit.

Agnico hits high-grade gold at Amaruq

Excited about new discovery just a few kilometers north of its Meadowbank Mine, producer expands drilling program by 500 percent

Mining News North of 60 – October 30, 2013

Shane Lasley

From expanding reserves at its proposed Meliadine gold mine to early-stage exploration at an enticing gold discovery a few miles up the road from its Meadowbank Mine, 2014 is emerging as a year marked with exciting growth for Agnico Eagle Mines Ltd.

In addition to growth through the bit of a drill, Agnico expanded its reserves and production profile through acquisitions.

In June, the producer and Yamana Gold Inc. finalized the purchase of Osisko Mining Corp. Agnico and Yamana each own 50 percent of Osisko and have formed a joint committee to operate the Malartic mine in Quebec.

The partners also will jointly explore and potentially develop other Quebec and Ontario exploration assets resulting from the Osisko purchase. In August, Agnico reported that one drill each was turning at the Upper Beaver and Kirkland properties that came with the Osiko purchase. Exploration programs and budgets for the Kirkland Lake camp were expected to be announced later this year.

While Agnico also operates gold mines in Quebec, Mexico and Finland, the company continues to focus on Nunavut as a core part of its growth strategy.

"Our drilling costs in Nunavut are less than they are in Mexico. So, this is why we say Nunavut is a big part of our strategy at Agnico; there's lots of gold there, its resource rich," Agnico Eagle President and CEO Sean Boyd explained during a Sept. 4 presentation at the Bank of America Merrill Lynch 20th Annual Canada Mining Conference.

A Whale Tail at Amaruq

Amaruq, an early-stage gold project located on Inuit-owned land 50 kilometers (31 miles) northwest of Meadowbank, has bolstered Agnico's confidence in Nunavut's gold riches.

"This project further enhances our northern strategy. Given the size and scope of the discovery, studies are currently underway to evaluate how Amaruq could be incorporated into the Meadowbank operational plan and possibly linked with the Meliadine project," explains Agnico Eagle CEO Sean Boyd.

The project, formerly dubbed IVR in reference to three of the original gold-bearing zones identified on the property, was renamed Amaruq in September.

Agnico Eagle's recent work has revealed the potential for multiple mineralized zones within a two-kilometer-wide (1.24 miles) northeast-southwest corridor that can be traced for at least 10 kilometers (6.2 miles). Based on current information, Agnico said all four structures identified to date – I, V, R and Whale Tail – are open in all directions including at depth.

High-grade results from drilling at R zone include: IVR14-031, with 26.1 g/t gold (54.4 g/t uncapped) over 4.8 meters at 89 meters depth; and IVR14-028, with 27.6 g/t gold over 3 meters at 58 meters depth.

The most recent intercept in the R zone, hole IVR14-057, encountered 5.6 g/t gold over 12.8 meters at 159 meters depth.

I zone is hole IVR14-050, which returned 7.6 g/t gold over 3.3 meters at 37 meters depth.

Whale Tail, a new zone that has been traced over a strike length of more than 1,000 meters, is the most tantalizing discovery at Amaruq.

"This year, the most exciting part is the Whale Tail zone. On the eastern side we are getting very high grades (over) four or five meters; on the western side we are getting 20-30-plus meter thicknesses in the five- to six-grams-tonne range," Boyd explained.

Highlights from drilling at Whale Tail include:

Hole IVR14-054 intersected four apparently parallel zones grading: 7.7 g/t gold over 6.5 meters at 52 meters below surface, 7.1 g/t gold over 9.6 meters at 104 meters depth, 7.3 g/t gold over 5.4 meters at 115 meters depth, and 3.1 g/t gold over 5.2 meters at 132 meters depth.

Across a 400-meter-wide lake, Hole IVR14-058 intersected what is interpreted as the same structure 500 meters along strike to the northeast, grading 4.9 g/t gold over 16.7 meters at 109 meters depth, including 8.1 g/t gold over 8.0 meters at 113 meters depth.

Some 70 meters farther east, hole IVR14-060 intersected 10.1 g/t gold over 3.8 meters at 86 meters depth.

Hole IVR14-081, drilled to test vertical continuity of Whale Tail, intersected 6.0 g/t gold over 23.7 meters at 122 meters depth; and 7.2 g/t gold over 7.5 meters at 289 vertical depth, representing the deepest intercept so far on the project.

On the next section, 70 meters to the west of drill hole IVR14-054, hole IVR14-056 returned two intercepts grading 3.6 g/t gold over 9.0 meters at only 9 meters depth including 5.3 g/t gold over 4.5 meters and a second intercept of 7.3 g/t gold over 3.5 meters at 43 meters depth. On the next section, 70 meters to the west of drill hole IVR14-056, hole IVR14-079 returned an intercept

grading 8.1 g/t gold over 21.6 meters at only 35 meters depth, including 27.3 g/t gold over 4.5 meters.

IVR14-103, drilled on the southwest side of Whale Lake, cut 55.6 meters grading 6.1 g/t gold, from a depth of 278 meters.

IVR14-116, drilled roughly 140 meters west of IVR14-03, cut 61.8 meters grading 5.2 g/t gold from a depth of 81 meters.

In addition to the drilling, a 600-meter-long boulder field containing large blocks of quartz vein material (locally with sulfides and visible gold) has been located about 3 kilometers (1.9 miles) west of the Whale Tail zone.

"We picked up boulders on surface that have visible gold in them, so it is very unique," Boyd said of an early September visit to Amaruq.

The blocky shape and large size of the boulders suggests they have not been transported far from their original location, an important discovery in a region lacking true exposed bedrock. Based on the nature of the boulders, the proximity of a significant electromagnetic conductor and Agnico's understanding of the glacial transport direction, a third drill rig has been mobilized to investigate this area.

Mammoth, located some four kilometers (2.5 miles) southwest of Whale Tail, and Whale Fin, situated about 1,000 meters south of Whale Tail, are two other promising targets of the 2014 program.

With an original budget of C$1.8 million to drill 5,000 meters, the 2014 program at Amaruq has been increased to roughly C$9.3 million to drill 25,000 meters. An inaugural mineral resource for the property is anticipated to be completed by the end of 2014.

To support the growing exploration program, a new 25-person exploration camp built at Amaruq is already being expanded to accommodate a crew of 60 by the spring of 2015.

Field work, including mapping and sampling, is currently underway focusing on geophysical anomalies highlighted by an airborne VTEM plus Time-Domain electromagnetic survey conducted earlier this year. A total of 510 surface rock samples have been collected so far in an area of about 1,300 hectares (32,123 acres), work that led to the discovery of the gold-bearing boulder field.

Agnico Eagle has begun collecting environmental baseline data at Amaruq in the second half of 2014, as well as beginning the preliminary engineering for road design. Qualified fisheries, geochemical, terrestrial and archaeological consultants have begun to review available baseline data from public sources and design field programs to gather additional data. Agnico said this baseline work could be used in future permitting for the Amaruq project.

The 408-square-kilometer (158 square miles) IVR property is located within Inuit Owned Lands and a 100 percent interest was acquired by Agnico in 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Inc.

Elsewhere in Nunavut

In addition to finding success north of Meadowbank, Agnico is seeking near-mine exploration upside a few miles to the south.

In June, Agnico Eagle entered into an option agreement with Aura Silver Resources Inc. to earn up to a 70 percent interest in 17 claims of Aura's Greyhound property located 32 kilometers (20 miles) south of Meadowbank. In July, Agnico began an initial 1,000-meter drill program to test three precious and base metals targets: South Aura Lake; North Aura Lake and the Dingo prospect to the northeast. During this initial drill program, approximately 300 meters will be drilled for each area.

Agnico Eagle can acquire an initial 51 percent interest in the property by paying Aura C$250,000 and completing C$1.75 million in exploration expenditures before May 31, 2017, this interest can be increased to 70 percent by paying another C$250,000 and investing another C$5 million in exploration.

Agnico also terminated its partnership with Homestake Resource Corp. to explore the Homestake Ridge gold-silver project in northwestern British Columbia in September. The miner withdrew from the option before earning an interest in the property, leaving Homestake with full ownership of its namesake project. Prior to letting the option lapse, Agnico drilled 2,972 meters in six holes at Homestake.

The Meliadine project, which covers a nearly 80-kilometer (50 miles) stretch of land near the western shore of Hudson Bay in the central Kivalliq region of Nunavut, is the target of C$8.3 million of exploration during 2014.

The surface program, which wrapped up in August, included 130 exploration and conversion holes totaling 37,991 meters completed at Meliadine.

The exploration portion of this program made an important discovery that indicates the potential of a high-grade resource at Meliadine’s Pump zone, including 5.2 meters of 19.8 g/t gold starting at a depth of 12 meters in hole M14-2220. Two other zones, Discovery and Wolf, also were targets of exploration drilling.

Conversion drilling targeted the project’s Wesmeg-Normeg and Tiriganiaq zones.

Agnico anticipates the results from this drilling will continue the expansion of the company’s largest and fastest-growing high-grade complement of reserves, plus resources.

Probable reserves total 2.8 million ounces of gold (12.0 million metric tons at a grade of 7.4 g/t), while indicated resources are 3.1 million oz of gold (19.0 million metric tons at 5.1 g/t) and inferred resources are 2.7 million oz of gold (11.7 million metric tons at 7.2 g/t).

Agnico Eagle is investing roughly another C$42 million on capital expenditures at Meliadine, a large portion of which is being spent on 1,400 meters of exploration ramp development. In addition to providing a platform for conversion drilling, the company said this ramp will help keep the advanced gold project on track for a potential 2018 start-up.

An updated technical study is expected by early 2015.

Meadowbank, which had proven and probable reserves of 1.75 million oz gold (16.8 million metric tons grading 3.2 g/t gold) at the end of 2013, was only targeted with roughly 2,000 meters of conversion drilling and 300 meters of regional exploration drilling during 2014.

Training for the mines

Former MLA now connecting Nunavummiut with job opportunities

Nunavut News/North – November 1, 2014

Walter Strong

A chance meeting at this year's Iqaluit trade show has led to former Quttiktuq MLA Ron Elliott agreeing to become the Nunavut representative for the Morrisburg, Ontario-based Operating Engineers Training Institute of Ontario.

Elliott has seen first hand the improvements that come with mining jobs in the North.

"About a year ago, we had 40 per cent unemployment," Elliott said about his come community of Arctic Bay. "We've had a big improvement since then thanks to mine hiring."

The mine hiring Elliott is referring to is at Baffinland Iron Mines Corp.'s Mary River iron ore mine which began producing iron ore last month.

Elliott has lived in his adopted home of Arctic Bay since 1991 and has worked to improve the challenging living conditions that come with living in remote Northern communities.

It came as no surprise then that Elliot would be concerned about a recent labour market report prepared for Baffinland that showed the company will face difficulties finding enough trained Northern workers to fill out its workforce.

Nunavut News/North reported last month that, according to the report, nearly 80 per cent of jobs at the Mary River site and the related port at Milne Inlet may have to go to a southern fly-in-fly-out workforce due to a lack of qualified Northern workers.

The majority of the 326 total jobs available between the Mary River site and the Milne Inlet site will require, at minimum, a high school diploma or occupation specific training. Of those 326 jobs, 177 will require higher-level college or apprenticeship training.

"The workforce is supposed to be representative of the population, but that is hard to do because you need a skilled labour force," Elliott said. "It's going to be a generation before we can get to that point."

Elliot estimates there are at least 30 Arctic Bay residents working at Mary River, and he believes there's room for improvement.

To that end, Elliott has forged a relationship with the institute.

"They've trained approximately 500 Nunavummiut in the last eight years," Elliott said. "I've been contracted by them to promote the training they do in Morrisburg. The (nine) people who have been sent down from Arctic Bay now all have jobs working at Mary River making good money."

With nine already working, connecting more Nunavummiut to the same opportunity is now Elliott's job.

"There are a lot of opportunities with the mines that are happening in the North," he said. "The average salary is around $100,000 with benefits."

Work at the mine is based on a two-week-in, two-week-out cycle.

"It's not a typical way of working in the 9-to-5 sense," Elliott said. "But the guys have the money they need to go hunting with their two weeks off. Even one new job in the community is a tremendous asset. With extended families, you're not just supporting the one family."

Elliott pointed to Baffinland's Arctic Bay employment liaison as just one example of how the company is making good on its commitment to hire locally. But he added that Northerners can't expect mining companies to provide all the solutions to increasing local employment.

"From what I've seen, Baffinland is trying their hardest, but they are behind the eight-ball," Elliott said.

"They're operating an active mine (and) it's hard to do training on top of it."

The hedge against falling gold

Agnico Eagle ends third quarter on positive Nunavut note

Nunavut News/North – October 31, 2014

Walter Strong

Gold may be down but relatively low cash operating costs across Agnico Eagle Mines Ltd's. (TSX:AEM) global production base, combined with increasing gold production and strong exploration results, leave plenty of room for the company to breathe.

This is the take-away message from the company's third quarter earnings report released last week.

Agnico Eagle reported a third quarter net loss of $15 million, primarily as a result of increased exploration spending, lower gold prices, and revised bookkeeping (a switch to international financial reporting standards) that resulted in a one-time increase in the book value of depreciable assets.

Net income from operations is up over the first nine months of this year to $104.3 million from $93.6 million last year, mainly on the back of increased gold production, particularly at Meadowbank.

"At Meadowbank, (we saw) very strong performance in the mill," said Sean Boyd, Agnico Eagle's president and CEO, during an earnings call with investors last week. "Cost performance continues to be very good, (averaging) $74 per ton. The mine used to have costs in excess of $100 per ton."

Boyd said Agnico Eagle has bumped expected gold output across all its mines for the remainder of 2014. The company now expects to produce 1.4 million ounces of gold by the end of the fiscal year, up from the 1.1 million ounces the company expected at the start of the year.

For 2015, the company expects to produce 1.6 million ounces, with Meadowbank at the heart of that production.

"Next year we expect a nice bump in production (at Meadowbank) up from the original guidance of 375,000 ounces," Boyd said. "We're looking to average 100,000 to 110,000 ounces per quarter next year."

Production of between 400,000 and 440,000 ounces of gold in 2015 would see Meadowbank potentially duplicate last year's record production of 430,613 ounces of gold.

Meadowbank's end of mine life is 2017 but ramped up exploration at Amaruq, approximately 50 km northwest of Meadowbank, has shown positive results and could soon be tied into a revised Nunavut strategy.

"At Amaruq, we drilled 144 holes - over 31,000 metres of drilling. The (exploration) budget increased from $1.5 million to $9 million with $7.4 (million) of that in (the third quarter)," Boyd said. "We continue to work on preliminary engineering for an all-weather road to connect the project to Meadowbank. We're also looking at. incorporating this project into the mine plan at Meadowbank and possibly linking it to the Meliadine project."

Agnico Eagle's Meliadine project received approval from the Nunavut Impact Review Board last month. Located 24 km northwest of Rankin Inlet, the 750-employee mine would have a 13-year mine life based on current resource estimates.

But it is positive results at Amaruq that have caught the company's attention.

"We're reviewing the entire Nunavut strategy because of the exploration success at Amaruq," Boyd said. "We'll have further information in November. We expect to calculate a preliminary resource on the project around the end of the year."

How quickly Agnico Eagle will advance on new projects depends almost entirely on the price of gold, Boyd said.

With all-in cash and sustaining capital costs, including future reclamation liabilities, across all operations of $990 per ounce, the company is well positioned to ride out the slump in gold. Boyd added that conditions which affect the price of gold can actually be positive for the company.

Boyd noted that a drop in the price of gold is often accompanied by a strengthening U.S. dollar. With approximately 80 per cent of Agnico Eagle's gold production coming out of Canada and Finland, a weaker Canadian dollar and Euro creates a natural buffer for the company against a decline in the price of gold.

"If we are to see further weakness in the gold price based on the stronger U.S. dollar, we would anticipate. a weaker Canadian dollar and a weaker Euro. So we have a built-in buffer with a lot of our operations focused in Europe and Canada," Boyd said.

But weak gold would have an impact on capital expenditures, with the Meliadine project the most significant capex on the company's radar.

"The only big capital (expenditure) on the horizon is Meliadine and that still remains to be decided," Boyd said. "That will be driven largely by the price of gold."

Although Meliadine's future is yet to be decided and is closely tied to the price of gold, Boyd added that Meadowbank's mine life could be positively impacted by the Amaruq deposit.

"Amaruq is the interesting wrinkle," Boyd said. "For relatively low capital compared to Meliadine we could still see an ability to maintain a production base up there and to generate. cash flow. That gives us some flexibility we didn't have a year ago."

Gold producers pummelled as bullion drops to four-year low

Rachelle Younglai - MINING REPORTER

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Gold has been hit hard by central bank actions in the United States and Japan, falling to four-year lows and further eroding the value of gold producers.

Investors had already driven bullion down to about $1,200 (U.S.) an ounce this fall in anticipation that the U.S. Federal Reserve Board would stop pumping dollars into the economy.

Then this week, the Fed ended its controversial economic stimulus program, a move that sets the stage for the central banker's first interest-rate hike since 2006. That, combined with the Japanese central bank's surprise decision Friday to further bolster its economy with more bond buying, sent the U.S. dollar soaring.

Bullion dropped to $1,171.60 an ounce on Friday, the lowest it has been since July, 2010.

"Any time the U.S. dollar strengthens, it's bad news for gold," said Bart Melek, head of commodity strategy with Toronto-Dominion Bank. "Investors are not interested in gold at this point."

Rock-bottom U.S. interest rates, combined with the Fed stimulus program known as quantitative easing drove gold to a record high of $1,921 in September, 2011.

"It was really quantitative easing and all the liquidity the Fed put into the U.S. economy that caused gold to move to an all-time high," said Patricia Mohr, commodity market specialist with Bank of Nova Scotia.

The chance of a U.S. rate hike is expected to drive investors away from gold and into interest-bearing assets such as U.S. Treasuries.

The price of gold is entering into dangerous territory for miners, particularly those that spend about $1,150 to produce an ounce of bullion. A sustained drop could force some producers to shutter their mines.

Canadian gold companies, already under duress given the slump in commodity prices, were pummelled. This week, Kinross Gold Corp. fell 20 per cent to $2.41 (Canadian) a share, Yamana Gold Inc. lost 30 per cent to $4.49 and Goldcorp Inc. lost 15 per cent to $21.15.

"It's a tough day in the gold equities," said Steve Letwin, CEO of Iamgold Corp., which dropped 20 per cent this week to $2.14 a share.