



page 8 Washington Companies get into NWT diamond business with Dominion buy

## NEWS NUGGETS

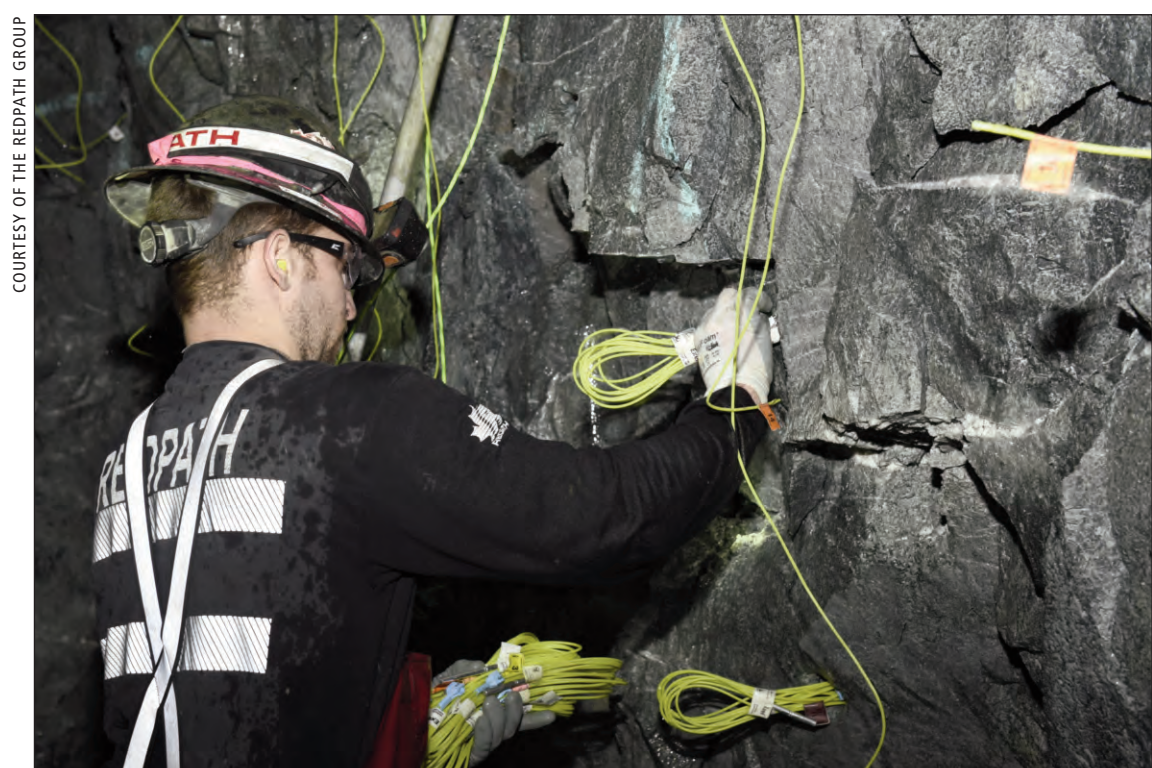
Compiled by Shane Lasley

**CopperBank drilled 13 holes this year aimed at confirming and expanding the roughly 1.1 billion pounds of copper previously outlined at its Pyramid copper project on the Alaska Peninsula.**

**Confirming, expanding Pyramid**

CopperBank Resources Corp. Oct. 30 reported drill results that continue to confirm and expand copper mineralization in the Main and North zones of its Pyramid project on the Alaska Peninsula. DDH 17PY035 cut 251 meters averaging 0.41 percent copper over two intervals in the Main zone – a near surface intercept of 137 meters of 0.45 percent copper, 0.02 percent molybdenum and 0.15 grams per metric tons gold from a depth of 42 meters and 114 meters of 0.37 percent copper, 0.01 percent molybdenum and 0.08 g/t gold from 205 meters. The two zones encountered in hole 35 were separated by a 26-meter fault zone of clay altered quartz diorite porphyry. CopperBank said the results from this and previously reported holes confirm a minimum length of 800 meters for the Main zone. DDH 17PY036 cut 179.5 meters of 0.37 percent copper, 0.03 percent molybdenum and 0.12 g/t gold in the North zone. CopperBank completed 3,690 meters of drilling in 13 holes at Pyramid this year. “Six holes have now been reported, representing phase one of our 2017 drilling program, and we look forward to reporting the results of our final seven holes that test open areas in the Central and West Zones in due course,” said CopperBank Executive Chairman Gianni Kovacevic. According to a 2013 calculation, Pyramid hosts roughly 1.1 billion pounds of copper in 122.5 million metric tons of inferred resource averaging 0.41 percent copper, 0.1

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A J.S. Redpath Corp. crewmember prepares for a blast as the company drives a decline to the high-grade Jualin gold deposit at Coeur Mining's Kensington Mine in Southeast Alaska.

**GOLD PRODUCTION**

## Kensington's gold future

Higher grade gold ore from Jualin to be the norm at SE Alaska operation

By **SHANE LASLEY**  
Mining News



**MITCHELL KREBS**

Undaunted by the slower than planned start, the company is sprinting for at least 40,000 oz of gold during the final 122 days of 2017.

“Kensington results during the first nine months now puts a lot of pressure on the team during the fourth quarter to deliver on the full year production guidance of 120,000 to 125,000 oz of gold,” said Coeur Mining President and CEO Mitchell Krebs.

**W**ith high-grade ore being hauled to the surface from the Jualin deposit, Coeur Mining Inc.'s Kensington Mine in Southeast Alaska is poised to churn out more gold at lower costs moving forward.

Through the first nine months of this year, this underground mine about 45 miles north of Juneau produced 80,162 ounces of gold.

Going into 2017, Coeur planned for Kensington to produce at least 120,000 oz of gold this year. The Chicago-based miner, however, had hoped to be closer to this goal by the end of the third quarter.

**Mining Jualin**

Mining ore from the high-grade Jualin deposit has been a cornerstone for increased production at Kensington since Coeur reconfigured its plan for

see **KENSINGTON'S FUTURE** page 15

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## NORTHERN NEIGHBORS

Compiled by Shane Lasley



DOMINION DIAMOND CORP.

An aerial view of Ekati, one of two world renowned diamonds mines The Washington Group bought into with its US\$1.2 billion acquisition of Dominion Diamond Corp.

### Washington Companies buys Dominion Diamond

Dominion Diamond Corp. Nov. 1 announced that it has closed the deal to sell all of its outstanding shares to The Washington Companies for US\$14.25 per share, worth roughly US\$1.2 billion. Founded by billionaire Dennis Washington, The Washington Companies is a group of privately held North American mining industrial and transportation businesses. "This is an exciting day for Dominion Diamond and The Washington Companies," said Washington President Lawrence Simkins. "We fully support Dominion's existing strategy and its exceptional employees, and we are confident that Dominion will continue to offer long-term benefits to all of the company's stakeholders." Dominion, which operates the Ekati diamond mine and 40 percent of the Diavik diamond mine, will operate as a standalone, private company. "With today's closing, I am excited to join forces with Dominion as well as with our respected partner at the Diavik mine – Rio Tinto. We look forward to owning and operating Dominion for decades to come, with a focus on maintaining safe and prosperous business operations in the Northwest Territories," said Dennis Washington. Patrick Evans, who recently served as CEO of Kennady Diamonds and Mountain Province Diamonds, is

see **NORTHERN NEIGHBORS** page 12

## • COLUMN

# Upbeat mood buoys outlook for AMA meet

On heels of increased exploration, development and production activities in 2017, Alaska miners welcome signs of industry revival

By **CURT FREEMAN**

Special to Mining News

In early November, the Alaska Miners Association will hold its annual convention in Anchorage. Unlike the past four or five years, the excitement surrounding the convention this year is palpable due to the steady increase in exploration, development and production activities in Alaska in 2017.

Clear signs of the industry's long-awaited revival include the fact that 11 new project acquisitions have taken place in 2017, half of which involve companies that are newcomers to the Alaska mineral industry. Total exploration spend for 2017 is up for the second straight year, easily topping the US\$90 million mark, and this, after four years of steadily decreasing investments beginning in 2012.

With metal prices stable or rising, output and revenue from Alaska's mines is healthy and growing.

The same lack of investment in new projects industrywide during the past four to five years, coupled with strong production figures, has created a shortfall in the number of high-quality mid-tier projects that producers can acquire to fill their short and long-term production pipelines. As a result, major and intermediate producing companies have been actively acquiring new Alaska projects at an earlier stage of exploration than typically seen.

While the recovery locally and around the globe is in no way at the "boom" stage, it is clear that 2018 promises to be an exciting year for the Alaska mineral industry.

### Western Alaska

**NORTHERN DYNASTY MINERALS LTD.** announced a sweeping series of new development considerations for its Pebble copper-molybdenum-gold project near Iliamna. Among the mine design changes being considered is reducing the footprint of the project's major mine facilities (pit, tailings storage facility) to roughly 5.4 square miles. Mine operations in the Upper Talarik River watershed region would be eliminated, minimizing the project's environmental footprint and addressing stakeholder concerns relating to the local salmon population. An enhanced tailing storage facilities (TSF) would be constructed with enhanced buttresses and slopes and a

### The author

The author Curt Freeman, CPG #6901, is a well-known geologist who lives in Fairbanks. He prepared this column



**CURT FREEMAN**

Oct. 30. Freeman can be reached by mail at P.O. Box 80268, Fairbanks, AK 99708. His work phone number at Avalon Development is (907) 457-5159 and his fax is (907) 455-8069. His email is [avalon@alaska.net](mailto:avalon@alaska.net) and his website is [www.avalonalaska.com](http://www.avalonalaska.com).

greater safety factor. Potentially acid-generating tailings would be separated from other tailings and stored in a lined TSF. All tailings storage would be consolidated to the North Fork Koktuli River area. The project would no longer require the use of waste rock piles, significantly reducing risk associated with acid rock drainage and potential related environmental impacts. Although safely used in Alaska and around the world to increase gold recovery, the project would not use cyanide in the recovery process. The development would include the creation of a new ferry route across Iliamna Lake, minimizing the total road area, stream crossings, bridges, and culverts and ultimately minimizing the project's impact on local wetlands. The mine also would be designed to withstand the greatest possible predicted seismicity. Under this scenario, the project's estimated annual revenue to the Lake & Peninsula Borough would be \$19 million to \$21 million per year. Estimated annual state revenue would be \$49 million to \$66 million per year, and estimated jobs created for Alaskans would total 1,500-2,000. A series of other community enhancements also were announced for the project.

**COPPERBANK RESOURCES CORP.** reported results from a 13 diamond-drill-hole, 3,690-meter 2017 drilling program on its Pyramid copper project near Sand Point. Significant results include hole 17PY032, which intersected three significant near-surface intervals totaling more than 290 meters at grades higher than 0.33 percent copper, including 201 meters 0.48 percent copper, 0.021 per-

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## FREEMAN

cent molybdenum and 0.1 gram per metric ton of gold, hole DDH 17PY033, which intersected 300 meters of 0.53 percent copper including 40.85 meters of 1.17 percent copper, and hole DDH 17PY034 which intersected 232.88 meters of 0.19 percent copper. Results from the higher-grade portions of these holes fall outside the current resource envelope and mineralization remains open laterally and at depth. Deeper mineralization associated with the main quartz diorite porphyry intrusion is dominantly chalcopyrite with chalcocite disseminated throughout the stratigraphic sequence. However, near-surface mineralization in hole PY034 was hosted in hornfels intruded by numerous porphyry dykes with continuous copper mineralization and higher molybdenum grades than observed elsewhere in the deposit. Mineralization in these near-surface rocks is mainly composed of disseminated chalcopyrite and molybdenite with chalcocite. Additional drilling results are pending.

**REDSTAR GOLD CORP.** announced completion of 2,641 meters of drilling in 13 drill holes at its Unga gold-silver project near Sand Point. The program tested four zones and Shumagin-style breccias were intercepted in all 13 drill holes. Colloform-textured carbonate breccias were intercepted in eight drill holes at a boiling zone elevation of 85 meters to 125 meters below sea level. Two drill holes intersected Shumagin-style breccia and stockwork in the newly identified Rising Sun gold zone. At the Shumagin Gold Zone, which consists of three zones (Main Breccia, Bunker Hill, East), 11 drill holes totaling 2,407 meters were completed over 750 meters of strike length with depths ranging from 85 to 225 meters below sea level. Previous drilling indicated that moderate-dipping Shumagin-style quartz-adularia +/- carbonate +/- rhodochrosite breccias were localized within the hanging-wall, while a steeper dipping, high-grade colloform textured, carbonate - green clay - pyrite breccia occurred in the footwall. Shumagin-style breccias were intercepted in all 11 drill holes targeted in this zone, while colloform-textured carbonate breccias were intercepted in all eight holes drilled deep enough to reach the footwall zone target. At the Rising Sun gold zone near the historic Apollo-Sitka Trend, two holes were designed to test breccias and stockwork that are exposed at the surface that occur

sub-parallel to the main Apollo gold zone. Shumagin-style breccias and stockwork were successfully intersected in both drill holes and are similar to those that occur historically along the Apollo-Sitka Trend mined over 100 years ago from the late 1880s to early 1920s. Assays are pending from this program.

### Interior Alaska

**ENDURANCE GOLD CORP.** reported additional results of geochemical sampling completed on the Trout prospect, part of its Elephant project in the Rampart-Eureka-Manley Hot Springs district. The 2017 soil survey has identified gold-in-soil values over 1 part per million along a 1,000-meter-long-plus, 100 parts-per-billion soil anomaly. Previous grab rock sample results returned up to 9.64 g/t gold. Mineralization occurs in a northeast-southwest trending shear zone hosted within a syenomonzonite intrusive plug. Mapping identified an iron-oxidize altered intrusive-hosted shear zone which was observed over a variable 8- to 23-meter width with a northeast trending strike. Within this anomaly is a 10- to 15-meter-wide gold-in-soil anomaly averaging greater than 500 ppb gold with an open-ended strike length of about 130 meters. Peak values within this core zone include 2,330 ppb gold and 2,100 ppb gold, and up to 4,130 ppb silver. The

higher gold-in-soil results are associated with elevated arsenic values. Due to oxidation and recessive weathering, there is no outcrop within the shear zone but frost boils in the area of the highest gold-in-soil anomaly have yielded oxidized quartz veining with grab samples assaying up to 1,260 ppb and 1,065 ppb gold, and up to 16,400 ppb silver. The shear zone and the greater than 500 ppb gold-in-soil anomaly is open in both directions. Additional follow-up work is planned for 2017.

Endurance Gold Corp. also reported additional results of geochemical sampling completed on its South Fork prospect, also part of its Elephant project. Initial assay results from 2017 sampling on South Fork returned up to 6.6 ppm gold and 1.94 percent lead. Follow-up rock samples returned gold values including 10.35 ppm, 6.73 ppm, 5.15 ppm, 4.10 ppm, and 3.53 ppm, confirming the gold potential associated with one or more structural linear features. The three highest gold-in-rock samples collected in 2017 also returned 0.48 percent lead, 1.280 percent lead, and 1.205 percent lead respectively. Elevated arsenic is also associated with the higher gold values in rock. Mineralization is related to oxidized sulfides associated with quartz veining, vein stockwork, and quartz healed breccia hosted in hornfels altered clastic sediments. Hand trenching

exposed the quartz-breccia over about nine meters in estimated true width associated with quartz breccia and quartz vein stockwork with slickensides and oxidized sulfides. Chip sampling averaged 0.547 ppm gold over 9.14 meters, including 0.846 ppm gold over 4.57 meters. With the trench assay and other rock samples, the quartz-breccia mineralization has now been confirmed in rocks over an east-west distance of 250 meters. Additional follow-up work is planned for 2017.

### Alaska Range

**POLARX LTD.** (formerly Coventry Resources) reported that visible mineralization was encountered in all of the drill holes completed at its high-grade Zackly copper-gold skarn deposit on the Stellar copper-gold project in the central Alaska Range. The company planned to complete 2,000 meters of drilling in 13 holes at Zackly and has completed additional induced polarization geophysics at the nearby Mars porphyry copper-gold prospect. Key geological observations from the drilling include evidence for multiple phases of mineralization including an initial alteration consisting of formation of marbles and weakly mineralized skarns adjacent to a diorite intrusion and introduction of disseminated iron,

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## FREEMAN

copper and molybdenum sulfides. A later, stronger mineralizing event included introduction of widespread garnet-bearing skarns containing clots, veins and disseminations of covellite, native copper and bornite, with local formation of secondary chalcocite and zones of massive magnetite-bornite-chalcopyrite skarns up to several thick. Previous drilling in 1981 and 1982 also encountered occasional coarse gold. Drill core also contained porphyry style veins overprinting potassic alteration containing potassium-feldspar and secondary biotite along with sub-vertical hydrothermal breccias, both of which suggest the possible presence of a buried porphyritic intrusion. Assay results from the 2017 drilling are pending. At the Mars prospect, ground geophysics indicates a chargeability anomaly consistent with the top of a mineralized porphyry copper system located approximately 100-150 meters below surface. The Mars prospect lies six kilometers to the northwest of

the Zackly deposit along a mineralized structural corridor which may host several buried porphyry copper-gold systems. At Mars, strong surface copper and gold values occur in soils and rocks, with rock-chip values up to 7.4 percent copper and 1.8 g/t gold. These anomalous rocks and soils lie directly above the induced polarization chargeability anomaly over a two-kilometer strike length. The chargeability anomaly is open to expansion. Assays are pending from this program.

### Northern Alaska

**GOLDRICH MINING CO.** reported final gold production figures for Goldrich NyacAU Placer LLC from its Chandalar placer gold mine in the Brooks Range. The mine production for 2017 was 14,670 ounces of raw placer gold, which is about equivalent to 12,000 ounces of fine gold. This compares with 10,209 ounces of raw gold, or roughly 8,200 ounces of fine gold, produced in 2016 and 4,400 ounces of raw gold, or about 3,600 ounces of fine gold, produced in 2015. The 2017 production season ran from about June 4 through Sept. 27. In

addition, stripping of overburden and stockpiling of pay gravel was completed in mid-October. The partners also completed 231 sonic drill holes, totaling 14,271 feet in 2017. A total of 15,000 feet of previously conducted reverse circulation drilling delineated about 10.5 million cubic yards of mineralized material at an average grade of 0.025 ounces (0.78 grams) gold per cubic yard containing an estimated 250,000 ounces of gold.

### Southeast Alaska

**HECLA MINING COMPANY** announced preliminary production results for the third quarter of 2017 at its Greens Creek mine. The mine's third-quarter production was 2.3 million oz of silver and 12,563 oz of gold, compared to 2.4 million oz and 11,988 oz, respectively, in the third quarter of 2016. The mill operated at an average of 2,391 tons per day, a life-of-mine record for the operation.

**COEUR MINING INC.** announced preliminary third-quarter 2017 production results from its Kensington mine. The mine produced 27,541 ounces gold during the quarter, a 4 percent quarter-over-quarter and year-over-year increase. The operation milled 172,038 tons of ore grading 0.17 ounces of gold per ton. Recovery was 94.1 percent for the quarter. Initial development ore was mined from the newly commissioned Jualin deposit. Production from Jualin is expected to ramp up as planned over the next twelve months. Higher anticipated grades from Jualin are expected to positively impact gold production in the fourth quarter. As a result, the company is estimating full-year production of 120,000 - 125,000 ounces of gold.

**CONSTANTINE METAL RESOURCES LTD.** reported additional assay results from four drill holes from

resource expansion and upgrade drilling at the South Wall Zone of its Palmer volcanogenic massive sulfide deposit near Haines. A total of 10,718 meters were drilled as part of the recently completed dual-focus resource expansion and regional exploration drill program. The 2017 program included 10 holes for 3,221 meters at South Wall, 13 holes for 4,993 meters at the AG Zone, three holes for 1,006 meters at the Cap prospect, and six geotechnical holes totaling 1,499 meters. Drilling at AG Zone has continued to successfully define the zone with step-outs along strike and to depth from the initial discovery holes. Significant new results include 20.9 meters grading 8.4 percent zinc, 0.1 percent copper, 40 grams-per-metric-ton silver, 0.2 g/t gold from hole CMR17-95; 14.5 meters grading 7.5 percent zinc, 1.9 percent copper, 66 g/t silver, 0.4 g/t gold and an additional 10.1 meters grading 8.5 percent zinc, 0.5 percent copper, 57 g/t silver, 0.4 g/t gold from hole CMR17-97, 12.8 meters grading 12.0 percent zinc, 0.5 percent copper, 64 g/t silver, 0.7 g/t gold and an additional 13.4 meters grading 5.4 percent zinc, 1.7 percent copper, 11 g/t silver, 0.2 g/t gold from hole CMR17-88, and 7.9 meters grading 5.3 percent zinc, 1.5 percent copper, 35 g/t silver, 0.1 g/t gold from hole CMR17-100. Collectively, the six 2017 drill holes that tested this part of the deposit have defined a thick new high-grade sub-zone of mineralization over a vertical dip length of roughly 150 meters and over a strike length of about 60 meters, which is open to further expansion. The average cumulative drill width of mineralization in each of the six holes is greater than 20 meters, with a length weighted average of 1.6 percent copper, 7.5 percent zinc,

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• ZINC PRODUCTION

# Red Dog delivers 2.2 billion lb zinc

*Extended shipping season good for 2017; mill upgrades, exploration success bode well for the future of Northwest Alaska zinc mine*

By **SHANE LASLEY**  
Mining News

Thanks to an extended shipping season, roughly 2.2 billion pounds of zinc is being delivered from the Red Dog Mine in Northwest Alaska to world markets starving for the galvanizing metal.

“The concentrate shipping season was extended by two weeks and is expected to be completed in the first week of November, having shipped the maximum possible of around a million (metric) tons of zinc concentrate and 210,000 (metric) tons of lead concentrate,” said Teck Resources Ltd. President and CEO Don Lindsay.

The extended shipping, coupled with zinc currently selling for around US\$1.50 per pound, is good news for both Teck, operator of Red Dog, and NANA Regional Corp. the Alaska Native corporation that owns the land where the world-class zinc mine is located.

For NANA, strong zinc sales and soaring prices are further sweetened by a 5 percent increase in its Red Dog royalty that kicked in at the beginning of October. With this increase, the Northwest Alaska Native corporation now receives a 35 percent royalty.

The royalty paid to NANA increases in 5 percent increments on each 5-year anniversary of Teck’s pay-off of up front capital and operational costs to a maximum of 50 percent royalty.

Considering the upgrades being made to the mill and the continued expansion of zinc resources at and around the mine, Teck and NANA are poised to benefit from billions of additional pounds of zinc being shipped from Red Dog to world markets in the coming decades.

**Back on pace**

Red Dog churned out 152,400 metric tons (336 million lb) of zinc in third quarter, bringing the total production for the first nine months of 2017 to 400,700 met-

ric tons (883 million lb). In addition, the Northwest Alaska operation produced 86,300 metric tons (190 million lb) of zinc during the first three quarters.

Red Dog zinc production got off to relatively slow start in 2017 due to the complexity of the ore coming out of Qanaiyaq, a new pit at Red Dog.

Qanaiyaq ore being introduced to the mill to supplement declining grade ore from the Aqqaluk pit adversely affected mill performance, particularly the highly oxidized material being mined at surface.

Teck quickly adjusted to the complex ore and is now on track to produce another 125,000 to 150,000 metric tons (275 million to 330 million lb) of zinc during the final quarter of 2017.

“As we have gained processing experience with this ore, we continued to improve metallurgical recoveries and

increased the amount of Qanaiyaq ore in the mill feed blend this quarter. Together with implementing changes in mine sequencing in the Aqqaluk pit to access higher grade ore, production increased significantly over the previous quarter,” the company wrote in its third quarter report.

As a result, Red Dog is expected to produce 525,000 to 550,000 metric tons (1.16 billion to 1.21 billion lb) this year, which was Teck’s goal going into 2017.

**Investing in the future**

Teck is investing roughly US\$110 million on mill upgrades that will help ensure strong zinc production from Red Dog in the coming years.

“In September, we initiated a mill upgrade project which is expected to increase average mill throughput by

about 15 percent over the remaining mine life, helping to offset lower grades and harder ore in the Aqqaluk pit,” the diversified miner wrote.

The company is forecasting annual zinc production at Red Dog to range between 475,000 and 550,000 metric tons over the next five years.

The mill upgrades currently underway are expected to increase average throughput by about 15 percent over the remaining mine life, which will offset the challenges of processing lower grade and harder ore in the Aqqaluk pit.

These improvements to the mill are expected to be finished by the end of 2019.

While these upgrades will increase the amount of ore being fed through the mill,

see **RED DOG** page 13



## UNDERGROUND HEROES

Nestled in the Alaska wilderness, Pogo Mine is home to many natural resources including gold and wildlife. Through a culture of responsibility, personal accountability, everyday environmental monitoring, and the management of over 50 permits, Pogo’s Underground Heroes are key to minimizing Pogo’s impact to the environment.



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**FREEMAN**

43.1 g/t silver and 0.32 g/t gold. Additional drill results are pending.

**GRANDE PORTAGE RESOURCES LTD.** announced that it has completed 12 drill holes (3,700 meters) at its Herbert gold project near Juneau. Initial drill results from the Goat Vein include 2.64 meters grading 27.93 g/t gold in hole 17L-2, 1.96 meters grading 7.5 g/t gold in hole 17L-3, and 6.3 meters grading 7.31 g/t gold in hole 17L-4. Significant results from the HW vein include 0.88 meters grading 10.54 g/t gold in hole 17K-1, 0.46 meters grading 26.3 g/t gold in hole 17L-1, and 1.34 meters grading 10.61 g/t gold in hole 17L-4. The drilling results confirmed the continuity of the Goat vein over 300 meters of strike and when combined with new surface samples and mapping, the strike of the Goat vein is now more than 650 meters. The 2017 drilling also confirms significant potential for the development of subsidiary high-grade veins in both the hanging and footwall of the Goat vein structure. Additional drill assays are pending. ●

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## NORTHERN NEIGHBORS

the new CEO for Dominion. "I will work relentlessly with management and our talented employees to help realize the long-term potential of Dominion's world-class assets, specifically by extending the life of the Ekati Mine, investing to develop the Jay project and reinvigorating our exploration program," said Evans. "I have long admired Dominion Diamond's deep ties to the Northwest Territories and Nunavut and to Yellowknife in particular, and I look forward to continuing that legacy with the full support and resources of The Washington Companies." Directors with a mix of relevant business and mining expertise have been added to the Dominion board, including Rolin Erickson, president of Montana Resources, a copper and molybdenum mine owned by Washington.

### Agnico advances next Nunavut gold mines

Agnico Eagle Mines Ltd. Oct. 25 said it remains on track to have two new gold mines at Amaruq and Meliadine projects in Nunavut by 2019. "Our major projects in Nunavut continue to advance on time and on budget and we are excited by the significant growth in gold production and the related cash flows that these projects are forecast to provide," said Agnico Eagle CEO Sean Boyd. Amaruq is being developed as a satellite to Meadowbank, a gold mine that lies about 50 kilometers (31 miles) to the south. Amaruq ore will be trucked to Meadowbank, where it will be processed through the mill. The company currently expects Amaruq to produce 2 million ounces of gold between 2019 and 2024. At the end of 2016, Amaruq hosted 16.9 million metric tons of open pit indicated mineral resource averaging 3.88 grams per metric ton (2.1 million oz) gold; 4.9 million metric tons of open pit inferred mineral resource



Agnico Eagle's Meadowbank gold mine in Nunavut has about another year's worth of ore left in reserves. Once these deposits are depleted, the mill will be used to process ore from Amaruq, a gold mine project about 31 miles to the north.

averaging 4.81 g/t (763,000 oz) gold; and 6.8 million metric tons of underground inferred mineral resource averaging 6.22 g/t (1.4 million oz) gold. Agnico completed 89,217 of drilling in 453 holes at Amaruq in 2017 through the end of September. This drilling targeted extensions of the deposits at Whale Tail and V Zone; tested the continuity of the new Tugak structure; and investigated the source of the gold-bearing boulders discovered north of Mammoth Lake. Hole AMQ17-1504, drilled at V Zone, encountered two distinct mineralized structures: 4 meters of 5.3 g/t gold at 313 meters and 6.1 meters of 5.6 g/t gold at 389 meters. The company said two other nearby holes intersected what appears to be the same two distinct mineralized layers at greater depths – AMQ17-1448, collared 140 meters east of hole -150, cut 4.8 meters of 5.5 g/t gold from 447 meters and 6.5 meters of 5.5 g/t gold from 492 meters depth; and AMQ17-1510, collared 160 meters southeast of hole -1504, cut 4.2 meters of 12.1 g/t gold from 402 meters depth and 5.3 meter of 6.4 g/t gold from 508 meters. Agnico said the deep V Zone results are expected to expand the under-

ground mineral resource estimate for Amaruq. At Whale Tail, direction drilling is targeting deep gold mineralization below the proposed pit. AMQ17-1433E, drilled to roughly 730 meters, cut 16.1 meters of 7.3 g/t gold from 627 meters. Almost 300 meters below this intercept, AMQ17-1436B cut 5.3 meters of 5 g/t gold at 915 meters, the deepest gold drilled so far. To date, the Whale Tail deposit has been defined over at least 2,300 meters along strike and from surface to 915 meters. Agnico drilled 28 holes at the Tugak showing, a 2017 discovery about 4,500 meters west of Whale Tail. One Tugak hole, AMQ17-1484, cut 1.2 meters of 13.6 g/t gold from a depth of 141 meters. A follow-up drill program will be carried out on the showing in 2018. The 2017 drill program at Amaruq will continue until mid-December.

Agnico is on pace to begin production at Meliadine, a gold project about 25 kilometers (15 miles) from the town of Rankin Inlet, Nunavut in 2019. The 2017 program there includes some 5,600 meters of underground development; about 26,500 meters of drilling; and new camp and other surface facilities. In addition to the development work, the company had one drill testing the potential of

targets along an 80 kilometer- (50 miles) long greenstone belt blanketed by the Meliadine property.

### White Gold drills into Golden Saddle deposit

White Gold Corp. Oct. 30 reported that drilling has cut broad intercepts of strong gold mineralization at the Golden Saddle deposit at the White Gold property, Yukon. Highlights from the latest batch of results from Golden Saddle include: 34 meters of 4.57 grams per metric ton gold from a depth of 155 meters in hole WHTGS17DD-0170; and 54.9 meters of 1.42 g/t gold from a depth of 64 meters in WHTGS17RC-005. White Gold, a company formed late in 2016, hold claims covering roughly 1 million acres (390,000 hectares) of the White Gold District. This includes the five claim blocks in the district previously held by Kinross Gold Corp. – White Gold, JP Ross, Black Fox, Yellow and Battle. The White Gold property hosts 9.79 million metric tons of indicated resource averaging 2.7 g/t (840,000 ounces) gold; and 2.17 million metric tons of inferred resource averaging 1.8 g/t (125,000 oz) gold, according to Kinross' reserves and resources statement for the end of 2016. White Gold Corp., which closed the deal to acquire Kinross' White Gold District portfolio in June, began drilling the White Gold property in September. This 4,432-meter program included 31 reverse circulation holes and four diamond holes. Assays are still pending from most of this work and the results will be included in an updated White Gold resource estimate slated for completion early in 2018. "The results received to date and revised geologic modelling from our 2017 field work indicate strong potential for additional mineralization along strike and within subparallel zones to both the Golden Saddle and Arc deposits," said White Gold Vice President of Exploration Jodie Gibson. "Additionally, numerous other exploration targets have been developed on the property that will require follow up work." ●

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## NEWS NUGGETS

grams per metric ton gold and 0.021 percent molybdenum. CopperBank is treating this resource as historical and plans to update it once all the results from the

2017 program are received. Kovacevic said "numerous high-grade intercepts received to date from the 2017 program fall outside of the historical resource envelope, which should help further our goal of expanding upon the historic resource estimate at Pyramid." ●



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The Red Dog Mine in Northwest Alaska supplies roughly 5 percent of the world's zinc. Operated by Teck Resources, this world-class zinc mine is located on private lands owned by NANA Regional Corp., an Alaska Native corporation that receives a 35 percent royalty from the operation.

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## RED DOG

the current life expectancy of Red Dog remains the same.

"Because the upgrade project will permit lower grade material to be processed, the current mine life, based on existing developed deposits, will remain unchanged through to 2031," Teck wrote.

### Massive Aktigiruaq

The existing developed deposits at Red Dog will likely not mark the end of this operation's perennial supply of zinc

to world markets.

By the time Qanaiyaq is mined out, it seems likely that the massive Aktigiruaq deposit on Alaska mining claims to the north will be ready to supply high-grade zinc ore to the Red Dog mill – potentially for decades.

This year, Teck is investing C\$16 million on an exploration program at Aktigiruaq that includes roughly 18,000 meters of drilling in 16 to 20 holes.

While Aktigiruaq had not previously been drilled sufficiently to calculate an NI 43-101-compliant resource estimate, the 25 widely spaced holes drilled prior to 2017 suggest this exploration target has

somewhere between 80 million and 150 million metric tons of material averaging around 13 percent zinc and 4 percent lead.

For comparison, Red Dog has processed 78.3 million metric tons of ore averaging 19.6 percent zinc and 5.3 percent lead over 27 years.

Early highlights from 2017 drilling at Aktigiruaq include 25.4 meters of 21.4

percent zinc and 4.1 percent lead in hole DDH 1730; and 54.6 meters of 16.8 percent zinc and 3.6 percent lead in DDH 1737.

Among the largest undeveloped zinc deposits on Earth, Aktigiruaq has the potential to be a source of ore for the Red Dog mill for 25 to 50 years beyond 2031 at current production rates. ●

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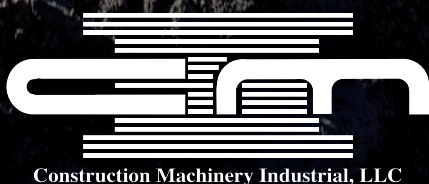


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## KENSINGTON'S FUTURE

the mine in 2015.

The Kensington property hosts two historical mines that date back to the dawn of the 20th Century – Jualin and Kensington.

Jualin operated for roughly 30 years beginning in 1896 and Kensington produced gold for about four decades, starting in 1897. Together, these bygone mines churned out some 40,500 oz of gold from 75,200 tons of ore, for an average recovery grade of around 0.54 oz/t.

Since Coeur resumed operations, it has mined ore from the Kensington area. Going into 2017 this area hosted 497,000 oz gold in 2.62 million metric tons of reserves averaging 0.19 oz/t.

A 2015 resource calculation, the most recent one published for Jualin, has the neighboring mine hosting 289,000 tons of inferred resource averaging 0.62 oz/t (179,000 oz) gold, more than triple the grades mined at Kensington so far this year.

Coeur began digging towards Jualin in mid-2015 and began hauling out the higher grade ore there in the third quarter of this year.

“We mined development ore from the new Jualin deposit earlier than planned and expect to start processing this higher grade material in the fourth quarter, which is a major accomplishment,” said Krebs.

This ore, coupled with high-grade ore from the Raven deposit in the Kensington Mine, is expected to push fourth quarter gold production high enough to reach the lower end of Coeur’s production guidance for 2017.

Krebs said Coeur anticipates that “mining from the high-grade Raven and Jualin zones to lead to significantly higher grades and production levels and lower unit costs to finish the year.”

The Coeur CEO told analysts on Oct. 26 that the final push for 2017 “leans heavily on ore coming out of Raven.”

“They’ll be dropping stopes to allow us to process some very high grade ore out of Raven that will supplement what we mine from Kensington Main to give us that great kick that we’ll need to achieve that kind of a production quarter,” he added.

With higher grade ore becoming the norm, it is expected that Kensington’s gold production will be in the 150,000 oz



Underground development reached the Jualin deposit at Kensington during the third quarter and this higher grade ore is expected to help boost gold production at the Southeast Alaska operation moving forward.

range for 2018.

A technical report due to be published early in 2018 will provide a better idea of how much high-grade gold bearing ore has been identified at Jualin and how this will translate into Kensington gold production in the coming years.

### A lot of drilling

In the meantime, Kensington continues to draw a large portion of Coeur’s exploration dollars.

Through the first nine months of 2017 the company invested roughly US\$6 million to drill some 33,400 meters at the high-grade gold mine.

“The results we are seeing justify these higher spending levels,” Krebs explained.

The Coeur CEO said there are five rigs turning at Kensington – two rigs targeting Jualin from the surface, another two focused on Jualin resource expansion from underground, and one expanding the high-grade Raven deposit in the

Kensington mine.

“As a result we are generating a lot of drill core during the second half of this year, which is the main reason we’re targeting an updated technical report for the end of the first quarter of 2018, so we can incorporate as much of this new information as possible into an updated reserve and resource,” he said.

This technical report seems likely to mark the start of a new phase for

Kensington – a period that could be known for higher grade ore resulting in more gold for less cost.

If Coeur’s strategy of investing more money in operations where it is having the most exploration success is any indication, then this new era could last awhile.

“There’s still a lot of drilling to be done at Kensington which has suffered from a lack of exploration funding over the years,” Krebs said. ●

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*Sourdough's services include trucking of all types. Our equipment fleet consists of Lowboys, Pneumatic Bulklers, Vans, and Flatbeds. We also Lease/Sell Connex Containers.*

### STEELFAB

2132 Railroad Ave.  
 Anchorage, AK 99501  
 Contact: Ron Doshier – Business Development Manager  
 Phone: (907) 264-2813 • Fax: (907) 276-3448  
 E-mail: RDoshier@SteelfabAK.com  
*STEELFAB is the largest Alaskan-owned Steel Service Center, Fabricator and Coating Facility in the state. It provides Stock Steel Products, Special Design Items Fabricated, Coating (paint & metalizing) and Recoating.*

### TTT Environmental LLC

4201 "B" St.  
 Anchorage, AK 99503  
 Contact: Tom Tompkins, General Manager  
 Phone: 907-770-9041 • Fax: 907-770-9046  
 Email: info@tttenviro.com  
 Website: www.tttenviro.com  
*The preferred source for instrument rentals, sales, service and supplies. We supply equipment for air monitoring, water sampling, field screening, PPE and more.*

### Taiga Ventures

351 East 92nd  
 Fairbanks, AK 99515  
 Contact: Mike Tolbert, president  
 Phone: 907-452-6631 • Fax: 907-451-8632  
 Other offices:  
 Airport Business Park  
 2000 W. International Airport Rd., #D-2  
 Anchorage, AK 99502  
 Phone: 907-245-3123  
 Email: contracting@taigaventures.com  
 Website: www.taigaventures.com  
*Remote site logistics firm specializing in turnkey portable shelter camps – all seasons.*