



page 6 North Arrow samples kimberlite source of Q1-4 yellow diamonds



## NEWS NUGGETS

Compiled by Shane Lasley



ENDURANCE GOLD CORP.

With a drill turning in the background, geologists inspect outcrop samples during the 2016 exploration program and Endurance Gold's Elephant Mountain property in Interior Alaska.

### Endurance Gold identifies new Elephant Mountain drill targets

Endurance Gold Corp. July 24 said induced polarization and ground magnetic surveys carried out at its Elephant gold property in Interior Alaska have identified four prioritized geophysical anomalies that warrant drilling. The largest of these is a linear east-west trending low that entirely bisects the area covered by 43 line-kilometers of IP and 39 line-kilometers of magnetic surveying completed during the program. This dominant anomaly is interpreted to represent the resistivity expression of the Elephant Mountain Fault traversing the intrusive. In addition, at least three linear north-westerly trending resistivity lows intersect the Elephant Mountain fault complex. A well-defined chargeability feature extends northwest from the Elephant Mountain fault. For targeting purposes, this chargeability feature has been broken into two separate lobes – North Zone and Pump Zone – defined by east-west oriented areas of higher chargeability. This anomaly is directly associated with a large gold-in-soil anomaly. Hole EL 16-13, drilled in the North Zone in 2016, cut 147.1 meters averaging 0.40 grams per metric ton gold. Endurance said portions of the stronger chargeability features associated with the North Zone target remain untested by drilling. The Pump Zone Target is newly recognized and remains untested by either trenching or drilling. A resistivity anomaly identified south of the Elephant Mountain Fault is associated with the South Zone. Hole EL 16-14A, the 2016 South Zone discovery hole, cut 4.6 meters averaging 4.09 g/t gold in an altered shear zone with bands of massive arsenopyrite and stibnite. Adjacent and on the east side of this resistivity feature and discovery hole is a near surface chargeability feature that remains untested by drilling. Endurance said the size of the North Zone and Pump Zone chargeability targets, combined with the associated wide low-grade gold intersections and gold-in-soil anomalies, indicates the potential for a large-tonnage low-grade gold resource. Drilling at these targets is recommended to focus on discovery of the feeder zones and oxidized lower grade gold zones. At the South Zone target, drilling is recommended to focus on expanding on the South Zone Discovery drill hole and identifying the source of the near surface chargeability anomaly which may represent a currently unrecognized sulfide-bearing shear zone. Located 76 miles northwest of Fairbanks, the Elephant property anchors three properties – Elephant, Trout and Wolverine – that form the Elephant Mountain gold project. The project is situated upland from a number of placer gold bearing streams in the Rampart-Eureka-Manley Hot Springs mining district and is easily accessed by the all-weather Elliott Highway.

### Drills turning at Shorty Creek

Freemgold Ventures Ltd. July 19 announced the start of

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## MINING POLICY

# Future of US mining

House minerals subcommittee looking for ideas to foster domestic mining

By SHANE LASLEY

Mining News

U.S. House Subcommittee on Energy and Mineral Resources sought input on how to foster a more robust domestic mining sector during a July 20 hearing, "Seeking Innovative Solutions for the Future of Hardrock Mining."

"Hardrock mining on federal land in the United States has a storied past, a challenging present and multiple needs for reform," Subcommittee Chairman Paul Gosar, R-Arizona, said. "From rocks to roads, rare earths to green technologies, and iron ore to wind farms, all infrastructure projects rely upon a mining operation."

While everybody at the hearing agreed that the domestic mining sector is in need of reform, there were vastly different views about what needs to be done.

Rep. Alan Lowenthal, D-California, ranking member of the subcommittee, made the case for modernizing the Mining Law of 1872, suggesting this law that allows the staking of mining claims on federal lands is outdated.

"The West has been settled," he said.

Others that testified at the hearing, however, see streamlining mine permitting, eliminating increases to the bonding requirements being proposed by the U.S. Environmental Protection Agency, and better public data on the domestic mineral potential as ways to spur domestic mining.

"It is important that we don't lose sight of the connection between the mining activities we carry out and what these metals are needed for," Coeur Mining President and CEO Mitchell Krebs stated. "By eliminating the unnecessary duplication that currently takes place at multiple levels of government and by tackling the lack of coordination and communication among various regulatory agencies, we could bring certainty and a level of common sense to the process."

### More geo data

Roughly \$75.6 billion worth of non-fuel minerals were produced in the United States last year, Murray Hitzman, associate director for energy and minerals, United States Geological Survey, told the committee.

While producing much of its mineral needs, Hitzman said "the U.S. is also increasingly reliant on foreign sources for processed mineral materials."

This reliance includes being a net importer of 50 non-fuel mineral materials, valued at \$32.3 billion. This includes 20 minerals for which the U.S. is 100 percent import-reliant.

Among the growing list of minerals for which the United States completely relies on foreign sources for its supply are critical and strategic minerals such as rare earth elements, manganese and niobium; and

COEUR MINING INC.



Taking 19 years to permit, Coeur Mining's Kensington gold project in Southeast Alaska serves as a posterchild for permitting delays in the United States.

important technology minerals such as graphite and yttrium.

Hitzman said the United States is rich in many of these minerals but less than one-third of the country has been mapped and further public geophysical data is needed to spur exploration.

"The nation's land undoubtedly contains additional deposits of critical and strategic minerals, but mineral exploration by the private sector is hampered by the lack of modern geological and geophysical data," he told members of the subcommittee.

"For example, Alaska and large portions of the mid-continent represent some of the most prospective ground for mineral discovery in the world, however, the favorable rocks from the deposits and not visible at surface – geophysical surveys are required for such areas," he added.

Hitzman said other mineral producing countries which have undertaken the geophysical surveys needed to provide a peek of the buried potential, such as Canada and Australia, report that a \$1 governmental investment has resulted in \$5 of investment by private sector companies exploring the intriguing prospects revealed.

### Streamlining permitting

Once a feasible deposit has been identified and delineated in the U.S., it takes nearly a decade to gain the permits necessary to develop a mine to extract the minerals, according to SNL Metals & Mining reports referred to by the subcommittee.

In a 2015 report, SNL detailed three mines – HudBay Minerals' Rosemont copper-gold-molybdenum mine in Arizona, Coeur Mining's Kensington gold mine in Southeast Alaska and Antofagasta's Twin Metals copper-nickel-platinum group metal project in northeastern Minnesota – as case studies for permit delays in the United States.

Of the three, only Kensington is currently in operation – albeit, it took nearly two decades and an arduous court battle for permit approvals.

"I was just up at our Kensington Mine in Alaska earlier this week, which I think serves as a posterchild for our country's inefficient and unpredictable permitting process," Coeur CEO Krebs told the committee. "It took us over 19 years; 1,000 separate studies; and, ultimately, a trip here to D.C. and the U.S. Supreme Court, to secure the 90 separate state, federal and local permits necessary to place that mine into production."

While not every mining project will face the same

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# NORTHERN NEIGHBORS

Compiled by Shane Lasley



NORTH ARROW MINERALS LTD.

This summer's surface sampling has identified two distinct phases of the Q1-4 kimberlite at North Arrow's Naujaat project in Nunavut.

## North Arrow collects Q1-4 kimberlite sample

North Arrow Minerals Inc. July 24 reported the collection of a 234-metric-ton mini-bulk sample from the Q1-4 kimberlite at its Naujaat (formerly Qilalugaq) diamond project in Nunavut. With the Q1-4 kimberlite lying beneath a 0.5- to 1-meter layer of glacial till, this sample could be collected with a mini-excavator. Initial evaluation of the exposed kimberlite identified a north trending internal contact between distinct kimberlite phases. Kimberlite to the west of the contact, known in the field as Green Kimberlite, accounted for roughly 30 percent of the pit area and is described as a dark green, very olivine rich kimberlite with fine to very coarse macrocrysts (predominantly olivine) and a good mantle sample. The remainder of the pit, known as Blue Kimberlite, is comprised of a blue, poorly sorted olivine rich volcanoclastic kimberlite with fine to very coarse olivine and a moderate mantle sample. As a result of the presence of two distinct kimberlite units, the sample was divided into three subsamples: Blue Kimberlite (60 bags), Green Kimberlite (31 bags) and mixed Blue-Green Kimberlite (159 bags). The sample will be processed for the recovery of commercial sized diamonds this fall. The resultant diamond parcel will be used to provide a better understanding and indication of the diamond content, size distribution, and fancy color diamond population within the sampled units. Results of the sample, and the current delineation drill program, will be used to plan collection of a larger bulk sample in 2018. This sampling and drilling is part of North Arrow's C\$3.2 million summer exploration program at the Naujaat and Mel diamond projects in Nunavut.

## Kivalliq explores new Nunavut gold project

Kivalliq Energy Corp. July 25 reported the start of a summer exploration program at the Baffin Gold property in Nunavut. This C\$775,000 program will include ground-truthing, geological mapping, prospecting, and rock and

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## MINING FUTURE

challenges as Kensington, SNL found that the U. S. permitting process is unduly long.

"The sheer number of permits required and the lack of coordination among the relevant agencies results in a seven- to 10-year permit timeframe for mining projects in the U. S.," the mining researcher wrote.

SNL found that more time does not necessarily result in stronger environmental protections.

"Like the U.S., the environmental permitting process in other developed world mining countries, such as Australia and Canada, is very stringent. These countries also require consultation with local communities and give stakeholders the right to raise objections and appeals. However, in both countries, the processes for obtaining permits are swifter than those observed in the U.S.," the research firm wrote.

In fact, mine permitting in these countries takes about a third the time as it does in the U.S.

"In Canada and Australia, a similar process takes 2 to 3 years. In Mexico, the average time to permit a new mine is about 18 months," Krebs said.

"By eliminating the unnecessary duplication that currently takes place at multiple levels of government and by tackling the lack of coordination and communication among the various regulatory agencies, we could bring certainty and a level of common sense to the process and save a tremendous amount of time and expense without sacrificing thoroughness or completeness," he added.

Legislation introduced to the House and Senate by Rep. Mark Amodei and Sen. Dean Heller, both Republicans from Nevada, aim to reduce the time it takes to permit a U.S. mine to around 30 months, which would put the U.S. on par with other Western Mining countries such as Canada and Australia.

## New Mining Law of 1872

Others at the hearing want to see changes made to the Mining Law of 1872, which authorizes and governs mineral prospecting and mining on federal lands.

"It is long past time to reform hardrock mining rules in this country," said California Rep. Lowenthal.

A sentiment shared by Earthworks Policy Director Lauren Pagel.

"Meaningful reform of the outdated 1872 Mining Law is the innovative solution that will bring our mining laws and practices into the 21st century, giving the mining industry the certainty it needs, while providing a fair return to the taxpayer, maintaining community involvement in mining decisions and adequately balancing mining with other uses of public lands," she told the subcommittee.

Gross royalties on minerals extracted from federal lands is among the reforms Earthworks is calling for.

Jim Cress, a lawyer that specializes in negotiating mining royalties, said mining companies with operations in the U.S. already pay a number of local, state and federal taxes.

"Any discussion of federal hardrock royalties should focus not only on the amount of the royalty, but on the entire tax and royalty burden applicable to mining," he said.

The mining lawyer said the U.S. is comparable to other mining countries in terms of taxes, fees and royalties under the current system. He suggested that streamlining the permitting process should be addressed before any federal royalty is considered.

"The U.S. ranking would be higher if not for the permitting delays. So if you're going to add a royalty, it will be a discouragement," he said.

*One of the innovative ideas considered at the hearing is to revisit an old idea – re-establish the U.S. Bureau of Mines.*

## Stopping CERCLA bonding

Arizona Department of Environmental Quality Director Bret Parke said EPA's proposed bonding requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) would be an added financial burden that would make the U.S. less competitive as global mining jurisdiction.

Commonly referred to as Superfund, CERCLA was enacted by Congress in 1980 in response to releases or threatened releases of hazardous substances that may endanger public health or the environment.

In 2016, EPA proposed hefty CERCLA financial responsibility requirements for the hardrock mining and mineral processing industry.

Parke argued that in the nearly four decades since CERCLA was passed, states have set up financial assurance programs that surpass the issues being addressed by Congress when it passed the Superfund act.

"These mature and sophisticated state and federal regulatory programs have made the requirement to promulgate the proposed rule duplicative and unnecessary," Parke said.

Krebs made a similar point, noting that Coeur already has roughly \$200 million million of bonding in place to cover the estimated cost of closure and post-closure activities at its three U.S. mines.

"Last December, EPA issued a proposed rule to require hard rock mining companies to demonstrate and maintain financial responsibility 'consistent with the degree and duration of risk associated with their mining operations', which sounds like a great idea. The only problem is, it already exists," the Coeur CEO said.

If implemented, it is estimated that EPA's proposed CERCLA financial requirements would cost the U.S. mining industry \$7.1 billion.

"Mining is a global competition. Every additional regulation upon the industry to operate in the United States should be carefully considered by policymakers," Parke advised.

## Re-open Bureau of Mines

One of the innovative ideas considered at the hearing is to revisit an old idea – re-establish the U.S. Bureau of Mines.

"The U.S. Bureau of Mines was a federal entity within the Department of Interior that operated from 1910 until 1996. The purpose of the bureau was to promote the health, safety and economic viability of the mining industry. Many from the mining community have pointed to the disbandment of the USBM as the beginning of the decline of mining in the U.S.," said Committee Chair Gosar.

The Bureau of Mines is still authorized but currently unfunded.

"The U.S. is the only developed country in the world without a federal entity promoting responsible mineral development and conducting important research," Krebs said.

The mining CEO suggested that a revamped Bureau of Mines could serve as a coordinator for the permitting process.

This could revitalize the future of U.S. mining, providing more domestic sources of the minerals increasingly needed in the modern world.

"We all may have a different view about mining, but I think it is important for people to not lose sight of the connection between the mining activities we carry out and what these metals are needed for in our society," Krebs said. ●

**Petroleum**  
NEWS

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## NORTHERN NEIGHBORS

till sampling. In May, Kivalliq announced that it had signed agreements with Nunavut Tunngavik Inc., a group that oversees Inuit land claims in Nunavut, and Commander Resources Ltd. to acquire the Baffin Gold property, a 408,982-hectare (1 million acres) land package that blankets the Foxe Fold greenstone belt on Baffin Island. BHP-Billiton, Falconbridge, Commander Resources and AngloGold Ashanti completed more than C\$25 million of exploration on this property over a decade starting in 2001. This work includes drilling 158 holes at four prospects on the property. Highlights from include 4.2 meters of 21.3 grams per metric ton gold; 4.5 meters of 10.2 g/t gold and 6 meters of 9.2 g/t gold. Kivalliq said there is excellent potential to make new discoveries and demonstrate continuity of mineralization at unexplained gold occurrences along strike of favorable geology and structural settings on this expansive property and this summer's program will focus on multiple geological and structural settings hosting significant gold mineralization primarily on Inuit owned land parcels. This work will include the exploration of gold anomalies along at least 100 kilometers (62 miles) of strike which were not followed up by resampling or drilling by earlier explorers; prospect, infill and charac-

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## NEWS NUGGETS

2017 drilling at its Shorty Creek copper-gold project about 75 road miles northwest of Fairbanks, Alaska. The company first tapped porphyry style copper-gold mineralization at Shorty Creek in 2015 and expanded upon its find last year. Hole SC 16-01, drilled last year at the property's Hill 1835 target, cut 434.5 meters averaging 0.57 percent copper-equivalent, which accounts for the value of the copper, gold and silver. This hole is 125 meters southwest of SC 15-03, which cut 292.6 meters averaging 0.38 percent copper-equivalent. Hole SC 16-02, drilled 120 meters southwest of SC 16-01, cut 409.6 meters grading 0.41 percent copper-equivalent. In addition to the copper, gold and silver, the 2016 drilling also tapped significant tungsten in the form of wolframite. SC 16-01 cut 2017 meters averaging 0.045 percent tungsten trioxide; and SC 16-02 cut 409.6 meters averaging 0.03 percent tungsten. Freegold said this year's drilling is focused on further expansion of mineralization at Hill 1835 and initial drill testing of the Steel Creek and Quarry targets. Steel Creek is a large magnetic and geochemical target directly northeast of Hill 1835. Quarry, situated about 5,000 meters east of Hill 1835, is a northeast trending magnetic high that is more than 10,000 meters (six miles) long and associated with stock-work veined quartz-feldspar porphyry. Ground magnetics and soil geochemistry over a small portion of this very large anomaly were also completed. The soil sampling returned both strong copper and molybdenum values. ●

terize broad till and geochemical gold anomalies; geochemical sampling in areas of cover where existing geophysical data suggests extensions to known gold zones and favorable geology; review and resample historic drill core; drone surveys over Kanosak and Central belt areas to produce high resolution photos and digital elevation models; and collect roughly 1,000 rock and till samples to evaluate known occurrences and evaluate areas of anomalous geochemistry. The company said future drilling will further assess known prospects, new structural targets, untested areas of outcropping mineralization and blind targets in covered areas based on till geochemistry and geophysics.

## Aben eyes high-grade zones at Forrest Kerr

Aben Resources Ltd. July 26 said a 2,100-meter drill program is slated to begin at its Forrest Kerr gold property in northwestern British Columbia during the first week of August. This drilling will follow up on exploration carried out earlier this season at Forrest Kerr, where crews completed soil geochemical sampling, ground-truthed historic data and evaluated mineralization potential on a property-wide basis. Focus was placed on areas containing historic high-grade precious- and base-metal occurrences. Drilling will target extensions of known mineralized high-grade horizons located in the Carcass Creek and Boundary zones. These zones reported some of the best grades on the Forrest Kerr property and the company feels there is the potential for the expansion of these known zones based on recent data compilation and field reconnaissance work. There are also some more conceptual targets to be tested south of Boundary, including areas of outcrop with multiple shear zones and abundant sulfides. Historical drill has encountered high-grade intercepts such as 29 meters of 9.97 grams per metric tons gold in the Carcass Creek zone and 11 meters of 33.4 g/t gold in the Boundary zone. Aben has not been able to independently verify the methodology and results from historical work programs but believes that the historical work programs have been conducted in a professional manner and the quality of data and information produced from them are relevant.

## Continued success west of Victoria's Eagle Gold

Victoria Gold Corp. July 24 reported the results from an additional 17 holes drilled at Eagle West, a zone of gold mineralization situated 500 meters northwest of the main Eagle Gold deposit at the company's Dublin Gulch project in the Yukon. Highlights from this latest batch of results include 31.5 meters of 0.99 g/t gold from 56.4 meters in hole DG17-809C; 35.3 meters of 1.03 g/t gold from 34.2 meters in hole DG17-821C; and 31.5 meters of 0.77 g/t gold from 7.6 meters in hole DG17-833C. These results are similar to and correlate well with the initial 22 holes from Eagle West released earlier this year, which included 21.3 meters of 2.11 g/t gold in hole DG17-805C; 58.5 meters of 0.87 g/t gold in hole DG17-805C; and 21 meters of 0.88 g/t gold in hole DG17-783C. Mineralization at Eagle West is geologically similar to Eagle and represents a potential satellite deposit accretive to the main Eagle deposit.

"The Eagle West drilling this season clearly demonstrates that additional, near-Eagle gold mineralization exists at Dublin Gulch and underscores Victoria's ability to continue to build out new gold resources within the shadows of the Eagle Gold Mine infrastructure," said Victoria President and CEO John McConnell. A total of 3,682 meters of diamond drilling was completed at Eagle West in 2017, with assays from 39 of the 41 drill holes from the drill-out received to date. While the majority of holes were 60-70 meters in length, eight holes deeper than 100 meters targeted and found gold mineralization continuity to depth. Drilling west of Eagle continues with the focus now shifted to the Eagle Extension Zone, an area on the northern contact margin of the intrusive units immediately adjacent to the western pit wall of the Eagle Gold Mine. Victoria said this area, like Eagle West, had previously received only cursory exploration drilling and represents an under-tested area contiguous to the Eagle Gold Mine that fits into the Potato Hills Trend exploration model.

## Startup zinc explorer begins Yukon drilling

Fireweed Zinc Ltd. July 21 announced the start of a 2,000-meter drill program at the Macmillan Pass zinc-lead-silver project in southeastern Yukon. The primary objectives of this initial phase of drilling is to verify historic mineral resources at the Tom and Jason deposits, and step-out drilling to expand the deposits. Together, these deposits host 6.43 million metric tons of historical resources averaging 6.3 percent zinc, 5.5 percent lead and 56.6 grams per metric ton silver in the indicated category; and 25.55 million metric tons averaging 6.7 percent zinc, 3.5 percent lead and 33.9 g/t silver. Fireweed, a new public mineral exploration company focused on zinc, has the option to acquire full ownership of Macmillan Pass by investing C\$1 million on property exploration and paying C\$1 million in cash to Hudbay Minerals Inc. Fireweed has already paid C\$250,000 and the balance is due upon exercise of the option. Additionally, upon exercise of the option, Fireweed must issue shares to Hudbay equal to 15 percent of Fireweed's issued and outstanding shares at the time. The Macmillan property has a camp, road and airstrip, which has allowed Fireweed to get off to a quick start on exploration. Fireweed plans to complete at least C\$1.2 million of exploration at the project this year with the aim of bringing the historical resources on both the Tom and Jason deposits to current standards and seek new discoveries across the 2,864-hectare (7,077 acres) property. In addition to drilling, the company's initial phase of 2017 exploration will include re-sampling of select historic drill core to confirm assays from previous work; surface mapping and geochemical sampling in exploration for new discoveries; surveying to accurately locate old and new drill hole locations; airborne LiDAR surveying to produce an accurate topographic map of the property; and compilation of historical data. The results of this year's program will be used to complete an updated NI 43-101 resource estimate before year end. Fireweed then plans to undertake a preliminary economic assessment to evaluate project economics which is expected to be completed in the first half of 2018. ●

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