



NEWS NUGGETS

Compiled by Shane Lasley



Under this mountain, the Arctic deposit hosts 2.4 billion pounds of copper and 3.4 billion lb of zinc in a high-grade indicated resource amenable to open-pit mining.

Substantial expansion of Arctic

Trilogy Metals Inc. April 25 reported that the Arctic deposit at its Upper Kobuk Mineral Projects in Northwest Alaska now contains 2.4 billion pounds of copper and 3.4 billion lb of zinc in the indicated resource category, a roughly 40 percent increase for both metals. At a 0.5 percent copper-equivalent cut-off grade, the Arctic deposit is estimated to contain 36 million metric tons of in-pit indicated resources averaging 3.07 percent (2.4 billion lb) copper, 4.23 percent (3.4 billion lb) zinc, 0.73 percent (581 million lb) lead, 0.63 grams per metric ton (728,000 oz) gold and 47.6 g/t (55 million oz) silver. "The resource is not sensitive to cut-off grade or metal prices at the ranges investigated, since a 300 percent increase in cut-off grade results in less than a 1 percent decrease in contained metal at higher average grades. That is a robust deposit," said Trilogy Metals President and CEO Rick Van Nieuwenhuysse. Additionally, this volcanogenic massive sulfide deposit hosts 3.5 million metric tons of inferred resources averaging 1.71 percent (131 million lb) copper, 2.72 percent (210 million lb) zinc, 0.6 percent (47 million lb) lead, 0.36 g/t (29,000 oz) gold and 28.7 g/t (3 million oz) silver. Trilogy Metals has budgeted US\$7.2 million for a 2017 work program that will focus on finalizing a prefeasibility study on developing an open-pit mine at Arctic. Additionally, South32 Ltd. is investing roughly US\$10 million on exploration of Bornite, a high-grade copper deposit about 16 miles south of Arctic. South32 has the option to earn up to a 50 percent stake in the Upper Kobuk Mineral Projects by investing up to US\$150 million in this expansive Northwest Alaska project over the next three years.

Ore difficulties hamper Red Dog

Teck Resources Ltd. April 25 reported the Red Dog Mine in Northwest Alaska produced 102,500 metric tons of zinc during the first quarter, a six percent drop compared to the same period last year. The company attributed this drop to challenges of processing the higher grade but more complex ore from Qanaiyaq, the new pit at Red Dog. During the first quarter, ore from Qanaiyaq pit was introduced to supplement declining grade ore from the Aqqualuk pit, however, mill performance was adversely affected as these ores are metallurgically complex, particularly in the highly oxidized ore near the surface. As less oxidized ore becomes available a larger percentage will be added to supplement the declining grades of Aqqualuk ore in coming years. As a result of the lower recoveries and unplanned downtime from the challenges of processing Qanaiyaq ore, Teck has lowered its 2017 zinc production guidance for Red Dog to 475,000 to 500,000 metric tons. The mine produced 583,000 metric tons of zinc last year. The company expects Red Dog to produce 110,000

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SHANE LASLEY



Drilling has outlined roughly 56.8 billion pounds copper, 70.4 million ounces gold, 3.4 billion lb molybdenum and 343.6 million oz silver in measured and indicated resources. Quaterra Resources has the option to earn up to a 90 percent interest in Groundhog, a promising early stage copper exploration project just a few miles to the north.

EXPLORATION

Quaterra options Groundhog

Junior to begin exploring for large copper deposit just north of Pebble

By SHANE LASLEY

Mining News

There are good indications that large porphyry copper deposits may be found beyond the borders of the Pebble property held by Northern Dynasty Minerals Ltd. Quaterra Resources Inc. has cut a deal on Groundhog, one of the most promising of these prospects in this area of Southwest Alaska known for its world-class copper potential.

"The Groundhog project offers the potential to discover a major deposit in an established porphyry belt," said Quaterra Chairman and CEO Tom Patton.

To get a better idea of this potential, Quaterra plans to carry out a US\$1 million exploration on the property this year.

Reasonable terms

The 40,000 acres of state mining claims that make up the Groundhog property blanket the northern extension of a structural zone hosting a number of porphyry prospects, including the massive Pebble copper-gold-molybdenum deposits about three miles south of the Groundhog boundary.

Alaska Earth Sciences, an Anchorage-based geological consulting firm, discovered the Groundhog prospect and Kennecott Exploration Inc., a subsidiary of Rio Tinto, explored the property for about five years prior to pulling out of Alaska in 2014.

Following Kennecott's departure, Alaska Earth Sciences formed a partnership with Kijik Corp., the Alaska Native village corporation for Nondalton, the nearest community to Groundhog.

This partnership, Chuchuna Mineral Company, set out to find a mining company to continue the

exploration of the promising asset.

Quaterra Resources cut a deal with Chuchuna that provides the exploration company the option to earn a 90 percent interest in Chuchuna in exchange for US\$5 million in exploration and US\$3 million in cash payments over a five-year period.

This includes a minimum of US\$1 million for exploration during the first year and at least US\$500,000 in each of the next four years. Each year, Quaterra has the option to terminate the agreement and the US\$3 million cash payment to Chuchuna is not due until the end of the option.

If Quaterra does complete the option, Chuchuna would hold a 10 percent joint venture interest in Groundhog and a 1.75 percent net smelter return royalty on the property. Quaterra would have the option to buy half of this NSR for US\$25 million.

While Quaterra has explored in Alaska before, in recent years the company has focused on Yerrington, a large copper project in Nevada.

With copper prices on the rise and mining markets recovering, Quaterra President and COO Gerald Prosalendis said the explorer has been on the hunt "for exploration opportunities that come with large-scale potential, credible partners, community support, valuable data; and that can be acquired on reasonable terms."

Quaterra leadership believes Groundhog and the deal it cut to acquire the Southwest Alaska copper project meets these criteria.

"With this deal, Quaterra has partnered with a local exploration team that has demonstrated previous exploration success, and with a village corporation that is grounded in the local community and has built strong relationships with its surrounding neighbors and governance authorities," Patton said.

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