After SuperLig REE pilot plant, Ucore, IBC design PGM facility

Tetlin winter drilling underway

Contango Ore Inc. Feb. 2 said the first phase of 2017 drilling at the Tetlin gold project in Interior Alaska was underway. Peak Gold LLC, a joint venture between Contango Ore and a wholly owned subsidiary of Royal Gold Inc., invested roughly US$10.6 million on exploration at Tetlin in 2016, which included the first winter drill program at this project located just south of the Alaska Highway near Tok. Royal Gold, which is the operator of the JV, can earn up to a 40 percent interest in Tetlin by investing US$30 million in Contango Ore’s 735,000-acre underexplored project by October 2018. Over the two years since joining the Tetlin project, Royal Gold has invested roughly US$17 million towards this earn-in amount, earning the Denver-based royalty company a 20.6 percent interest in the joint venture. The initial phase of 2017 exploration at Tetlin is expected to include 6,000 meters of drilling that primarily targets North Peak, an exciting new deposit the partners outlined at Tetlin in 2016. An updated resource for Tetlin that includes additional drilling at the Main Peak deposit and a maiden resource for North Peak are expected to be completed by March.

Ucore, IBC design PGM facility after SuperLig REE pilot plant

Ucore Rare Metals Inc. Feb. 8 reported that it has completed the initial stage of detailed engineering for a platinum group metals – rhodium, palladium and platinum – phase of its U.S. strategic metals complex. Being developed as a joint venture between Ucore and IBC Advanced Technologies, the strategic metals complex is a planned industrial scale version of the SuperLig One pilot plant the partners developed to separate the rare earths found at the Bokan Mountain project in Southeast Alaska. The same molecular recognition technology to separate the notoriously tightly interlocked rare earth elements is now being applied to platinum group metals. The PGM separation plant is being designed to receive, process and separate recycled catalytic converter material which has been concentrated to a metal alloy via a plasma arc smelter. “The ‘Stage A’ processing circuits will prepare the PGM-bearing input material for submission to the SuperLig metal separation process,” explained Ucore Vice President of Operations Mike Schrider. “The design will accommodate unpurified PGM bearing metal alloys (from third party sourced recycled catalytic converters) as input material to the MRT process, and then transform the high purity rhodium, palladium and platinum concentrate MRT output into high value products such as individual PGM sponge and specialty salts, both in high demand in U.S. markets.” Ucore said the final PGM separation plant design allows for an ultimate annual production rate of 40,000 ounces of PGM.

2017 mine values flat

USGS finds little growth for domestic miners, increased import reliance

2017 mine values flat

According to the United States Geological Survey’s annual report, “Mineral Commodity Summaries 2017,” the value of non-fuel minerals produced in the United States and Alaska during 2016 remained at similar levels to 2015. Alaska mines produced roughly US$3.09 billion worth of minerals, excluding petroleum and coal, marking the seventh straight year that output from Alaska mines has topped US$3 billion. Gold and zinc account for roughly 80 percent of Alaska’s mineral production value in 2016. Silver and lead account for most of the balance, while aggregates and other construction materials contributed roughly 1 percent of Alaska’s mine production value.

With steady output, Alaska holds as the nation’s seventh-largest mineral producing state – behind Nevada, Arizona, Texas, California, Minnesota and Florida.

Nevada, the top mining state in the nation, produced US$7.65 million worth of non-fuel minerals in 2016. This output was dominated by gold and copper. The steady value of non-fuel minerals produced in Alaska is a reflection of the United States as a whole. The overall value of 2016 non-metal mine production is estimated at US$74.6 billion, a slight increase from the US$73.4 billion produced here in 2015.

This raw production combined with roughly US$18.5 billion worth of domestically recycled minerals accounts for a significant percentage of the U.S. economy when you consider the products made from the materials.

“Industries – such as steel, aerospace and electronics – processed non-fuel mineral materials and created an estimated US$2.8 trillion in value-added products in 2016, which contributed 15 percent to the total U.S. gross domestic product,” explained Steven Fortier, director, USGS National Minerals Information Center.

Foreign reliance

Despite the steady output of domestic mine production, USGS continues to highlight a trend of increasing U.S. dependence on foreign countries for many key minerals.

The number of minerals that the United States is 100 percent import-reliant has increased from 11 in 1984 to 20 in 2016. The country also depends on foreign sources for more than half its supply of another 30 minerals.

According to the data compiled by USGS, China is a major source of roughly half of the 50 minerals for which the United States is at least 50 percent import reliant.

Among the growing list of minerals for which the United States is fully import reliant are critical and strategic minerals such as rare earth elements, manganese and niobium, and important technology minerals such as graphite and yttrium.

“This trend, documented now by the federal government, is troubling as these metals are the building blocks of our supply chain and our infrastructure,” said National Mining Association President and CEO Hal Quinn. “Although we have these minerals and metals in abundance, an inefficient permitting process has slowed access to them and steadily increased our reliance on foreign sources such as China.”

Earlier this year, Rep. Mark Amodei and Sen. Dean Heller, both Republicans from Nevada, introduced similar legislation in both the House and Senate aimed at addressing mine permitting delays.

Known in both cases as the National Strategic and Critical Minerals Production Act of 2017, the permit streamlining bills were introduced in the Senate as S.145 and in the House as H.R.520.

Domestic rare earths

In its 2016 report, USGS pointed out that the United States lost its only rare earths producing mine when the Mountain Pass Mine in California