

Grande Portage Charts a Low-Environmental Impact Path to High Grade Gold Production in Southeast Alaska

By Peter Kennedy

Alaska is big and has enormous mineral potential. According to the Alaska Department of Natural Resources' 2024 mining industry overview, 773,354 square kilometres of the U.S. state is open to mining (more than the mineral entry lands in British Columbia). There are seven lode mines currently in production, as well as the Usibelli Coal Mine, where mining activity dates back to 1943.



Alaska's diverse geology with associated diverse mineral endowment means exploration for various minerals will likely create the opportunity to discover or leverage other mineral commodities, like critical minerals, hydrogen capture.

Mining in Alaska delivered significant economic benefits last year, including US\$1.1 billion to at least 450 local businesses for goods and services. Other key benefits included US\$50 million in local -tax and US\$136 million in state government revenue for libraries, road repairs, airports, schools and public safety. It is also worth noting that in 2024, the mining industry in Alaska delivered

US\$235 million in royalty payments to Alaska Native Corporations. It also supported 11,400 direct, indirect and induced jobs, plus US\$1 billion in wages state-wide.

Teck Resources Ltd.'s [TECK.B-TSX, TECK.A-TSX, TECK-NYSE] Red Dog operation is the largest critical minerals mine in the United States. In 2024, Red Dog was expected to produce between 520,000 and 570,000 tonnes of zinc, with 90,000 to 105,000 tonnes of lead. In 2023, Red Dog produced 6.5 million ounces of silver as well as by-product germanium.

Ore grade for the first three quarters of 2024 averaged 15.5% zinc and 4.8% lead. With 600 employees and 700 contractors on the payroll, the open pit mine has been in production since 1989.

Other major operations include Kinross Gold Corp.'s [K-TSX, KGC-NYSE] Fort Knox Mine. With 730 employees and 300 contractors on the payroll, Fort Knox was expected to produce between 320,000 and 350,000 ounces of gold in 2024. Northern Star Resources (Pogo) and Coeur Alaska (Kensington) also operate gold mines in Alaska.

Although based on a volcanogenic massive sulfide deposit in Southeast Alaska, **Hecla Mining's** [HL-NYSE] Greens Creek Mine ranks as the largest silver producer in the United States. It was expected to produce 8.6-9.0 million ounces of silver and 46,000 to 51,000 ounces of gold last year.

Other notable projects include **Northern Dynasty Minerals Ltd.'s** [NDM-TSX, NAK-NYSE] Pebble Partnership, which ranks as the first or second largest porphyry copper deposit in the world. Northern Dynasty has

spent the last two decades trying to develop the Pebble Project, which is located on a contiguous block of 1,840 mineral claims in southwestern Alaska. The projected 20-year life-of-mine production is estimated at 6.4 billion pounds of copper, 7.3 million ounces of gold, 300 million pounds of molybdenum, 37 million ounces of silver, 254 short tons of rhenium and by-product palladium.



The 2024 Alaska mining industry overview estimates that US\$205 million was spent on exploration in the state through the third quarter of 2004. That compares to US\$230 million in the whole of 2023. The survey also estimates that 37% of exploration activity in 2024 was focused on gold (including 26% on intrusion-related gold). Volcanogenic Massive Sulphides (polymetallic) ranked second at 17% and graphite ranked third at 12%.

Names that featured in the report include Nova Minerals Ltd. [NVA-NASDAQ, ASX, QM3-FRA] (Estelle Project), U.S. GoldMining Co.

[USGO-NASDAQ] (Whistler project), and American Pacific Mining Corp. [USGD-CSE, USGDF-OTCQX, 1QC1-FWB] (Dowa-Palmer).

Grande Portage Resources Ltd. [GPG-TSXV, GPTRF-OTCQB, GPB-FSE] is developing a high-grade gold project near the city of Juneau Alaska, that will feature a limited environmental footprint.

The company's conceptual mining plan, designed by Kyle Mehalek, P.E., former Chief Mining Engineer at Hecla Mining's Green's Creek Mine in Alaska, envisions the future development of the New Amalga gold mine as a selective underground mining operation which would send ore off-site to be processed at a third-party facility, enabled by the project's location near tidewater and an existing paved highway that is just 6.5 kilometres from the mine site.

The company says this would result in a dramatically reduced mine site environmental footprint due to the avoidance of chemical processing and tailings storage. It is expected that this conceptual mine plan will smooth New Amalga's journey through the mine permitting process.

Grande Portage holds a 100% interest in New Amalga, (previously known as the Herbert gold project), which is known to host at least six main composite vein-fault structures that contain ribbon structure quartz sulfide veins. The project lies within the 160-kilometre-long Juneau Gold Belt, which has produced nearly eight million ounces of gold.

The project covers 91 unpatented lode claims and covers six parallel vein structures that are exposed on surface.



On June 12, 2024, the company announced an updated mineral resources estimate using a base case cut-off grade of 2.50 g/t gold capped at 181 g/t. It includes an indicated resource of 1.44 million ounces of gold at an average grade of 9.47 g/t gold in 4.72 million tonnes. On top of that is an inferred resource of 515,700 ounces at an average grade of 8.85 g/t gold in 1.8 million tonnes. The company has said gold and silver resources at New Amalga remain open and along strike.

In an interview, Grande Portage President Ian Klassen said the plan to limit the project's environmental footprint by having the ore processed off-site, is driven by management's practical desire to keep activity on site to a minimum and to potentially partner with one of the established mills within the State. It is worth noting that New Amalga is located south of Coeur Alaska's profitable Kensington gold mine.

In a press release on April 8, 2025, Grande Portage announced the results from test work of a sensor-based ore sorting system, utilizing a composite core sample from the project.

The purpose of ore sorting is to quickly separate particles of waste dilution rock from the mined material.

"We are extremely pleased with the results from the test work with Steinert ore sorting equipment, which demonstrated excellent ability to identify and select the unmineralized particles within the sample of New Amalga material, resulting in a 120% increase in gold grade and a 57% reduction in mass with a very minimal gold loss," Klassen said.

Klassen went on to say that these results are game changing for a host of reasons. "Integrating ore sorting into the conceptual mine production plan significantly reduces the amount of mined rock requiring transportation and processing at a third-party facility, lower the per-ounce cost and also providing useful sorter reject material for underground backfill, all without the use of chemical processing reagents," Klassen said. "This further enhances the existing advantages of our proposed direct ship mine configuration which utilizes offsite processing," he said. "As demonstrated by the test results, it may also create opportunities for inclusion of thinner veins into the mine plan – areas of the deposit which otherwise may not have been considered viable."

Grande Portage recently launched a series of baseline studies, an early critical step to advance the New Amalga project towards production. The studies include wetlands delineation, surface water sampling, and archeological and cultural resources review, and collection of meteorological data.

On April 22, 2025, Grande Portage shares were trading at 20 cents in a 52-week range of 38 cents and 14 cents, leaving the company with a market cap of \$26 million, based on 129 million shares outstanding.

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