Nixon Fork Gold Mine

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Summary

Nixon Fork is a small, previously developed, gold and copper mine in Interior Alaska, which re-opened in July 2011 and then suspended operations in June 2013. Operators hoped to produce another 100,000-150,000 ounces of gold over the course of 3-5 years, and had also begun exploration that could have extended the life of the mine. The mine is currently (summer 2014) owned by a creditor and the original lease holders.

Mine information

The Nixon Fork Mine, located about 25 miles northeast of McGrath, has changed hands numerous times in the last century. The area was mined intermittently by various small operations from 1918-1964, the Nixon Fork mine operated from 1995-1999, and then was re-opened briefly in 2007 by a different operator. Most recently, Canadian-based Fire River Gold Corporation (http://www.firerivergold.com/s/Home.asp) owned the infrastructure at the small underground mine and

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the right to the mining leases. The mine is already fully permitted and bonded, and almost all the required equipment and infrastructure are still in place which made restarting the operation relatively easy. The mine is powered (/Issues/MetalsMining/Powering-Large-Mines-In-Alaska.html) by an on-site diesel generator facility and the fuel is delivered by air. During the previous opening of the mine, the empty fuel planes returned with ore concentrates (http://www.marketwired.com/press-release/St-Andrew-Announces-First-Shipment-Copper-Gold-Concentrates-From-Nixon-Fork-Gold-Mine-636311.htm) to Fairbanks, where the ore was then shipped to Canada for further processing. The most recent plan had also called for for removing the ore by plane, and shipping it from Anchorage to a refining facility in Utah (http://www.newswire.ca/en/releases/archive/July2011/11/c4402.html).

Fire River Gold spent around $1.25 million in 2010 on a “Re-Evaluation Program (http://www.firerivergold.com/s/NixonFork.asp?ReportID=368220)” for the mine. This program also included surface and underground exploration for additional mineral deposits nearby. In February 2011 they released (http://www.firerivergold.com/s/NewsReleases.asp?ReportID=443029&_Type=News-Releases&_Title=Fire-River-Gold-Announces-Results-of-Snowdens-PEA-for-the-Resumption-of-Und...) the results of a preliminary economic assessment for reopening the mine.

Fire River’s future plans (http://www.prnewswire.com/news-releases/fire-river-gold-project-update---nixon-fork-gold-mine-alaska-winter-2010-83243982.html) for Nixon Fork involved

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extracting the remaining lower grade ores near the existing mine, as well as reprocessing some of the old mine tailings (/Issues/MetalsMining/MineTailings.html), using cyanide heap leaching (/Issues/MetalsMining/GoldCyanidation.html). In addition, Fire River was exploring the area for additional deposits

Environmental Concerns

The operating plan (http://dnr.alaska.gov/mlw/mining/largemine/nixonfork/pdf/POOfinalAug3005withFig1-4050915PDF.pdf) (8.7 MB) submitted by the previous owners does not predict that acid mine drainage (/Issues/MetalsMining/AcidMineDrainage.html) will be a problem at the site and none was detected during operation. This is based on the fact that the surrounding rock has a high neutralization potential (http://www.epa.gov/osw/nonhaz/industrial/special/mining/techdocs/amd.pdf) which should balance out the acid formation from the mine tailings. The mine uses toxic cyanide (/Issues/MetalsMining/GoldCyanidation.html) to extract remaining gold from mine tailings and low grade ore but had planned to recycle and/or destroy all the cyanide used. In addition, the mine uses “dry stacking” for tailings disposal (/Issues/MetalsMining/MineTailings.html) which reduces the risk of water contamination from acid mine drainage.

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Current Status

Preliminary mining began in March 2011 (http://www.petroleumnews.com/pntruncate/188984834.shtml) and the mill began operation (http://www.firerivergold.com/s/NewsReleases.asp?ReportID=465458&_Type=News-Releases&_Title=Fire-River-Gold-Starts-Up-the-Nixon-Fork-Mill) in July 2011. Ongoing exploration had extended (http://www.firerivergold.com/s/NewsReleases.asp?ReportID=483020&_Type=News-Releases&_Title=Fire-River-Gold-Announces-New-Ore-Zone-Discovered-at-the-Nixon-Fork-Mine) the mineralization zone beyond the original estimates. However, mine operations were suspended (http://www.firerivergold.com/s/NewsReleases.asp?ReportID=590402&_Type=News-Releases&_Title=Fire-River-Gold-Suspends-Operations) in June 2013 and the chances of Fire River losing control of the project were high (http://www.instituteforenergyresearch.org/2013/08/26/alaska-an-energy-and-economic-analysis/) by late summer 2013. By summer 2014, Fire River had turned over (https://www.pehub.com/canada/2014/07/08/waterton-takes-ownership-of-mining-assets-of-fire-river-gold/) all their mine-related assets to a creditor, Waterton Global Value LP. The original lease holders, the Almasy family, still retain control over the mining leases.

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Further Reading

> Alaska DNR page on Nixon Fork Mine (http://dnr.alaska.gov/mlw/mining/largemine/nixonfork/index.htm)

> Northern Alaska Environmental Center page on Nixon Fork Mine (http://northern.org/programs/clean-water-mines/hardrock-mines-in-interior-and-arctic-alaska/nixon-fork-mine/nixon-fork-mine)

> Fire River Gold company website (http://www.firerivergold.com/s/Home.asp)

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