



**Michael S. (Mickey) Fulp
M.Sc., C.P.G.**

MercenaryGeologist.com
contact@mercenarygeologist.com

Mercenary Alert: Trilogy Metals Delivers Again

A Special Alert Musing from Mickey the Mercenary Geologist

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[Contact@MercenaryGeologist.com](mailto:contact@mercenarygeologist.com)

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In my last missive on **[Trilogy Metals Inc \(TMQ.MKT; TMQ.TSX\)](#)**, I wrote that the next catalyst would be its much anticipated Arctic project pre-feasibility study in Q1 2018 (**[Mercenary Alert, December 22, 2017](#)**).

This major milestone was delivered right on schedule this week and the economics are quite robust. Here's a link to the news release: **[Arctic Project Pre-Feasibility Study, Alaska](#)**.

The PFS for the Arctic project describes the technical and economic viability of establishing a conventional, open-pit, copper-zinc-lead-silver-gold mine-and-mill complex for a 10,000 tonne-per-day operation.

Trilogy's base case parameters include long-term metal prices of \$3.00/lb for copper, \$1.10/lb for zinc, \$1.00/lb for lead, \$18.00/oz for silver, and \$1,300/oz for gold. The economic study was prepared on a 100% ownership basis with a 1% net smelter return to NANA Corporation. It did not consider NANA's option to purchase from 16 to 25% of Arctic with a 15% net proceeds royalty. It did not consider South 32 Ltd's option to form a 50-50 joint venture with TMQ on its entire Alaska asset base for total consideration of \$150 million.

Highlights of the Arctic study include:

- Base case after-tax NPV at an 8% discount rate estimated at \$1,413 million with an after-tax IRR of 33.4%.
- Initial capital expenditure of \$780 million and sustaining capital of \$66 million for total estimated capital expenditures of \$846 million over a 12-year mine life; closure and reclamation costs estimated at \$65 million for an all-in capex of \$911 million.
- Estimated after-tax payback of initial capital within 2 years.

- Probable mineral reserves of 43.0 million tonnes grading 2.32% Cu, 3.24% Zn, 0.57% Pb, 0.49 g/t Au, and 36.0 g/t Ag with a life-of-mine strip ratio of 6.9 to 1.
- Minimum 12-year mine life supporting a maximum 10,000 tonne per day conventional grinding mill-and-flotation circuit to produce copper, zinc, and lead concentrates containing significant gold and silver by-products.
- Average annual payable production projected at 159 million pounds of copper, 199 million pounds of zinc, 33 million pounds of lead, 30,600 ounces of gold, and 3.3 million ounces of silver.

This positive economic study means the Arctic project is ready to advance to permitting and feasibility. Since I last reported, the public scoping phase of the Ambler road access project was completed and a draft environmental impact statement is now underway.

In my opinion, the base case economic study is conservatively done in its assumptions: it uses metals prices below current spot levels (except for minor by-product Ag) and calculates an after tax net present value with an 8% discount rate.

I found none of the usual red flags that plague most economic studies tabled by mid-tier juniors. That said, I did not critically assess most of the study's cost inputs and will leave that task to engineers and analysts who are experts in these areas.

The Arctic project is arguably the largest, highest grade, undeveloped volcanogenic massive sulfide deposit in the world. It grades more than 5% Cu equivalent with total projected production of 1.9 billion pounds Cu, 2.4 billion pounds Zn, 400 million pounds Pb, 367,000 ounces Au, and 40 million ounces Ag.

With an estimated NPV at more than 1.5 times its all-in capex, Arctic appears to be a robustly economic deposit. In addition, the project has strong support from Alaska state government. However, as with all projects situated in remote, infrastructure- and climate-challenged regions, Arctic carries significant development, permitting, and financing risk.

That said, the pre-feasibility study documents the deposit's superb economic value and is a huge step forward for Trilogy Metals.

Trilogy Metals' share price has been quite volatile over the past nine months and I expect that to continue.

I picked the stock at 66 cents on May 25. It went to \$1.35 just 11 weeks later, dropped to 69 cents during tax-loss selling in December, touched an intraday high of \$1.64 in mid-January, and closed Friday at \$1.45. With 106.4 million shares, TMQ's current market capitalization stands at \$155 million.



Trilog Metals Inc was my top pick in copper space in the spring of 2017 and it remains exactly that today. The company is strongly leveraged to the price of copper and is not always especially liquid. That said, I think the upside for TMQ is good as the bull market for copper plays out and the company continues to advance its two flagship projects with most of the funding in 2018 provided by partner South 32 Ltd.

The opinions expressed herein are mine and are skewed by my shareholdings in the company and its sponsorship of this website. As always, I encourage you to do your own due diligence by digging deeper into this economic study.

Ciao for now,

Mickey Fulp
Mercenary Geologist



The [Mercenary Geologist Michael S. “Mickey” Fulp](#) is a Certified Professional Geologist with a B.Sc. Earth Sciences with honor from the University of Tulsa, and M.Sc. Geology from the University of New Mexico. Mickey has 35 years experience as an exploration geologist and analyst searching for economic deposits of base and precious metals, industrial minerals, uranium, coal, oil and gas, and water in North and South America, Europe, and Asia.

Mickey worked for junior explorers, major mining companies, private companies, and investors as a consulting economic geologist for over 20 years, specializing in geological mapping, property evaluation, and business development. In addition to Mickey’s professional credentials and experience, he is high-altitude proficient, and is bilingual in English and Spanish. From 2003 to 2006, he made four outcrop ore discoveries in Peru, Nevada, Chile, and British Columbia.

Mickey is well-known and highly respected throughout the mining and exploration community due to his ongoing work as an analyst, writer, and speaker.

Contact: Contact@MercenaryGeologist.com

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