EXPLORATION insights | JOE MAZUMDAR BRENT COOK
Turning Rocks into Money

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# Flawed gold projects get rejuvenated on the Yellow Brick Road

by Joe Mazumdar

On the heels of Newmont Corp.'s (NEM.NYSE, NGT.T) acquisition of GT Gold Corp. (GTT.V) for its Tatogga copper-gold property, investors saw another three mergers and acquisitions (M&A) last month worth ~US$745 million. These transactions involved gold projects that would not have fallen in my top 10 of high-value gold assets for reasons I explain below.

Three intermediate precious metal producers based out of Canada (First Majestic Silver, FR.T, AG.NYSE), Australia (Evolution Mining, EVN.ASX), and Colombia (Gran Colombia, GCM.T), acquired miner Jerritt Canyon Gold and junior developers Battle North Gold (BNAU.T) and Gold X Mining (GLDX.V), respectively, for shares and cash at an average premium of over 40% versus their previous close, (Table 1), which is encouraging for investors.

| Suitor | Ticker | Target | Ticker | Asset | Stage | Jurisdiction |
|---|---|---|---|---|---|---|
| Gran Colombia | GCM.T | Gold X Mining | GLDX.V | Toroparu | PEA | Guyana |
| Evolution Mining | EVN.ASX | Battle North Gold | BNAU.T | Bateman | Feasibility | Ontario, CA |
| First Majestic Silver | AG.NYSE | Jerritt Canyon Mine | Private | Jerritt Canyon | Operating | Nevada, USA |

| Target | Ticker | Premium (%) | Type (cash/ shares) | Value (US$ M) | Working capital (US$ M) | Global resource (Moz) | EV/oz (US$/oz) |
|---|---|---|---|---|---|---|---|
| Gold X Mining | GLDX.V | 39% | Shares | $252 | $7 | 10.5 | $23 |
| Battle North Gold | BNAU.T | 46% | Cash | $275 | $38 | 1.4 | $173 |
| Jerritt Canyon Mine | Private | na | Shares | $470 | $0 | 2.0 | $239 |

*(Table 1: Comparison of metrics for recent M&A transactions. Source: Company news release and Exploration Insights)*

The companies' gold projects located in the Americas range from scoping study level (Toroparu and Bateman) to production (Jerritt Canyon), and, combined, contain over 13 million ounces of global resources (Measured & Indicated plus Inferred).

Given the Toroparu gold project's low grade and risky jurisdiction (Guyana), Gold X Mining was acquired at an enterprise value per ounce (EV/oz, US$/oz) of only US$23 (GLDX), which is about half the value for the average junior explorer with a resource, according to Haywood Securities' Weekly Dig. On the other hand, the gold projects in Nevada (Jerritt Canyon) and Canada (Bateman) were acquired at a premium (2.0-3.5x) to the average of their respective peer groups.

Most M&A transactions since the mega-mergers of 2018-2019 (link here) were well-founded deals. On the other hand, the most recent ones have left me scratching my head as my wizardry has yet to help me unravel their hidden value.


*(Flawed projects vend their wares to the keen wizard. Source: Daily Tribune and Exploration Insights)*

## THE TINMAN: JERRITT CANYON - POOR GROUND CONDITIONS, UNDERUSED FACILITY, AND LIABILITY

The investment thesis for owning shares of the well-promoted precious metal producer First Majestic Silver Corp. (FR.T, AG.NYSE) is relatively simple: lots of silver in Mexico, (Fig. 1).


| Million ounces | 2018 | 2019 | Y/Y |
|---|---|---|---|
| Mexico | 194.5 | 190.3 | -2% |
| Peru | 146.5 | 135.4 | -8% |
| China | [illegible] | 110.7 | 1% |
| Australia | 40.3 | 42.9 | 6% |
| Russia | 43.1 | 42.4 | -2% |
| Poland | 40.9 | 40.4 | -1% |
| Chile | 40.0 | 38.2 | -4% |
| Bolivia | 38.3 | 37.2 | -3% |
| Argentina | 30.9 | 34.8 | 13% |
| United States | 29.8 | 31.5 | 6% |
| India | 21.2 | 20.4 | -4% |
| Kazakhstan | 19.5 | 16.7 | -14% |
| Sweden | 15.0 | 14.4 | -4% |
| Canada | 11.8 | 13.5 | 14% |
| Morocco | 7.4 | 8.1 | 9% |
| Indonesia | 10.6 | 7.7 | -27% |
| Uzbekistan | 6.0 | 6.1 | 2% |
| Papua New Guinea | 3.0 | 4.7 | 58% |
| Dominican Republic | 5.1 | 4.5 | -12% |
| Turkey | 4.7 | 3.2 | -33% |
| Others | 29.3 | 33.4 | 14% |
| **Global Total** | **847.8** | **836.5** | **-1%** |

Source: Metals Focus

*(Figure 1: The rationale for investing in the Mexican silver producer. Source: First Majestic Silver)*

So why buy the refractory gold, Carlin-style Jerritt Canyon mine in Nevada, (Fig. 2)?


*(Figure 2: Location of the Jerritt Canyon District northwest of Elko, Nevada. Source: Jerritt Canyon Gold)*

With the benefit of hindsight, the seeds of the transaction may have been planted in the fall of 2020 when Eric Sprott closed a C$78-million bought deal to purchase 5 million of First Majestic's shares (C$15.60/sh) for a 2.3% ownership of the company. The deal has provided the billionaire investor a 37% return so far.

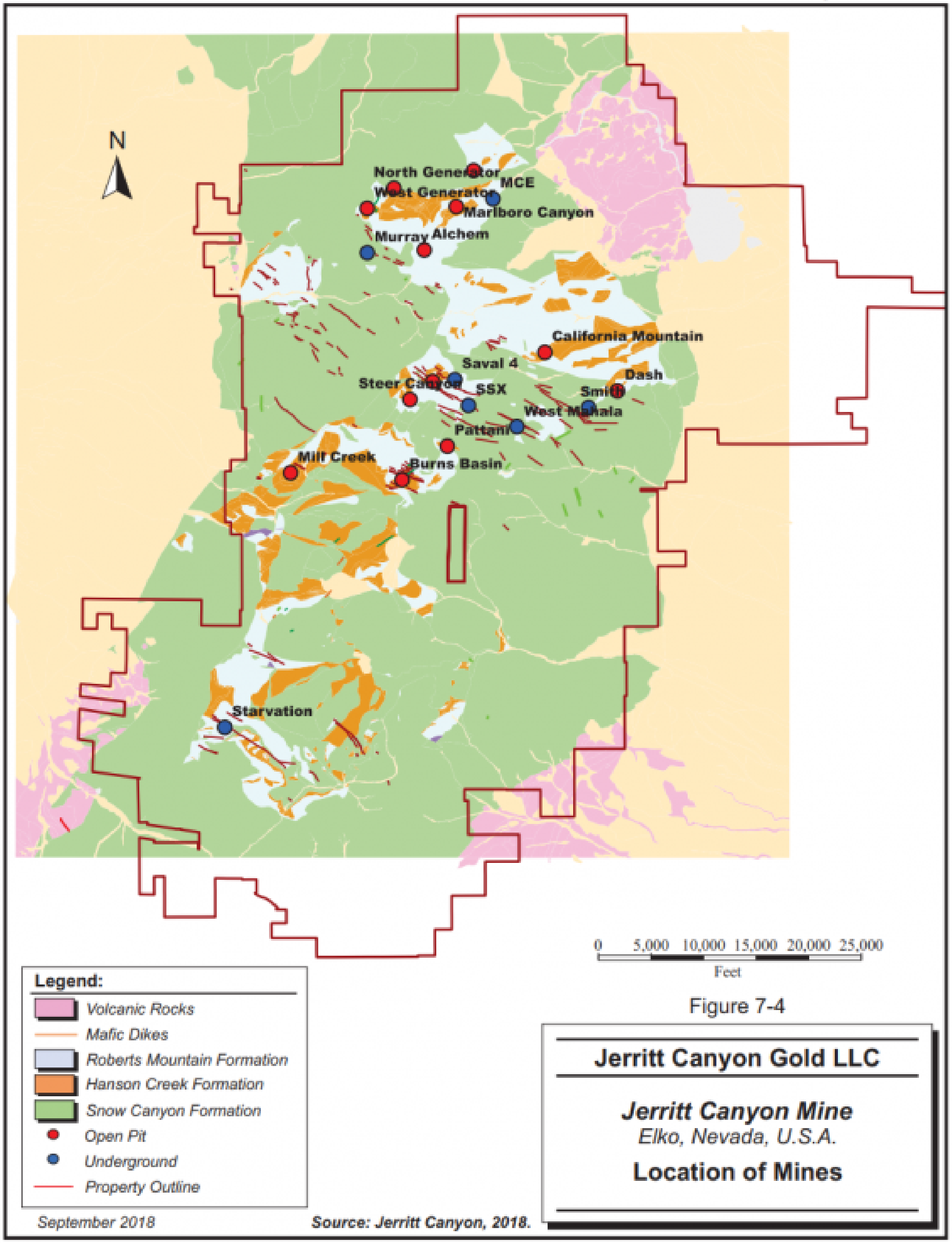
Critically, Sprott Mining owns (80%) and operates the Jerritt Canyon gold mine in Nevada, (Fig. 3), since it purchased it in 2015 for a fraction of its current valuation. The mine began production as an open pit and transitioned to predominantly underground in 2009.


*(Figure 3: View of the Jerritt Canyon plant in Nevada [left] and plant facility [right top and bottom]. Source: First Majestic Silver)*

Between 1981 and 1999, previous operators extracted 5.2 million ounces of refractory ore (open pit) at an average grade of 6 grams per tonne gold, which was then processed in the roasting facility at a rate of 4,500 tonnes per day (85% recovery).

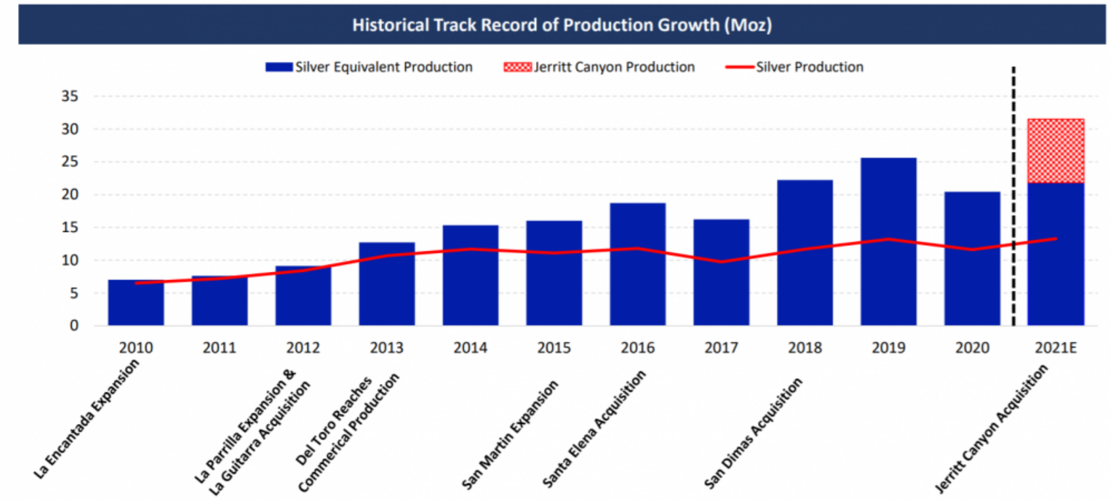
Underground operations started in 1997 and have since delivered about 4.1 million ounces of gold grading 8.5 grams per tonne while dealing with poor ground conditions and high dilution. The underground ore fills about half of the processing plant; therefore, keeping the other half on care and maintenance is an additional cost to be borne.

Since Sprott Mining took over in 2015 to the end of 2017, the operation produced 416,000 ounces of gold at a head grade of 5.1 grams per tonne from several underground mines (SSX-Steer Complex, West Mahala, Smith and Saval 4), (Fig. 4).




*(Figure 4: Location of open pit [red dots] and underground [blue dots] projects and mines in the Jerritt Canyon District. Source: First Majestic Silver)*

First Majestic Silver's production growth is underpinned by a highly acquisitive strategy, (Fig. 5). The transaction to acquire Jerritt Canyon will be its 4th over the past two decades, and it should generate a growth in production of well over 5 million silver equivalent (Ag Eq) ounces to over 30 million, although the growth will be entirely from gold.




*(Figure 5: Pro-forma silver equivalent production for 2021 after the acquisition of Jerritt Canyon. Source: First Majestic Silver)*

The rationale for the acquisition is production growth and diversification of revenues outside of Mexico, given the company's ongoing issues with the Government regarding the company's silver stream on the San Dimas mine with Wheaton Precious Metals (WPM.NYSE, WPM.T), (Fig. 6).

First Majestic Silver recently initiated an arbitration process under NAFTA's Chapter 11, yet history suggests it is not easy to achieve a satisfactory outcome when you take the country where you are operating to court.

**BACKGROUND**

- Primero Mining Corp. ("PEM"), now a subsidiary of First Majestic, acquired the San Dimas mine in 2010 and at the time had a Silver Purchase Agreement that required PEM to sell 100% of the silver produced to Wheaton Precious Metals Corp., up to 6 million ounces and 50% of silver produced thereafter, at the lower of: (i) the spot market price or (ii) $4.04 per ounce plus an annual increase of 1%.
- In 2012, PEM applied for and received an Advance Pricing Agreement ("APA") from Servicio de Administracion Tributaria ("SAT") which gave PEM assurance and tax certainty that SAT would accept the realized selling price of silver to which taxes were to be calculated. Under Mexican tax law, an APA is generally applicable for a five-year period and this ruling was made effective for the period of 2010 to 2014.
- In 2016, PEM received a legal claim from the SAT seeking to nullify the APA. The legal claim initiated does not identify any different basis for paying taxes.

**OUR POSITION**

- The Company continues to vigorously defend the validity of the APA and its transfer pricing position through the applicable provisions of three separate International double taxation treaties.

**LEGAL UPDATES**

- On May 13, 2020, the Company served the Government of Mexico with a Notice of Intent to Submit a Claim under the provisions of Chapter 11 of North American Free Trade Agreement.
- On November 12, 2020, the Company received the written decision made on September 23, 2020 by the Federal Court nullifying the APA. SAT has been directed to re-examine the evidence and basis for the issuance of the APA with retroactive effect, for the following reasons (i) SAT's errors in analyzing PEM's request for the APA and the evidence provided in support of the request; and (ii) SAT's failure to request from PEM certain additional information before issuing the APA. Upon review the Company's legal advisors are of the opinion that the decision is flawed and intends to appeal the decision to the Circuit Courts.
- The Company continues to assess all its legal options, both domestic and international including under the North American Free Trade Agreement, and will make additional updates, when necessary, on its legal plan of action.

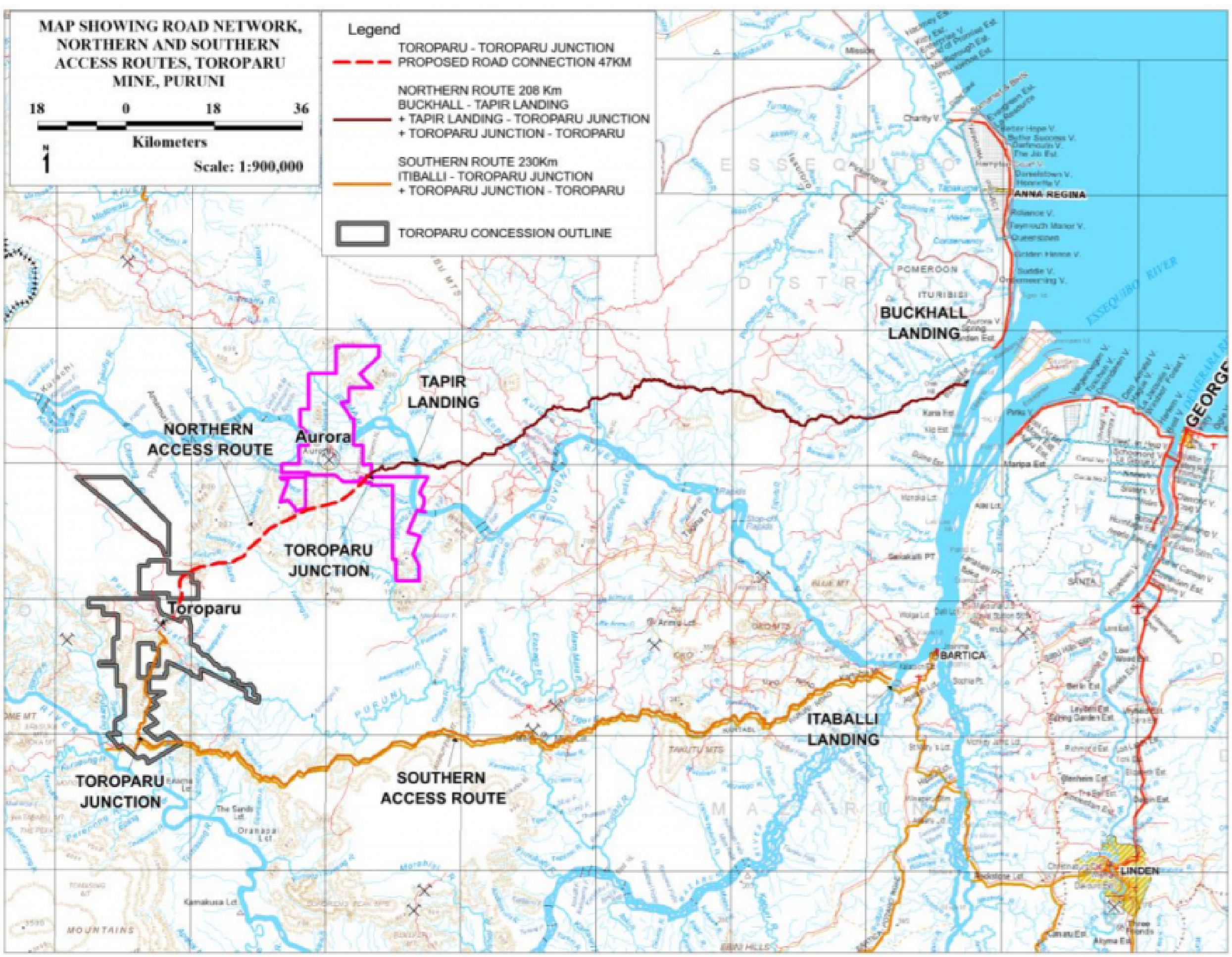
*(Figure 6: Timeline of the dispute between First Majestic Silver and the Mexican government. Source: First Majestic Silver)*

Despite the need for diversification and Nevada's high ranking among mining-friendly states, it doesn't sound like a good idea to buy an underground gold mine with a high dilution rate, poor underground conditions, and an underutilized, aging roasting facility.

In addition, the tailings dams are nearing their end of life, a new water treatment plant is required to achieve the planned water balance, and the closure and reclamation costs (2018) are estimated at ~US$85 million. Given that Jerritt Canyon is a private company, there are no reserves declared at the operation. Nonetheless, the asset was acquired at a premium to publicly traded junior producers (EV/oz US$239 vs. US$100).

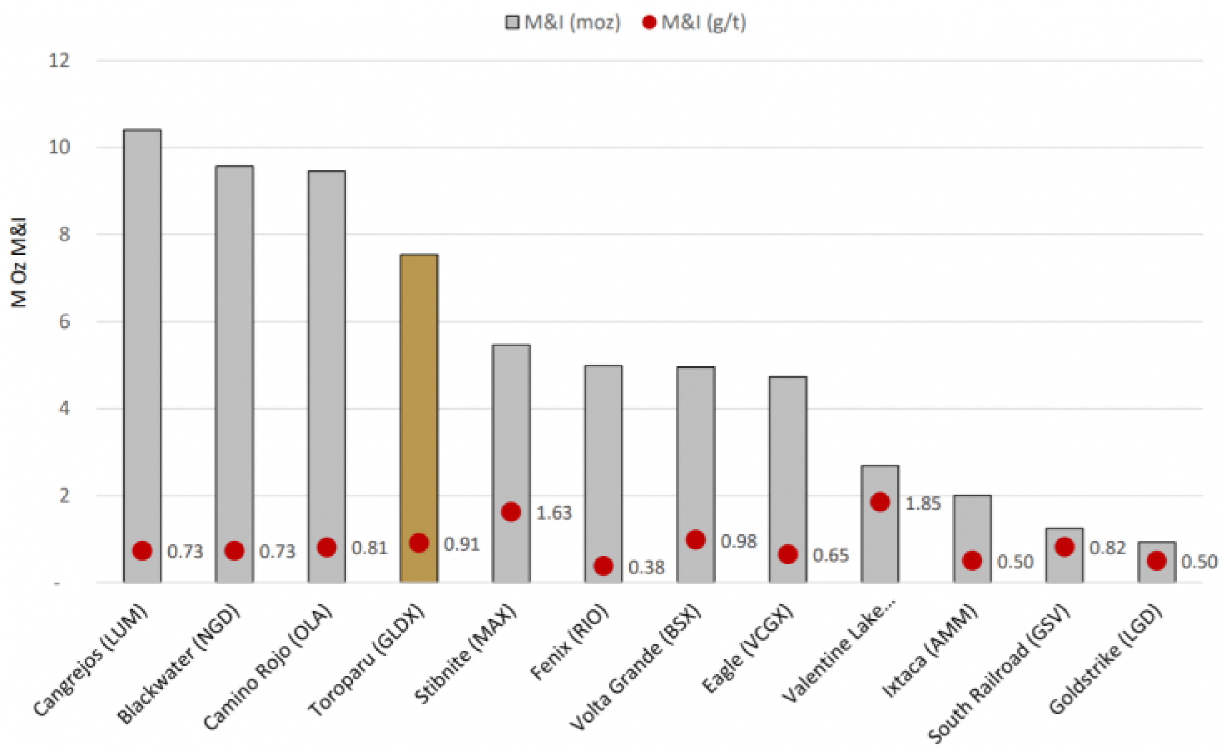
## THE SCARECROW: GOLD X MINING - LOW GRADE, HARD ORE, RISKY JURISDICTION

The acquisition of Gold X Mining (GLDX.V) by Gran Colombia (GCM.T) for its Toroparu open pit gold project in Guyana, (Fig. 7), may be the culmination of a failed 3-way merger with Guyana Goldfields back in May 2020 (link here).




*(Figure 7: Location of the remote Toroparu project in northern Guyana and the two proposed accesses to the coast. Source: Gold X Mining)*

Toroparu's claim to notoriety is the high number of contained Measured and Indicated gold ounces (7.4 Moz) at a marginal grade of ~1 gram per tonne associated with low grade copper mineralization (0.08% Cu), (Fig. 8).




*(Figure 8: Comparing the amount of Measured and Indicated resources of open pit gold development projects. Source: Gold X Mining)*

The 2013 reserve statement included three types of ore, namely saprolite (4%), gold in fresh rock (55%), and gold/copper in fresh rock (41%), (Table 2). The metallurgical recoveries vary from 96% for the gold-bearing saprolite and fresh rock to 88% for the copper-gold mineralized fresh rock. The revenue is further impacted by an 8% net smelter return royalty on the gold production.

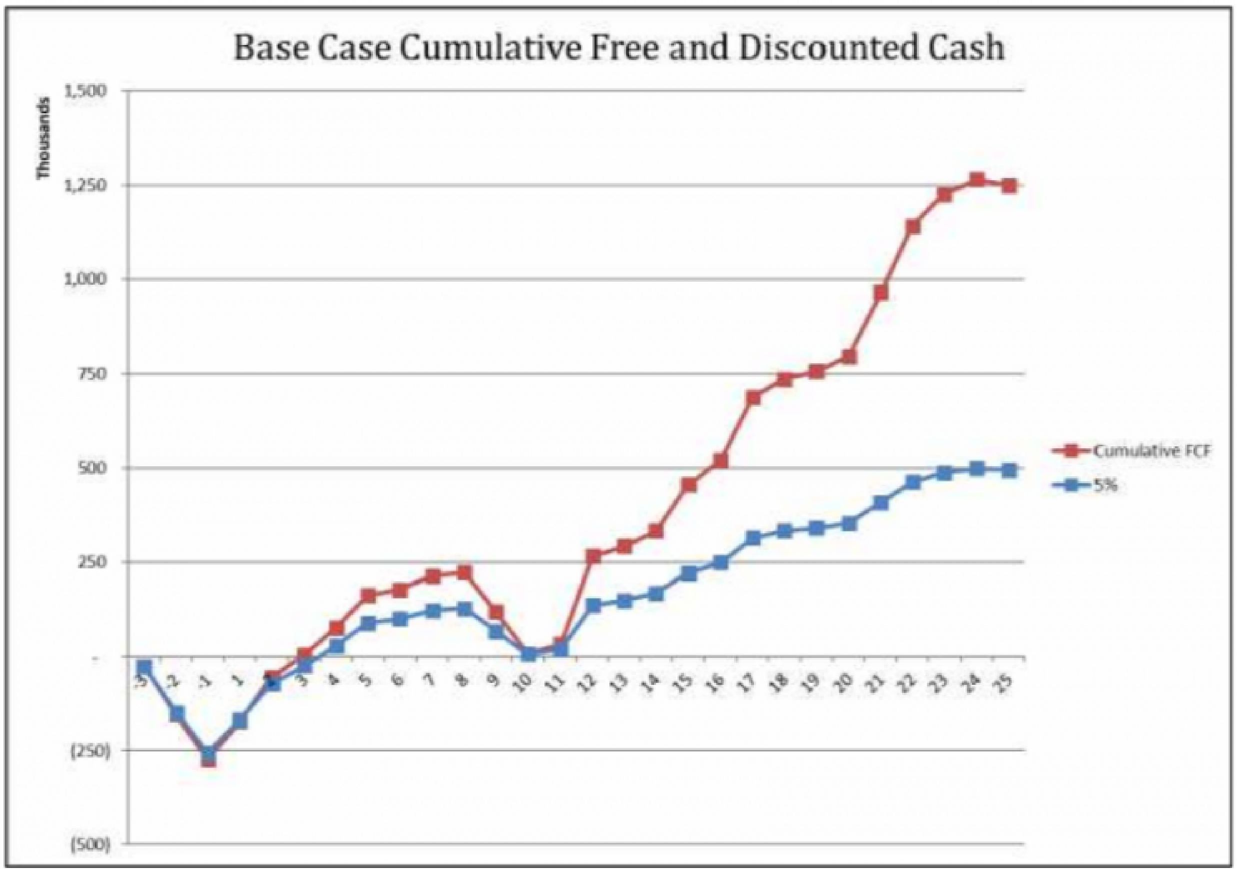
| 2013 Reserves | Proportion (%) | Au (koz) | Au (g/t) | Au recovery (%) | Rec. grade (g/t Au) | Cu (%) | Cu (Mlbs) |
|---|---|---|---|---|---|---|---|
| Saprolite | 4% | 148 | 0.91 | 96% | 0.87 | 0.10% | ----- |
| Fresh Au | 55% | 2,006 | 0.89 | 96% | 0.85 | 0.05% | ----- |
| Fresh Au/Cu | 41% | 1,953 | 1.17 | 85% | 0.99 | 0.18% | 211 |
| **Total** | **100%** | **4,107** | **0.91** | **91%** | **0.83** | **0.10%** | **211** |

*(Table 2: 2013 proven and probable reserves from Toroparu. Source: Gold X Mining and Exploration Insights)*

The 2020 preliminary economic assessment's (PEA) mine plan attempts to high grade* the orebody with a smaller plant (11.5 kt/d) that requires an initial capital expenditure of US$378 million before doubling its capacity once the grade drops off and all the rock is fresh and hard.

[*High grading an orebody allows a miner to feed the plant higher than average grade for the first few years to generate a higher internal rate of return.]

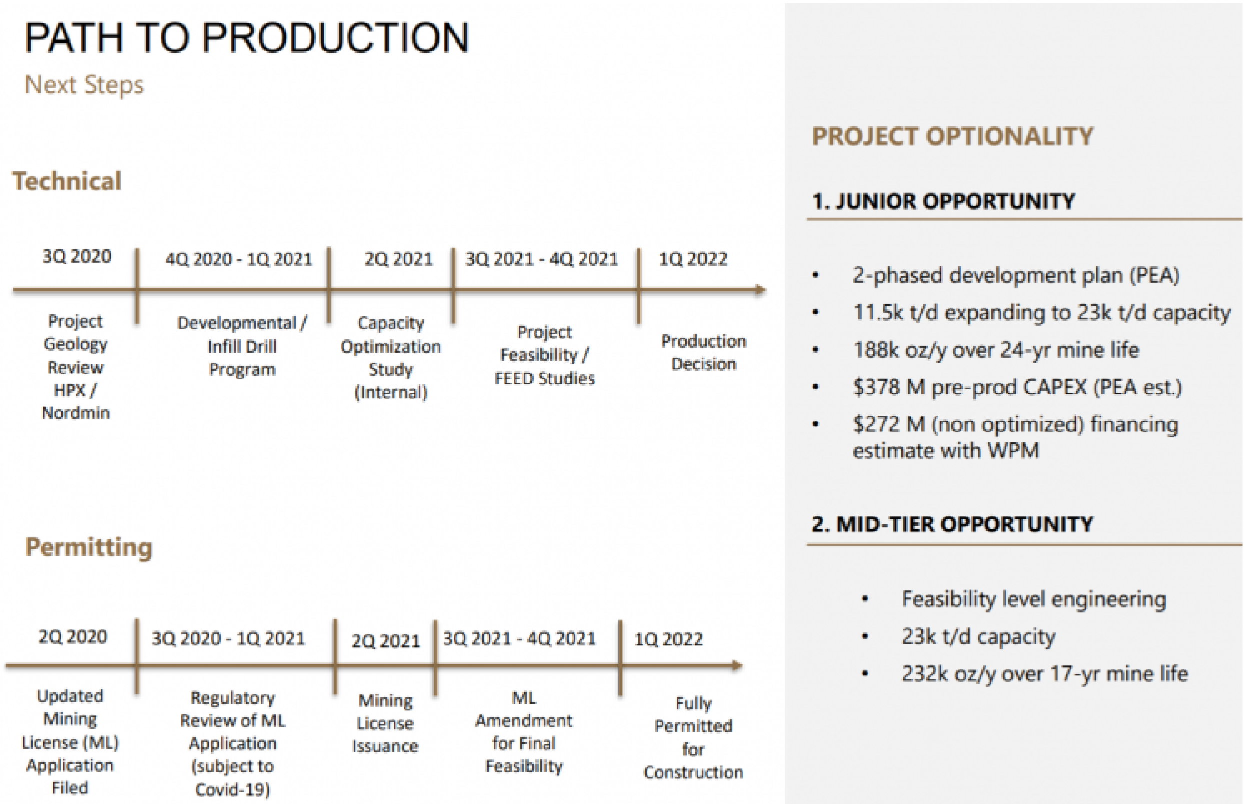
The amount of sustaining capital required for the expansion (US$614 M) generates a significant drop in cumulative free cash flow, suggesting that the project has two payback periods, (Fig. 9).




*(Figure 9: Cumulative undiscounted and discounted [5%] free cash flow envisaged by the 2020 PEA. Source: Gold X Mining)*

Although Gold X Mining added Robert Friedland as Chairman to help it negotiate a deal with a Chinese gold producer — such as Zijin Mining (601899.SSE), which purchased Guyana Goldfields in August 2020 (link here) —, the junior developer's lower capital intensity, incremental approach to the development of Toroparu, (Fig. 10), may have triggered Gran Colombia's hand to acquire it.

The market is aware that Gran Colombia is keen on diversifying its portfolio outside of Colombia, and Toroparu has been on its radar for almost a year; therefore, the acquisition is not surprising. Nonetheless, the acquisition price was a significant discount to its peer group on an enterprise value per ounce basis.

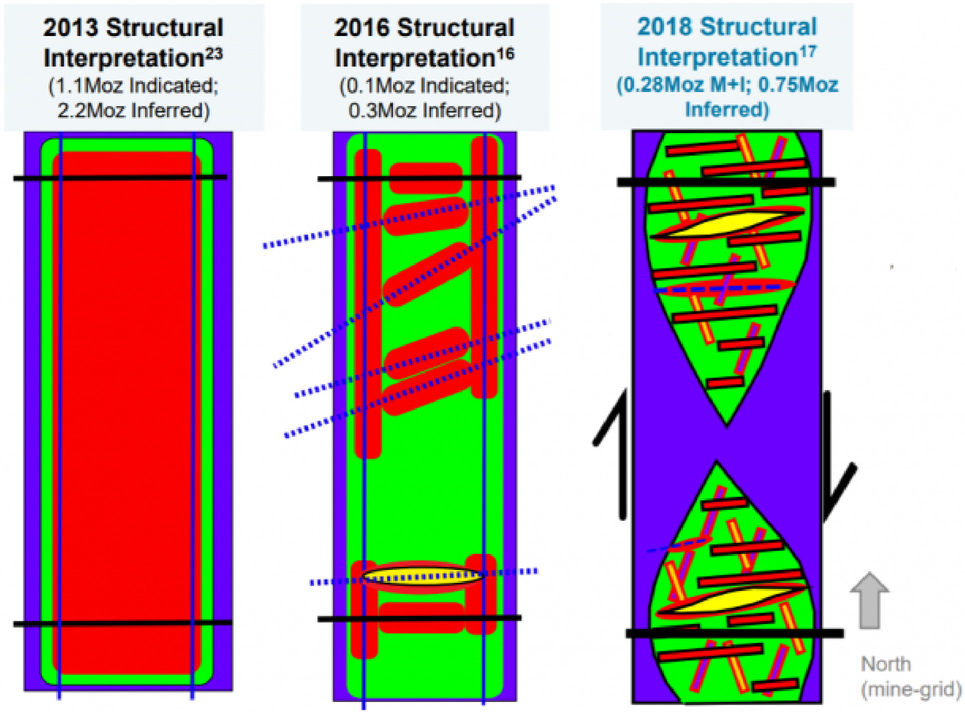



*(Figure 10: Path to proposed production. Source: Gold X Mining)*

## THE LION: BATTLE NORTH GOLD - GRADE CONTINUITY, SMALL RESOURCE

The reason for changing the name of a former ill-fated project and/or company is to protect it from any lingering negative bias. The Phoenix Gold Project, now called the Bateman Gold Project, which was previously owned by Rubicon Minerals, now Battle North Gold, fits the bill.

The critical problems with the deposit's gold mineralization include a lack of continuity and high variability, (Fig. 11). A changing structural interpretation of the gold mineralization has underpinned a significant drop in the global resource from 3.3 million ounces in 2013 to about 1 million ounces in 2018. Currently, it stands at 733,000 ounces grading 7.0 grams per tonne gold between the F2 and Finlay zones.



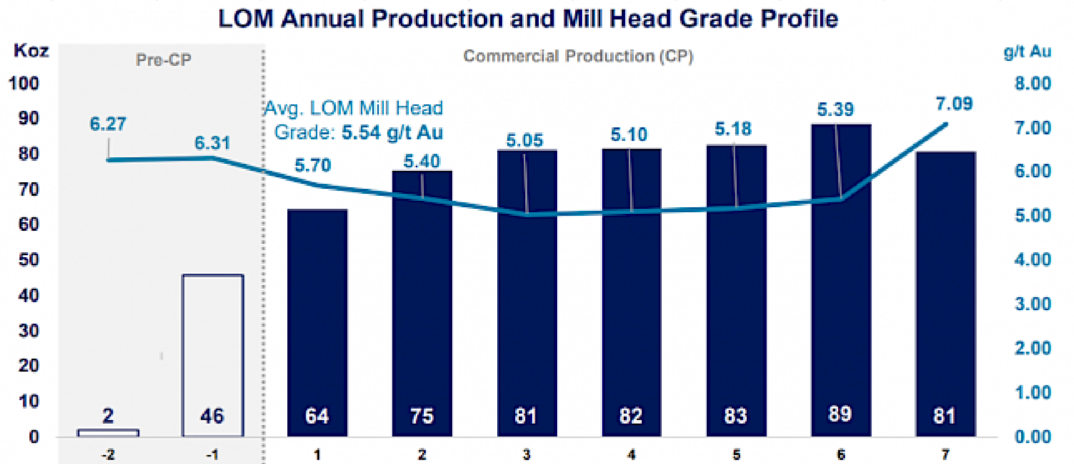

*(Figure 11: Evolution of the Bateman gold deposit's structural interpretation from 2013 to 2018. Source: Battle North Gold)*

Regardless, previous operators had sunk about C$770 million into the 1,800 tonne per day plant facility and underground mine development, including a shaft, (Fig. 12); therefore, Battle North did not think it needed a lot more funds to get the project into commercial production (C$109 M).


| Sunk Capital (C$ millions) | |
|---|---|
| Mill construction | +$150 |
| Surface construction | +$95 |
| U/G exploration, development, etc. | +$525 |
| **Total** | **+$770 M** |

*(Figure 12: Phoenix processing plant in the Red Lake gold district of northern Ontario. Source: Battle North Gold)*

Given a 20% dilution rate, the Bateman project's life-of-mine head grade is 5.5 grams per tonne gold, (Fig. 13), hardly high-grade compared to peer deposits in the Red Lake mining district of northern Ontario. The forecast annual production in the 2020 feasibility study was about 80,000 ounces at an all-in-sustaining cost (AISC) of US$865 per ounce over an 8-year mine life.

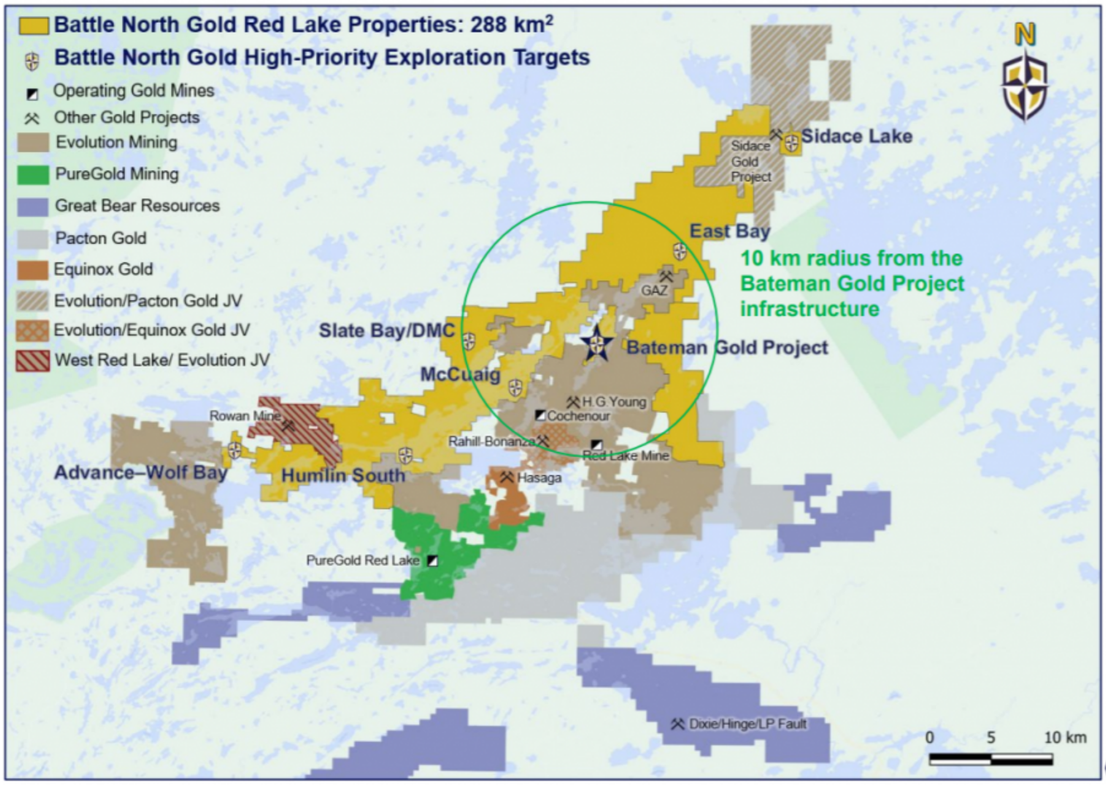



| | -2 | -1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | LOM |
|---|---|---|---|---|---|---|---|---|---|---|
| Throughput (tpd) | 180 | 660 | 1,029 | 1,270 | 1,467 | 1,457 | 1,451 | 1,495 | 1,038 | **1,315** |
| Cash Costs (US$/oz) | | | $677 | $648 | $632 | $661 | $636 | 563 | $495 | **$613** |
| AISC (US$/oz) | | | $1,161 | $949 | $863 | $947 | $1,006 | 698 | $531 | **$865** |
| AIC(US$/oz) | | $1,880 | $1,340 | $1,102 | $1,005 | $1,088 | $1,146 | $828 | $652 | **$1,010** |
| Init. Capex (C$M) | $62.0 | $47.3 | | | | | | | | **$109.3** |
| Sust. Capex (C$M) | | | $42.1 | $30.7 | $25.3 | $31.6 | $41.2 | $16.1 | $1.8 | **$188.8** |
| FCF (C$M) | $(68.7) | $(6.4) | $31.6 | $58.5 | $72.6 | $63.7 | $57.8 | $98.8 | $110.6 | **$418.5** |

*(Figure 13: Life of mine annual production and head grade for the F2 Zone. Source: Battle North Gold)*

Evolution Mining (EVN.ASX)'s cash acquisition of Battle North Gold was driven by the Australian-based mid-tier gold producer's desire to add adjoining ground (+288 sq km) to its Red Lake land package, including the Bateman gold project, (Fig. 14), and get hold of another plant (permitted to 1.25 kt/d) to expand the annual production from its Red Lake operation to over 300,000 ounces.

The timing of the transaction may have been dictated by the Bateman project's development timeline, as Evolution Mining would rather acquire Battle North Gold before it started using the plant to treat its own ore from the F2 Zone.




*(Figure 14: Claim map of the Red Lake district showing Battle North Gold properties abutting Evolution Mining's ground to the north, east, and west. Source: Battle North Gold)*

In addition to the infrastructure and land package provided by the acquisition, the previous expenditures at the Bateman gold project have generated a significant tax loss pool (C$704 M) that could be used to reduce the tax impacts of any operating income from the mid-tier producer's operations at Red Lake, (Fig. 15).

**AFTER-TAX IRR (%)/NPV$_{5\%}$ (C$ MILLIONS) – SENSITIVITIES TO GOLD PRICE AND CAD$/USD$ FX RATE**

| US$/C$ FX Rate | Gold Price (US$/oz) | | | | |
|---|---|---|---|---|---|
| | US$1,700 | US1,800 | US$1,900 | US$2,000 | US$2100 |
| 0.84 | 48%/ $289 | 56%/$344 | 64%/ $400 | 73%/$456 | 82%/ $510* |
| 0.80 | 55%/ $336 | 64%/$395 | 73%/ $454 | 82%/$510* | 91%/ $552* |
| **0.7407 Base Case** | 67%/ $416 | 77%/$480 | 86%/ $531* | 97%/$577* | 107%/ $622* |
| 0.70 | 76%/ $479 | 87%/$534* | 98%/ $582* | 109%/$630* | 120%/ $677* |
| 0.66 | 87%/ $535* | 99%/587* | 110%/ $637* | 123%/$688* | 135%/ $737* |

*Scenarios where entire the C$704 million tax loss pools are exhausted

*(Figure 15: Positive economic impacts of applying accumulated tax losses of C$704 million on operating income at different scenarios. Source: Battle North Gold)*

Despite the issues with the project's development (grade continuity, small resource), the transaction makes more sense than the other two because of the permitted plant and the size of the land package.

Based on its peer group of junior developers, the acquisition cost (EV/oz) was a significant premium (US$173 vs. US$50-55) due, most likely to the permitted plant facility and sizable land package in Ontario.

**SUMMARY**

*"Toto, I've a feeling we're not in Kansas anymore."*

*Dorothy from the Wizard of Oz*

Given the amount of free cash flow precious metal producers have generated over the past year and the desire for production growth by intermediate producers, we will no doubt see more suitors following the yellow brick road to pursue questionable private placements and M&A transactions at potential premiums to the market value. Mind you, these premiums are good news for junior explorers' investors.

Potential target companies in the Exploration Insights portfolio include those with:

- quality assets, such as Liberty Gold (LGD.T, LGDTF.OTC),- Bluestone Resources (BSR.V, BBSRF.OTC), and Loncor Resources (LN.T, LONCF.OTC)
- assets proximal to existing operations, such as Bellevue Gold (BGL.ASX)

*(M&As have stepped outside of Kansas. Source: National Arts Center)*

That's the way I see it,

*Joe*