



To: MJG Capital Limited Partners
From: Matt Geiger
Date: February 12, 2019
Subject: 2018 Second Half Review

Below is set forth MJG Capital Fund, LP's performance through December 31, 2018.

6 Month Performance

MJG Capital Fund, LP (net of all fees and expenses)	(22.08) %
S&P 500	(7.78) %
S&P/TSX Venture Composite Index	(24.70) %

1 Year Performance

MJG Capital Fund, LP (net of all fees and expenses)	(38.10) %
S&P 500	(6.24) %
S&P/TSX Venture Composite Index	(34.50) %

3 Year Performance

MJG Capital Fund, LP (net of all fees and expenses)	87.37 %
S&P 500	22.65 %
S&P/TSX Venture Composite Index	5.99 %

5 Year Performance

MJG Capital Fund, LP (net of all fees and expenses)	(3.49) %
S&P 500	35.64 %
S&P/TSX Venture Composite Index	(40.20) %

Performance Since Inception (9/1/11)

MJG Capital Fund, LP (net of all fees and expenses)	(68.41) %
S&P 500	105.66 %
S&P/TSX Venture Composite Index	(69.23) %

Note: All returns for MJG Capital partners are estimated and subject to the completion of an audit at a future date. The returns for each limited partner may vary depending upon the timing of their individual contributions and withdrawals.

Introduction

The MJG Capital Fund, LP was formed roughly seven and a half years ago and the results are detailed on the previous page. The S&P 500 represents the alternative investment of choice, while the TSXV is the closest proxy to the universe of resource equities that fits our investment mandate.

There are no two ways about it; 2018 was a disastrous year. After strong performance in 2016 and 2017, I expected more of the same last year and said as much in the past two investor letters. At the beginning of 2018, the global economy was in the late stages of a business cycle which is generally when inflation and commodity prices perk up. Additionally, we had recently experienced a grinding five-year mining bear market between 2011 and 2015. A third consecutive year of gains didn't seem unreasonable.

However, a stubbornly strong US dollar and an escalating Trump/China tariff battle ensured this third year of gains did not pan out. In fact, as will be discussed in this letter's *Market Musings* section, we actually entered a new mining bear market in February 2018 – though this wouldn't become clear until the waves of selling witnessed in late 2018.

In what was a bad year, the MJG partnership itself was a stark underperformer – even relative to the TSXV. This underperformance was driven by a few of our larger positions having particularly poor years. Additionally, we had a significant number of warrants enter 2018 “in-the-money” only to fall out of the money over the course of the year. (For reporting purposes, we value non-listed warrants at their intrinsic value.)

In retrospect, we would have been better served by holding more cash over the course of the year. Higher exposure to the royalty names in our portfolio like EMX and Metalla would have also helped limit the losses.

Despite the tough year, I would like to note that our three-year and five-year numbers still show substantial outperformance of the TSXV. And over the past three years, we have nearly quadrupled the performance of the S&P 500. Even with the step backwards in 2018, we do have positive momentum over the medium term.

Given this new bear market, we have primarily been focused on private placements. The only mining position we've purchased on the open market in the past six months is Adriatic Metals, which is this letter's *Featured Investment*. Otherwise all new mining positions initiated in the past half year have been through opportunistic private placements – many of which have included full 3-5 year warrants. Recent placements include TerraX Minerals, Boreal Metals, and most recently Kootenay Silver. All three have compelling stories with management ownership of at least 10%. (For full transparency, we've also initiated one agriculture position and one aquaculture position on the open market in the past six months.)

Private placements are the only silver lining of mining bear markets. As financing conditions get difficult, even good companies are forced to sweeten deal terms with warrants to incentivize investors. Warrants give investors the right to purchase additional shares for a set period of time. When things go right, warrants can turn a 10x return into a 19x return.

Of course, investors should only participate in placements with high-quality issuers that they would consider owning anyway. High insider ownership is vitally important as management needs to remain incentivized for the term of the warrant. And it's important for the company to be raising enough cash to answer at least one unanswered question before the next financing. Our continued participation in these types of deals ensures the MJG partnership substantial leverage when the resource market turns – whether in 2019, 2020, or 2021.

In this letter's *Market Musings*, the new mining bear market and the likely scenarios for 2019 are discussed.

In the *Overview of Partnership Holdings*, the fund's capital allocation is reviewed by (1) commodity, (2) jurisdiction, and (3) business model. At current, the fund has twenty-three publicly traded positions in the portfolio.

We finish with the most recent *Featured Investment* (Adriatic Metals) as well as updates on four current holdings featured in previous letters (Golden Valley Mines, Sama Resources, Ardea Resources, & Excelsior Mining).

Market Musings

A New Mining Bear Market? Pt. 2

The year 2018 can best be described as a “dumpster fire” for investors of all stripes; simply holding US Dollars and T-bills would have trumped nearly any other investment strategy. As Adrian Day points out in his recent investor letter, the only countries whose stock markets offered dollar-based gains for the year were Panama, Jamaica, Ukraine, Macedonia, Kuwait, Bahrain, Saudi Arabia, and Qatar. A motley crew if I’ve ever seen one!

The S&P 500 was down over 6% for its worst annual decline since 2008. The FAANG stocks, which have led the market higher for nearly a decade, all fell at least 25% from their intra-year highs. REITs lost 4% on the year. The high yield bond market lost money on the year – with a particularly painful Q4. And, ignoring the handful of countries mentioned above, emerging markets got clapped with the MSCI down 14% in 2018.

As evidenced by the MJG partnership’s year end results, this carnage extended to natural resource investors and especially those with exposure to the junior mining market. Just look at the prices of zinc or copper, which fell 26% and 19% respectively over the course of the year. Or the S&P/TSX Global Base Metals ETF, which was down 28% from its intra-year high. Or the S&P Metals & Mining Index, which fell 27% from its intra-year high. Or the TSXV, which lost roughly 35% over the course of the year and over 40% from its intra-year high. The strength of the USD Dollar and the uncertainties stemming from the Trump/China trade war have taken a cudgel to the mining space.

In the July 2018 investor letter, I argued that the weakness we experience in the first half of 2018 was a correction in the mining bull market that had begun in January 2016 and was NOT the onset of a new bear market. Well, six months later, this has been proven wrong. The declines we witnessed over the remainder of 2018 were simply too extreme NOT to not be deemed a new bear market.

Therefore, I have revised my view and now believe that the bull market that began in January 2016 ended in early February 2018. We have since been in a new mining bear market.

That said, I expect this bear market to be short when compared to the agony experienced between 2011-2015. In fact, we may have already exited the bear market as of late December 2018. The nickel price is up roughly 25% YTD, the gold price is up roughly 10% since early December, the TSXV is up 15% since mid December, and the MJG partnership itself was up 20.5% in January alone – which I believe is our record for a single month.

But it is far too early to celebrate. It will take another 3-4 months of sustained gains before mining investors can comfortably feel that the bear market has been left in the rearview window. Our fate will be decided by two highly uncertain factors:

1. How the recent shift in Fed Policy affects the US Dollar. The USD was rampant over the course of 2018 and could still very well press higher. A strong dollar of course is bad news for natural resource investors given that commodities are priced in USD's. All things equal, a stronger dollar means lower prices of metals, grains, and energy.
2. Whether there is a legitimate resolution to the Trump vs. China tariff battle. No need to go into the details here as this saga has been endlessly reported. The key takeaway is that raw materials linked to global GDP growth have a lot to gain from a resolution, and even more to lose if the trade war persists throughout the year. The trade war has hurt China asymmetrically, and the health of the Chinese economy is of paramount importance to natural resource investors due to China's outsized influence in virtually all commodity markets.

Likely, we'll see a split decision – such as no resolution to the trade war while fed dovishness dampens the strength of the USD. In this scenario, the market would bifurcate with the base metal miners underperforming the precious metal names. (The notable strength in silver juniors like Alexco, MAG, and SilverCrest over the past eight weeks signals that this nascent precious metal rally may have staying power.)

In a worst-case scenario, we would see no resolution to the trade war and a further year of USD strength. This would result in another 2018-like year across the whole resource space. While sobering, it remains a real possibility. (A second worst-case scenario would be a liquidity-driven panic like we saw in 2008.)

Conversely, if the trade war comes to a conclusion by the March 31st deadline and we see the DXY drop into the low 90's, then the stage will be set for a broad-based rally that would rival 2016. This is the goldilocks scenario, and I wouldn't count it out given the flying start we've had to the year. (Though as a note of caution, the MJG partnership was up 8% in January 2018 before suffering seven consecutive monthly declines.)

Needless to say, we are in store for quite an interesting year. Given the variability in potential outcomes, as natural resource investors we need to focus on what we can control. This includes initiating our new positions through opportunistic private placements, versus buying on the open market. This includes liquidating positions that have missed milestones, deviated from the original thesis, or soon need to raise additional capital. And most importantly, this includes backing experienced, high-integrity management teams with insider ownership north of 10%. If we do these things, we set ourselves up for long-term success – irrespective of how 2019 unfolds.

Overview of Partnership Holdings

Below is a snapshot of our investments as of January 31, 2019.

The partnership is exposed to different commodities, jurisdictions, and business models. At current, we have twenty-three publicly traded positions in the portfolio.

Over the next six months, we will look to increase our exposure to uranium, farmland, and aquaculture.

Allocation by Commodity	
Farmland	
Canola*	3%
Cotton*	3%
Grapes*	2%
Aquaculture	
Salmon*	3%
Ag Minerals	
Potash	2%
Energy Metals	
Uranium	15%
Nickel	10%
Copper	7%
Vanadium	6%
Cobalt	3%
Graphite	2%
Industrial Metals	
Zinc	4%
Bauxite	3%
Precious Metals	
Gold	22%
Silver	11%
Cash (USD)*	4%

* Signifies minimal correlation to the mining sector

Allocation by Jurisdiction	
United States	31%
Canada	28%
Australia	8%
Côte d'Ivoire	8%
Bosnia	7%
Serbia	5%
Cameroon	3%
Sweden	2%
Brazil	2%
Ecuador	2%
Cash (USD)	4%

Allocation by Business Model	
Prospect Generation	15%
Exploration	16%
Development	37%
Production	14%
Royalty/Streaming	14%
Cash (USD)	4%

Featured Investment

Adriatic Metals (ASX: ADT)

The partnership first initiated a position in Adriatic Metals in mid-September 2018 at A\$0.39 per share. Our cost basis is now roughly A\$0.53 factoring in subsequent purchases. Adriatic is a post-discovery play currently drilling out the ultra-high grade Rupice deposit in central Bosnia. Due to the project's location, this investment is not for the faint of heart. However, the exceptional drill results that Rupice has yielded coupled with the company's A\$118m enterprise value make ADT a must-own for junior mining investors with a tolerance for geopolitical risk. This is a potentially world-class discovery that will become a producing mine in the not too distant future.

In this *Featured Investment* piece, I begin by providing an overview of Adriatic's relatively short company history - with a focus on the company's formation, management, insider ownership, working capital, and fundraising history.

We then discuss the Federation of Bosnia as a mining jurisdiction. Geopolitical risk is a major part of the Adriatic story.

We then review the company's flagship asset: the Vares mining concession that is home to the Rupice and Veovaca deposits.

Next, we put Adriatic's A\$118m enterprise value into perspective by comparing Rupice to Sandstorm's Hod Maden and Silvercrest's Las Chispas - two high-grade, world-class discoveries from the past 5 years.

We conclude with Adriatic's expected catalysts over the coming few years, so readers can keep tabs on the company's progress alongside me.

Company Background

Adriatic Metals has been a public entity for less than a year and is the only publicly listed junior with Bosnian mining assets. The Vares mining concession was originally held by Yugoslavian state mining company Energoinvest, which put the Veovaca deposit into production between 1984-1988. However the entire concession was abandoned in 1992 due to the onset of the Bosnian Civil War. Twenty years later, an Australian group named Balamara Resources acquired the project for A\$3.4m but conducted minimal work in the following four years. Vares was then bought by the Adriatic Metals ownership group in February 2017. Miloš Bošnjaković, a co-founder of Balamara, currently sits on the Adriatic board.

Given the magnitude of the Rupice discovery, Adriatic has been able to attract a talented team to advance the project. For the sake of brevity, I want to focus on three key team members team that give me confidence that the project is in good hands.

The first is director Paul Cronin, who is the single largest shareholder at roughly 18%. Paul orchestrated the February 2017 transaction with Balamara, helped pull together the current executive team, and has assisted with the company's capital raises. In addition to his role at Adriatic, Paul serves as CEO of Black Dragon Gold and as a director of Global Atomic. Throughout his career, Paul has consistently aligned himself with good people – and it is serving him well.

Geraint Harris was appointed CEO of Adriatic in October 2017. Geraint is a mining engineer with over 20 years of experience across operations in Europe, North and South America, Central Asia, the former Soviet Union, and China. Geraint worked for seven years as an engineer and manager at Vedanta's underground Lisheen Mine in Ireland, which was one of the world's largest zinc mines before its closure in 2015. I was able to sit down with Geraint in San Francisco a few months back and came away impressed.

The third key player is the company's chairman Peter Bilbe. Mr. Bilbe lends instant credibility to the story given his 40 years of experience in gold, base metals, and iron ore at the operational, CEO, and board levels. Most notably, he has served as Chairman of Independence Group for the past nine years. Independence Group is a well-respected gold and base metal mining company with a current market capitalization of ~A\$2.5 billion. Mr. Bilbe's experience will serve Adriatic well in the likely event that the company receives takeover overtures this year or next.

All told, Adriatic directors and management own roughly 30% of the company. This is outstanding insider ownership for a company valued north of A\$100m. Additionally, all of these shares will be held in escrow through May 2020. This is a perfect recipe for decision making that is aligned with the interests of ADT shareholders.

It is also worth noting that ASX-listed copper producer Sandfire Resources owns 7.7% of Adriatic. Sandfire took down 20% of Adriatic's A\$10m IPO financing in April 2018 and participated in ADT's most recent placement to maintain its 7.7% stake. It has been reported that Sandfire recently attempted to raise its ownership in Adriatic to 19.9% - only to be rebuffed by ADT's directors and management. Sandfire is flush with cash and recently announced a takeover offer for MOD Resources – another ASX-listed junior in which Sandfire owns a strategic position. It is not unreasonable to expect Sandfire to make a run at Adriatic sometime in the near future.

Adriatic completed a A\$10.8m institutional placement in mid November at A\$0.55 cents. There were no warrants attached to the deal, demonstrating strong investor appetite in what was a very challenging market. As of year-end 2018, the company sits on a healthy cash position of A\$14.6 million. ADT spends roughly A\$120k per month on G&A, which is more than reasonable for a company quickly advancing an exciting discovery. The current working capital position should comfortably last the company into 2020,

though I wouldn't be surprised to see another placement conducted in the second half of 2019 – especially if the share price is north of A\$1.00.

Bosnia

Geopolitical risk is undoubtedly a major risk factor for Adriatic shareholders given the company's operations in Bosnia. Bosnia is located within the Balkan Peninsula and borders Croatia, Serbia, Montenegro, and the Adriatic Sea. The country was formed in 1995 when the Dayton Peace agreement brought to an end a bloody three-year civil war. Bosnia is now a secular society but there remains a palpable tension between the country's three main religious groups: Muslims (51% of population), Orthodox Christians (31%), and Catholics (15%). The country is structured as a parliamentary democracy with general elections held every four years. The most recent of these elections took place in October 2018.

Bosnia had a rich history of metal mining from before the civil war and there remains well-developed infrastructure from the Soviet-era. Additionally, the country has an attractive mining code with just US\$0.90/t ore royalty, no minority interest, and a 10% corporate tax. Importantly, the local municipalities receive a high proportion of revenue paid by companies in royalties, taxation, and permit applications. This incentivizes local support for mining.

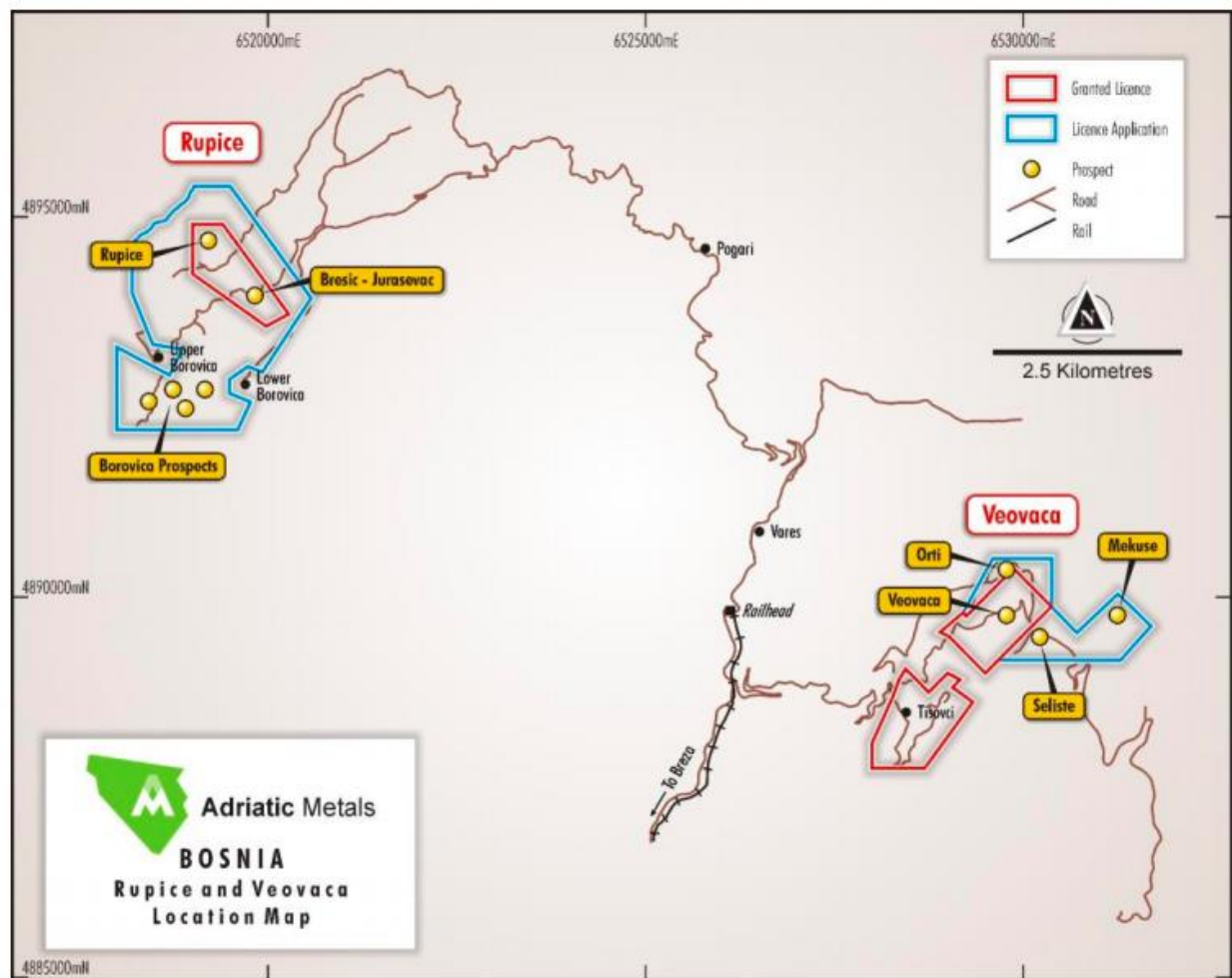
There are of course significant negatives to working in Bosnia. The post-civil war country isn't particularly mature as a mining jurisdiction – though there is notable coal production by state run entities as well as iron ore production by ArcelorMittal. However none of the major base and precious metal players working in neighboring Serbia, such as Rio Tinto, Freeport-McMoRan, Zijin Mining, or Eldorado Gold, have current operations in Bosnia. Aside from Adriatic, the only junior mining outfit active in Bosnia is Mineco – a private, UK-based company led by ex-Glencore executives and a Russian oligarch. For this reason, the efficiency of the Bosnian permitting process is still an open question.

Additionally, very few mining investors have experience investing in Bosnia. This has resulted in extreme skepticism from the investment public about the Adriatic story. If this same discovery had been made in a more established mining jurisdiction such as Mexico or Turkey, the current ADT valuation would be at least 2x higher. Shareholders should expect this extreme geopolitical discount to persist for the medium term. That said, even factoring in this discount, there is plenty of money to be made if the company successfully demonstrates that a combined Rupice and Veovaca operation has NPV potential north of US\$1 billion.

Rupice

Rupice is the reason to invest in Adriatic Metals, plain and simple. The deposit is located 15 kilometers to the northwest of the past-producing Veovaca deposit. The nearby town of Vares provides critical infrastructure including 6-8c/kWh grid power and rail links into the European network and to ports on

the Adriatic coast. Vares has a population of 6,000 which affords Adriatic manpower as operations scale. The project can be accessed from Sarajevo in a sixty-minute drive on paved roads.



Over the past 18 months, Rupice has been transformed from an interesting, Soviet-era prospect to a potentially world-class polymetallic mineral deposit. Rupice was first discovered by Energoinvest in 1952 and exploration continued intermittently until 1990. Energoinvest stuck forty-nine holes into the deposit totaling 5700 meters, with an initial focus on barite mineralization and later zinc and lead. Importantly, only 35% of the holes were ever sampled for gold and silver. This is because the closed Soviet economy had very little need for precious metals, and the state mining companies were instructed to prioritize metals which fed the industrial complex such as barite, zinc, and lead.

Energoinvest's decision to overlook precious metals is of course to Adriatic's benefit. Upon acquiring Rupice in early 2017, the company drilled seven holes into the deposit to confirm the Yugoslav era drilling. Sure enough, the historic lead and zinc grades were confirmed. However, significant copper, gold, silver, and barite grades were also encountered. Four of these holes averaged an impressive 39 meters of 23% ZnEq (or 16 g/t AuEq). These are undoubtedly impressive grades but at the time the deposit was thought to be small.

Things got more interesting in June 2018, which was less than 60 days after the company's IPO on the ASX. On June 12th, the company announced what I consider to be the true "discovery hole" at Rupice - 64m @ 4.6g/t Au, 537g/t Ag, 0.9% Cu, 7.7% Pb, 10.8% Zn, 46% BaSO₄. This incredibly rich intercept, equivalent to 25 g/t AuEq, caught the market's eye – causing Adriatic's share price to rocket from below 20 cents in early June to above 50 cents by the end of the month.

On July 16th, Adriatic wowed the market again by announcing that a 40-meter step out hole to the north had returned 66m @ 2.1g/t Au, 158g/t Ag, 2.3% Cu, 8.6% Pb, 12.8% Zn and 37% BaSO₄ from 210m depth in drill hole BR-5-18. This too is a world-class intercept, both in terms of width and grade.

At this point, Adriatic management put their foot on the gas pedal and ordered four drill rigs to site. The company proceeded to drill 15,000 meters at Rupice in 2018. This is quite an accomplishment considering that the drill program only began in May, not to mention the sub-zero temperatures and significant snowfall during the winter.

Drilling remains ongoing and on January 21st the company announced another batch of exceptional results. Highlights included BR-36-18 which intersected a stunning 72m @ 18.3% Zn, 10.7% Pb, 211g/t Ag, 2.5g/t Au, 2.5% Cu, and 25% BaSO₄ from 206m, and BR-25-18 which returned 46m @ 12.7% Zn, 9.6% Pb, 309g/t Ag, 4.1g/t Au, 1.0% Cu, and 40% BaSO₄ from 218m. These are the best intersections globally in terms of grade x thickness so far in 2019 and have drawn new eyes to the Adriatic story.

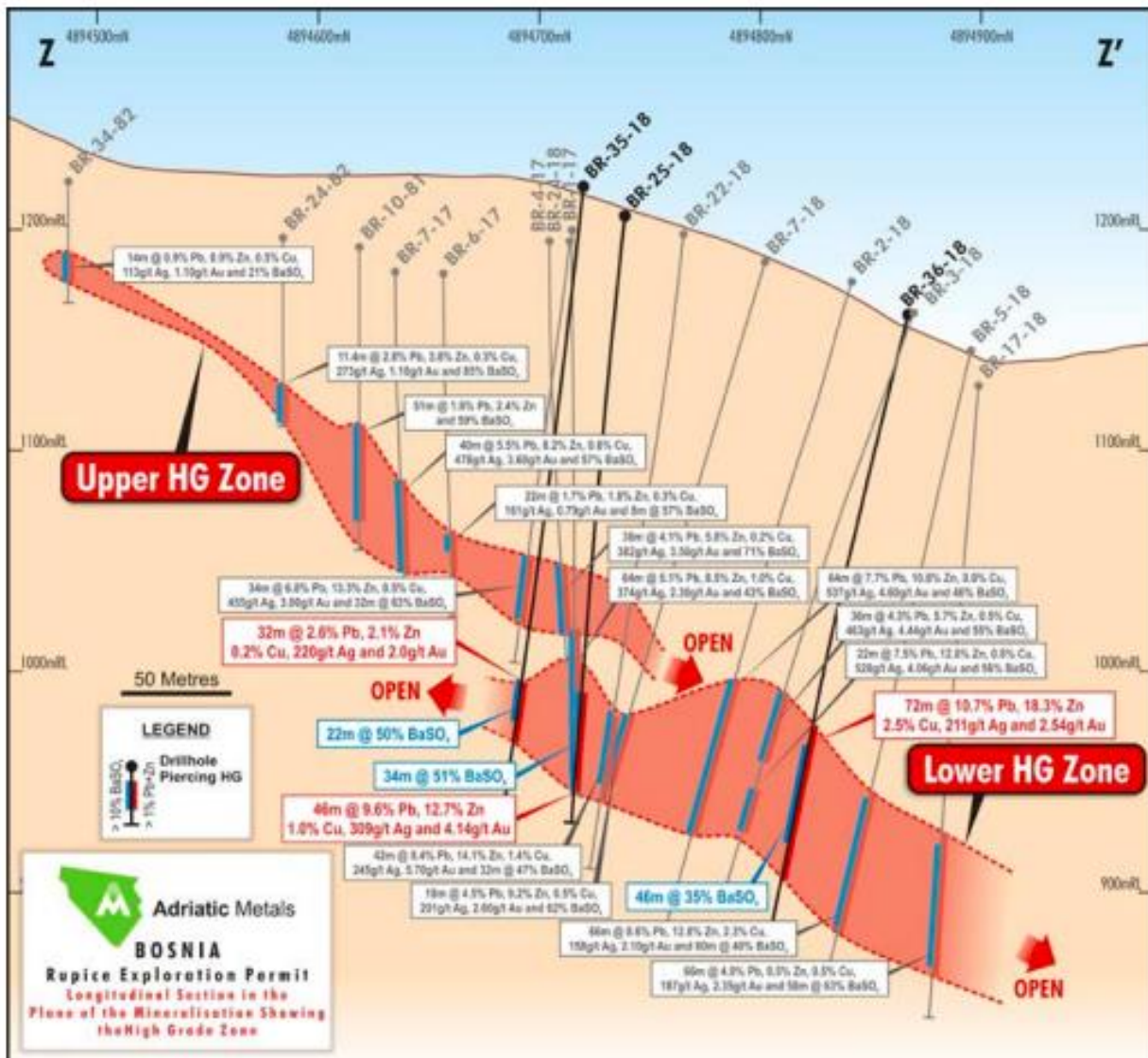
Commenting on the most recent results, Adriatic CEO Geraint Harris stated: *"These drill hole results released today continue to demonstrate not only the exceptional grade, continuity and thickness of the mineralisation at Rupice, but also substantially improve our geologic understanding of this unique region. Our focus in early 2019 will be to extend the high-grade zones to the north and south-east and also to improve our understanding of the system between Rupice North and Jurasevac-Brestic. At Rupice we will declare a Maiden Resource Estimate in the first half of this year. Also, metallurgical, geotechnical and hydro-geological studies are underway, which will feed into a Scoping Study, the Exploitation Permit application and ultimately a Feasibility Study. We look forward to a busy, and successful 2019."*

As Geraint mentions, the grade and thickness of the Rupice ore body is increasing as it extends and dips to the north and backwards to the south-east. In short, further upside at the project will be determined by the scale of these north and south-east extensions.

The south-east extension was only discovered in late November 2018 when hole BR-25-18 intercepted high-grade mineralization deeper and further to the south-east than anticipated. (BR-25-18 returned 22m at 22.6% Zn, 16.0% Pb, 286g/t Ag, 5.6g/t Au, 1.4% Cu and 37% BaSO₄ from 230m.) The south-east extension is still open, giving Adriatic an exciting target to further test over the coming months.

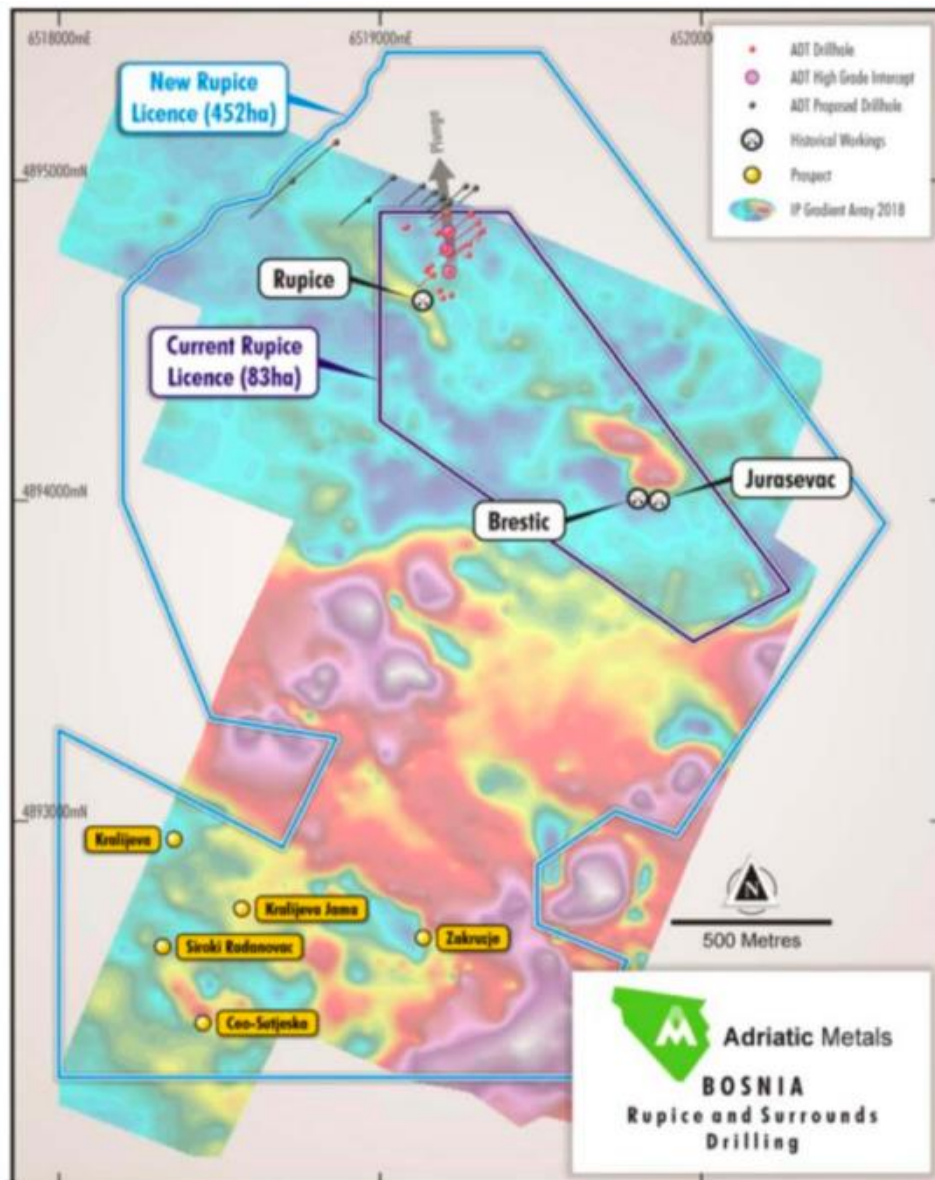
More important is the northern extension, which can be seen as open at depth in the below cross-section. At this point, Rupice is going to be put into production on way or another; however the size of this northern extension will determine whether the ADT share price continues its exceptional run.

Figure 7: Long Section illustrating the interpreted geometry of the high-grade mineralisation



The Adriatic technical team has been chomping at the bit to further drill test the northern extension but the company has already drilled up against the northern boundary of the Rupice exploration license. (See holes BR-17-18 and BR-5-18 in the cross-section.)

Fortunately, on November 6th, the company announced that local regulators had approved an application for a significant land extension to the current Concession Agreement. This was undoubtedly positive for the company and ADT shareholders. As seen in the below graphic, the new license (outlined in light blue) more than quintupled the size of the existing Rupice license and most importantly gives the company another ~ 500 meters of leeway to test the northern extension.



Even with the new license in hand, the company cannot yet begin drill testing the northern extension. As described in the company's news release: *"Before drilling can commence, the Company must apply for an Urban Planning Permit from Zenica-Doboj Canton and once that has been received, apply for an Exploration License from the Federal Ministry. The Company applied for the Urban Planning Permit in December 2018."*

For the time being, the company is at the mercy of the Bosnian federal regulators. The Urban Planning Permit was granted on February 6th and now the company is waiting for the Federal Exploration License. I've heard from management that this federal license should be in hand by the end of February. Under this timeline, new northern extension drill results can be expected in mid Q2 2019. This is the single biggest catalyst for Adriatic Metals shareholders.

Aside from the size of the northern and south-eastern extensions, the other big question mark at Rupice is metallurgy. After all, this is a polymetallic deposit that hosts six different metals (zinc, lead, barite, copper, gold, silver) and will likely produce three different concentrates once in production. For a standard sulphide ore body, we usually see 70-90% recoveries and payability between 80-90%. If Rupice falls into these two ranges, then the story is in great shape. By mid-year, the company is expected to announce a comprehensive metallurgical update with results for both Rupice and Veovaca.

It is going to be a very busy 2019 for Geraint and his team. Greater than 15,000 meters of drilling is planned this year as the company tests the northern and south-east extensions, while also conducting infill drilling to better define the orebody. Metallurgy will be announced in the summer – shedding a light on Rupice’s recoveries and payability. But as mentioned, the story will hinge on the success of step out drilling to the north. This is the single most important catalyst. Before we get answers, we must wait for approval of the Federal Exploration License. If all goes to plan, this license will be in hand this month – allowing for new northern extension drill results to be announced in mid Q2.

Veovaca

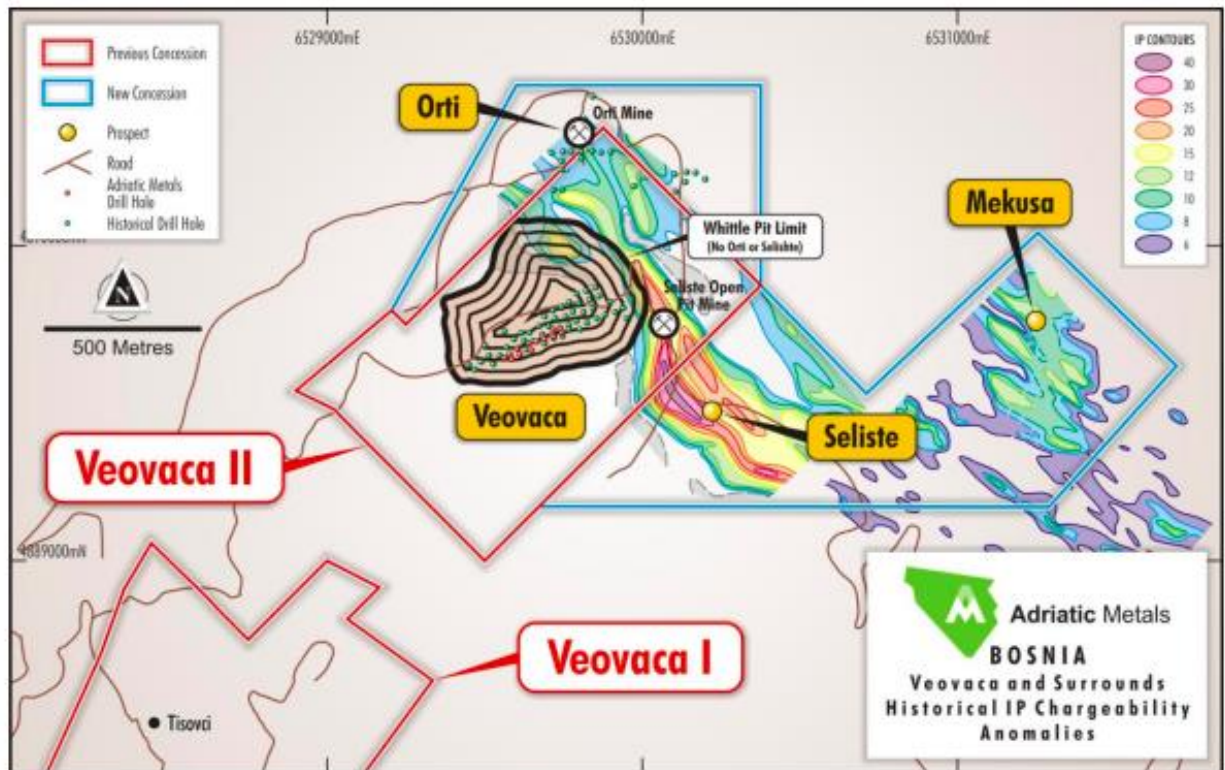
The Veovaca deposit is located 15 kilometers to the southeast of Rupice. As previously mentioned, Veovaca was a past producing mine in the 1980’s. It operated as an open-pit and produced zinc, lead, and barite. Gold and silver were ignored in typical Soviet fashion. The historic Veovaca pit can be seen in the image below.



Veovaca pit looking south east – ore exposed at surface

Thick mineralization remains exposed on the pit's floor. Veovaca has a JORC compliant resource of 4.4 million tonnes of 1.96% zinc and 1.11% lead, using a 2% ZnEq cut off. 64% of this resource is classified as indicated. Notice that no gold and silver is included in the resource model. Adriatic is currently drilling at Veovaca to confirm gold and silver mineralization for the next resource update, which is expected in the next six months alongside the Maiden Resource at Rupice.

Figure 3 – The expanded concession at Veovaca, showing the historical IP chargeability anomalies to the east of the current open pit at Orti, Seleste and, further to the east, the prospect at Mekusa.



The significant land extension announced by Adriatic on November 6th also applies to Veovaca. As seen in the above graphic, the company added land to the north and to the east of the open pit. The expansion will allow the company to commence modern exploration and drilling campaigns over the significant base metal prospects of Orti, Seleste, and Mekusa – where historical work yielded positive results from geophysics, surface trenching, and limited drilling.

Ignoring potential exploration upside from Orti, Seleste, and Mekusa, the Veovaca deposit is important to Adriatic for a couple key reasons. The first is that Veovaca presents a brown-field mining site with excellent infrastructure for the construction of a new project. High grade ore could potentially be trucked down from Rupice, down-blended with Veovaca's existing resource, and then processed near the existing Veovaca open pit. This would both increase throughput and provide a longer mine life than a Rupice-only operation. Trade-off studies on establishing all or parts of the plant at Veovaca will be conducted in 2019, leading into a Feasibility Study by mid 2020.

The second reason is that Veovaca's existing JORC-compliant resource will help ensure a 30-year license tenure for the entire Vares concession – Rupice included. On September 4th, Adriatic announced that the Federal Ministry of Mining had “provided written acknowledgment of the completion of the Reserves Elaborat for the Veovaca deposit.” This satisfies an important condition to receive an Exploitation Permit at Veovaca, which the company expects to have in hand by year end. Once this Veovaca Exploitation Permit is received, the license tenure over the entire Vares concession will be extended to 2048. This will be a significant milestone for major producers considering a takeout of Adriatic Metals.

Valuation

Adriatic Metals is a post-discovery speculation and not a deep value story like our last featured investment Golden Valley Mines. Valuing post-discovery speculations is an inexact science to say the least. The Rupice deposit does not yet have a maiden mineral resource and it is still growing in two directions – making it difficult to quantify the potential upside. Metallurgy for Rupice and Veovaca are both question marks. For these reasons among others, Adriatic has yet to publicly announce preliminary economics for a combined Rupice and Veovaca operation.

The best way to approach valuing a story like Adriatic is a risk-adjusted peer comparison. As mentioned earlier, there are two world-class, high-grade discoveries from the past few years that serve as realistic comps: Sandstorm Gold's Hod Maden in eastern Turkey and SilverCrest Metals' Las Chispas in Sonora, Mexico.

Hod Maden was discovered by a junior named Mariana Resources in early 2015. The discovery hole hit 103 meters of 9 g/t Au and 2.2% Cu; or roughly 1300 gram x meters. (This compares nicely to Adriatic's discovery hole in June of last year: 64m meters at 25 g/t AuEq; or roughly 1600 gram x meters.)

Mariana continued to drill out Hod Maden over the following 24 months before Nolan Watson's Sandstorm Gold announced a takeover bid of Mariana for US\$175m. It is important to note that Mariana only owned 30% of Hod Maden – with the remainder owned by Turkish miner Lidya Madencilik Sanayi ve Ticaret A.S. This means that Sandstorm's offer valued the project at US\$408m on a 100%-basis. At the time of the takeover offer, Hod Maden had an indicated resource of 7.1 million tonnes at 15.6 g/t AuEq - assuming recoveries of 88% Au and 90% Cu.

Las Chispas was first drilled by SilverCrest Metals in 2016. Over the past three years, the project has turned into the most exciting discovery in North America. SilverCrest shares are up an astounding 3400% since the beginning of 2016. The company sports an enterprise value of US\$345m at the current share price.

The best drill result at Las Chispas was announced just last month when Hole BA18-122 intersected 9.3 meters (true width) of 84.5 g/t AuEq. (For some perspective, this is equivalent to roughly 786 gram x meters – or less than half of that of Adriatic's discovery hole.)

In September 2018, SilverCrest announced an updated resource of 4.3 million tonnes at 8.3 g/t AuEq. This assumed a 2 g/t AuEq cut-off and average metallurgical recoveries of 86.6% for silver and 98.9% for gold.

At current share prices, Adriatic Metals has an enterprise value of roughly A\$118m, or US\$84m. For the sake of this valuation exercise, out of conservatism we are going to ignore Veovaca and focus solely on Rupice. As previously mentioned, Adriatic has yet to announce a Maiden Resource at the Rupice deposit. So there is not yet an official number. However, from parties more skilled in resource modelling than myself, I've seen credible estimates between 1.7m tonnes at 15 g/t AuEq on the low end to 4.5m tonnes at 14 g/t AuEq on the high end.

Let's take the midpoint of these estimates and assume 3.1 million tonnes at 14.5 g/t AuEq. We will then discount this by a healthy 20% to account for recoveries that will likely be lower than both Hod Maden and Las Chispas. This leaves us with a current resource estimate of 2.5 million tonnes at 14.5 g/t AuEq for Rupice.

With this Rupice estimate in mind, let's look at a side by side comparison of these three projects. Please note that the Hod Maden numbers are reflected on a 100% project ownership basis, while in reality Mariana (and now Sandstorm) only owned 30% of the asset.

	Tonnage	AuEq Grade	Jurisdiction	Enterprise Value	AuEq Ounces	EV / AuEq Oz
Hod Maden**	7.1 million	15.6 g/t	Turkey	US\$408m	3,561,071	\$115
Las Chispas	4.3 million	8.3 g/t	Mexico	US\$345m	1,147,477	\$301
Rupice	2.5 million	14.5 g/t	Bosnia	US\$84m	1,165,444	\$72
**On 100%-basis at time of acquisition by Sandstorm Gold						

What do these numbers tell us? We'll look at Rupice vs. Hod Maden first. There is a healthy 37% discount between the EV / AuEq valuations for each deposit. While Turkey in its own right has seen its attractiveness diminished as a mining jurisdiction over the past few years, it is inarguably a more desirable location than Bosnia. That said, a 37% discount is too extreme and a number around 25% is more appropriate. This implies an EV / AuEq Oz of \$86 is more realistic for Adriatic Metals.

Hod Maden was acquired by Sandstorm Gold roughly 2 years after the initial discovery. Let's assume that the same thing happens with Rupice in June 2020. I remain hopeful that Rupice alone will end up with over 10m tonnes of economic material. (After all, every successful 75-meter step out to north of Rupice is expected to add another 1 million tonnes of material and then there's the southeast extension to boot.)

However, out of conservatism let's assume that the company is only able to delineate 5 million tonnes at 14.5 g/t AuEq by the time of this hypothetical acquisition in June 2020. Using the more appropriate \$86 EV / AuEq Oz, this implies a valuation of US\$200m – or A\$280m. On a fully diluted basis, this is equivalent to a A\$1.65 share price which is 114% above where ADT trades today. Not bad for less than

18 months of waiting. And the upside could be as high as A\$3.30 if Rupice hits 10m tonnes by the time this hypothetical acquisition occurs.

Now let's turn to Rupice vs. Las Chispas. The first thing to note is that Rupice may already be larger than Las Chispas in terms of AuEq ounces. Despite this, SilverCrest has an enterprise value that is 4x higher than Adriatic's. It is true that Mexico is a more desirable mining jurisdiction than Bosnia, even with the recent handwringing surrounding AMLO's ascension to power. It is also true that Las Chispas is roughly two years ahead of Rupice in terms of development and has an established NI 43-101 resource (though no PEA yet). And let's not forget that SilverCrest has an all-star management team that is better known than Adriatic's.

That said, the disparity in valuations is simply too extreme given the similar size of the two projects. Both of these will become very profitable mines in the near future, but the market is valuing Adriatic as if this won't be the case. All things considered, I think that a 50% discount is a far more appropriate and that this will be borne out over time. A 50% discount implies that a US\$175m (or A\$247m) is an appropriate valuation for Adriatic at this stage. On a fully diluted basis, this is equivalent to a A\$1.45 share price which is 88% above where ADT trades today.

I appreciate that the above valuation estimates are back-of-the-envelope and involve a fair number of assumptions. As previously mentioned, valuing a discovery with no resource (let alone no economic study) is an inexact exercise at best. However, I hope to have demonstrated that when compared to two recent world-class discoveries of similar grade and size, ADT shares could justifiably be trading at twice the current share price of A\$0.77 by mid 2020 – if not sooner. Please remember that any upside from Veovaca and the potential for new discoveries on the greater Vares concession have been completely ignored in this analysis. Additionally, I've assumed that Rupice only grows to 5m tonnes total, while in reality 10m tonnes is not out of the question. I look forward to refining these estimates when the Rupice Maiden Resource is reported in the coming 4-6 months.

Upcoming Catalysts

I've provided below the catalysts that can be expected from Adriatic Metals over the coming few years. As mentioned previously, the most important milestone will be step-out drill results from Rupice's northern extension. Assuming timely issuance of the Federal Exploration License, first assays should be announced in mid Q2 2019.

- Federal Exploration License received **by end February 2019**
- Step-out drill results @ Rupice's Northern Extension **by end Q2 2020**
- Metallurgical results from both Rupice and Veovaca **by end Q2 2019**
- Maiden Resource @ Rupice + Resource Update @ Veovaca **by end Q2 2019**

- First drill results from the Brestic-Jurasevac prospect near Rupice **by end Q2 2019**
- Exploitation License granted @ Veovaca **by end 2019**
- 1-2 additional project acquisitions in Bosnia **by end 2019**
- Feasibility Study from combined Rupice + Veovaca operation **by end Q2 2020**
- Break ground on construction from combined Rupice + Veovaca operation **by end Q1 2021**
- First production from combined Rupice + Veovaca operation **by end 2021**

Conclusion

Rupice is the most excited I've been about a new discovery since Reservoir Minerals and Freeport-McMoRan first discovered Timok in 2012. The exceptional grades and thick intercepts indicate to me that Rupice may be on its way to becoming a Tier 1 asset. The market has certainly not ignored this potential – with ADT shares up nearly 300% since the company's IPO in May 2018. Even with this impressive share price performance, the company is inexpensive at this stage relative to similar caliber discoveries such as Hod Maden and Las Chispas.

All that said, Rupice is still small. Adriatic shareholders need this deposit to continue to grow to make money from the current share price level. That is why the step out drilling of the northern extension is so vitally important to the story. If Adriatic steps out 50-100 meters to the north and hits another ~60 meters of 5+ g/t AuEq, then the share price will continue to march higher. But if the first step out is a duster, the ADT share price could fall by 30-40% overnight.

It is for this reason (along with the project's location in Bosnia) that owning Adriatic shares is not for the faint of heart. These coming few months of drilling will be crucial to the success of the story. But the risk-reward remains tilted in the favor of ADT shareholders. At the company's current stage, a valuation 2x higher could be justified. And in an upside scenario where Rupice grows to 10 million tonnes or larger, then 4x upside from current share price levels should be expected – unless of course the company is taken out in the meantime.

Past Featured Investments

Over the course of previous letters, I've shared featured investment write-ups for fourteen different companies. These write-ups provide current and prospective investors a glimpse into our portfolio, and also give insight into the methodology I use to identify undervalued securities.

We are current shareholders of four of these companies, and I've provided updates on each of them below. I also include the *average cost per share* and *exit price* of the past featured investments that we no longer own.

Golden Valley Mines (TSXV: GZZ)

Featured In: **July 2018**

Average Cost per Share: **C\$0.27**

Current Market Price (Feb 11, 2019): **C\$0.34**

Golden Valley Mines was the featured investment in our most recent semi-annual letter. The partnership has owned GZZ shares since April 2016. Over the past 6 months, we've lowered our cost basis to C\$0.27 per share. Golden Valley remains a compelling deep value opportunity with the company valued at a substantial discount to its cash and marketable securities.

The majority of the value inherent in GZZ comes from company's 44.7% equity stake in Abitibi Royalties (TSXV: RZZ). Abitibi Royalties is a well-managed junior royalty company which owns a 3% NSR on the eastern portion of the Canadian Malartic mine. The Canadian Malartic Mine, operated by Agnico Eagle and Yamana Gold, is no small-scale operation. In fact, production from the mine supports the largest gold mill ever built in Canada. (Agnico Eagle will be announcing its year end results on February 15th and will most likely provide a comprehensive update on operations at the Canadian Malartic.)

There have been a couple positive developments for Abitibi Royalties over the past half year. In late October, the company announced opportunistic acquisitions of a 1.5% NSR on the Midway Project and a 15% NPI on the Radium Property from third parties. Both of these are located within the Malartic complex and further increase the company's royalty exposure to this world-class operation.

More recently, on January 16th the company reported *"that production commenced at the end of Q4-2018 in the area covered by the Company's 3% net smelter royalty ("NSR") at the Canadian Malartic Mine"*. This is referring specifically to the Jeffrey Zone, and production from the Barnat Extension zone will follow in late 2019 or early 2020. The first royalty payment from this new source of production was received in January, and Abitibi Royalties is expecting cashflow of C\$4.0-4.5m in 2019 – a 33% increase over last year.

There was minor setback however. On December 24th, RZZ announced that despite environmental approval from Quebec regulators *“additional conditions will be required to complete the Odyssey Project approval process for a potential operation, beginning with an update of the economic studies for the project”*. This means that development of an exploration ramp (to provide access to underground drilling and the collection of a bulk sample) to the shallower portions of Odyssey South and East Malartic will be delayed into 2019. It was previously anticipated for ground to be broken on the exploration ramp as soon as Q4 2018. Abitibi Royalties holds a 3% NSR on both the Odyssey South and East Malartic zones.

Golden Valley's equity stake in Abitibi Royalties is worth roughly C\$69m at RZZ's current share price of C\$12.12. This compares favorably to Golden Valley's current fully diluted market capitalization of C\$49m. It is worth noting that the Abitibi Royalty share price has hit an all-time high in each of the past three weeks. Meanwhile the Golden Valley share price is still 21% off its recent high of C\$0.43 reached in January 2017.

Golden Valley of course has additional equity stakes beyond its C\$69m position in RZZ. At current share prices, Golden Valley's equity stakes in Val-d'Or Mining (TSXV: VZZ), International Prospect Ventures (TSXV: IZZ) and Sirios Resources (TSXV: SOI) are worth another C\$2.5m combined. Each of these companies have catalysts to look forward to in 2019. Val-d'Or Mining is currently conducting ground exploration programs and will look to drill its Oregon, Magoma, and/or Ducros Sill prospects later this year. International Prospect Ventures has recently secured all of its Pilbara tenement titles and will be advancing work programs this year. And Sirios Resources has announced that a maiden resource estimate will be completed by mid-2019 at its Cheechoo Gold Project. (Remember that Golden Valley also owns a sliding scale 2.5-4% NSR on Cheechoo, in addition to the small equity stake in Sirios.)

Finally, Golden Valley Mines has three active partner-funded joint ventures. Cumulatively, these agreements stipulate for C\$11m in expenditures over the next three years. The first is with Alexandria Minerals, who have the right to earn an 80% interest in Golden Valley's Centremaque property. While Alexandria has yet to report assays from the final five holes drilled at Centremaque in the winter 2018 program, it seems that Alexandria likes what it's seeing. In a December 6th news release, Alexandria announced that *“planning is underway for a 2500m drill program at its Centremaque property”*.

The second of these partner-funded JVs is with Battery Minerals Resources, who have the option to earn an 80% interest in Golden Valley's Island 27 property by spending C\$5m over 4 years. In August, BMR completed a full drill program of 10 holes at Island 27. Assays are still pending.

The third of these agreements is with Bonterra, who recently earned an 85% interest in Golden Valley's Lac Barry by spending C\$2m over a 3-year period. In late 2017, Bonterra discovered the Temica Gold Zone at Lac Barry after drilling 2.7m of 4.7 g/t Au and 44.6 g/t Ag. It is expected that Bonterra will return to Temica for a follow up drill program in 2019 – now that the merger with Metanor has been completed. Golden Valley has a free carried interest to production for its 15% stake in the project as well as a 3% NSR (with 1% of the NSR subject to a buyback for C\$1m).

I've provided below the Golden Valley catalysts that can be expected over the next two years. I've also included some milestones pertinent to Abitibi Royalties and its NSR exposure to the Canadian Malartic Mine, given the relevance to GZZ shareholders.

- Abitibi Royalties announces 3-year production schedule for its Canadian Malartic royalties **by end Q1 2019**
- Drill results (10 holes) from Battery Minerals @ Island 27 **by end Q1 2019**
- Maiden Resource from Sirios @ Cheechoo **by end Q2 2019**
- Drill results (2500m) from Alexandria Minerals @ Centremaque **by end Q2 2019**
- Drill results from Bonterra @ Lac Barry's Temica Gold Zone **by end 2019**
- Drill results from Val-d'Or Mining @ Oregon, Magoma, and/or Ducros Sill prospects **by end 2019**
- Canadian Malartic Group breaks ground on exploration ramp to access Odyssey South and East Malartic zones **by end 2019**
- 1-2 new partner-funded option agreements announced **by end 2019**
- Abitibi Royalties announces first production @ Norrie, Odyssey & East Malartic **by end 2020**

The Golden Valley share price needs to rise roughly 40% before the company achieves a positive enterprise value. Given the company's three active partner-funded joint ventures and the 2.5-4% sliding NSR at Cheechoo, there is no reason why this shouldn't be the case.

In fact, one could also argue that Golden Valley deserves a takeout premium given the 7% position established by Osisko Royalties in early 2018. Abitibi Royalties is a prime takeout candidate for a larger royalty player given its substantial exposure to the world-class Canadian Malartic operation. Any suitor for Abitibi Royalties would have to enter through the front door by buying Golden Valley first. I'm thrilled to have been able to increase our exposure to GZZ, while lowering our cost basis, in the second half of 2018.

Sama Resources (TSXV: SME)

Featured In: **January 2018**

Average Cost per Share: **C\$0.11**

Current Market Price (Feb 11, 2019): **C\$0.285**

The partnership first initiated a position in Sama Resources through a private placement in late 2016. Subsequent purchases have raised our average cost per share to C\$0.11. The company is exploring for a world-class nickel sulphide deposit in the Ivory Coast alongside Robert Friedland's private vehicle HPX.

Importantly, Sama owns 24.7m shares of SRG Graphite (TSXV: SRG) which covers 30% of the Sama's fully diluted market capitalization of C\$70m. The company also has C\$5m in cash, which should cover overhead into 2021.

While it took longer than expected, exploration drilling is finally underway at the company's highly prospective land package in the Ivory Coast. On October 23rd, Sama and HPX announced that a 6000m drill program had commenced at the Yepleu prospect. The program is targeting semi-massive and massive polymetallic sulphide anomalies located between 600m and 900m from surface. Both an airborne HTEM survey and an EM survey powered by HPX's proprietary Typhoon technology were conducted at Yepleu earlier in 2018 to guide the drill program. The announcement also stated that a Phase 2 Typhoon survey is planned over additional EM targets.



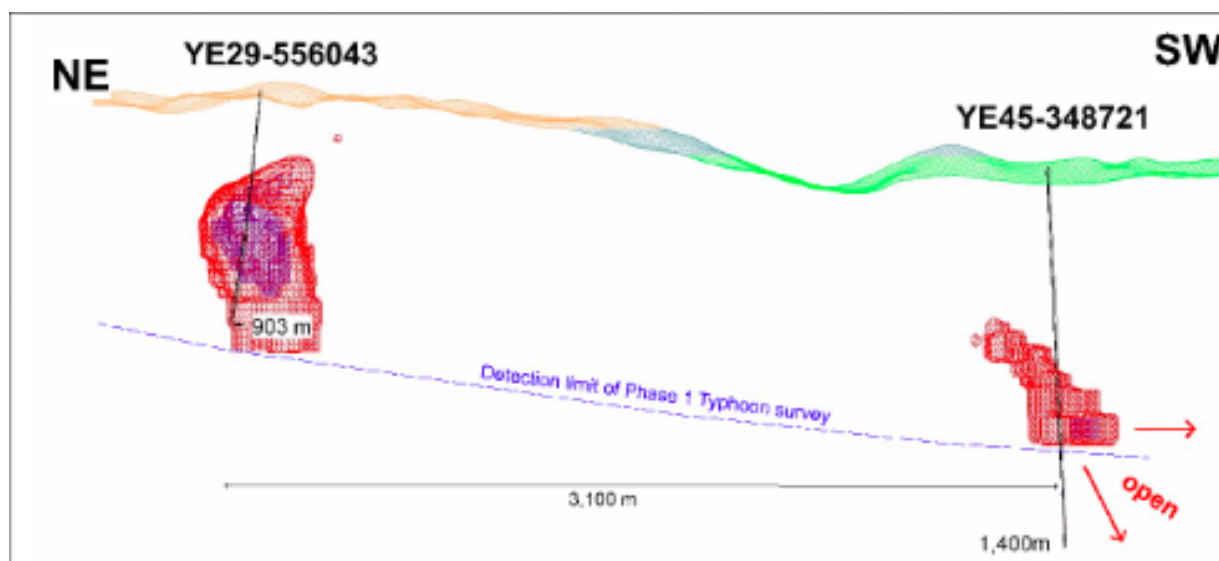
Photo: Capital drilling's rig moving to the first site at Sama's Yepleu project

On December 12th, Sama announced that the first hole had hit 36 meters of mineralized material starting at a depth of 536m and including a total of 10.75m of semi-massive sulphides. Readings from a Niton XRF Analyzer showed up to 5.18% Cu at a depth of 543m and up to 3.56% Ni at a depth of 569m. These grades are not economic at such a depth; however this is an encouraging result for the program's

very first drill hole as it hit the upper edge of the Typhoon EM target leaving the remaining bottom two-thirds and the center untested. The news release stipulated that the hole was at 776m and ongoing.

A month later, on January 8th, the company announced that a second deep exploration hole was underway roughly 3.1 kilometers southwest of the initial drill hole. Reading between the lines, this indicates that Sama and HPX were not thrilled with the remainder of the first hole – otherwise they would be drilling the second hole within a couple hundred meters of the first. This need not worry Sama shareholders as the company has dozens of other high priority targets to test on the property, and this initial drill program still has 4-5 holes left to be drilled.

For the second target, the Typhoon response begins at approximately 750m from surface, with a core at 950m, and appears to be open at depth. A SW-NE cross-section can be seen below showing the previous drill hole (YE29-556043) as well as the current hole (YE45-348721). Based on the turnaround time of the first hole, I would expect Sama to update the market on the outcome of hole #2 by the end of February.



It is also worth touching on the status of SRG Graphite given Sama’s outsized ownership of the company. SRG Graphite is advancing the Lola Graphite Project in Guinea towards production. SRG is currently working on Lola’s Feasibility Study which should be complete in Q2 of this year.

In early October, SRG announced that the *“fieldwork required for the feasibility study is either well under way or completed ahead of schedule or on time”* and that *“given the positive advancement of fieldwork, SRG management is confident in the timeline established”*. A few weeks later, the company announced assays for 162 boreholes completed at the project since June 2018. Highlights from the drill program can be seen below. In terms of size and grade, this is undoubtedly a top tier graphite deposit.

- Hole LL36-262441: 50 m at 8.92% Cg including 48.00 m at 10.07% Cg
- Hole LL39-139708: 05 m at 8.67% Cg including 23.05 m 13.12% Cg
- Hole LL42-112057: 10 m at 8.62% Cg including 21.40 m at 17.61% Cg
- Hole LL48-177588: 85 m at 11.38% Cg including 12.85 m at 12.94% Cg

In mid November, SRG announced that a metallurgical laboratory had been completed on site at the Lola Project. The news release explained that *“the laboratory will serve many purposes such as small-scale graphite production to pursue business development.... training of the local technical workforce, and education of local communities about the project. The laboratory will also be used for sample preparation for exploration, geotechnical metallurgical testing and vendor tests, as well as further tests for process development.”*

Two months later, on January 15th SRG announced that the metallurgical laboratory is now producing 95% graphite samples at various flake sizes. These flake samples are now being sent to prospective offtake partners to test. The company expects 1-2 offtake partners to be announced in the coming six months.

I’ve included below the catalysts that Sama shareholders can expect over the coming months. Given the company’s outsized ownership position in SRG Graphite, major milestones pending at Lola have been included as well.

- Drill results from hole #2 @ Yepleu prospect **by end Feb 2019**
- License renewed for Samapleu PR123 **by end Q1 2019**
- Three new exploration licenses granted **by end Q1 2019**
- Drill results (3800m) from infill program @ Samapleu **by end Q1 2019**
- 1-2 offtakes announced @ SRG’s Lola Project **by end Q2 2019**
- Feasibility Study @ SRG’s Lola Project **by end Q2 2019**
- Production decision @ SRG’s Lola Project **by end Q2 2019**
- PEA announced for Samapleu open-pit operation **by end 2019**
- EIS approval @ Samapleu **by end 2019**
- Mining permit received @ SRG’s Lola Project **by end 2019**
- First production @ SRG’s Lola Project **by end 2020**

The far and away biggest catalyst for Sama shareholders is the remaining 4-5 drill holes from the ongoing 6000m exploration program targeting deep nickel sulphide reservoirs. We can expect these results to continue to roll out into Q2 of this year. A discovery hole has the potential to transform the Sama story overnight.

With 240.5m shares fully diluted, Sama Resources has a market capitalization of roughly C\$70m at the current share price. The company has an outsized working capital position of C\$5m in cash and C\$21m in shares of SRG Graphite (TSXV: SRG). Assuming that all options and warrants are exercised (which would add C\$11.7m in working capital), this results in a fully diluted enterprise value of just C\$32m. This to me is excellent speculative value given the ongoing drill program, the involvement of Robert Friedland, and the sheer size of the prize that HPX and Sama are chasing.

Ardea Resources (ASX: ARL)

Featured In: **July 2017**

Average Cost per Share: **A\$0.73**

Current Market Price (Feb 11, 2019): **A\$0.50**

We've owned Ardea shares for roughly 18 months and it remains the partnership's only cobalt-focused investment. Ardea is advancing its massive Goongarrie Nickel Cobalt Project (GNCP) in Western Australia. It was a busy 2018 for the company with multiple positive developments throughout the year. However, the ARL share price was crushed due to a cobalt price that plunged 53% over the course of 2018. The share price seems to have bottomed out in the 50-cent range and the company is sitting on a healthy cash position of A\$12.2m as of December 31st, 2018.

There have been a couple significant developments at the GNCP since I last wrote about the company. In early October, Ardea announced the following drill results from the Pamela Jean Deeps orebody which likely would be mined first in any GNCP production scenario.

- **AGSR419 112m at 1.30% Ni, 0.26% Co, 31g/t Sc from 30m¹**
- **AGSD0001 100.8m at 1.00% Ni, 0.08% Co from 32m²**
- **AGSR0413 76m at 1.11% Ni, 0.09% Co and 38g/t Sc from 24m**
- **AGSR0418 56m at 1.29% Ni, 0.14% Co and 18g/t Sc 104m**
- **AGSR0190 57m at 1.04% Ni, 0.10% Co and 21g/t Sc from 70m**

Aside from the impressively high grades, these results are significant as they confirm that the base of Pamela Jean is "funnel-shaped" and penetrates up to 165m below surface. With continuous mineralization to depth, this geometry fortuitously mimics the open pit design parameters in the recent

scoping study. Much of this high-grade mineralization was considered waste up until this drill program and will now be incorporated into the mine plan. This lowers the strip ratio and will likely increase the overall head grade from Pamela Jean Deepes.

In late October, the company's executive chair Katrina Law announced that *"The pilot plant trial has demonstrated that a high-quality product can be produced from the ore at Goongarrie and this will be critical during our current search for a strategic partner and potential off-takers. The samples we have produced will now be sent to interested parties for evaluation."* I've included below a visual of the cobalt sulphate crystals produced by the pilot plant. The availability of product samples will go a long way in advancing strategic partner discussions.



Figure 3 - Cobalt Sulphate Crystals

An update of the resource estimate at the GNCP is targeted for completion in early 2019. This will include the 47,239m of new drilling completed by Ardea in 2018. The company is currently awaiting the final drill assays from this program. A strong structural control on mineralization was recognized in 2018 drilling, which will allow more appropriate resource block sizes to be used for selective high-grade mining. The resource will also include variably mineralized carbonate saprock to be used for neutralizing free acid after leaching the ore, which will provide additional nickel and cobalt credits.

Ardea continues discussions with interested funding parties and will seek to obtain the best outcome for shareholders. Once the strategic partner funding is in place, the recent programs can be quickly

expanded to the full feasibility level. Given that a partner has not yet been announced, the Definitive Feasibility Study has been delayed into 2020. I've confirmed with management that the strategic partner will be appointed sometime in 2019 and that the company will not have to raise money in the meantime thanks to the healthy working capital position.

In late November, Ardea announced an increased focus on gold and nickel sulphide exploration at company-owned prospects near the GNCP in Western Australia. This announcement gave me pause as I believe the company should conserve its working capital for the GNCP. However, management has assured me that the exploration budget for the next six months is a modest A\$1m.

This gold exploration effort will focus on the company's Mt. Zephyr tenement. A first-pass drill program commenced in early February targeting the Jones Area A, Paul's Find, Dunn's North, and Dunn's Line prospects. Jones Area A is a Ni-Cu-PGE sulphide target with distinct geological similarities to Mt. Windarra. The other three are gold-focused. Dunn's North and Paul's Find are newly generated targets by Ardea's exploration team. Dunn's Line is a historic gold mining center with limited modern exploration. Drill results for each of these should be announced in Q2 2019.

A two-phase program is also planned for Mt. Zephyr's Gale prospect. This program will commence upon receipt of all necessary drill permits. Dr. Matt Painter, who is spearheading these exploration efforts, recently told me that he *"would go as far to say that Gale is probably the strongest surface gold anomaly in the Eastern Goldfields, if not Australia, that is not associated with historic mining."* I expect the company to receive drill permits at Gale in the first half of 2019, so by the end of summer we should know whether Dr. Painter's enthusiasm is warranted.

To conclude this update, I've provided below the milestones that Ardea shareholders should expect through year end 2019 at the GNCP as well as the company's proximal assets in Western Australia and New South Wales:

- Additional drill results @ GNCP **by end Q1 2019**
- Updated reserve estimate @ GNCP **by end Q1 2019**
- Initial scandium JORC resource @ GNCP **by end Q1 2019**
- Referral to EPA for environmental permit @ GNCP **by end Q1 2019**
- Resource estimate @ Lewis Ponds Project in NSW **by end Q1 2019**
- Drill results from Jones Area A, Paul's Find, Dunn's Line, & Dunn's North prospects @ Mt. Zephyr **by end Q2 2019**
- Drill permits received for Gale prospect @ Mt. Zephyr **by end Q2 2019**
- Drill results from Gale prospect @ Mt. Zephyr **by end Q3 2019**

- Spin out of all NSW assets **by end 2019**
- Drill results @ BTZ Gold Project (adjacent to GNCP) **by end 2019**
- Strategic partner announced @ GNCP with concurrent financing **by end 2019**

At this point, Ardea should be thought of as a cashed-up optionality play dependent on the prices of cobalt and nickel. In recent years I've eschewed optionality investments, which require rising metal prices to render a given project economic. However I've made an exception for Ardea in order to provide the partnership leveraged exposure to cobalt and nickel – my two favorite battery metals.

At its current share price, Ardea has a fully-diluted enterprise value of just under A\$51m factoring in the company's healthy cash position. This looks attractive relative to the A\$50m spent at the GNCP by Vale and Heron between 2005-2009, and the roughly A\$15m that has been put into the ground by Ardea in the past three years.

When the prices of battery metals begin a new up leg, the ARL share price could double or triple in short order like we saw in 2017. However, it should be understood that at current metal prices the GNCP is sub economic. Value creation through gold exploration drilling at Mt. Zephyr and the spin out of the company's NSW assets (including Lewis Ponds) is certainly possible. However, out of conservatism, it is best not to factor in any value from these assets for the time being.

Viscount Mining (TSXV: VML) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **January 2017**

Average Cost per Share: **C\$0.33**

Exit Price: **C\$0.29**

Golden Arrow Resources (TSXV: GRG) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **July 2016**

Average Cost per Share: **C\$0.24**

Exit Price: **C\$0.76**

Excelsior Mining (TSXV: MIN)

Featured In: **July 2016**

Average Cost per Share: **C\$0.24**

Current Market Price (Feb 11, 2019): **C\$0.81**

We've owned Excelsior shares since mid-2014, with an average cost basis of C\$0.24. Despite a couple of very significant developments, the company's share price remains largely flat since I last wrote about the company in August. A struggling copper price due to a strengthening US dollar and growing anxiety over the Trump/China trade war has not helped matters. While this has no doubt been frustrating, MIN shareholders must have faith that the share price will take care of itself as long as Excelsior management continues to deliver on expected milestones.

We'll first start with a review of recent developments before moving onto valuation. By far the most significant was the announcement on October 5th that the company had come to a settlement with the parties appealing Excelsior's UIC permit. (For those not following the story closely, the UIC permit was the final permit necessary for Excelsior to commence construction at Gunnison.)

The company's Oct 5th press release states that *"The Agreement provides for additional monitoring wells and certain other matters. The Agreement does not take the place of the extensive protective measures, monitoring and reporting requirements of the Federal EPA UIC Permit and the State ADEQ Aquifer Protection Permit. However, it does provide for additional items that are a benefit to local stakeholders."*

Subsequent discussions with management revealed that the company agreed to nine additional monitoring wells which cost roughly \$150k apiece. Two of these have already been completed with a third one underway. The remaining six wells won't need to be drilled for at least six years.

Another concession is that the company has agreed to be more sensitive to the "light pollution" that comes with overnight drilling of the Gunnison wellfield. The company is still allowed to drill overnight but have agreed to point the floodlights away from the town of Dragoon.

These concessions are more than reasonable and the company made the right decision in coming to this compromise. I applaud management for working collaboratively with the petitioners to come to a swift settlement. It is rare indeed to see an environmental appeal settled within 90 days of first being lodged.

On October 31st, the company announced a US\$75m construction financing package with Triple Flag Mine Financing – a subsidiary of Paul Singer's Elliott Management Corp. While the company's ability to raise construction financing was never in doubt once the final UIC permit was granted, the party and structure of the deal was a mystery until the very end. I'm sure the company had at least half a dozen financing solutions to choose from. As a shareholder, I am pleased with the structure of the Triple Flag deal.

The package consists of a US\$65 million copper metal stream and a concurrent US\$10 million private placement (which has since closed). The stream stipulates that Excelsior will sell to Triple Flag the below percentages of refined copper at a price equal to 25% of the copper spot price. (Remember that Gunnison is expected to ramp up over three different stages, though the company has hinted that Stage 2 might be skipped pending market conditions.)

Stage 1 (25 M lbs/yr)	Stage 2 (75 M lbs/yr)	Stage 3 (125 M lbs/yr)
16.5%	5.75%	3.5%

Importantly, the stream is not subject to interest payments and is unsecured, allowing for future project debt financing (if necessary) to expand the project production capacity up to the targeted 125 million pounds per year. The agreement also provides an option for Triple Flag to provide an additional US\$65 million in funding for the second/third stage expansion of the Gunnison Copper Project. Excelsior preserves the right to buy-down 50% of the stream at any time.

This package was structured in a way to avoid upfront share dilution and in this respect it was successful. The stream will have a drag on Gunnison's economics, however the project is robust enough to more than support the payments due to Triple Flag. On November 30th, the company announced closing of the financing package and also that Greenstone Resources (Excelsior's largest shareholder at 48.5%) had decided to exercise its pro-rata right to acquire US\$9.443 million in shares at C\$0.95 per share.

In a further sign of confidence in the project and Excelsior management, the well-respected Altius Royalty Corporation announced less than a week later that it would be paying Excelsior C\$5m in return for an additional gross revenue royalty. Combined with the GRRs that Altius previously acquired, Altius now holds a 1.625% GRR on the Gunnison Copper Project while Plant Capacity is less than 75 million lbs of copper per annum and 1.5% while the Plant Capacity is greater than or equal to 75 million lbs of copper per annum.

Between the US\$75m stream & placement with Triple Flag, the US\$9.443m pro-rata exercise with Greenstone, and the C\$5m GRR payment from Altius, Excelsior now has more than enough funding to complete Stage 1 construction – with a healthy working capital cushion to boot. All told, the company has just over US\$100m while the initial capex at Gunnison is projected to cost between US\$50-60m.

Sure enough, on December 4th, the company announced that construction had officially commenced at Gunnison. There are currently five drill rigs turning on site and "63 wells, including 41 production wells and 22 compliance wells, totaling approximately 82,000 feet will be completed" in Q2 of this year. First copper production is expected in Q4 2019, while nameplate Stage 1 production should be achieved in H1 2020 if all goes to plan.

Let's move on to the company's valuation where we now must account for the effect of the Triple Flag stream on project economics. This can be done in numerous ways; my preference is to account for the stream by discounting the copper price payable to Excelsior. Given that the company must sell 16.5% of annual production to Triple Flag at a 75% discount to spot, this is equivalent to the company taking a 12.375% price discount for all of its production ($16.5\% \times 75\% = 12.375\%$). In other words, we can pretend the stream doesn't exist as long as we discount our copper price assumption by 12.375%.

Discounting the current copper price of \$2.80 by this number gives us an effective copper price of \$2.45 per pound. We'll drop this to \$2.25 and assume the non-acid plant scenario out of conservatism. As seen in the feasibility study's sensitivity analysis provided below, this results in an after-tax NPV of US\$405m (or C\$537m at current exchange rates).

Post-Tax Sensitivity Analysis*										
	Acid Plant					Non-Acid Plant				
Cu Price	\$3.25	\$3.00	\$2.75	\$2.50	\$2.25	\$3.25	\$3.00	\$2.75	\$2.50	\$2.25
IRR	51%	45%	40%	35%	29%	51%	46%	41%	35%	28%
NPV*	\$1,086	\$947	\$807	\$664	\$522	\$972	\$831	\$691	\$548	\$405
*million \$ at 7.5% discount rate										

Of course, Gunnison is not in production and as such should not be valued at 100% of after-tax NPV. I typically use a discount of 50% for fully-financed projects that are under construction to account for execution risk. This 50% discount suggests a fair value of C\$268m at \$2.25 copper in the non-acid scenario. Including the C\$133m in cash that Excelsior has on hand, this suggests a C\$1.58 share price given the company's fully diluted share count of 254m ($\$401\text{m} / 254\text{m shares}$). Or 95% upside from the current share price of C\$0.81.

Keep in mind that the above calculation is aggressively conservative for a few reasons. First, we assume that the stream with Triple Flag remains at 16.5% of production for life of mine when in reality it will drop to 3.5% by stage 3. Second, the feasibility study assumes that MIN expands production to Stage 2 and Stage 3 funded entirely by equity. This no longer seems likely given that there is currently no debt component to Gunnison's project financing. Third, we assume life of mine copper prices of \$2.80 per pound. This may be accurate for the next year or two, but copper supply/demand fundamentals suggest that the metal will be priced higher than \$3 for the significant majority of Gunnison's 24-year mine life. Finally, the feasibility study does not account for the recent cut in the US corporate tax rate to 21%.

I've included below the catalysts that MIN shareholders can expect over the coming months and years.

- Drilling of production wellfield completed **by end Q2 2019**
- First copper production @ Gunnison **by end Q4 2019**
- Stage 1 nameplate production achieved (25m pounds per annum) **by end Q2 2020**

- Break ground on Stage 3 expansion **by end Q2 2022**
- Stage 3 nameplate production achieved (125m pounds per annum) **by end 2024**

If there is one weakness to this story, it is the lack of substantial news flow over the next 6-9 months. In the meantime, the MIN share price will be largely beholden to fluctuations in the copper price. However, if management executes on the above milestones, we should see a substantial re-rating in the coming 12-18 months. As soon as Excelsior successfully reaches Stage 1 nameplate production, investors will begin valuing the project at or near 100% of after-tax NPV.

Almadex Minerals (TSXV: AMZ) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **January 2016**

Average Cost per Share: **C\$0.16**

Exit Price: **C\$1.62 CAD**

Quintis Ltd (ASX: QIN) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **July 2015**

Average Cost per Share: **A\$1.16**

Exit Price: **A\$0.00**

Nevsun Resources (NYSE: NSU) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **January 2015**

Average Cost per Share: **US\$2.45**

Exit Price: **US\$4.42**

Tsodilo Resources (TSXV: TSD) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **July 2014**

Average Cost per Share: **C\$0.86**

Exit Price: **C\$0.71**

Lithium Americas (TSX: LAC) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **January 2014**

Average Cost per Share: **C\$1.20**

Exit Price: **C\$12.70**

Phoscan Chemical Corp (TSX: FOS) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **July 2013**

Average Cost per Share: **C\$0.29**

Exit Price: **C\$0.32**

South Boulder Mines (ASX: STB) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **July 2012**

Average Cost per Share: **A\$0.48**

Exit Price: **A\$0.28**

Northern Graphite (TSXV: NGC) – NO LONGER A PARTNERSHIP HOLDING

Featured In: **January 2012**

Average Cost per Share: **C\$0.97**

Exit Price: **C\$0.80**