Research as a Service

Australian Gold Conference 2024 Highlights

Sector Review

Gold Miners

Who and what did we find interesting at the event?

4 September 2024

We attended the 2024 Australian Gold Conference last week at a time when gold is coming back in vogue with the gold price continuing to push to new highs in CY24, exceeding US$2,500/oz or a little over A$3,800/oz. This environment has been good for producers, particularly the higher cost miners that have the most operating leverage to higher gold prices. However, there are early signs that investor interest is starting to flow down through to developers, in particular more advanced ones. Junior explorers remain very much unloved but with the right discovery, share price re-rates and capital does flow. The conference hosted a bit of everything from producers to explorers as well as industry people and investors, thus it offers potential insights from a wide range of people active in the Australian gold sector. This report aims to provide some brief insights and thinking around the sector garnered from attending but also flag several potential opportunities amongst the companies we spoke with.

The gold sector

From an Australian perspective, gold equities have been tough to invest in over recent years as cost inflation has affected producers with domestic operations, especially those in WA, with only a handful demonstrating consistent cashflow generation throughout the period. However, the fortunes of many began to change in 2023 and more so in 2024. In 2024, the gold price lifted from ~US$2,000/oz to ~US$2,500/oz whilst inflation pressures abated leading to a tapering in the growth in all-in sustaining costs (AISC). As such, an increasing number of producers have seen improved cash flow generation or started producing positive cashflows (e.g. ASX:CYL, ASX:PNR) or the prospect to generate positive cashflows (e.g. ASX:OBM). For some producers (e.g. ASX:WGX, ASX:CMM), rolling off or buying out hedging has been a key to improving cashflows. Some entrepreneurial juniors have engaged in joint venture mining to toll treat campaigns of ore from smaller non-core deposits to provide ongoing funding with notable examples being Brightstar Resources (ASX:BTR) and Blackcat Resources (ASX:BC8). For others they sold ounces to nearby producers noting sizable deals involving Patronus Resources (ASX:PTN), Solstice Minerals (ASX:SLS) and Strickland Metals (ASX:STK).

The prospect of sustained improvements in cashflows amongst producers, more so the high cost leveraged ones, appears to be driving increased positive investor sentiment towards Australian gold equities. At some point, positive sentiment should reach a level that increases risk appetite to opportunities further down the curve. This now appears to be occurring in developers with several seeing recent re-ratings and strong appetite from investors to fund project equity with notable examples being BC8 and Meeka Metals (ASX:MEK). Outside of certain examples (e.g. ASX:SPR), explorers remain in the doldrums.

From a WA perspective, the backlog with the mining regulator is a point of issue as approvals for mining proposals have blown out materially with no sign of abating. This means prospective developers or campaign miners must plan further in advance to mitigate the risks of elongated approval cycles and burn less capital in the interim.

On the regulatory front, it is clear from some conversations that the recent Section 10 decision against Regis Resources (ASX:RRL) has marked NSW as a much harder place to do business as a miner, however, I would hazard that investors and companies need to be more diligent in the parts of NSW they invest/operate in. Akin to how it is in Victoria.

An observation of the recent Australian, and to a degree, global gold sector is the divergence of valuations between producers and the rest which creates a strong backdrop for ongoing M&A activity. Producers armed with cashflows, cash and better priced script are in a good position to pick off the companies, projects or ounces that add the most value to their existing operations or growth objectives, in our view.

The companies detailed

Of the 30 or so companies that presented or exhibited at the conference, there were eight that interested us, having appeal from a value perspective and/or having clear catalysts for a re-rate from either mine building or ongoing exploration, even in one case, a return from administration. These are Alkane Resources (ASX:ALK), Flynn Gold (ASX:FG1), Legacy Mineral Holdings (ASX:LGM), Meeka Metals (ASX:MEK), Navarre Minerals (ASX:NML), Patronus Resources (ASX:PTN), Saturn Metals (ASX:STN) and Sunshine Metals (ASX:SHN).

Stocks in this report and prices

Detailed write up	
ALK	$0.395
FG1	$0.026
LGM	$0.210
MEK	$0.054
NML	n/a
PTN	$0.052
STN	$0.205
SHN	$0.013
Brief Mention	
BC8	$0.380
BTR	$0.017
CMM	$5.780
CYL	$2.250
GGP	£6.87
GMD	$2.190
GOR	$1.700
OBM	$0.580
PNR	$0.115
RRL	$1.760
SLS	$0.180
SPR	$1.370
STK	$0.094
WGX	$2.93

Prices as at 3 September 2024

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***The author owns shares in PTN, MEK & SLS**

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Alkane Resources Ltd (ASX:ALK)

Shares on Issue (SoI): 603m, Price: $0.40, Market Cap: $241m, Cash: $52m, Debt: $50m

Most Recent Presentation
RaaS Report for the Sydney Mining Club Leading Edge Conference February 2024

ALK is a company that I have followed personally since the discovery of Boda and I put out my thesis on the stock in 2020 via Livewire. ALK has two projects being its existing mining operation, Tomingley, and porphyry discovery, Boda-Kaiser, both of which are located in NSW.

Tomingley has been operating for 10 years, however, with the relatively recent discovery of the San Antonio and Roswell deposits, the operation is entering a new era as ore from those deposits are mined and processed through the existing plant (subject to upgrades). FY25 is the first year in the new mine plan with ALK guiding to 70-80koz for FY25 with plans to ramp up production to 100-110koz from FY27 to at least FY29 for cumulative production of 455-505koz over the 5 year period. This compares to the prior five years in which the Tomingley operations produced an average of ~55koz p.a. As production ramps up from San Antonio and Roswell, the all-in sustaining cost (AISC) is set to fall, going from ~A$2,400-2,600/oz to ~A$1,900-2,100/oz once production reaches the peak level of 100-100koz p.a. The mine plan to FY29 is supported by defined reserves of 664koz whilst I note that the deposits have a combined total resource of ~1.1Moz thus there is scope to extend the mine life into the 2030s through mining reserves outside of the mine plan and resource conversion. ALK has stated than another $132m in capex over the next 12-18 months is required to achieve the production level of 100-110koz p.a. in FY27.

Boda-Kaiser was a porphyry discovery made by ALK in 2019 and is located east of Dubbo. In July 2024, ALK released a Scoping Study for the project which detailed an economic mining operation that would produce 414kt of copper and 2.1Moz of gold over 17 years and on a gold equivalent (AuEq) basis, this equates to ~225koz p.a. This would require the mining and processing of 323.5mt of ore or ~20mtpa which is a serious scale project noting that the Cadia mine (located in NSW) processes ~35mtpa. Capex was estimated at A$1782m with a life of mine AISC of A$1,902/oz of AuEq (or A$630/oz net of by-products) whilst using a gold price of A$3,500/oz and copper price of A$15,000/t, this delivers a pre-tax NPV7 of A$1,809m and life of mine cashflow of A$324.1m p.a. with a payback of ~4 years. What is clear to me from the study is that this is what I refer to as a “bull market” asset such that it requires stronger and likely higher gold and copper prices than those used in the study to truly incentivise development. In addition, given the quantum of capex, it is a project that ALK would, in my opinion, likely require to joint venture with a partner to fund development. This is a path that has been successfully used by companies such as Gold Road Resources (ASX:GOR), Sheffield Resources (ASX:SFX) and Astron Corp (ASX:ATR) to minimise dilution and secure project equity funding for construction.

I believe ALK presents an intriguing opportunity as the Boda-Kaiser study likely overshadows the progress made at Tomingley and on the basis the company achieves the production target of 100-110koz p.a. at an AISC of A$1,900-2,100/oz, then the current market capitalisation of ~$240m appears low when compared to peers such as Catalyst Metals (ASX:CYL) and Ora Banda (ASX:OBM) who produce/target ~100koz p.a. apiece (noting both have planned growth into the mid 100koz range for FY26) at an AISC well north of A$2000/oz and support market capitalisations of ~$500m and ~$1b respectively. For ALK, these peer examples demonstrate the potential upside from the current $240m on the basis the company successfully delivers to plan at Tomingley in the coming 2-3 years plus adding on whatever value you may ascribe to Boda-Kaiser. I think the key element to understanding the timing and size of any potential re-rate is how the remaining $132m in capex is funded and whether existing cash, cashflows and debt are sufficient to cover the spend. My thinking is that if ALK can comfortably cover the spend, then this removes what is a likely a current overhang which would then enable a potential re-rating into the higher cashflows from production ramp up and deleveraging that occurs post the capex spend.

Flynn Gold Ltd (ASX:FG1)

SoI: 255m, Price: $0.025, Market Cap: $6.4m, Cash: $3.0m, Debt: $0m

Most Recent Presentation

FG1 is a gold explorer whose flagship projects are in the northeast of Tasmania which has been a historically prolific gold producing region and best known for the Beaconsfield mine. The company also has projects in the western side of Tasmania that is more prospective for base metals whilst it also has an extensive landholding across WA which is prospective for gold and lithium but are now considered non-core to the company. Joint venture or divestiture of WA ground may be the preferred options with these assets so I would not be surprised if the company was open to outside interest in either capacity.

Within the company's northeastern Tasmanian landholding, Golden Ridge is the core focus of exploration efforts with gold mineralisation identified across 9km+ of what the company believes to be the contact zone of a granodiorite intrusive. This has led the company to enhance the geological model and considers it to be an Intrusion Related Gold System (IRGS). Drilling to date has identified several prospects along the contract zone which show narrow vein high grade gold often sitting with broader lower grade halos. Most of the drilling to date has concentrated on the Trafalgar and Brillliant prospects thus most the interpreted contact zone along the intrusive remains lightly or completely untested. To the north Golden Ridge, the Warrentinna project has demonstrated thicker higher grade intercepts at the Derby North project and supports the view of the project area hosting orogenic style gold mineralisation typical of this part of Tasmania.

On the western side of Tasmania, FG1's focus is on the Firetower project which is a polymetallic prospect hosting mineralisation comprising of gold, cobalt and tungsten. The company acquired the project in June 2023 and built off prior exploration with a drill programme of 496m in late 2023 to test depth extensions on three prior RC holes and on new diamond holes with results supporting the prior exploration work.

I believe the appeal of FG1 is also a possible issue with sustaining investor interest and support as it has the potential to put together a high grade resource at Golden Ridge as its drills all the prospects along the intrusive but given the nature of vein hosted gold and scale of the intrusive system, it requires a lot of drilling, shallow and deep with a lot in diamond core which is pricey. With such a large contact zone that remains not fully tested, there is scope for FG1 to jag the kind of hit/discovery that could take the market by storm and drive a sustained re-rate. Given the current enterprise value that is little above shell value, the potential for substantial upside creates the appeal to work on the opportunity in more detail, in my opinion.

Legacy Minerals Holdings Ltd (ASX:LGM)

SoI: 105m, Price: $0.245, Market Cap: $25.7m, Cash: $3m, Debt: $0m

Most Recent Presentation
RaaS's company note for the Sydney Mining Club Conference in July 2024

Fortunately, I can keep this brief shorter than the others as my note for the Sydney Mining Club (SMC) Leading Edge Conference in July 2024 is linked above and gives a good run down of the company, their projects and the current state of work programmes.

In essence, I believe LGM is an attractive exploration opportunity given the approach management has taken to project prioritisation and partnering. LGM has seven projects of which four are under active alliance agreements or joint ventures with both juniors (e.g. S2 Resources [ASX:S2R]) and majors (e.g. Newmont [ASX:NEM]). This approach enables LGM to maintain exposure to multiple high impact and ongoing exploration programmes simultaneously. As such, it has a rolling series of catalysts that in theory can drive higher upside risk for success than they would individually to the downside from failure.

Investors often lament companies joint venturing out projects with what they think have tier 1 discovery potential but often forget examples such as Greatland Gold (LON:GGP) with the Haverion deposit. As such, for a junior it is sometimes better to own 20-40% of a potential tier 1* discovery that is well capitalised to explore than own 100% of a project you can't afford to do much with. The terms of the agreements LGM has with its partners noting that the one with Newmont means that LGM is effectively free carried into production on the basis an economic deposit is discovered and progressed to mining. However, to maintain the higher leverage to exploration success that investors do desire in junior explorers, LGM retains 100% of three projects which are Drake, Black Range and Thomson, that it currently plans to fund on its own.

**NB. whilst I talk about joint venturing in the realm of tier 1, the reality of exploration is that most discoveries aren't tier 1 and, in many cases, don't result in economic deposits, however, I aim to highlight that joint venturing doesn't take away from the ability to generate the returns exploration investors expect but owning a lesser share of the project when a high quality discovery is made.*

Meeka Metals Ltd (ASX:MEK)

SoI: 1,935m, Price: $0.055, Market Cap: $106.4m, Cash: $35.9m, Debt: $0m

Most Recent Presentation

MEK's flagship project is their Murchison Gold Project which comprises of the formerly producing Andy Well mine and nearby Gnaweeda deposits which hosts ~1.2Moz of high grade open pit and underground ore. MEK acquired the project in 2020 for $8m from Silver Lake Resources (ASX:SLR). Since acquisition of the project, MEK has grown the resources from 776koz to 1.2Moz and progressed a development plan which has culminated in a DFS being published in May 2024. The study showed an economic mining operation that would produce 400koz over 9 years with capex of $44m at an all in cost of $1,993/oz which delivers a post-tax NPV_8 of $160m using a gold price of A$3,000oz ($244m at A$3,500/oz).

However, not long after the release of the document, the metrics were somewhat redundant as MEK was able to secure a higher capacity second-hand mill, going from 500kW (490ktpa) to 750kW (640ktpa). In addition, MEK acquired the camp infrastructure from the DeGrussa mine. Combined, I estimate that MEK may have saved ~$2-3m in capex whilst it has materially increased the economic potential of the project at the same time given the higher potential throughput. The higher capacity mill should enable MEK to process up to 30% more ore a year over the prior feasibility study with the company currently revising engineering and updating the mine plan ahead of starting construction whereby they will update investors in December 2024 on the updated project economics.

The project has secured all but one permit which is for the open pit at Gnaweeda, noting that the timelines from DEMIRS to process mining proposals has blown out from the targeted/expected 30 days to 139 days on average with only 41% completed within the target timeframe. Post conference, MEK secured a funding package of $73m comprising a $26m gold loan, $12m in a stream with Auramet and $35m in equity (upsized from $23m) incl. a $5m contribution from Auramet. The loan also gives Auramet call options over 12koz of gold (1koz/mth for 12 months) which would be considered a hedge. The upsizing of the equity component gives MEK an additional working capital buffer to manage any challenges that could arise during construction, commissioning and ramp up. Despite permitting delays and the need to update engineering and the mine plan to accommodate the larger mill, MEK says it is still targeting first production in the September quarter of 2025.

Another attribute of MEK is the management team who have successfully built and operated mines, in particular experience with narrow vein underground mines whilst what is also a rarity amongst junior resources companies, via equity and debt, the board and management have invested ~$3.0m+ of their own capital along the way. In the project funding raise, board and management have invested another ~$0.5m.

With funding secured post conference, MEK should be in full control of its destiny to refurb the mill and prove it can become one of the ASX's next gold producers, which hopefully generates excess cashflows. Whilst there is risk ahead through the construction and commissioning phase, junior producers of around scale of production that MEK is targeting have market caps ranging between A$250m to A$1b, thus at a post raise market cap of ~A$96.8m (1.94b shares at the raise price of $0.050/sh), the risk/reward to investors may well be skewed to the upside from here.

Navarre Minerals Ltd (ASX:NML)

SoI: n/a, Price: n/a, Market Cap: n/a, Cash: n/a, Debt: n/a

Most Recent Presentation

NML is a reboot story as it is working its way out of the administration process to return to exploring for gold in Victoria and trading on the ASX. As a brief backstory, the reason for NML going into administration was a function of the prior management team acquiring the Mt Carlton Gold Mine in QLD. Operating the mine was troublesome burning through capital (debt and equity) and with little prospect of operations improving, the company was placed into administration. During this attempt to operate the mine, the Victorian exploration projects received little care and spend.

In June 2024, NML raised $1.7m in a convertible note and approved a plan to be released from the Deed of Company Arrangement (DOCA) which enables the company to emerge from administration with no residual debt or creditors as a pure play Victorian gold explorer, with the same assets the company was focused on prior to acquiring Mt Carlton. The next steps for the resumption of trading on the ASX requires NML to catch up on all its reporting requirements and listing compliance in addition to raising an appropriate level of capital to support ongoing work plans which centres around covering 12-18 months of continuous exploration.

What shape are the Victorian projects in? Well prior to the acquisition, NML had established an inferred resource of 304koz at 2.4g/t across the Resolution and Adventure prospects at the Stawell Corridor Project (NML's Flagship), which is located just south of the Stawell Gold Mine. In addition, an exploration target (ET) was established citing the potential to add between 280-420koz at 2-3g/t to the existing resource, which comprises of drilling along the northwest strike and down plunge at Resolution and at depth/down plunge at Adventure. Parts of the ET appear to be covered by some drilling thus likely appears to be low hanging fruit to be captured through smaller step outs and infill drilling to bring into a resource status, however, the down plunge target at Resolution appears to be more of an extrapolation of the south shoot plunge. Overall, in my opinion, the ET demonstrates the potential for a positive return on investment from resuming exploration at these deposits. NML's portfolio contains several other interesting prospects in addition to a joint venture with Catalyst Metals (ASX:CYL), however, I think post raise and relisting, the bulk of NML's focus will be on the Stawell Corridor Project.

Whilst I have not been conferred the terms of the recapitalisation, if they have been determined yet, I believe the appeal of NML is that recapitalisations are usually done (based on my observations over time) at very attractive terms to the new equity coming in the company. This typically skews the risk/return to the upside, particularly with the prospect of a steady stream of drilling that creates catalysts for re-rates. Thus, I think NML may well be one to watch out for once it goes to investors with the raise.

Patronus Resources Ltd (ASX:PTN)

SoI: 1,637m, Price: $0.053, Market Cap: $86.8m, Cash: $66.8m, Debt: $0.0m, Investments: $22.0m

Most Recent Presentation

PTN, formerly Kin Mining NL (ASX:KIN) is an exploration focused company with assets located in WA and NT, with the latter coming via the merger with PNX Metals (ASX:PNX) which is expected to complete 12 Sept 2024. PTN's cash and investment holdings are a result of two deals with Genesis Minerals (ASX:GMD) with the bulk coming via the sale of the Cardinia Project to GMD in December 2023 in which PTN received $53.5m in consideration for 610koz or ~A$88/oz. As at the date of writing, the combined value of PTN's cash & remaining investment in GMD (~10m shares) is $88.8m which is equates to $0.054/sh.

Further divestment potential remains the two remaining WA gold projects which are located adjacent to the asset sale PTN conducted with GMD. Mertondale is the most advanced, hosting 457koz at 1.22g/t, and is effectively "shovel ready" with access agreements and the mining proposal approved. If there is a willing buyer, I think this project could garner a sale price of $30m+ based on recent transactions. East Cardinia (475koz at 1.42g/t) is less advanced in comparison but work programmes are being planned to advance the project such as to maximise the potential value which I think would be similar to Mertondale. Current work programmes at both projects included drilling to support better resource definition and potential upgrades whilst specifically at Cardinia East, this includes securing relevant permitting such as the mining proposal. The acquisition of PNX also comes with gold projects in the NT.

Beyond these gold projects, PTN has emerging base metal prospectivity after the discovery of the Albus VMS in early 2024. Initial drilling demonstrated a technical success as intercept lengths were skinny, but retains promise given the assays showed potential for economic ore grades. Follow up drilling is planned for 2H24 to test the VMS potential of the project area. Amongst the assets acquired under the merger with PNX, the immediate exploration focus is at the Thunderball Uranium project. Of note amongst the broader work programme at the project is a NT-government co-funded diamond hole which will aggressively step out 450m down dip to test the potential of the existing defined resource. Success with this hole would suggest economic scale potential may exist and would warrant a larger follow up drill campaign to delineate the resource.

The attraction of PTN is that its offers value as an asymmetric return potential as one would retain the upside of further asset realisation and/or exploration success with much lower downside risk given the tangible asset backing and interest income generated from the cash. In my opinion, one can think of it as a low cost call option.

Saturn Metals Ltd (ASX:STN)

SoI: 308.9m, Price: $0.20, Market Cap: $65.9m, Cash: $13.1m, Debt: $0m

Most Recent Presentation

STN is a relatively new story to myself in which my time chatting to Ian Bamborough (MD) provided a good rundown on STN's asset, heap leaching and the company's forward plan. STN's flagship project is Apollo Hill which hosts a gold resource of 105Mt at 0.54g/t for 1.84Moz and whilst this grade appears "too low", it appears amenable to heap leaching given the characteristics of the orebody enable low strip/low cost bulk tonnage open pit mining with ore that has clean and simple metallurgy. Heap leaching differs from conventional CIL processing in which ore is dug up and crushed to a coarse size, stacked onto a pad in which a leaching agent is flushed through the stacked ore to extract the gold rather than being processed through a plant which combines gravity and concentrated leaching. Whilst heap leach mines are uncommon in Australia, they are quite common in North America with several mines producing gold profitably at grades similar or lower than that of what STN proposes to mine.

STN released an updated Preliminary Economic Assessment (PEA) in August 2023 which demonstrated a mining operation that could economically produce 1.23Moz over 10 years. Capex was estimated at A$303.6m whilst life of mine AISC was A$1,857/oz which gives a pre-tax NPV_7 of A$388m with an IRR of 30% using a gold price of A$2,665/oz. I note that at a more current gold price of A$3,300/oz, the NPV_7 increases to A$900m+ with and IRR of 50%+. Like with the previously mentioned MEK, the study highlights the strong operating leverage these developers have in the current gold price environment.

The company is also proposing a three stage development approach to derisk the project being:

- A pilot phase comprising of mining 1.2mt to recover 24koz of gold
- A "Roll On" phase comprising of mining 3.5mtpa
- Commercial phase to at PEA metrics of 10mtpa to recover ~123kozpa

The pilot phase is underway with approvals expected to be submitted in this quarter. Concurrent to this work stream, STN is progressing the pre-feasibility study (PFS) with the key aspect, to me at least, is the ongoing metallurgical test work as recent results indicate the ability to increase the crush size from 8mm to 4mm which should result in recoveries increasing from 75% to 88%. If these results can be proven at a greater scale of testing with consistency, this could drive a step change in project economics which is typically not seen as a company progresses through each level of feasibility work. As a rule of thumb, the best economics are typically at the Scoping/PEA stage with the economics typically "worsening" as a function of the increased scrutiny placed on the inputs and assumptions for a project at higher levels of feasibility. That said, the "worse" economics at a DFS are usually the "realest" economics. To offset this, a company would need a breakthrough in an area like metallurgy or what is more common is a new discovery that can drive a step change in the proposed size of a mining operation.

STN recently completed a A$14m raise which enables the company to further progress the pilot phase work for Apollo Hill in additional to broadening exploration across the project area as in June 2024, it received access agreements for high priority targets along strike from the existing ore body at Apollo Hill.

Like many other Australian resource investors, I am unfamiliar with heap leaching so this is an area for myself to do more work, however, beyond that, I believe STN potentially represents an interesting opportunity amongst the gold developer peers set and trades at a material discount to the value of its proposed mining operation.

Sunshine Metals Ltd (ASX:SHN)

SoI: 1,588m, Price: $0.013, Market Cap: $20.6m, Cash: $3.5m, Debt: $0m

Most Recent Presentation

SHN is a junior explorer whose flagship project is the Ravenswood Consolidated project in North Queensland (~50km from Townsville) which hosts a gold-copper-zinc (Au-Cu-Zn) resource that continues to grow through ongoing exploration. With the success at this project, SHN continues to reduce spending at their other projects or in the case of Triumph, divests them.

Within the Ravenswood Consolidated project, Liontown is the prospect of primary focus from an exploration standpoint with SHN building of the existing polymetallic VMS resource. The resource currently stands at 5.45Mt at ~12% ZnEq of which 63% is classified as indicated. Since SHN acquired the project outright in Sept 2023, the company has grown the resource by ~21% overall and the indicated component by ~116%. Ongoing exploration work in 2024 will be used to support an update to the resource estimate which is targeted for release in December 2024. For a VMS deposit like this, 10Mt is typically a rule of thumb hurdle to justify considering a standalone mining operation. Although it's unclear if SHN will achieve this in the next update, there is a potential pathway to achieving this required level given the orebody is open along strike and at depth and also noting that the hurdle for development may be lower for SHN given the established regional infrastructure which includes smelters (i.e. local customers). The table below shows a breakdown of the resource that may help quantify its value.

	Au	Cu	Zn	Ag	Pb	Total
Measure	Oz	T	T	Oz	T	
Metal Contained	190,391	52,954	357,487	6,512,740	110,062	
Comm Spot Price (US$)	2,493	9,206	2,858	28	2,055	
Insitu Value (US$)	474,644,763	487,494,524	1,021,697,846	184,961,816	226,177,410	2,394,976,359
Proportion	20%	20%	43%	8%	9%	
Comm Equiv	960,680	260,154	837,990	84,330,153	1,165,439	
Comm Equiv Grade Gpt	5.5			481.5		
Comm Equiv Grade T		4.8%	15.4%		21.4%	
Recovery Assumption	65%	80%	88%	65%	70%	
Insitu Value Post-Recs	308,519,096	389,995,619	899,094,104	120,225,180	158,324,187	1,876,158,187
Proportion	13%	16%	38%	5%	7%	
Comm Equiv	752,570	203,797	656,458	66,061,908	912,972	
Comm Equiv Grade Gpt	4.3			377.2		
Comm Equiv Grade T		3.7%	12.1%		16.8%	
Tonnage	5,447,000					
NSR/t (US$)	440					
NSR/t Post-Recs (US$)	344					
Effective Overall Recovery	78%					

Source: Company report and RaaS calculations

The resource is relatively complicated as it is hosted across four separate veins/lenses which have differing metal zonation going from gold rich to base metals rich. This increases the complexity of metallurgy and mine/processing planning, noting that SHN is currently conducting metallurgical test work which will be utilised in the upcoming resource update. In met results on a project like this, the recovery of the metals is not the only important factor as the number of concentrate streams and quality of those concentrates can be very important as that drives the payability of the metals produced. Quality of concentrates is not just about impurities or deleterious elements like Arsenic but the grade of the key metals in each concentrate stream as when a metal is below a certain grade threshold, payability penalties apply e.g. if the Zinc concentrate is below a grade of 53.3% Zinc then additional price discounts are applied. This is above the minimum T&RCs charged by off-takers for concentrate.

SHN continues to narrow the focus on Ravenswood as indicated by its recent agreement to divest the Triumph project to Dart Mining (ASX:DTM) for a total consideration of $2m in which half is paid in cash and the rest in shares of DTM. This further increases the runway for SHN on its current work projects at Ravenswood Consolidated as it builds scale through exploration at Liontown and other prospects within the Ravenswood Consolidated project area.

Summary

I would like to add that I am sure that many other companies at the event which I have not mentioned have equally interesting prospects. However, due to time constraints there was not sufficient opportunity to chat will all companies in order to understand the opportunities they presented. There were also some good companies exhibiting that could be mentioned in this report but we have chosen not to as their story is well known and they are well covered in the market, thus an opinion from myself wouldn't add any insight. The idea of this note is to flag companies that may not be well known to investors with whom I conversed that appear to offer a potential opportunity.

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This Financial Service Guide (FSG) is designed to assist you in deciding whether to use RaaS's services and includes such things as who we are, our services, how we transact with you, how we are paid, and complaint processes

Contact Details, BR and RaaS

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RaaS is the entity providing the authorised AFSL services to you as a retail or wholesale client.

What Financial Services are we authorised to provide? RaaS is authorised to

- provide general advice to retail and wholesale clients in relation to
  - Securities

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Our general advice service

Please note that any advice given by RaaS is general advice, as the information or advice given will not take into account your particular objectives, financial situation or needs. You should, before acting on the advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Prospectus, Product Disclosure Statement or like instrument. As we only provide general advice we will not be providing a Statement of Advice. We will provide you with recommendations on securities.

How are we paid?

RaaS earns fees for producing research reports about companies we like, and/or producing a financial model as well. When the fee is derived from a company, this is clearly highlighted on the front page of the report and in the disclaimers and disclosures section of the report. Sometimes we write reports using our own initiative.

Associations and Relationships

BR, RaaS, its directors and related parties have no associations or relationships with any product issuers other than when advising retail clients to invest in managed funds when the managers of these funds may also be clients of BR. RaaS's representatives may from time to time deal in or otherwise have a financial interest in financial products recommended to you but any material ownership will be disclosed to you when relevant advice is provided.

Complaints

If you have a complaint about our service, you should contact your representative and tell them about your complaint. The representative will follow BR's internal dispute resolution policy, which includes sending you a copy of the policy when required to. If you aren't satisfied with an outcome, you may contact AFCA, see below.

BR is a member of the Australian Financial Complaints Authority (AFCA). AFCA provide fair and independent financial services complaint resolution that is free to consumers.

Website: www.afca.org.au; Email: info@afca.org.au; Telephone: 1800931678 (free call)

In writing to: Australian Financial Complaints Authority, GPO Box 3, Melbourne, VIC, 3001.

Professional Indemnity Insurance

BR has in place Professional Indemnity Insurance which satisfies the requirements for compensation under s912B of the Corporations Act and that covers our authorized representatives.

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The science of climate change is common knowledge and its impacts may damage the global economy. Mitigating climate change may also disrupt the global economy. Investors need to make their own assessments and we disclaim any liability for the impact of either climate change or mitigating strategies on any investment we recommend.

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