Alien Metals: exploring the exploratory assets

Good morning investors of FTSE AIM and welcome to your stock of the week.

Today we're going to take a look at Alien Metal's exploratory portfolio. Last week, I cast a critical eye over Hancock — this remains the flagship and the company's share price, at least in the near term, will be dictated by whether Alien gets a deal for this asset over the line in the near term. The full report is below.

But the focus for this secondary piece is the exploratory portfolio. Interestingly, the name Alien Metals is perhaps a misnomer for a company whose future rests on iron ore (the most commonly mined element), but the exploring perhaps better justifies the name.

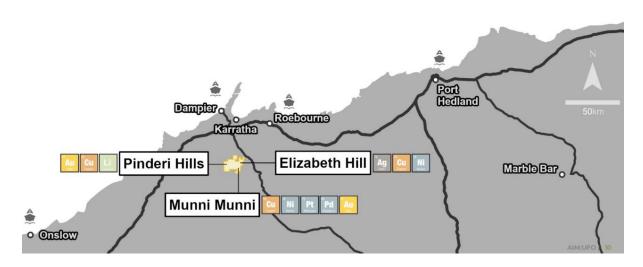
Assuming Hancock gets over the line (and yes, this remains an assumption), there's plenty more to be positive about — and you can consider the exploration as a bonus.

Before we get started, please remember this is not financial advice, and you should only consider investing in small caps from a position of financial resilience and within a diversified portfolio.

Let's dive in.

Pinderi Hills

The first thing to understand, which Alien has not explained particularly well in press releases/RNSs is what the exploratory portfolio actually is.



So here's the breakdown — Pinderi Hills is the wider tenement area. Elizabeth Hill and Munni Munni are licences within Pinderi Hills — and Alien has consolidated these two projects into a single tenement alongside surrounding assets in the Pinderi Hills geographical area into a 100%-owned 180.25 square kilometre parcel of land.

So when Alien says Pinderi Hills, they may be talking about what's going on at Elizabeth Hill, or Munni Munni, or other exploring outside of these two tenements, or all of it as a whole.

It's not confusing if you've been following the story for years, but understandably is not ideal if you're approaching Alien for the first time. The problem is that all of these tenements were previously owned by different owners — but now, as a unified resource, Alien is better positioned than past owners to deliver value.

And they've already identified walk up targets across nickel, copper, PGMs and other critical minerals through a comprehensive geological review.

Let's go asset by asset.

Errawarra Resources Lithium Joint Venture

On 29 April, Alien executed a JV agreement with Errawarra, respecting **solely the lithium rights** on the Pinderi Hills project within West Pilbara.

Here's the breakdown:

- Errawarra can earn up to a 50% interest in the lithium rights in the project by spending up to AU\$4 million, with the first AU\$500,000 being by way of a subscription for UFO shares, gaining the lithium rights for 60 months.
- These shares, admitted on 3 May, were bought at 0.2p (the 10-day VWAP, but now a hefty premium to the current share price).
- It allows some development of the Project whilst also allowing Alien to remain focussed on the development of the Hancock Project and Pinderi Hills nickel, copper, and platinum group metals projects.
- The Pinderi Hills area covers a major ultramafic/mafic complex which is potentially prospective for **lithium bearing pegmatites**.
- West Pilbara is a prospective emerging lithium province, with interpreted pegmatite dykes which the Directors of Alien believe are comparable to the recently discovered Lithium Caesium Tantalum pegmatites within the Andover intrusive mafic-ultramafic Complex located 35km to the north-east.

Executive Director Guy Robertson, at the time, noted that 'Errawarra has immediate plans to commence exploration for lithium on the project.' You'd assume there has now been circa six weeks of initial work.

- 1. In Stage 1 of the venture, Errawarra will earn 25% of the JV by spending AU\$1 million within 24 months.
- 2. In Stage 2 of the venture, Errawarra can earn a further 25% (total 50%) by spending an additional AU\$2.5 million within 60 months. Importantly, some of that additional AU\$2.5 million can be spent within the first 24 months.

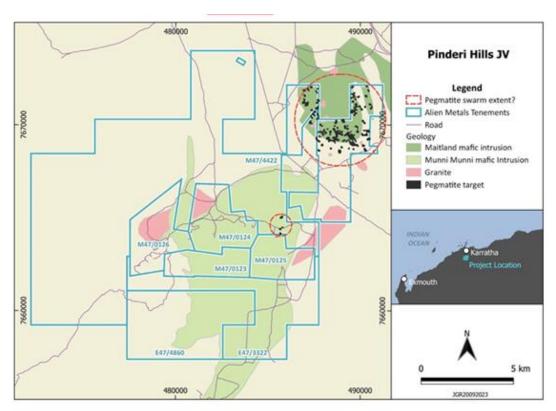


Figure 2: Pinderi Hills pegmatite swarm extent noted to date

Once Stage 2 completes, both companies are expected to contribute 50:50 financially to further exploration or potentially development — Alien better have that Hancock free cash flow by then! If Errawarra doesn't meet the spend, its interest in the JV will simply be adjusted proportionally downwards.

If Alien subsidiary AMA chooses not to contribute financially post-stage 2, its own 50% interest will dilute on a pro rata basis and if it falls to 10% this will be converted to a 2% gross revenue royalty.

Errawarra also retains the first right of refusal to buy the royalty from Alien — and importantly, Errawarra also enjoys first right of refusal to acquire all the remaining mineral rights to the Pinderi Hills nickel, copper, and platinum group metals projects.

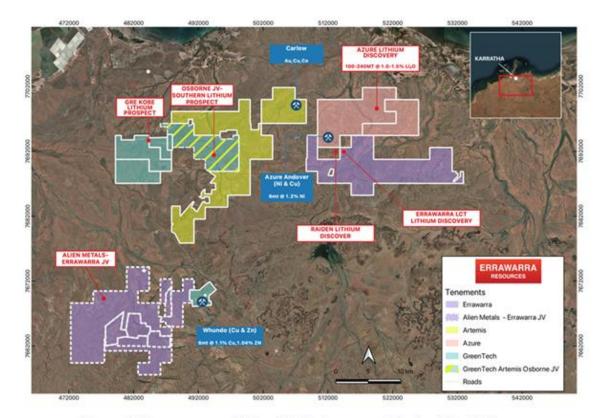


Figure 1: Errawarra and Alien Metals tenements in the West Pilbara

Interestingly, this is all positive news as the lithium rights had a zero carrying value on Alien's balance sheet — and yet the area is clearly prospective, being relatively close to other viable discoveries.

For the technical minded, the JV area is filled with granites belonging to the Orpheus suite of rocks — the legendary Greek could even charm stones with his music — and these granites are associated with lithium pegmatite emplacement in the significantly mineralised lithium pegmatite corridor located 20km to the north.

For context, at the Maitland Intrusive Complex, there may even be pegmatite dyke swarms comparable to the recently discovered LCT pegmatites within the Andover Intrusive Complex located 35km to the north-east.

It's worth pointing out that the JV data will be freely available to Alien, covering all metals — not just lithium. This will be invaluable.

For examples of where this could go:

- Artemis Resources has an AU\$30 million market capitalisation.
- Raiden Resources has an AU\$100 million market capitalisation.
- And for the dreamers, Azure sold for AU\$3 billion, without a resource of even a DFS.

All three are in the nearby region.

Today investors were treated to an update:

- Reconnaissance soil sampling on a 400m x 100m grid comprising 926 samples is almost completed
- Reconnaissance stream sampling comprising 124 samples is almost completed
- Rock chip sampling of pegmatites with some 80 samples collected
- Photogrammetry completed over the NE portion of E47/4422
- A historical drone survey is being reprocessed to assist in the targeting of pegmatites
- Over half of the samples have been dispatched to Australian Laboratory Services Perth
- Complete surface mapping and sampling of pegmatites

Ongoing work will pause after the current reconnaissance program is complete, with the final batch of samples being dispatched within the coming fortnight. The first set of results will be ready by the end of the month, with all results available by the end of July 2024.

After follow-up program will then be planned and is expected to be implemented during Q4 2024.

Munni Munni...

Munni. It's a rich man's world.

The good news for Munni Munni (and also Elizabeth Hill) is that an independent review by Resource Potentials Pty recently reported back — covering recent activities and exploration works planned for later this year at Pinderi Hills (and also Hancock — but that's below).

As a reminder, Pinderi Hills as a complex hosts a combination of PGMs and gold within Munni Munni, silver within Elizabeth Hill, and multiple other nickel-copper and lithium targets — these last metals covered to various degrees via the JV with Errawarra.

- Munni Munni has a JORC 2004 resource of 24Mt @ 2.9g/t PGM and gold for 2.2Moz PGM.
- Elizabeth Hill has a pre-JORC resource of 46.8kt @ 2,700g/t Ag for 4.05Moz Ag.

However, Alien believes that reverse circulation drilling from the campaign of November 2022 is sufficient evidence that the resource at these assets can be 'significantly expanded' and they could:

'potentially host a Tier 1 Precious Metals and Ni-Cu project.'

This view is reinforced by a government-backed Geoscience Australia 2016 report, which highlighted Munni Munni as a 'high-priority area for a world-class ultramafic hosted Ni-Cu-PGE Sulphide deposit.' The whole thing is located close to major infrastructure — just 50km from mining regional city Karratha. And this is Australia, the best mining jurisdiction on earth.

Resource Potential principal consultant and geoscientist extraordinaire Dr Jason Meyers' review means Alien is confident enough to expedite exploration, with a plan to increase the current resource base and even potentially find new deposits. Exploration is planned for Q3 — that is, next month — starting with soil geochemical surveys over the main Ni-Cu target areas and Judy's Reef PGM trends.

Technical Director Robert Mosig enthused:

'Further to Resource Potentials' review of Pinderi Hills, including encouraging silver, base and precious metals drilling results from Elizabeth Hills (AIM: 20 February 2023), the Company has fast-tracked plans to develop the Elizabeth Hills Silver Mine, as well as furthering our understanding of base

metals deposits as we explore new opportunities in the area. The region's recent history has not been explored, so we are delighted, based on the review and the Company's previous drilling program, to announce our plans for the next phase of exploration in the region.'

The Meyers factor

Australian government department Geoscience Australia has highlighted Pinderi Hills as having a high potential for intrusion-hosted Ni-Cu-PGM sulphide deposits in mafic/ultramafic complexes.

In terms of silver, previous drilling by Alien in 2022 identified exceptional broad intersections of native silver.

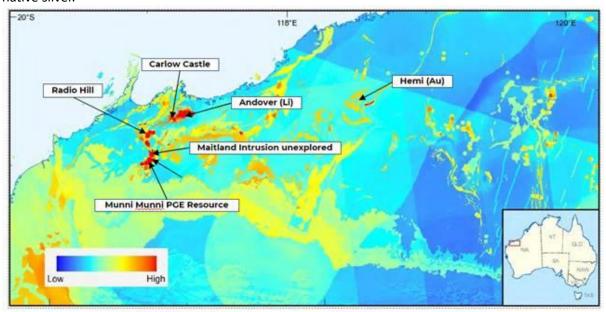


Figure 1: West Pilbara high potential areas for Ni-Cu-PGM sulphide deposits with the focus on Munni Munni Complex (Geoscience Australia, 2016)

These mafic/ultramafic complexes of the West Pilbara are some of the most fertile rock types for significant discoveries — if you don't believe this then just look at any map of mining assets in Australia. They're igneous rock formations that form when magma cools and crystallises underground, with the composition of the magma determining the specific minerals that form within the complex.

Alien is planning a comprehensive exploration programme led by Mosig — who has over 40 years of experience and has already explored the Pinderi Hills location as MD of Helix Resources (NOT Helix Exploration) and Platina Resources.

To expedite the programme, Meyers — who spent a decade as an Associate Professor in Exploration Geophysics at the WA School of Mines — will be assisting closely. He and his team have completed a comprehensive study on the mineral potential of Pinderi Hills and provided a recommended exploration plan.

The plan for Q3 2024 is centred around soil geochemical surveys over the nickel-copper targets and Judy's Reef PGM trends. As both mineralisations overlap, Alien should be able to test for both styles in one program — with the results to be used to help decide where to conduct geophysical work and future drilling. Alien also plans to target larger silver ore bodies at depth at Elizabeth Hill — along the strike from the known silver deposit/mine zone.

Once again, the data from Errawarra from the current fieldwork is expected to provide critical information which will assist in the analysis and drill targeting for silver, base and precious metals at Pinderi Hills.

Technical detail

Let's take a deeper look at the current resources, including key drill results:

- 1m @ 3.98% Cu, 12 troy ounces ("ozt") Ag, 0.95% Ni from 35m in EC002
- 1m @ 3.5% Cu, 125ozt Ag, 0.58% Ni from 2m in UGD063
- 5.2m @ 2.18% Ni, 166ozt Ag, 0.76% Cu from 3m in UGD069
- 1.05m @ 1.90% Ni, 114ozt Ag, 1.25% Cu, from 5.05m in UGD072

The Elizabeth Hill Silver Mine has a pre-JORC compliant resource of circa 4.05Moz of silver and in the past was once Australia's highest-grade silver mine.

Over 1 million ounces of silver was produced in 1999-2000 from a shaft and on-site processing plant before the mine was closed during a dispute between the previous joint venture partners back in 2000. The mine is now 100% owned outright by Alien, and prior historical drilling has been compiled into a secure geological database.

Long-time readers will know that this is one of my favourite strategies; buying decent assets for cheap when there is already a massive database, where the asset has been sold for non-technical reasons.

Indeed, this idea has been used to great effect by other companies in Southern Africa.

The main silver mineralisation is located south of the Volcanogenic Massive Sulphide anomalism, which has been targeted with several historical reverse circulation holes. It lies on a structurally controlled fault contact between granite and ultramafic rocks, with the main zone of mineralisation plunging steeply to the south. Drilling of the interpreted parallel structures is in the long-term plan.

It's also worth noting that Elizabeth Hill has previously recorded values of up to 2.09% — and Alien thinks it could also add gold, platinum and palladium credits to the resource through further exploration.

For example, at Munni Munni, Alien already thinks more PGMs can be found. The current (2004) resource (not JORC-2012 compliant) stands at 24Mt @ 2.9g/t Platinum Group Element and gold for 2.2Moz PGM. This includes 1.14Moz of palladium, 0.83Moz of platinum, 152koz gold and 76koz of rhodium.

And Munni Munni is already considered to be one of the country's largest platinum group deposits.

The current Munni Munni resource mineralisation is on the Hunter/Ferguson Reef. However, field mapping and geophysical interpretation have together highlighted a lower reef — Judy's Reef — that has seen very limited drilling and only needs some basic soil sampling to advance it towards drill target status. And previous metallurgy test work on the asset can arguably be upgraded via modern techniques.

Alien reported decent reverse circulation drilling results in April 2023, which targeted Judy's Reef; the takeaway was that a reef similar to the Hunter/Ferguson Reef at Munni Munni is located further west of this drilling. They reported anomalous PGEs, nickel, copper and elevated chromium units of a similar tenor form and orientation, with a similar dip to the granite contact as seen at the Munni Munni Resource area.

The asset's intrusive complex is tilted onto its side, so the base of the intrusion is located along the northern edge and eastern edges, where Judy's Reef West and Judy's Reef PGM reefs form along the basal contact with the surrounding granite.

The base of the intrusion is largely under-explored for intrusive Ni-Cu-PGE sulphide deposits and the company notes that it requires soil geochemical surveying, mapping, EM surveying and drilling. The nickel-copper mineralisation could be similar to the successfully mined deposit at Radio Hill, located around 15km to the north.

One last target — the Cadgerina Dyke is a magma conduit for the Munni Munni intrusion, and remains untested by electromagnetic surveying or drilling, despite having strong geochemical anomalism. This could be a very interesting target to explore.

Further Elizabeth Hill considerations



In the 18 months that the previous operator mined silver at Elizabeth Hill, the price was just US\$5 per troy ounce, and the metal is now trading six times higher at circa US\$30 — arguably this is still too low given the disconnect between silver and gold and its historical price pairing.

It also focused on mining and selling specimen silver nuggets, as these command a more than tenfold price premium compared to standard silver. This includes the pictured silver specimen owned by junior explorer magnate Mark Creasy and the 145kg Queen Karratha nugget which can be viewed in the Perth Mint— Australia's largest ever found.

Sadly, the mine was pillaged for specimen silver with the day to day production never specifically for the normal silver grades.

For context, high grade silver mines remain rare — most silver mines are at grades running into the 100s of grams per tonne and use silver equivalent credits (including lead and zinc) to bolster the investment case. Elizabeth Hill remains predominantly silver at 1000s of grams per tonne and was historically Australia's highest grade silver mine.

There's also the potential to start up some small scale silver production while also exploring the wider resource. You could see a scenario where Elizabeth Hills is producing silver while the asset size is increased via exploration — potentially paid for by the silver sales.

In this single year of operation between 1999 and 2000, the operation mined 1.2Moz @ 70.6ozt/t Ag (2195g/t Ag) — and mining stopped in a single day due to the JV partners falling out with each other. A large untapped resource could be out there, waiting to be discovered.

Alien's initial drilling hit some 19.7m @ 113ozt/t Ag, in additions to bulk tonnage suggesting intercepts such as 52m @ 22.6ozt/t Ag.

The project is located over the eastern part of the Munni Munni Intrusive Complex, at the contact of basement granites and the Munni Munni sequence. The Munni Munni fault is a major north-south regional structure with a horizontal displacement in excess of 500m, along which the Elizabeth Hill Mineralisation has been intersected over only a 100 m north-south zone along the boundary of the fault.



Native silver with associated copper (green) in drill core, drillhole EHDD003, 16.5m depth, Elizabeth Hill, September 2021

Alien's maiden drilling totalled 19 holes covering 1.991m, spread across the Project and comprising 4 diamond drilled holes totalling 211m, and 15 holes and 1780m of reverse circulation drilling.

Interpretation of the diamond core results suggest the mineralised envelope at Elizabeth Hill may be larger than work by previous explorers has suggested, with the mineralisation starting at surface in easily extractable material.

Diamond drill results include:

- 19.7m @ 102.8ozt/t Ag (3198g/t Ag) from 5m with end of hole mineralisation of 1.7m @ 638.7ozt/t Ag (19,865g/t Ag) from 23m, in drillhole 21EHDD003.
- 24.8m @ 28.2ozt/t Ag (877g/t Ag) from 2m in drillhole 21EHDD001.

RC drill results include:

- 52m @ 22.6ozt/t Ag (703g/t Ag) and 0.009% Pb from 38m in drillhole AMEHRC009
- 2m @ 49.8ozt/t Ag (1,550 g/t Ag) from 108m, in drillhole AMEHRC012, which represents a
 potential new mineralised zone 400m south of the Elizabeth Hill mine along the Munni
 Munni Fault.

In November 2022 Alien completed a follow up drilling program comprised of 12 holes for 1,370 metres designed to test the down dip, plunge and depth extension to the known high grade silver mineralisation. However, due to water inflow some holes did not reach their target depths.

Regardless, Alien reported:

42m @ 12.1ozt/t Ag (377g/t Ag) and 0.52% Pb from a depth of 8m in drillhole 22AMC001 Including 13m @ 35.4ozt/t Ag (1102g/t Ag), 1.11% Pb and 0.48 g/t Au-Pt-Pd from 16m.

This result confirmed extensions to the main silver lode, which when combined with a re-evaluation and re-interpretation of historical data available strongly suggests the original EH high-grade, narrow silver vein is in fact the high-grade core of a much larger mineralised halo.

As a result of multiple holes not reaching there target depth, the programme is considered unfinished and further drilling remains warranted.

Grant funding?

It's probably worth considering some of the key quotes from Mosig's interview on the Dig Deep Mining Podcast — posted out on 13 June.

Here's the key quotes:

- 'Naturally, I guess, Alien's vision is to become a miner in the very near term.'
- 'Right now we have iron ore and it's imminent into production.'
- 'With iron ore, we have a lot of the larger companies sniffing around now thinking about...let's see if we can't do some form of negotiation.'
- Maybe iron ore might be shared, and with both Elizabeth Hill and Munni Munni...these could be mined together.'

We're not hanging about for the Lassonde Curve weakness; that part of the journey is over. With a 'super team' in place, and huge advances in geophysical and drilling tech, Alien seems set for exploratory growth.

Unsurprisingly to anyone in mining, West Australia is booming in terms of exploration — and importantly Mosig noted that 'the Australian government is looking particularly at helping juniors and the more advanced companies in terms of funding.'

It's possible this could apply to Pinderi Hills because while there's some impetus for silver exploration, it's also clear that more widely, the Australian government would like to develop more PGM mines outside of South Africa to help develop its own independent supply.

The bottom line

Mosig notes that the plan is to be 'doing an aggressive drilling program out on Pinderi Hills later this year or early next year.'

We know that the plan is to get Hancock over the line within the next few weeks/months — so there is a future where Q3 sees a JV partner come in to run the show at Hancock, while Pinderi Hills exploratory work gets going.

Q4-Q1 then sees drilling start at Pinderi while the cash rolls in from Hancock.

That's the plan anyway.

Bonus: Hancock update

Today's RNS continues to tease a near-term funding deal — Alien is 'is actively progressing the ongoing review of strategic funding options with regards to the Hancock Project, including possible funding by way of joint venture and or debt funding.'

Approvals to explore sufficient to expand the resources and reserves to circa 20-50Mt (up from 8.4Mt @ 60.20% Fe) are being finalised — and the company is undertaking bulk sample collection for testing to end users (steel mills).

Engineering and transport logistics are advancing well, and are scoped for mining, crushing, road haulage, and port loading — with the intent to further develop and then move towards a tender process.

Robertson noted that 'As negotiations continue with potential funding partners with regards to the Hancock Project, Alien is working hard on progressing developmental milestones and expanding the existing iron ore resource significantly in Q4 2024 with additional exploration at the Mallina Target west of the Hancock Mining Lease.'

Of course, with BCI Minerals recently selling its iron ore assets to Mineral Resources' subsidiary Polaris Metals — for \$60.1 million certain + \$12.5 million potential — it's fair to consider whether this major could be the partner in mind.

This is especially viable as MinRes has a history of getting in bed with partners before conducting a full buyout. But there's also Hancock Prospecting — John Hancock (Gina Rinehart's son) used to own the project.

But it's not like there's only one buyer for Western Australian iron ore assets out there. Macarthur Minerals is selling the rights to mine and develop its Lake Giles Ularring iron ore project to Gold Valley Yilgarn in a deal that could be worth up to \$89 million.

And CZR Resources has agreed to sell its majority interest in the Robe Mesa iron ore project in Western Australia to a subsidiary of China's Shenzhen Naao Jianglan Investment Company for some \$102 million.

Time to get this over the line.