



Resources Stocks Down Under

🗨️ *Darkdoom did this? Oh, why is it always the bald ones?* 🗨️

- Mark Walden, (b. 1972), Author of the Higher Institute of Villainous Education series

SUNSTONE METALS

Exploration in the Light
of America

RED DIRT METALS

Golden times in the
Golden State

ALTECH CHEMICALS

HPA key in new
generation batteries

SUNSTONE METALS

Exploration in the Light of America

Stocks Down Under rating: ★★★★★

ASX: STM
Market cap: A\$235M

52-week range: A\$0.012 / A\$0.123
Share price: A\$0.11

Aptly-named Sunstone Metals is hunting for large-interconnected copper and gold systems in Ecuador. If there's one thing this little South American country has a lot of, it's copper and gold. That reputation is delivering strong results for Sunstone at two underexplored projects - Bramaderos (87%) and El Palmar (51%). Having reached its first objective at El Palmar, Sunstone is awaiting further assays to plan its next steps.

[READ MORE](#)

RED DIRT METALS

Golden times in the Golden State

Stocks Down Under rating: ★★★★★

ASX: RDT
Market cap: A\$198M

52-week range: A\$0.14 / A\$0.935
Share price: A\$0.76

Maybe it will be considered impolite in some circles to say that you own stock in 'Red Dirt', but we actually think it is more memorable than the old name of TNT Mines. One of the reasons behind the name change was the September 2021 acquisition of the Mt Ida Gold Project from Ora Banda Mining which, apart from its untapped gold and copper potential, also appears to have hidden sources of lithium – to everyone's surprise.

[READ MORE](#)

ALTECH CHEMICALS

HPA key in new generation batteries

Stocks Down Under rating: ★★★★★

ASX: ATC
Market cap: A\$152M

52-week range: A\$0.04 / A\$0.15
Share price: A\$0.105

Emerging High Purity Alumina producer Altech Chemicals has spent the last several years working out its plans for HPA production from its kaolin project in Western Australia, and is now close to branching out into the graphite market to support demand for higher quality lithium batteries. Although movement has been slow, the company is working on patenting its HPA coating technology while planning for an actual processing plant in the heart of Asia.

[READ MORE](#)

SUNSTONE METALS

Exploration in the Light of America

Stocks Down Under rating: ★★★★★

ASX: STM
Market cap: A\$235M

52-week range: A\$0.012 / A\$0.123
Share price: A\$0.11

Aptly-named Sunstone Metals is hunting for large-interconnected copper and gold systems in Ecuador. If there's one thing this little South American country has a lot of, it's copper and gold. That reputation is delivering strong results for Sunstone at two underexplored projects - Bramaderos (87%) and El Palmar (51%). Having reached its first objective at El Palmar, Sunstone is awaiting further assays to plan its next steps.

Share price chart



Source: Tradingview

Another porphyry in copper's boom-time

Sunstone is hunting in elephant country. Let us give you two examples of how big copper and gold projects can become in Ecuador. The first relates to SolGold, LSE: SOLG. That fortunate company has been kicking around in a concession in Ecuador called Cascabel since 2012. The current resource at Cascabel, just in the main deposit of Alpala, is a truly gigantic 21.7m ounces of gold, 9.9m tonnes of copper and 92.2m ounces of silver. That's about the same amount that you could find at Llurimagua, a potential future copper mine of Chile's state-owned Codelco. At that deposit we're talking 982m tonnes grading 0.89% copper and 0.04% molybdenum.

Okay, Sunstone hasn't bagged its porphyry copper-gold elephant yet, but the early work is promising. Take the El Palmar project, which is located in northern Ecuador only 60km northwest of Ecuador's capital, Quito. The first drilling here came up with a 480-metre-long copper-gold intersection from a 11-metre depth, with assays revealing hits like 0.71 g/t Au and 0.20% Cu from 52 metres.

Then there's Bramaderos, located in southern Ecuador 130 km from the city of Loja. Bramaderos contains multiple targets, with six gold-copper porphyry systems identified and at least two epithermal gold-silver systems to the north-east. Sunstone is excited about this one because it could be an extension to the Dynasty Goldfield Project of Titan Minerals (ASX: TTM) which we wrote about on [14 January 2021](#). Bramaderos is also a venture between the company and Cornerstone, with 87% ownership to Sunstone. At this stage, the Brama

deposit is the most advanced. On 18 November 2021, Sunstone reported hitting 111m (you read that right) at 2.3g/t gold, including 7.2m at 26.9g/t. Clearly, there are strong indications of a large gold-copper porphyry at the surface with 13 holes drilled to date. As Sunstone said in its announcement, “outstanding result reveals potential for Sunstone to make a second major discovery”.

A moment in the sun

With two developing projects in tow, Sunstone is part of an exciting time for Ecuador as it rapidly evolves its mining sector. Mining is now a firm part of Ecuador’s growth – representing US\$80m in exports in 2020 – under new President Guillermo Lasso, who appears keen to improve responsible mining and expand foreign investment. With several copper and gold discoveries coming up, Bramaderos is a prime example of a project with long-overdue exploration: sporadic exploration since the 1970s has slowly uncovered anomalous zones of copper, lead, molybdenum and zinc and the discovery of several centres of porphyry style gold-copper, with a focus on the Brama deposit. With five additional porphyries only partially-tested or not tested at all, Sunstone has finished its Phase 1 program and begun Phase 2 for an additional six holes covering 2,300 metres as a basis for a resource estimate.

In the midst of a staged settlement with Cornerstone Capital Resources (TSX-V: CGP) to secure 100% of the El Palmar property, Sunstone also has its eyes on defining new magnetic targets to pinpoint the project’s similarity with neighbouring Llurimagua. As previous exploration was undertaken with no geophysical data, all information is new information, but Sunstone’s magnetic surveys have delivered a compelling porphyry target at the project’s centre. Assays received from four drillholes have so far uncovered strong gold as well as the presence of bornite (sometimes called ‘peacock ore’, a colourful copper iron sulphide mineral) and other high-grade copper sulphide minerals suggesting higher copper grades are present within the system. The company’s 2,000 metre program over the next three months will help to determine if there is a significant discovery.

Pushing the envelope

Sunstone is fully-funded (through cash and equity) with \$21m as of September 2021. But it’s always a good idea to have extra cash for core projects, so on 16 December 2021, it received another \$920,000 in cash and shares after selling 83.6% interest in its Finland Lithium project to United Lithium Corp (CSE: ULTH). So, there should be no imposition moving forward with the staged acquisition of El Palmar as it continues to meet the project’s development milestones. The company will eventually move to a cash payment of \$2m for 100% acquisition. While Sunstone has no near-term plans for a capital raising, much of the work already done at El Palmar speaks for itself, and the addition of another drill rig to the next phase of drilling will concentrate on providing further upside from those four holes.

At Bramaderos, the December 2021 quarter saw the start of a detailed geological 3D model of the Brama deposit, with six more drillholes planned to underpin a mineral resource estimate (MRE), after which Sunstone will consider which target is next. Since the company is fully-cashed up and pushing the envelope to uncover a large porphyry system from surface, its exploration success (so far) has led to gains in the share price, which is now around its high of \$0.123. We think there’s more where that came from. Four stars.

RED DIRT METALS

Golden times in the Golden State

Stocks Down Under rating: ★★★★★

ASX: RDT
Market cap: A\$198M

52-week range: A\$0.14 / A\$0.935
Share price: A\$0.76

Maybe it will be considered impolite in some circles to say that you own stock in 'Red Dirt', but we actually think it is more memorable than the old name of TNT Mines. One of the reasons behind the name change was the September 2021 acquisition of the Mt Ida Gold Project from Ora Banda Mining which, apart from its untapped gold and copper potential, also appears to have hidden sources of lithium – to everyone's surprise.

Share price chart



Source: Tradingview

Sea of red

Acquired in September 2021 for \$11m in cash, Mt Ida – which includes the historic Timoni Gold Mine – has a current gold resource of 318,000 tonnes at 13.8 g/t Au for 141,000 ounces, but Red Dirt's shares have shot up since it identified multiple high-grade lithium results from historic drilling and rock chip sampling. The assay results were recovered from a 5 km strike on the western side, including 24 metres at 1.84% lithium and 350 ppm (parts per million) tantalum from spodumene-bearing pegmatite. Located 100 km north-east of Menzies, previous operations at Timoni and environs have produced over 300,000 ounces at a grade of 17.2 gold.

Alongside Mt Ida, Red Dirt has a growing gold story at its Eureka Gold Project, 51 km north of Kalgoorlie, once the site of an open pit operation in the early 1990s. While ore is still available at the existing pit, Red Dirt has managed to expand the current resource with a wider plan to discover the regional opportunity. Red Dirt maintains two other pre-production stage projects at Warriedah, 50 km north-west of Paynes Find in the Yalgoo gold field, and Lockeridge in the Earraheedy Basin, east of Wiluna.

A literal Eureka moment

Red Dirt identified those lithium intervals just four days after the Mt Ida acquisition closed in September, resulting in a share price rise from \$0.18 to \$0.90. That's an unusually good restart for a project which hasn't seen any exploration since 2009, even though previous diamond drilling data did show spodumene-bearing pegmatite in the Baldock copper-gold deposit. The company's new multi-element analysis has so far

identified 15 holes containing assays for lithium and tantalum, from over 4,000 holes. As the project contains multiple lodes with limited drilling, Red Dirt's first 3– 6 months will see it remodel all geology and commence first drilling and geophysics at the prospective Dave and Timoni deposits, which still have resource growth potential. Similarly, no copper production has been recorded at Mt Ida, but the Baldock deposit contains copper mineralisation in chalcopyrite (a copper-abundant sulphide mineral), which the company will use to target further copper discoveries through downhole electrical geophysical techniques.

Obviously, the high-grade gold system still available at Mt Ida is the main attraction, with near-surface oxide resources offering potential short-term cashflow options after years of under investment. But while a decision about the mining process is still a long way off, Eureka has a newly updated resource of 112,000 ounces at 1.42 g/t Au, an increase of 68,900 ounces gained for a mere \$21 per ounce outlay. Since the early '90s, limited exploration has mainly focussed around the existing open pit with the objective of following the existing mineralisation down dip, which Red Dirt have been testing since April – with assays pending – but very minimal work has been done outside the pit area. In an effort to find the edges of a wider gold system, the company has finished its third round of RC drilling over 1,816 metres, which has shown high-grade mineralisation intersected in Eureka's north and northeast extension.

Don't tread on the wildflowers

The company's good findings at Mt Ida have already led to a flurry of activity, with junior explorer Victory Mines deciding to apply for five additional exploration licences at its Mt Ida-Ida Valley Project, which shares a boundary with Red Dirt. While Mt Ida's first pass diamond and RC programs will take priority, the strong results at Eureka have given the company another reason to get to work before year's end for follow up, especially the northern portion and at another gold anomaly further south (parallel to the Zoroastrian pit).

Although Warriedar and Lockeridge are still in the tenement acquisition and geophysics stages, Mta Ida remains an encouraging multi-element asset with lithium, gold and copper values and suitable processing opportunities. Red Dirt has mapped out its list of milestones for the project over the next two years, which includes increasing the resource at the Baldock, Meteor and Whinnen deposits before turning to regional testing. The company recently completed a \$15m capital raise so it's funded for the near term. After so many years being tied up in the Davyhurst plans, Ora Banda's financial decision may be a real gain for Red Dirt. Four stars.

ALTECH CHEMICALS

HPA key in new generation batteries

Stocks Down Under rating: ★★★★★

ASX: ATC
Market cap: A\$152M

52-week range: A\$0.04 / A\$0.15
Share price: A\$0.105

Emerging High Purity Alumina producer Altech Chemicals has spent the last several years working out its plans for HPA production from its kaolin project in Western Australia, and is now close to branching out into the graphite market to support demand for higher quality lithium batteries. Although movement has been slow, the company is working on patenting its HPA coating technology while planning for an actual processing plant in the heart of Asia.

Share price chart



Source: Tradingview

Here comes the technical bit

Using the feedstock from its 100% owned kaolin (or aluminium-bearing clay) deposit at Meckering in Western Australia, Altech is aiming to become one of the leading producers of 99.99% (4N) alumina at a proposed plant in Johor, Malaysia for use in lithium-ion batteries and several other applications. While the company continues its testwork for its HPA product in Australia and in Germany, Altech is also exploring for new sources of kaolin, most recently uncovering a new deposit in Western Australia.

If you know something of the industrial versatility of kaolin and halloysite (a rare tubular derivative of kaolin), it's surprising how underappreciated these minerals remain compared to big-time 'green' minerals like lithium. HPA has a much smaller (but high-value) niche as a critical ingredient required for the production of synthetic sapphire in LED lights, scratch-resistant glass and the separator coatings in lithium-ion batteries. HPA's use as a separator coating is of particular interest to battery manufacturers because of alumina's ability to reduce capacity and safety problems in lithium batteries. As silicon is a major contributor to that, battery makers are keen on 4N HPA and its low levels of silica and other impurities.

There are gains to be made in several markets

Given the huge expectations in HPA demand – which could climb from 30,000 tonnes per annum to 272,000 tonnes per annum by 2028 – the immediate focus for Altech and others is how to most efficiently produce HPA, with the small minority of HPA stocks using different methods. Rather than exploiting expensive refined aluminium metal from hard-to-find bauxite deposits, Altech is looking to find a much lower-cost solution directly producing 4N HPA from kaolin clay – a huge advantage when the feedstock has already been purified and processed naturally. As the company is following a simple acid leach process, it expects a low production cost of less than US\$10 per kg. That kaolin advantage is set to get a bit better with the kaolin market expected to expand to US\$6.3bn by 2026 as refined aluminium supply shrinks.

As production of high-grade HPA requires a rigorous process, the company has previously opened a battery materials HPA coating plant in the Saxony region of Germany, where research and development into alumina-coated graphite for the lithium-ion battery industry is the focus. While Altech has since submitted its own patent for that technology, the company has now established a newer R&D lab in Perth to expedite those plans. At the same time Altech is advancing its pre-feasibility study work for the proposed 10,000 tonnes per annum coating plant back in Saxony, where the focus is on using renewable power to produce anode graphite. With the process design complete, the company's subsidiary Altech Advanced Materials (AAM) completed a capital raise in the June quarter of €3.07m to support the PFS costs. On the plus side, Altech already has an MoU with German graphite supplier SGL Carbon in place.

An expensive undertaking

After all that, Altech's base case for Meckering stands on its own, with the project's Final Investment Decision Study (FIDS) detailing a 4.5 tonnes per annum operation over 30 years. After CAPEX of US\$298m (A\$398m) this project has a Net Present Value (NPV) of US\$505m (A\$675) at a 7.5% discount and an Internal Rate of Return (IRR) of 22% for payback over four years. The cash balance of \$3.9m on 30 September 2021 doesn't cover costs required for all the plant, PFS and construction at Johor and Meckering. However, Altech raised \$10.3m in December 2021 and we think this has potential to fund the company through to project financing.

Altech's stock has more-or-less range traded between \$0.09 and \$0.14 since early November. The breakout from there will, we think, be driven by further news on the Johor's processing plant. Continued good form on the price of aluminium will also likely help. This and the obvious future need for quality HPA sources in the future make this one a four star opportunity.

Pitt Street Research Pty Ltd

95 Pitt Street, Sydney, NSW 2000, Australia

Stocks Down Under gives you an information advantage to better invest and trade in ASX-listed stocks!

Stocks Down Under (Pitt Street Research AFSL 1265112) provides actionable investment ideas on ASX-listed stocks. The Content is financial advice but is not (and cannot be construed or relied upon as) personal financial advice. No investment objectives, financial circumstances or needs of any individual have been taken into consideration in the preparation of the Content. Please make sure that investing in such products is suitable for your circumstances, and ensure you obtain, read and understand any applicable offer document.

Financial products are complex, entail risk of loss, may rise and fall, and are impacted by a range of unpredictable market and economic factors.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from Pitt Street Research Ltd Pty. All intellectual property relating to the Content vests with Pitt Street Research/ Stocks Down Under unless otherwise noted.

Stocks Down Under/Pitt Street Research directors and staff may own shares in the companies mentioned in our articles, videos, reports and analyses.

You are receiving this email because you subscribed to our newsletter.

