St george lithium-ion batteries

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St George is building a portfolio of exploration and development projects to capitalize on the global clean energy trend. We are at the start of a multi-decade transition to clean energy, which is driving unprecedented demand for critical metals like lithium, nickel, and copper.

Some forecasts give more colour to the magnitude of the clean energy transition. The US government forecasts the global supply of lithium alone needs to increase 42 times by 2050 to meet the rising demand for electric vehicles. Rio Tinto predicts that to enable plausible growth in emission free energy, more copper will be required in the next 25 years than was consumed in the last 500 years.

Let"s look at your flagship Mt Alexander project, where you have added lithium to your nickel sulphide discoveries. You recently received promising results from the Jailbreak lithium prospect, have these results helped your understanding of the distribution of pegmatites in the area?

Our first discovery at Mt Alexander was for high-grade nickel sulphides. We have discovered four near-surface deposits across a strike of 5.5km. The mineralization is predominantly nickel sulphide, but includes high-grade copper, cobalt, and platinum group metals. We completed detailed metallurgical test work with XPS in Falconbridge, Canada - a Glencore subsidiary and experts in this kind of polymetallic nickel sulphide. That work confirmed that we can produce separate nickel and copper concentrates with high credits for copper, platinum group metals, and cobalt.

We are now continuing to drill-out these nickel discoveries and to further consider an appropriate mining proposal. The rise in the nickel price - around 400% since we made our first discovery in 2016 - is giving us more options on how we can commercialize this mineralization.

In October 2021, our neighbours at Mt Alexander - Delta Lithium (ASX: DLI) - formerly Red Dirt Metals, announced a high-grade lithium discovery and proclaimed the region a new hard-rock lithium province. That prompted us to add lithium exploration to our field programme at Mt Alexander with immediate positive results. A 15km-long pegmatite corridor was identified within our tenure, with many wide pegmatite outcrops mapped and confirmed by sampling to contain high-grade lithium.

We completed drill programmes in late 2022 and early 2023 at the Jailbreak prospect. Drilling intersected pegmatites from near surface and down to more than 250m depth. The drill results confirmed that we have a large, fertile pegmatite field with the highest-grade lithium intercepts found within the pegmatites hosted in the ultramafic belt. This was an important finding in how the pegmatites and lithium are distributed along the pegmatite corridor. With only 2km of the 15km pegmatite corridor drilled so far, this understanding is very useful for ongoing drill targeting.

St George holds a large part of the new Mt Ida lithium province that is being actively explored for pegmatite-hosted lithium, are there any other significant projects in the area that help to build a picture of the deposit size?

In addition to St George, the other two main explorers are Delta Lithium and the joint venture between Hancock Prospecting, Legacy Iron (ASX: LCY), and Hawthorn Resources (ASX: HAW). Delta already has a maiden resource, which is being fast-tracked to development. The maiden resource is just the beginning, as drilling continues at a frenetic pace, it will almost certainly result in a significant upgrade to the resource.

This area is certainly growing in significance within Western Australia (WA) as a premier hard-rock lithium address. We expect to see more discoveries in this area. It is an established mining region, which makes mine development much easier, and could attract lithium hydroxide or carbonate plants given the large resource base in the area.

Ajana is now drill ready and we expect to start in the next few weeks. We have used modern geophysics to identify what we believe is a layered mafic intrusion, which could host nickel-copper sulphides. This is a large-scale target and, if it is mineralized, we could be looking at a very significant discovery.

At Woolgangie, we have ground that covers around 100km of the Ida Fault - a major crustal fault in WA that is associated with numerous major deposits, including the large Kathleen Valley lithium deposit. In addition to lithium targets, we have rare earths and copper targets. These are supported by historical drilling that intersected rare earths and copper, but the discoveries were never followed up on as the explorer was looking for nickel. We will aim to be drilling at Woolgangie in the second half of 2023.