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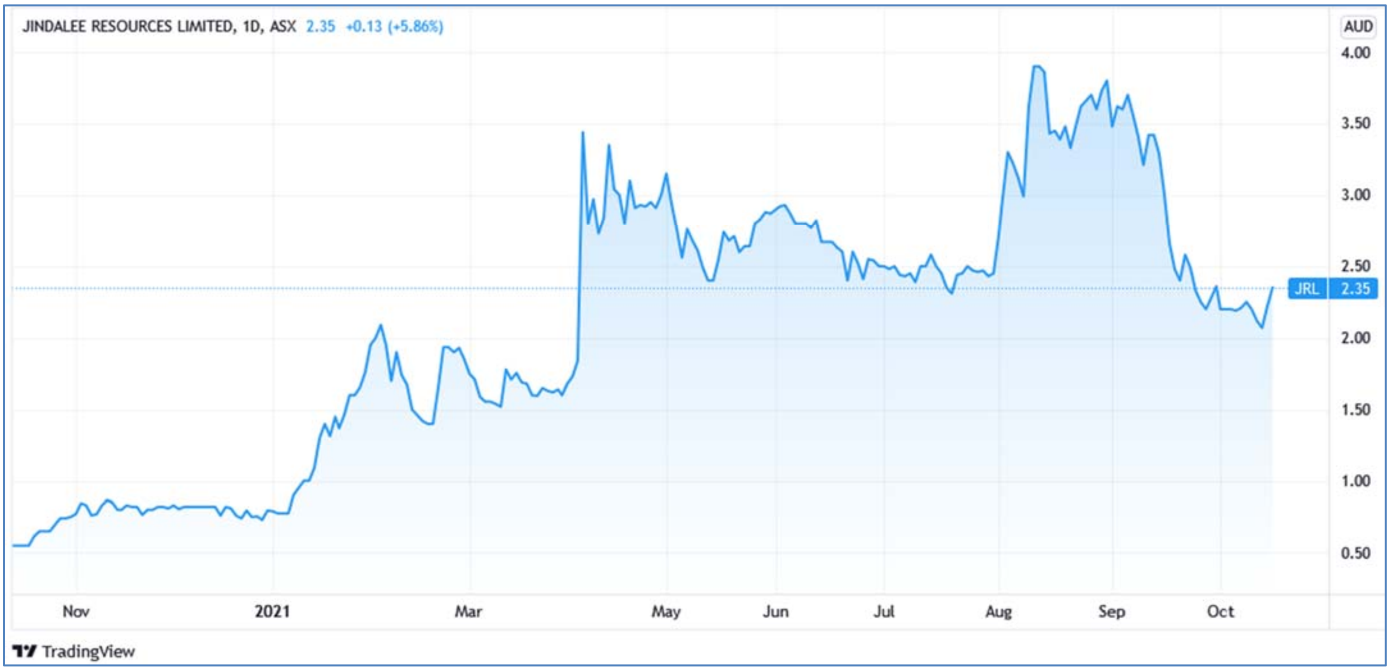
RESOURCE BULLETIN by Gavin Wendt

Friday 15th October, 2021

Stock to Watch

Jindalee Resources - (ASX: JRL, Share Price: $2.37, Market Cap: $112m)



Key Catalyst

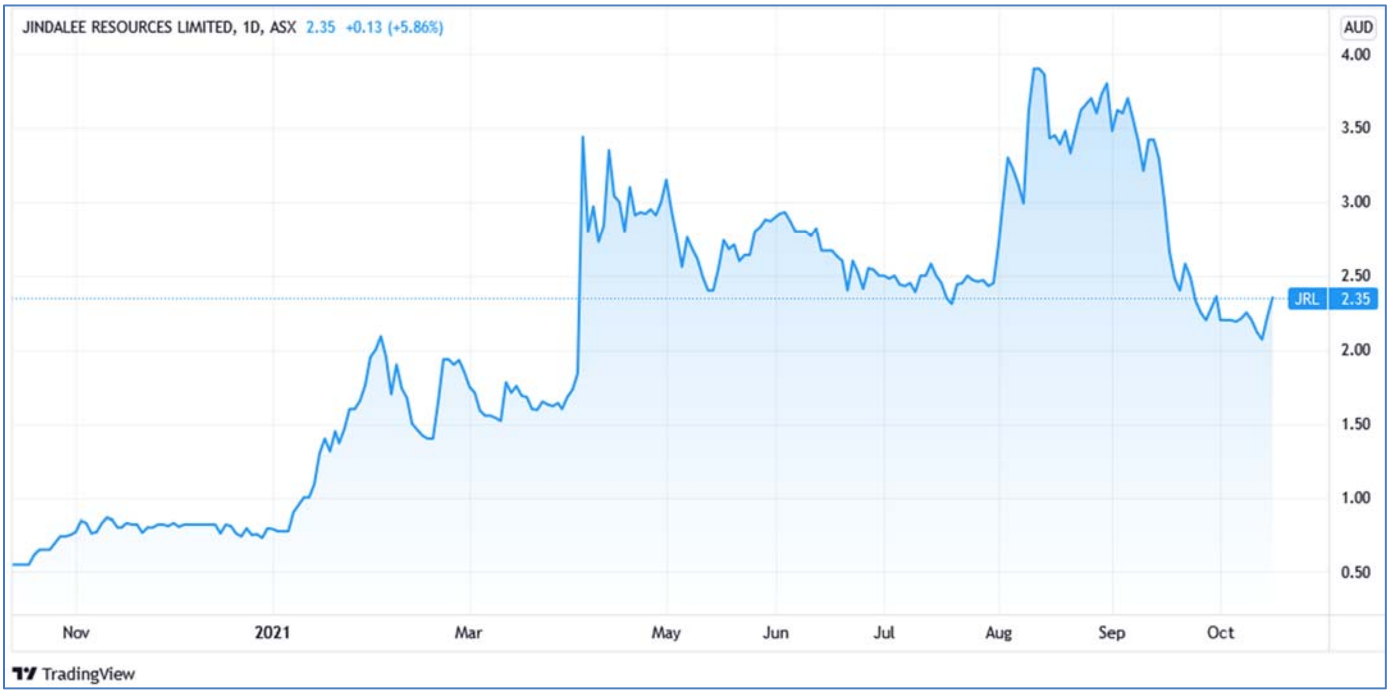
Completion of Preliminary Scoping Study on McDermitt lithium project in the USA confirms potential to produce high-quality lithium carbonate to supply US battery makers for decades.

JRL is an emerging player in the lithium sector, having invested more than three years in detailed exploration and evaluation of its McDermitt lithium project, which is located in southeast Oregon, USA since it acquired the project back in June 2018. Extensive drilling work since its work programs commenced in September 2018 delivered a maiden Inferred Mineral Resource during November 2019, which was subsequently enhanced through additional drilling and resulted in an enlarged Indicated and Inferred Mineral Resource that was announced during April 2021, comprising 1.43Bt at 1,320ppm Li for 10.1Mt LCE (using a cut-off grade of 1,000ppm Li). The entire Indicated and Inferred Mineral Resource sits within 100m of surface and is flat-lying, both positive factors for future project economics. A recently completed Preliminary Scoping Study supports the case for a viable standalone processing operation.

Overview

We have followed JRL's progress for a little over a year now, however we'd felt that we'd effectively 'missed the boat' as it were, given the company's strong share price performance, based on the rapid exploration progress that it had made at its McDermitt Lithium Project in the USA, which has coincided with rapidly escalating lithium demand and prices, as well as a surge in investor interest in the sector that has led to a spike in the share prices of ASX-listed junior lithium plays.

Along these lines, JRL has benefitted from all of the positive factors outlined above with respect to its' share price performance for the majority of the past 12 months, however over recent months the company has seen a sizeable retracement that has put it out of step with its emerging lithium peers. This can be seen clearly in the graphic below.



It's fairly accurate to say that the share price retracement can be directly related to some sections of the market being disappointed with the results of the company's recently released Preliminary Scoping Study for its McDermitt Project. Frustratingly for existing shareholders, directors and outsiders watching the stock, JRL has not able to announce as much information as it would have liked with regards to the project, due to restrictions related to ASX listing rules. Some JRL shareholders have interpreted the lack of detailed information as a negative indicator, which in turn has led to selling in the market and share price retreat in the wake of the Scoping Study's release. Indeed, JRL's share price has fallen from a high of $4.05 to a recent low of $2.07, before recovering somewhat in today's trade to $2.37.

In my mind, the recent share price retreat represents an ideal opportunity for investors to take a look at what appears to be a well-managed company with a high-quality resource base, which has completed a Preliminary Scoping Study that support a viable standalone lithium mining and processing operation, with a long project life that can supply the rapidly growing US battery manufacturing industry.

McDermitt Preliminary Scoping Study

On 16th September, JRL announced the results of a Preliminary Scoping Study with respect to its 100%-owned McDermitt Lithium Project, which is currently the largest lithium resource in the USA.

The key outcomes of the Study underline the potential of the project to support a viable, standalone lithium mining and processing operation, reinforcing the project's significance as a potential long-life source of future supply to the rapidly growing US battery manufacturing industry.

The results of the Study indicate positive operational and economic outcomes. The Study envisages an open-pit mining operation processing ore by means of sulphation roasting to produce battery-grade lithium carbonate. The Study also identifies opportunities for further optimization of the processing flow sheet in order to reduce operating costs.

A key benefit of the sulphation roast flowsheet is the production of sulphate of potash (SOP) as a byproduct. SOP (K_2SO_4) contains 50-52% K_2O and ~18% S (both essential trace elements for plants) and is the world's most widely-used low-chloride fertiliser. During 2020, the global SOP market was worth an estimated US$3.68B and this is expected to reach US$4.57B by late 2027. The SOP price during July 2021 was ~US$550 per tonne.

The mining schedule was staged to enable the plant feed grade to be maximised in the earlier years of the project life and steadily decline towards the end of the mine life. The proportion of Mineral Resource by classification in the optimised pit shell is approximately 22% Indicated to 78% Inferred, in line with the current breakdown of the overall Mineral Resource classification. Pit optimisations were performed based on an average Life-of-Mine lithium carbonate price of ~US$11,000 per tonne, versus the current spot price of lithium carbonate of ~US$19,350 per tonne.

Given the proportion of Inferred Mineral Resource used in the Study, full operational and financial metrics have not been released due to regulatory constraints. However, the results support the company's ongoing focus on de-risking the project through drilling, metallurgical and environmental studies.

A comprehensive economic model was prepared as part of the Study, assuming a three-year preproduction period before the commencement of mining operations. The results from the economic model were positive and justify the company's continued investment and commitment to the next stage of exploration and development at McDermitt.

Technical Significance

The Preliminary Scoping Study results are in my view sufficient to provide ongoing encouragement for existing IRL shareholders, as well as outside investors that are looking for a quality emerging lithium story. Given the nature of these early-stage studies, there is much that can be improved upon, particularly with respect to the processing flowsheet side of the proposed operation. The retracement in JRL's share price provides an opportune potential entry point for investors that otherwise wouldn't have existed.

Lithium Market Overview

The lithium market has experienced a significant uplift in the last 12 months, driven by the global political and social push for electrification of the transport sector. A crucial component for the Electric Vehicle (EV) revolution is the raw materials such as lithium required for battery production. The United States currently produces 5,000tpa lithium carbonate equivalent (LCE), with demand forecast to reach 331,000tpa LCE by 2030. Roskill are forecasting demand in the battery sector to be dominated by the automotive industry over the next 10 years.

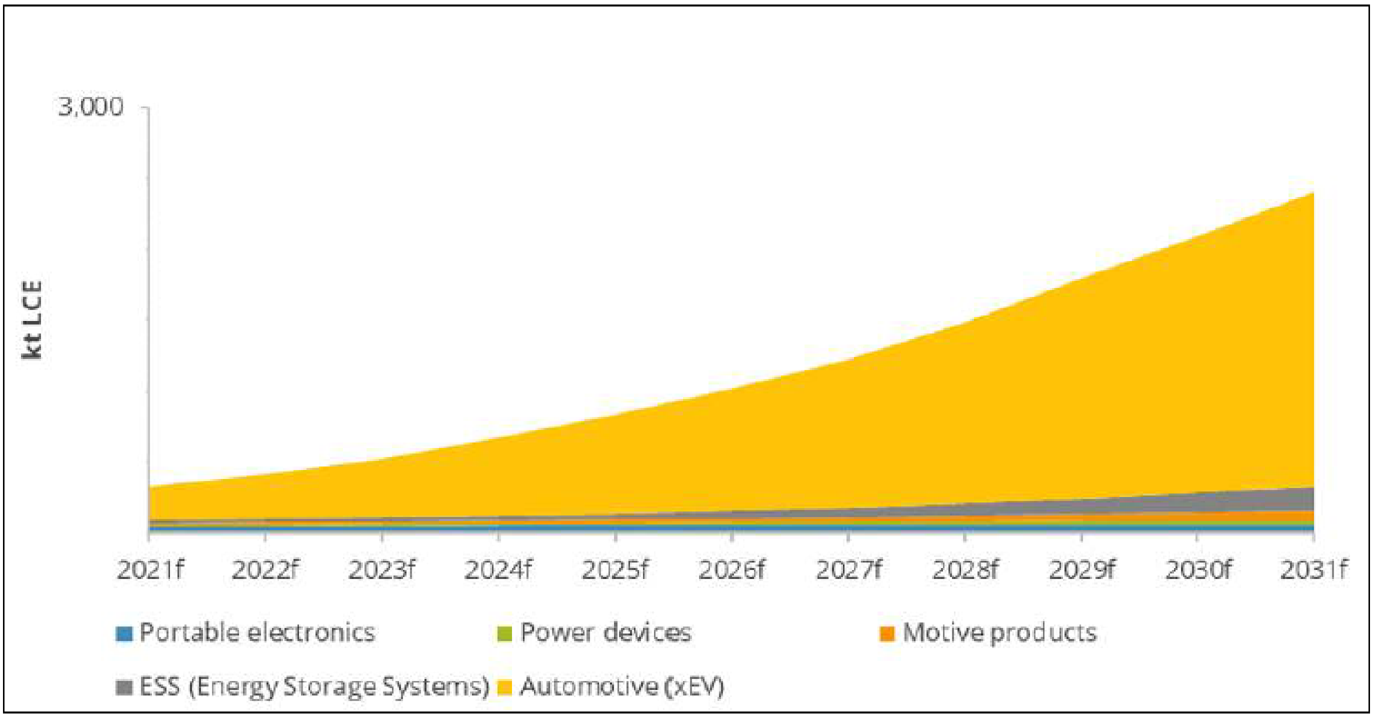


Figure 1: Forecast lithium demand by Li-ion battery application, 2021-2031 (kt LCE). Source: Reproduced from Roskill, Lithium Outlook to 2031.

At present, lithium prices have hit a three-year high due to an upsurge in electric vehicle (EVs) sales, which has led to a depletion of lithium inventories in China, the world's biggest consumer. At the present time, market conditions are so tight that players are fiercely competing for any spot tonnage available, which was evidenced by Pilbara Minerals (ASX: PLS)' recent spot sales auction, which fetched well above prevailing market prices ($US2,240 per tonne for a parcel of spodumene compared to the $US900 per tonne price in the preceding fortnight). There are fears in the market that if new lithium supply doesn't come to the market quick enough, then EV production rates might be hamstrung by a lack of raw material supply.

Spot prices for lithium carbonate in China have climbed 170% so far this year to $22,000 a tonne, their highest level since April 2018. Meanwhile, prices of spodumene, a source of lithium mainly mined in Australia, have climbed 144% this year to $990 a tonne.

Global sales of electric vehicles were up 150% during the first seven months of 2021 to July, to just over 3 million units, compared to the same period in 2020, with about 1.3 million sold in China. Demand for lithium is expected to jump by 26.1% or about 100,000 tonnes of LCE to a total of 450,000 tonnes, flipping the market into a deficit of 10,000 tonnes, according to Benchmark Mineral Intelligence.

Global battery capacity deployment onto roads in all newly sold passenger EVs combined amounted to 108 GWh in H1 2021, up 157% year-on-year. The increase was driven by surging sales growth in the Americas (135% year-over-year), Europe (124% year-over-year), and Asia Pacific (94% year-over-year) as the market moves past 2020's pandemic-induced malaise.

Next Steps

The upcoming diamond and RC drilling program at McDermitt are expected to address most of the geological and geotechnical recommendations in the Study, in addition to supplying additional sample material for metallurgical test-work. Identification of the optimal processing flowsheet remains the most important factor determining the preferred development route for the McDermitt Project.

Whilst the Study assumed a sulphation roast flowsheet, it is important to note that this is not fixed. One of the objectives of a scoping study is to identify the uncertainties in a project to be resolved in the next stage of study, and the data required to achieve this, with several phases of test-work having been recommended to inform the next study phase.

External environmental consultants have commenced work on the environmental and permitting actions.

Other Project Interests

Widgiemooltha District

The Widgiemooltha district has a long mining history, with numerous historic and currently operating gold, nickel and rare metal mines. Despite this long history, considerable exploration potential remains.

JRL has built a significant ground position over the past four years in this premier mining district, with holding costs remaining minimal as most tenements are still in application (JRL is the sole applicant in almost all cases). Available ground with the district is very limited and options for realising the value in JRL's tenement package continue to be tested.

A comprehensive district scale targeting study has highlighted a number of high quality targets including:

- the interpreted southern strike extensions of the Mandilla mineralised trend, where Anglo Australian (ASX: AAR) has reported gold intercepts of up to 93m @ 3.1 g/t.
- a demagnetised zone of interpreted Chalice Mines stratigraphy under transported cover that has never been drill tested. The Chalice open-pit gold mine (excised from Jindalee's tenements) produced over 0.5M oz at 5.6 g/t in the late 1990's.
- the northern strike extensions of the ultramafic rocks hosting the Cassini nickel deposit (1.254 Mt @ 4.0% Ni) owned by Mincor Resources (ASX: MCR).
- ultramafic rocks between Mincor's Republican nickel prospect and the Lanfranchi Nickel Mine, which have seen minimal exploration since the 1980's.

JRL is currently planning exploration programs to test these and other targets at Widgiemooltha.

Summary

I believe JRL is a stock that's worth watching, as stability returns to the share price. For patient investors the stock will have appeal, as the overall results from the Preliminary Scoping Study are encouraging and underline the fact that there is a lithium project there with decades' worth of production potential. RRL will now undertake infill drilling and metallurgical test-work planned during Q4 2021 that will enable the publication of more detailed project metrics during mid-2022.

The other positive aspect of JRL is that since the company listed on the ASX way back in July 2002 after raising $2.7M, the company has undertaken very few capital raisings since, and as a result has only 53.4M shares on issue. JRL's directors are strong supporters and also have significant skin in the game, holding approximately 30% of the company.

We have added JRL to our Watch-List coverage.