

Lachlan Star Limited (ASX:LSA) ACN 000 759 535

30 January 2019

# **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2018**

Lachlan Star Limited (Lachlan or the Company) is pleased to present its quarterly activities report for the December quarter.

#### **HIGHLIGHTS:**

- Desktop review of the Princhester Magnesite Project, including the compilation and digitisation of extensive historical database, commenced during the quarter
- Company continues to review a range of mineral exploration opportunities in Australia and overseas
- Company remains well funded with ~\$1.7 million cash on hand

#### **OPERATIONS:**

# Princhester Magnesite Project

The Princhester Magnesite Project is located 85km north west of Rockhampton, Queensland and comprises two granted Mining Leases (ML), ML5831 and ML5832. The ML's are close to the Bruce Highway and are within 2 kilometres of the main north coast railway line (**Figure 1**).

During the quarter the Company continued the research into the historical drilling and surface geochemistry to allow a full review of the Princhester project. As stated in the previous Quarter report the geological review confirms the presence of magnesite mineralisation (Figure 2 and Figure 3). The filed visit planned for the December quarter was delayed due to logistical constraints and is now planned to be completed in the March quarter. The field visit will verify the historic drilling and determine areas suitable for further exploration targeting expansion of the magnesite mineralised zone. The field visit will also review the environmental rehabilitation.

# Conceptual exploration target

Based on the level of exploration work previously undertaken in respect of the MLs, and the size and mineralised nature of the Princhester Magnesite Project, the Company has generated an exploration target tonnage of between **4.13Mt and 5.44Mt of magnesite** at a grade between **46% to 47% MgO**.





Figure 1: Location of Princhester Project, Queensland



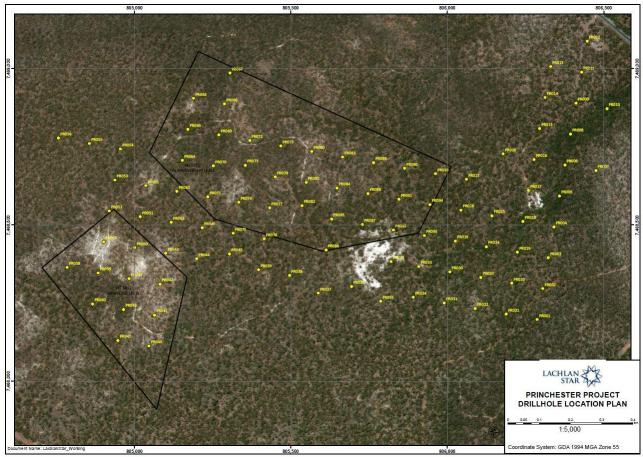


Figure 2: Princhester Project historic drilling on satellite image

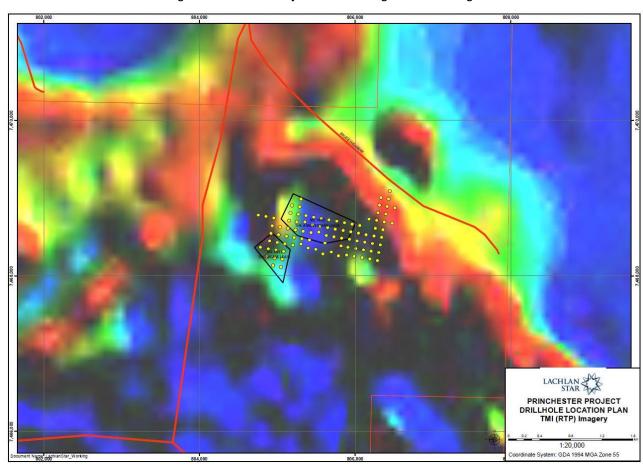


Figure 3: Princhester Project regional aeromagnetic data and project drilling location



## Magnesite

Magnesite is an ore for magnesium production and the source of a range of industrial minerals.

There are two main uses for magnesite. The first is as feedstock in the production of dead-burned magnesia and for refractory brick use in lining furnaces in the steel industry and non-ferrous metal processing units and cement kilns. The second use is for processing to caustic calcined magnesia which is used principally as a food supplement in agribusiness and in fertilisers as well for fillers in paints, paper and plastics. Raw magnesite is used for surface coatings, landscaping, ceramics and as a fire retardant.

### Evaluation of new mineral resource opportunities

The Company has allocated part of its working capital budget to the identification and evaluation of new mineral resource opportunities in Australia and overseas. The Company will also consider the acquisition and development of any other investments, both within the mining industry and in market segments unrelated to the mining industry. No decision to invest in any of the projects currently being reviewed has been made at this stage.

#### Competent Persons Statement

The information in this report that relates to exploration results, including the exploration target, is based on information compiled by Mr Bernard Aylward. Mr Aylward is a Non-Executive Director of the Company. Mr Aylward is a member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Aylward consents to the inclusion in the announcement of matters based on his information in the form and context it appears.

#### **Cautionary Statement**

The potential quantity and grade as stated, is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target is based on completed exploration drilling and a review of previous attempts to estimate mineralisation. The information relating to estimates of MgO grade are based on historic sample data from drill holes and check samples completed by previous explorers. The grade range is based on a simple arithmetic mean of samples. The tonnage estimate is based on completed exploration drilling and attempts at a coarse block modelling with 100m square blocks defined with drill holes located in each corner. The volume of each block is based on the arithmetic mean of the thickness of magnesite intersections in each drill hole, and a tonnage estimated using an assumed SG of 2.2 for magnesite. The Exploration target provides a range of tonnage that reflects the level of exploration drilling and the broad scale attempt to quantify potential mineralisation, and the grade range reflects the sampling.



# Annexure 1: Lachlan Star Limited – tenements held directly by Lachlan Star or subsidiary company

Tenements	Acquired during quarter	Disposed of during quarter	Held at end of quarter	Country
ML5831 (Princhester)	-	-	100%	Australia
ML5832 (Princhester)	-	-	100%	Australia
EL5574 (Bushranger)	-	-	Nil	Australia
			(Company retains a 2% NSR)	