

**ASX Announcement**  
7<sup>th</sup> July 2021

## **Exploration Study at Box Hole Project to Commence**

ASX Code SHH

ACN 130 618 683

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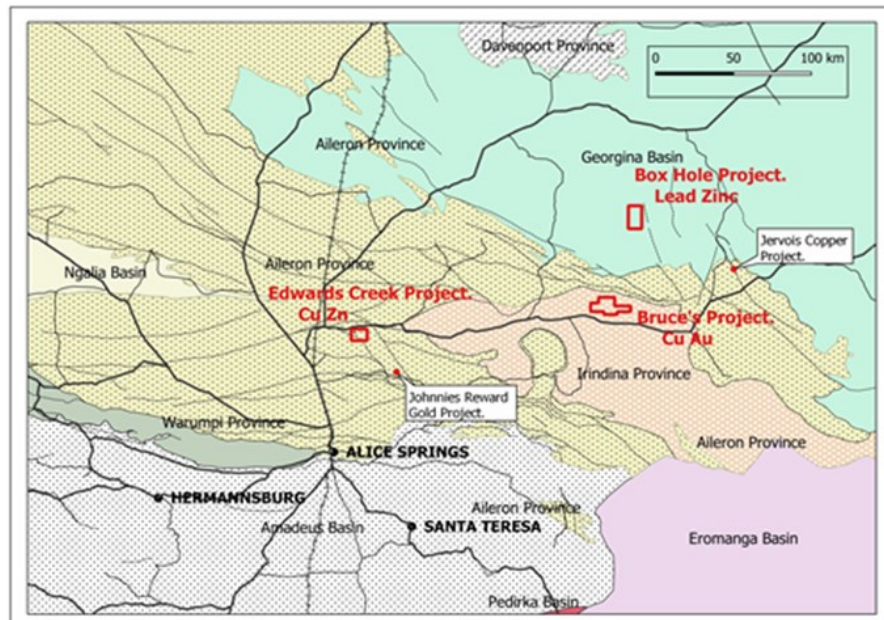
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- **The research study will receive 50% co-funding from the CSIRO Kick-Start Program**
- **Study aim is to integrate all available data to generate a 3D model to assist with drill targeting**
- **The study will give Shree access to extensive expertise within CSIRO**

Shree Minerals Ltd (“Shree” or the “Company”) is pleased to announce that it has signed an agreement with CSIRO (Australia’s national science agency) for collaboration on a research project at the Box Hole Project, near Harts Range in the Northern Territory (Figure 1).



*Figure 1: Regional location of the Arunta Joint Venture projects and major resource projects in the region*

The study aims are to evaluate and re-process existing geophysical, lithological and geochemical data as the basis for building a 3D model of the prospect and the control of the lead-zinc mineralisation.

The study outcome is to create an integrated dataset that will improve targeting for exploration drilling. The data evaluation and re-processing will include: VTEM data inversion, gravity modelling, geochemical and lithological data evaluation, structural analysis and 3D structural modelling.

The project was made possible by CSIRO Kick-Start, an initiative that provides funding and support for innovative Australian small businesses to access CSIRO's research expertise and capabilities to help grow and develop their business. The total cost of the study is approximately \$60,000 of which 50% will be co-funded by CSIRO.

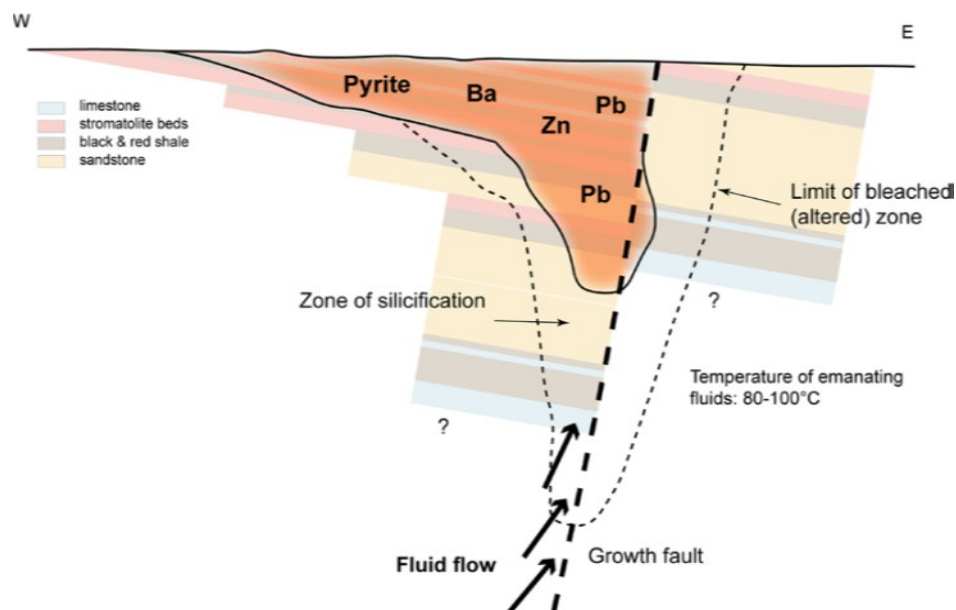
Sanjay Loyalka, Executive Director of Shree Minerals commented: *'The Company is very pleased to have engaged CSIRO for the study at Box Hole and for this study to be supported by 50% funding from CSIRO. The study will give Shree access to the CSIRO's expertise in the fields of geophysical data processing, geochemical vectoring and 3D modelling. The resultant lithostructural model will improve understanding of the controls of mineralisation and allow better targeting of exploration drilling'*.

## Background

The Box Hole Project (EL32419) covers an area of 127km sq located approximately 250 kilometres northeast of Alice Springs in the Northern Territory (Figure 1).

The project is prospective for large tonnage carbonate-hosted lead-zinc deposits of the Mississippi Valley Type (MVT). Examples of this type of deposit in Australia include the Cadjebut and Blendevale Mines near Fitzroy Crossing in Western Australia.

Genetic models of MVT mineralisation involve oxidised basinal metalliferous brines migrating up basin margin growth faults and precipitating sulphides into favourable permeable and chemical lithological traps, such as carbonates, graphitic shales and dolostones. The model is illustrated in Figure 2.



**Figure 2.** Genetic model for MVT deposits.

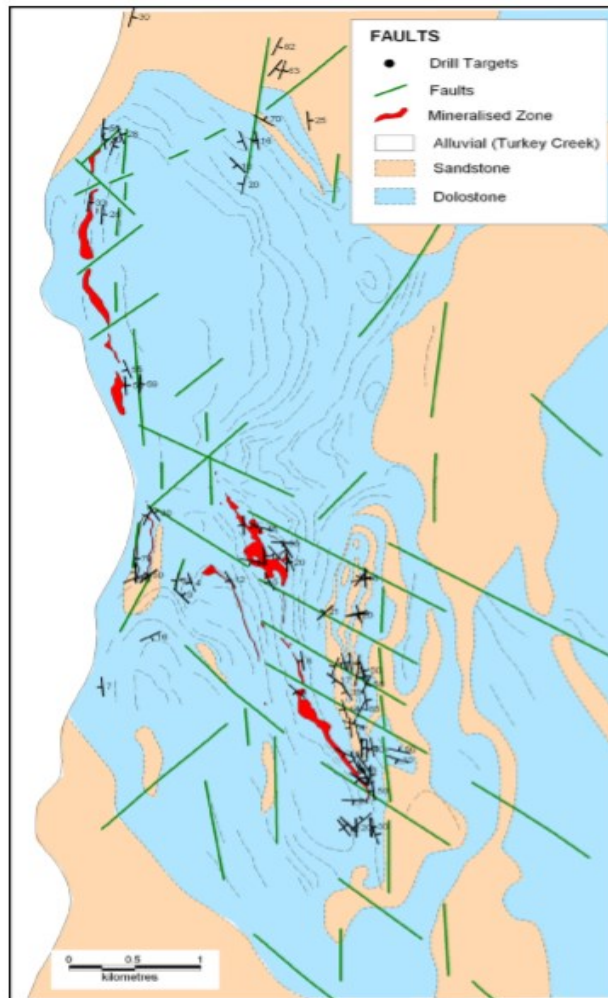
Box Hole is centred on the King's Workings that were mined by hand in the 1960's for galena. 15 tonnes of galena with an average grade of 66% Pb, 58.5g/t Ag and 0.43% Bi was hand-picked and sold to the Broken Hill Smelter<sup>1</sup>.

The Pb-Zn mineralisation is hosted by a mixed carbonate and shale sedimentary sequence within the Georgina Basin. The mineralisation is generally associated with silicified dolostone containing **gossans that extend for over 6km** in a north-south orientation parallel to faulting and anticlinal hinges (Figure 3). The faults could represent the growth faults that have acted as conduits for hydrothermal fluids derived from the basin.

The project has been explored by a variety of companies since its discovery. The most significant exploration program was completed by Uramet Minerals in 2007-9 comprising various IP and gravity surveys, geochemical surveys and shallow drilling. Uramet conducted RAB drilling of only selected gravity and IP targets, interpreted to be less than 75m deep (*Refer*

to Shree Minerals (ASX:SHH) announcement 30th June 2020: Farm-in and joint venture with Territory Lithium Pty Ltd to explore for gold and basemetals).The best intersection was:

**12m at 2.8% Zn, 0.67% Pb from 17m in HDB045<sup>1</sup>  
Includes 1m @ 14.7% Zn, 0.3% Pb from 24m.**



**Figure 3.** Geological plan of the Box Hole project area (Penna 2009).

There are several strong deep IP anomalies that were not RAB drilled by Intercept (Uramet). The IP anomalies provide significant target positions, especially those that were considered too deep by Intercept Minerals. Several IP anomalies are coincident with regional faulting (possible growth faults), adding weight to their prospectivity. The IP anomalies may represent mineralisation leakage from a more substantial mineralising system or significant mineralisation proximal to an unknown growth fault, as illustrated in Figure 2.

### References

1 Penna, P. 2009. EL22537 Annual Technical Report Box Hole Base Metal Project. Uramet 2009.

### Competent Person Statement

The review of historical exploration activities and results contained in this report is based on information compiled by Martin Bennett, a Member of the Australian Institute of Geoscientists. He is a fulltime employee of Shree Minerals Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which 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 (the JORC Code).

Martin Bennett has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Where the Company refers to the Mineral Resources in this report (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed.

The release of this document to the market has been authorised by the Board of Shree Mineral Ltd.