

FIELD WORK TO COMMENCE AT SHOOBRIDGE LITHIUM PROJECT

HIGHLIGHTS

- Field exploration programs to commence at the Shoobridge Lithium Project, directly abutting DeSoto's Fenton Gold Project and Core Lithium's (ASX:CXO) Shoobridge Lithium Project to the East, West and South.
- The Project partially covers the prospective Tipperary Pegmatite district, which includes the Shoobridge pegmatite field and the Plateau Point pegmatite field, importantly, both fields are considered analogous to the Bynoe pegmatite field.
- Lithium exploration has not been the focus of historical exploration at Shoobridge, however anomalous tin-tantalum mineralisation within the Tipperary Pegmatite District provides significant encouragement for a lithium discovery with tin-tantalum mineralisation a pathfinder for lithium deposits.
- DeSoto will be the first company to systematically explore the Shoobridge licences for potentially lithium-rich pegmatite systems and the first modern exploration completed in the tenure since 1993.
- The geological setting for Lithium-Caesium-Tantalum (LCT) deposits, commonly known as the 'Goldilocks Zone', are located within the area ~5km outboard of granitic intrusions (Fig. 1).
- Comprising EL33188, EL33225, EL32884 and EL32885, Shoobridge has multiple granitic bodies with overlapping 'Goldilocks Zones' occurring in all 4 licence areas, providing a large area for potential lithium discovery.
- Stream sediment program to begin within the next two weeks.
- Core Lithium's (ASX:CXO) Shoobridge Project shares the Fenton Granite with DeSoto and based on this work and many other prospects, DeSoto considers the Shoobridge Project to be well situated geologically for lithium mineralisation.
- Supported by the Company's strong \$9m cash balance, work programs at Shoobridge will overlap the Company's Fenton Gold Project, with two separate teams exploring both projects.





Figure 1 - Desotos' Shoobridge Lithium project showing interpreted buried granites with a 5km 'Goldilocks Zone' buffer and planned stream sampling.

DeSoto Resources Limited (ASX:DES or 'Company') is pleased to provide an update on its 100%-owned Shoobridge Project, located in the Northern Territory (Fig. 2).

The Shoobridge Project partially covers the western edge of the prospective Tipperary Pegmatite district where tin-tantalum pegmatites were first discovered in 1882. These pegmatites are similar to those in the Bynoe Pegmatite field and are considered prospective for lithium.

No historic lithium exploration has been conducted in the Project tenure however Core Lithium (ASX:CXO) acquired the historical Shoobridge Pegmatite Project adjacent to the Project Tenements and is now exploring for lithium across that project area.

A 4-week geological mapping and sampling program to begin shortly, is designed to identify potentially outcropping pegmatites, new lithium prospective areas with stream sampling and mapping, and assess the potential of the historically mapped pegmatites.

Historical tin and tantalum mineral occurrences in the area will be evaluated, and the stream sediment sampling program which commenced in 2022 will be expanded.





Figure 2 - Shoobridge Lithium Project directly abutting the Company's Fenton Gold Project, located in the Northern Territory.

About Shoobridge Lithium Project

In 1882, George Barrett discovered the first pegmatite-hosted tin-tantalum lodes, 35 km southeast of Adelaide River township near Mount Shoobridge in the Pine Creek area¹. This area is currently held by Core Lithium.

One pegmatite lode became known as Barretts and the other Old Company (Mount Shoobridge) mine. Both Barretts and the Old Company mine ceased operation in the mid-1890s after a total recorded production of 147 t and 117 t of tin-concentrate respectively.

The source of the Shoobridge pegmatites is the Shoobridge Granite, part of the Cullen Supersuite fractionated I-Type granites, with the dominant host stratigraphy the Burrell Creek Formation of the Finniss River Group, or its metamorphic equivalent, the Welltree Metamorphics. The Shoobridge pegmatites are hosted in the Burrell Creek and Mount Bonnie Formations (Mount Finniss and South Alligator Groups).

The Plateau Point pegmatites are interpreted to be hosted in the Mount Partridge Group Wildman Siltstone and these host rocks have been recorded to occur within the DeSoto Licences where pegmatites have been logged in previous exploration drilling but were not assayed for lithium.

¹DES ASX Announcement: DeSoto Resources Prospectus (13th December 2022)



Historic Work within Desoto Shoobridge Licences

A compilation and review of the previous exploration conducted within the Desoto Shoobridge Project licences is currently underway. The data summarised by year and company below is in the process of being digitally captured and validated for reporting purposes.

1972-1973: Halpern Glick and Lewis conducted large scale surface sampling and 4 shallow percussion holes within the Shoobridge licence. However, only the limestone was tested for its economic cement grade and only CaO and MgO values were assayed.

1986: Australian Coal and Gold Holdings explored the Shoobridge area for Au, Sn and Diamond.

1988: Coronation Hill Gold Mines explored for epigenetic Au mineralisation of a quartz vein stockwork type.

1988-1989: Newmont Australia conducted surface sampling programs for Cu-Pb and Au.

1992: Dominion Gold completed several exploration programmes across the Shoobridge area, targeting Au and base metals.

1993: Nullabor Holdings completed stream sediment sampling targeting Au mineralisation.

This announcement is authorised by the Board of Directors of DeSoto Resources Limited.

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For further information visit our website at DeSotoresources.com or contact:

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ABOUT DES AND PROJECTS

DeSoto is a gold and battery-metal exploration Company with a 1,893km² landholding located in the Northern Territory's prolific Pine Creek gold and pegmatite province. The Company's immediate focus is the ongoing exploration of these exciting assets with an experienced Board that uses a distinctive exploration method and capability which sets us apart from our peers.

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With strong mineral-finding capability and a systematic geophysics and geochemical approach to gold exploration, DeSoto is well positioned to make new mineral discoveries. The Company has already identified important indicators of lithium potential in our Northern Territory projects, including pegmatites in some historical core and known tin occurrences.

COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on and fairly represents information and supporting documentation prepared by Ms Bianca Manzi. Ms Manzi is an employee of the company, is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Manzi consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

COMPLIANCE STATEMENT

DeSoto advises that it is not aware of any new information or data that materially affects the previous exploration results or mineral resource estimate contained in this announcement and all material assumptions and technical parameters underpinning the mineral resource estimate continue to apply and have not materially changed.