

Locksley Resources Limited: Strategic U.S. Collaboration Drive for Mojave Critical Minerals Project

17.06.2025 | [ABN Newswire](#)

[Locksley Resources Limited](#) (ASX:LKY) is pleased to provide an update on the advancement of a strategic collaboration initiative across the United States to accelerate the development of its Mojave Critical Minerals Project in California.

HIGHLIGHTS:

- Strategic U.S. collaboration drive initiated across multiple federal government agencies, academic institutions and private stakeholders
- Focus on downstream alignment through partnerships in REE and antimony associated materials and mining technologies
- Engagement pathways initiated with federally aligned programs e.g. U.S. EXIM Bank, DOE, and DOD for strategic funding and project support
- Multifaceted R&D engagement underway for technologies complimentary to Locksley's Mojave critical minerals portfolio
- Desert Antimony Mine identified as a potential flagship asset with antimony grades from surface samples up to 46% Sb, distal high-grade silver up to 1,022g/t and associated lead and zinc
- El Campo REE Project shares geological similarities to the Mountain Pass Mine, which is located directly ~5km along strike
- Two primary zones of interest:
 - o El Campo Prospect: REE-dominant system with rock chips up to 12.1% TREO and 3.19% NdPr
 - o Desert Antimony Mine Area: Historic production zone with extremely high-grade surface samples

This initiative targets engagement with U.S. federal agencies, national laboratories, leading U.S. universities and downstream technology partners to align the Company's antimony and rare earth elements (REE) assets with America's critical minerals strategy.

The El Campo prospect shares comparable geology and mineralogy to Mountain Pass, the only operating REE mine in the U.S. Locksley's El Campo prospect, combined with collaboration efforts with U.S. laboratories, presents an opportunity to enhance and leverage processing synergies for REE materials. Locksley is focused on mining technologies in the way of systems and innovations used to improve mineral extraction, processing and e-waste management.

Collaboration Objectives

Locksley is actively pursuing collaborative opportunities with U.S. laboratories to co-develop and/or license novel technologies linked to its critical mineral assets. Areas of engagement range from mining and ore processing enhancement to downstream applications aligned with industrial, consumer and Defense related innovation. Initiatives include but are not limited to:

- Bench-scale metallurgical and separation test work to enhance processing pathways for REE's and antimony
- Evaluation of integration pathways into U.S. based downstream REE/antimony supply chains
- Participation into federally supported pilot programs or feedstock supply opportunities

Next Steps

Locksley will progress discussions under suitable U.S. partnering mechanisms such as Cooperative Research and Development Agreements (CRADAs), ACT agreements, and SBIR/STTR channels. The Company will also evaluate integration opportunities within the U.S. Department of Energy (DOE), Department of Defense (DoD), and Critical Materials Institute (CMI) initiatives.

Technical Overview

The Mojave Project hosts multiple high-grade targets across distinct mineralisation zones:

- El Campo Prospect: Gossanous and intrusive hosted REE system with strong NdPr mineralisation, occurring over a prospective 860m strike length, and showing evidence of structural control and dip continuity.
- Desert Antimony Mine Area: Historic workings with high-grade stibnite-quartz-calcite veins.

Surface samples show polymetallic signature including antimony, silver, lead, and zinc.

Geochemical sampling across the broader North Block has returned anomalous TREO values (up to 0.26%), supporting broader district-scale potential. Locksley has preserved samples for future metallurgical and mineralogical testing, including potential evaluation by U.S. laboratories.

Nathan Lude, Chairman of Locksley Resources, commented:

"The Mojave Project is not just a promising exploration opportunity, but a potential strategic supply chain across rare earths and antimony for the United States. The similarities in the El Campo geology to the Mountain Pass Mine, present a clear opportunity to enhance value through synergies associated with similar ore to the only U.S producing REE mine. By aligning with world class U.S. research institutions, we aim to utilise mining technologies to unlock advanced processing pathways and downstream innovations that benefit both industry and our shareholders."

Mojave Project

Located in the Mojave Desert, California, the Mojave Project comprises over 250 claims across two contiguous prospect areas, namely, the North Block/Northeast Block and the El Campo Prospect. The North Block directly abuts claims held by MP Materials, while El Campo lies along strike of the Mountain Pass Mine and is enveloped by MP Materials' claims, highlighting the strong geological continuity and exploration potential of the project area.

In addition to rare earths, the Mojave Project hosts the historic "Desert Antimony Mine", which last operated in 1937. Despite the United States currently having no domestic antimony production, demand for the metal remains high due to its essential role in defense systems, semiconductors, and metal alloys. With surface samples grading up to 46% Sb as well as silver up to 1,022 g/t Ag, the Desert Mine prospect represents one of the highest-grade known antimony occurrences in the U.S.

Locksley's North American position is further strengthened by rising geopolitical urgency to diversify supply chains away from China, the global leader in both REE & antimony production. With its maiden drilling program planned, the Mojave Project is uniquely positioned to align with U.S. strategic objectives around critical mineral independence and economic security.

Tottenham Project

Locksley's Australian portfolio comprises the advanced Tottenham Copper-Gold Project in New South Wales, focused on VMS-style mineralisation in a well-established mining region.

Locksley is committed to delivering value through discovery, development, and strategic partnerships, with a focus on securing access to U.S. aligned funding and downstream collaborations.

*To view tables and figures, please visit: <https://abnnewswire.net/lnk/6YGVA190>

About Locksley Resources Limited

Locksley Resources Ltd ASX:LKY Locksley Resources Limited is an ASX-listed explorer focused on critical minerals and base metals, with assets in both the United States of America and Australia.

The Company is actively advancing exploration across two key assets: the Mojave Project in California, targeting rare earth elements (REEs) and antimony, alongside the Tottenham Copper-Gold Project in New South Wales. Locksley Resources aims to generate shareholder value through strategic exploration, discovery and development in highly prospective mineral regions.

Contact

[Locksley Resources Limited](#)

Nathan Lude, Chairman

T: +61 8 9481 0389

Link: Strategic U.S. Collaboration Drive for Mojave Critical Minerals Project

https://media.abnnewswire.net/media/en/gallery/132734_en_image_5_3_h.png

Dieser Artikel stammt von [Rohstoff-Welt.de](#)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/695581--Locksley-Resources-Limited--Strategic-U.S.-Collaboration-Drive-for-Mojave-Critical-Minerals-Project.html>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).