

# Locksley Resources Limited: New Rare Earths Target Adjacent to Mountain Pass

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Perth, Australia - [Locksley Resources Ltd.](#) (ASX:LKY) (FRA:X5L) (OTCMKTS:LKYRF) announced that data processing of the recently completed high-resolution helicopter-borne magnetic and radiometric survey across the Mojave Project has been finalised.

## HIGHLIGHTS

- High-resolution heli-magnetic and radiometric survey has identified a pronounced Thorium anomaly in the North Block claims, a key indicator for potential Rare Earth Element (REE) mineralisation
- The new anomalies are located in the same geological district as the Mountain Pass Rare Earth Mine, the only operating REE mine in the U.S., which is also defined by a strong Thorium signature
- A second Thorium anomaly has been delineated trending parallel and 700m east of the high-grade El Campo Prospect, providing potential for parallel mineralisation
- High-resolution magnetics (40m line spacing) have revealed complex faulting and distinct magnetic domains, providing a detailed structural map to guide target generation
- Immediate field validation is underway, with mapping and sampling to groundtruth these new targets

The survey, flown at a low altitude of 35 metres with tight 40-metre line spacing, has delivered a step-change in data quality compared to historical regional data. This precision has allowed the Company to identify discrete, high-priority targets for further investigation.

## Radiometric Data and REE Targeting

The radiometric data have identified a pronounced Thorium anomaly in the northeast extents of the Mojave Project North Block claims (Figure 1\*), with a notable weathering feature which correlates with the regional drainage. In addition, a second new Thorium anomaly has been delineated which trends parallel and 700m east of the El Campo Prospect (which also has an elevated Thorium anomaly). Notably, the northern Thorium anomaly coincides with a broad zone of diffuse magnetic response, which may be indicative of alteration or lithology.

Technical Note on Radiometrics: It is important to note that a radiometric sensor detects gamma rays emitted during the decay of radioactive isotopes, each with a specific and unique signature.

- **Shallow Detection:** The signals are derived from the upper 20-30 centimetres of the Earth's surface, reflecting shallow lithological compositions rather than deeper stratigraphy
- **Surface Expression:** Such anomalies may represent surface expressions of alteration, leached zones, or weathered outcrops that could be spatially related to REE mineralisation
- **Blind Deposits:** For this reason, blind deposits will not be directly detected, and even small surface expressions and anomalies warrant field investigation to ascertain if they are associated with a larger surface alteration or REE mineralisation which could represent the tip of a larger buried target

Additional more discrete anomalies are also evident in the data, and the Company continues to assess and rank these secondary targets.

The newly identified Thorium anomalies are considered significant given their proximity to the Mountain Pass mine rare earth element deposit, located to the west, which is spatially associated with a large Thorium anomaly. It is important to note that the large anomaly evident at Mountain Pass is due to the mining activity which has occurred and distributed the mined rock across the active mine area. The pre-mining anomaly would likely have been much more discrete.

## Magnetic Interpretation and Targeting

The newly acquired magnetic data has significantly increased the resolution which in turn has advanced the Company's geological interpretation. The new magnetic data (Figure 2\*) is currently being interpreted and to date has delineated multiple orientations of complex faulting, along with distinct magnetic domains, providing valuable insights into the structural framework, potential zones of alteration, and unmapped lithologies. Structural interpretation and field mapping is underway to support the preliminary interpretations.

A key benefit of the magnetic data is to provide information to support the detailed structural framework which is being developed. The magnetic data does not directly detect primary mineralisation being targeted by the Company but does highlight the structures which act as conduits or pathways for mineralisation. Combined with surface mapping, rock chip sampling and stream sediment sampling, the data will support additional target identification for future drill testing.

Kerrie Matthews, Managing Director & CEO, commented:

"The results from this high-resolution geophysical survey are a game-changer for our targeting at Mojave. Moving from broad legacy geophysical data to this level of detail is like turning on the lights in a dark room. We can now see clearly defined structural corridors and Thorium anomalies that look geologically similar to the systems, known in the district.

The identification of a potential parallel system near El Campo is particularly exciting and will be a priority for our field teams."

Next Steps:

Structural interpretation is ongoing, with field teams currently deployed to verify these new anomalies. This ground truthing involving mapping and rock chip sampling is the first step ahead of defining new drill targets for 2026.

\*To view tables and figures, please visit:  
<https://abnnewswire.net/lnk/86CRH1E5>

About Locksley Resources Limited:

Locksley Resources Limited (ASX:LKY) (FRA:X5L) (OTCMKTS:LKYRF) is an ASX listed explorer focused on critical minerals in the United States of America. The Company is actively advancing exploration across two key assets: the Mojave Project in California, targeting rare earth elements (REEs) and antimony. Locksley Resources aims to generate shareholder value through strategic exploration, discovery and development in this highly prospective mineral region.

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 significant surface sample results, 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

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