

Locksley Achieves 99.5% Purity Antimony Trioxide, Advancing U.S. Supply Chain Capability

Desert Antimony Mine feedstock validates potential for U.S. mine-to-market production of 100% American-made, high-purity antimony products

HIGHLIGHTS

- 99.5% purity antimony trioxide successfully produced from Desert Antimony Mine feedstock, confirming the ability to generate high-purity refined products from Mojave Project material
- Trioxide product produced at bench scale, measured by X-Ray diffraction (XRD) analysis
- Result achieved via Locksley's ongoing metallurgical optimisation program, validating 100% U.S. based refining pathways for high-grade antimony products and aligning with U.S. government priorities to restore domestic processing capability for critical minerals
- High-purity antimony trioxide is a critical input for defense technologies, including munitions primers, military electronics and flame-retardant systems
- Achievement supports Locksley's strategy to help re-establish secure 100% American-made supply chains for antimony, a mineral classified as critical by the United States and allied governments
- U.S. annual demand is approximately 25,000–30,000 tonnes of antimony, yet has limited domestic refining capability, leaving supply heavily dependent on foreign processing
- High-purity product targeted for qualification with strategic offtake partners, metals traders and government supply chain participants
- Program runs in parallel with the Company's DeepSolv™ advanced metallurgical technology pathway, providing dual processing routes to de-risk development and accelerate commercialisation

Locksley Resources Limited (ASX: LKY, OTCQX: LKYRF, FSE: X5L) ("Locksley" or "the Company") is pleased to announce a significant metallurgical milestone with the successful production of 99.5% purity antimony trioxide from feedstock sourced from the Desert Antimony Mine at the Mojave Project in California.

The result, achieved through the Company's metallurgical optimisation program demonstrates the potential to produce high-purity antimony products capable of supplying strategic Western defense and industrial supply chains. With antimony classified as a critical mineral and global supply heavily concentrated in China, this achievement represents an important step in Locksley's strategy to help re-establish secure, 100% American made, antimony production and refining capability.

Locksley is one of the few antimony focused development projects in the United States capable of directly controlling mining, processing and product specification.



Figure 1: Photo of interim pure antimony trioxide sample

Locksley Resources Managing Director and CEO Kerrie Matthews commented:

"This achievement marks an important milestone for Locksley. Demonstrating that feedstock from the Desert Antimony Mine can be upgraded to 99.5% purity antimony trioxide validates the potential to produce high value refined, 100% American-made antimony products from our Mojave Project.

At a time when Western governments are prioritising the development of secure domestic supply chains for critical minerals, Locksley is advancing a strategy that integrates mining, processing and downstream refining. This result reinforces the potential for the Mojave Project to play an important role in supporting future U.S. government and industrial demand for antimony.

Metallurgical Optimisation Program

Initiated in Q4 2025, the metallurgical optimisation program evaluates and refines pyrometallurgical processing pathways to produce high-purity antimony products from DAM mineralisation. The program runs in parallel with the advancement of the Company's DeepSolv™ solvometallurgical technology, creating dual pathways to de-risk the path to production while responding to rising U.S. defense and industrial demand for antimony products.

This outcome represents an important step in establishing a potential downstream refining pathway for antimony from the Mojave Project, supporting the Company's integrated mine-to-market strategy. The program has targeted:

- Improving concentrate upgrading techniques to maximise antimony grade and recovery
- Development of pyrometallurgical processes designed to produce refined antimony metal and compounds
- Implementing impurity removal and purification strategies targeting high purity products suitable for premium industrial and defense applications

Through iterative metallurgical test campaigns, Locksley has assessed a range of temperature regimes, oxidative and reductive processes to optimise product purity and maintain processing efficiency.

These efforts have culminated in the successful production of a 99.5% purity antimony trioxide sample, measured by X-ray diffraction (XRD) analysis confirming the dominance of the antimony phase in the final product.

While this result represents an important technical milestone, these results are preliminary and further work will focus on validating product purity through ICP analysis, followed by larger batch test work and repeatability studies to confirm the robustness and reproducibility of the process.

Significance of High-Purity Antimony

Antimony is essential for defense systems, munitions, electronics and advanced industrial applications. Achieving $\geq 99.5\%$ purity antimony trioxide meets a key threshold for entry into specialised markets and enables a pathway for qualification with defense and strategic supply chain participants.

The successful production of this material demonstrates the technical potential to generate high value antimony products from Locksley's feedstock, supporting the potential establishment of downstream refining capability aligned with Western critical mineral supply initiatives.

The principal barrier to domestic antimony supply is not ore availability, but the lack of U.S. processing and refining capability, a gap Locksley's mine-to-market strategy is designed to address.

Next Steps

The next phase of metallurgical work will focus on:

- ICP metallurgical testing to confirm impurity threshold and refine parameters for consistent high-purity antimony production
- Scaling metallurgical testing to larger batch sizes to evaluate process stability and reproducibility
- Evaluate engineering and economic parameters for potential pilot and commercial scale refining methods including early pathways via toll processing arrangements
- Integrating metallurgical findings into process flowsheet development, process criteria and project studies
- Engaging strategic partners, metals traders and government supply chain participants for product qualification pathways

This announcement has been authorised for release by the Board of Directors of Locksley Resources.

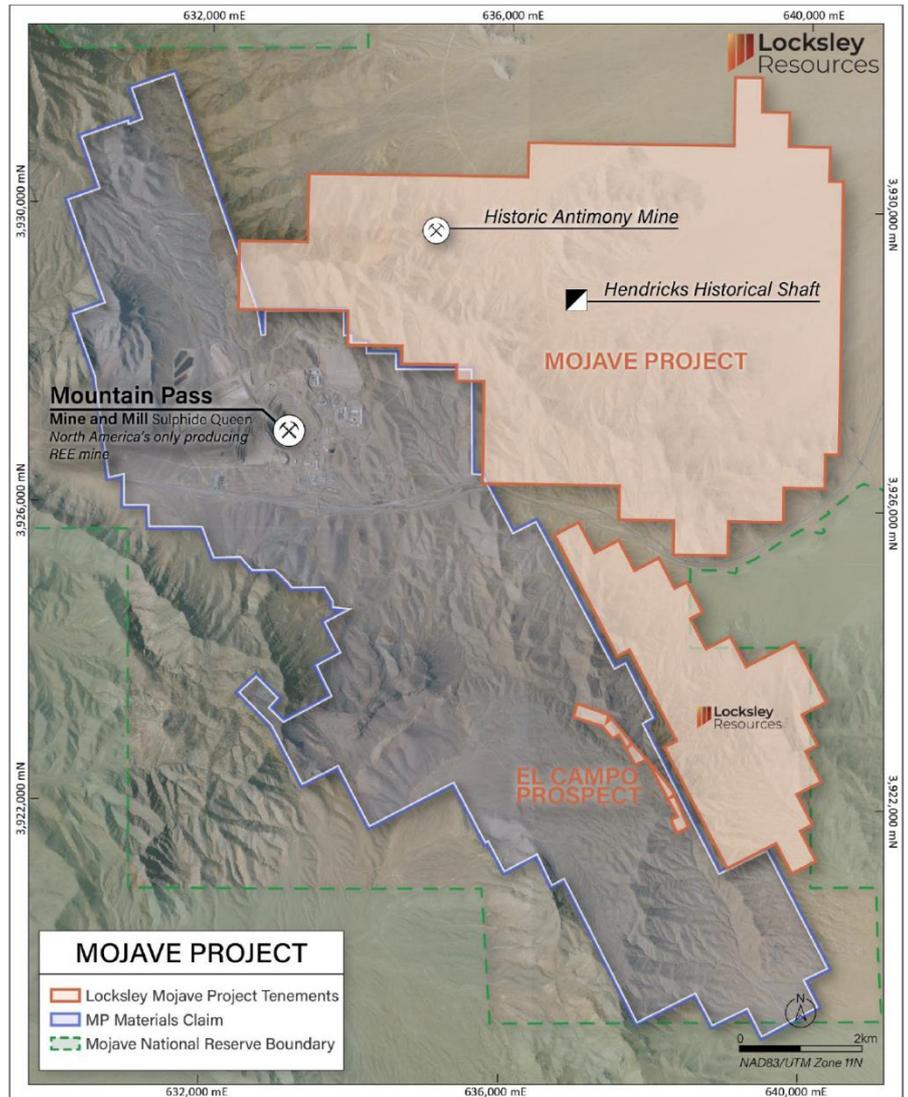
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ABOUT LOCKSLEY RESOURCES LIMITED

Locksley Resources Limited is focused on critical minerals in the United States of America. The Company is actively advancing the Mojave Project in California, targeting rare earth elements (REEs) and antimony. Locksley is executing a mine-to-market strategy for antimony, aimed at re-establishing domestic supply chains for critical materials, underpinned by strategic downstream technology partnerships with leading U.S. research institutions and industry partners. This integrated approach combines resource development with innovative processing and separation technologies, positioning Locksley to play a key role in advancing U.S. critical minerals independence.



Location of the Mojave Project Blocks in south-eastern California, USA

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Locksley Resources planned activities and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Locksley Resources Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Cautionary Statement

This announcement may contain visual exploration results in respect of the Mojave Project. Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.