# **Locksley** Resources

# **INVESTOR UPDATE**

## LOCKSLEY CONFIRMS EXPANDED ANTIMONY & REE TARGETS FOLLOWING STRUCTURAL MAPPING AT MOJAVE

#### **Highlights:**

Multiple mineralised trends confirmed at both the Antimony & REE prospects

Desert Antimony Mine (DAM):

 Up to three antimony rich vein positions within a NNE-SSW corridor; additional E-W trending structures mapped, expanding the mineralised target footprint

El Campo:

- Steep 70-80° SW dipping REE hosting shear confirmed, increasing mineralisation potential within Locksley claims and amenable to underground mining methods
- New exploration targets defined at El Campo REE Project:
  - South Fault mapped and identified as a potentially mineralised structure for REEs
  - Surface samples are interpreted to have under sampled the main breccia horizon, leaving high-grade REE zones potentially untested
- 3D geological models completed for both prospects to refine drill targeting and assist in defining JORC Exploration Targets
- Expanded drilling program being planned at DAM:
  - $\circ$  New Plan of Operations (POO) to be submitted to the BLM in late July
  - Approval expected early September, enabling expanded RC drilling program in Q3 2025
- Apple's recent US\$500 million investment into MP Materials to secure domestic rare earth magnets underscores the strategic importance of the Mojave region

#### ASX RELEASE

17 July 2025

#### LOCKSLEY RESOURCES LIMITED

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Locksley Resources Limited (**ASX: LKY / OTCQB: LKYRF**) ("**Locksley**" or "**the Company**") is pleased to report that structural geology mapping completed in late June at the Desert Antimony Mine (DAM) and El Campo prospects has delivered significant new insights to support drill targeting and potential JORC Exploration Target definition at the Company's Mojave Critical Minerals Project in California.

#### The program, undertaken by a specialist structural geologist, achieved three key objectives:

- Detailed geological surface maps across both prospects, providing detailed lithological and structural constraints on the geological architecture
- Enhanced understanding of mineralised structures and controls
- Initial 3D geological models to guide drill targeting and JORC Exploration Target preparation

The mapping has confirmed and expanded the understanding of mineralisation at both prospects, resulting in refined additional drill targeting and an expanded drilling strategy.

#### Desert Antimony Mine (DAM)

- Mapping confirmed up to three discrete vein positions within a NNE-SSW trending mineralised corridor, with massive stibnite observed in and around historical underground workings.
- Stibnite veining mapped directly at surface extends some 200m along strike
- Quartz-carbonate veins locally up to 1m wide host antimony rich stringer veins anastomosing within broader structures.
- E-W trending potential secondary mineralisation identified, introducing three geological models for testing, including a potential network of interconnected vein sets.
- An expanded drill program is now planned to test these additional targets, with a new Plan
  of Operations (POO) to be submitted to the Bureau of Land Management (BLM) in late July.
  Approval is anticipated in early September to allow RC drilling to expand during the
  September quarter.
- A 3D solid geology model of DAM has been completed, enabling refined drill planning and assisting with potential JORC Exploration Target definition (Figure 1).





**Figure 1 –** Isometric view to the NE of the 3D geological model which has been constructed from surface geology mapping at the Desert Antimony Mine Prospect. The 'Broader Mineralisation Zone' target horizon is annotated and defined from surface mapping of the occurrence of Stibnite rich Quartz Carbonate Veins. Discrete Stibnite veins have also been modelled and interpreted from surface exposures.

#### El Campo (Rare Earth Elements)

- Structural mapping has substantially refined targeting of the REE mineralised shear, confirming a steep 70-80° SW dip which is highly favourable for hosting more mineralisation within Locksley's leases and potentially amenable to underground mining methods.
- Historical trenching is now considered to have under sampled the main shear horizon, leaving high-grade REE zones potentially untested.
- The E-W trending South Fault was mapped and confirmed at surface, representing a new exploration target to be tested as part of the September 2025 RC drill program.
- A 3D solid geology model of El Campo has been completed, enabling refined drill planning and assisting with potential JORC Exploration Target definition (Figure 2).





**Figure 2** -Isometric view to the NE of the 3D geological model which has been constructed from surface geology mapping at the El Campo Prospect. Surface geological map draped over the solid geology model with structural measurements shown as discs. Note high grade TREO result location in the southern part of the target area and interpreted steep dipping hosting shear zone (annotated).

#### Locksley's Strategic Position within the U.S Critical Minerals Supply Chain

The recent announcement of Apple's US\$500 million investment into MP Materials to secure domestically produced rare earth magnets, further validates the strategic importance of the Mojave region as a critical hub for U.S. rare earth supply. Locksley's Mojave Project, located just 1.4km from MP's Mountain Pass operation, is now confirmed to host expanded antimony and rare earth element targets, following detailed structural mapping. With the U.S. government and global technology leaders prioritising domestic sourcing of critical minerals, Locksley is ideally positioned to capitalise on this shift as it advances its exploration programs in the heart of America's rare earth supply chain.

#### Locksley Technical Director, Julian Woodcock, commented:

"The structural mapping program has significantly advanced our understanding of both the Desert Antimony and El Campo prospects, confirming the mineralised trends we are targeting and provided us with a solid geology model which is being used to refine our drill targeting. These results support our strategy to rapidly unlock the critical minerals potential of the Mojave Project at a time when U.S. government support for domestic supply chains is accelerating."



#### **Next Steps**

- Submission of expanded drilling POO to BLM late July
- Complete drill tender process to secure RC drilling contractor
- Q3 2025 RC drilling scheduled to test both antimony and REE targets, including the South Fault at El Campo
- Ongoing integration of structural data into updated 3D models and JORC exploration target
   preparation

For further information, please contact:

Nathan Lude

#### **Chairman, Locksley Resources Limited**

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

#### **Competent Persons Statement:**

Information in this release that relates to Exploration Results and is based on information compiled by Mr Julian Woodcock, who is a Member and of the Australian Institute of Mining and Metallurgy (MAusIMM(CP) – 305446). Mr Woodcock is a Technical Director of Locksley Resources Limited.

Mr Woodcock has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Woodcock consents to the disclosure of the information in this report in the form and context in which it appears.

#### Forward-Looking Statement:

This document may includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Locksley Resources Limited's planned exploration program 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.



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#### **About Locksley Resources Limited**

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.

#### **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 wellestablished 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.





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

### JORC Code, 2012 Edition – Table 1 report template

#### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	No sampling data being reported.
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	No drilling reported.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No drilling reported.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul> <li>Outcrop mapping was geologically logged and quantitative nature. Structural measurements were taken and plotted on stereonets to assist in geological structural interpretation.</li> <li>Photographs were taken of outcrops and rock types to aid in</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	reporting.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No sampling data being reported.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>No assay results being reported.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No sampling or assay data being reported.</li> <li>All primary data (structural geology readings) captured and recorded in to digital software during mapping.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Methods used to obtain location of samples are a hand-held GPS with an accuracy of +-5m.</li> <li>All stream outcrop mapping locations were obtained using Universal Transverse Mercator NAD83 Zone11 format.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing is random based on available outcrop locations and varies between close spaced (metre scale) to large scale 10's t 100's metres.</li> <li>Data is not being used for a Mineral Resource Estimate.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>All measurements are taken from visible extents in outcrop.</li> <li>Where veins have been seen and thickness estimated they are based on the visual extents in the exposure.</li> <li>Estimates of vein thickness reported are thought to be true width but further data is required to be collected.</li> <li>Estimates of mineralised zone length are based on out crop observations and interpreted connectivity but not confirmed. Further data is required to determine if mineralised zone is continuous.</li> <li>No drilling is being reported and no sampling bias has been determined.</li> </ul>
Sample security	The measures taken to ensure sample security.	No sample (assay) data is being reported.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Data and sampling techniques have not been reviewed or audit.

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The Mojave Project combines to a total area of 18.74 km <sup>2</sup> . The El Campo Prospect is a Rare Earth Element (REE) prospect and the Desert Antimony Mine (DAM) Prospect is an antimony prospect located to the southeast and east of the Mountain Pass Mine respectively in San Bernardino Country, California. The project area lies to the north of and adjacent to Interstate-15 (I-15), approximately 24 km southwest of the California-Nevada state line and approximately 48 km northeast of Baker, California USA. This area is part of the historic Clark Mining District established in 1865 and Mountain Pass is the only REE deposit identified within this district. The project is accessed via the Baily Road Interchange (Exit 281 of I-

Criteria	JORC Code explanation	Commentary
		15) and the southern extensions of the project area can be accessed via Zinc Mine road.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previously announced surface sampling was completed by Locksley Resources staff in conjunction with MINEX staff, who assisted Locksley with site familiarisation, sampling, and logistical aspects of the surface sampling program.</li> <li>The company has no substantial information on exploration completed by other parties.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The Mojave Project is located in the southern part of the Clark Range in the northern Mojave Desert. The Mojave Desert is situated in the southwestern part of the Great Basin province, a region extending from central Utah to eastern California. The region is characterised by intense Tertiary regional extension deformation. This deformational event has resulted in broad north-south trending mountain ranges separated by gently sloping valleys, a characteristic of Basin and Range tectonic activity. The Mountain Pass Rare Earth deposit is located within an uplift block of Precambrian metamorphic and igneous rocks that are bounded on the southern and eastern margins by basin-fill formations in the Ivanpah Valley. The block is separated from Palaeozoic and Mesozoic rocks to the west by the Clark Mountain fault, which strikes north- northwest and dips steeply to the west.
		Mountain Pass, located within 1.4 km to the Mojave Project, is a carbonatite hosted rare earth deposit. The mineralisation is hosted principally in carbonatite igneous rock and Mountain Pass is the only known example of rare earth deposit in which bastnasite is mined in the primary magmatic economic mineral.
		The Desert Antimony Mine is a quartz carbonate vein with Stibnite (Antimony Sulphide) stringer veins contained within it as the ore bearing mineral.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul> </li> </ul>	No drilling reported.

Criteria	JORC Code explanation	Commentary
	<ul> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No data aggregation methods reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>No drilling reported. True widths of mineralization cannot be interpreted from the results received to date.</li> <li>The geological boundaries of the prospective horizon were interpreted by field geologists, who engaged in mapping of lithological boundaries and conducted outcrop orientation to determine dip and dip direction.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>No drilling reported. Isometric view images of the interpreted solid geology models are included in the body of the release. No discovery is being reported.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>No assay results are being reported.</li> <li>The geological models produced and show in the figures in the body of the release the mineralised horizons being targeted.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>All material results have been previously reported and can be viewed on the Company's website.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions,</li> </ul>	<ul> <li>Ongoing development and refinement of the geological model.</li> <li>Drill hole planning and submission of new Plan of Operations for additional drilling at the Desert Antimony Mine prospect</li> </ul>

Criteria	JORC Code explanation	Commentary
	including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul> <li>Commencement of drilling program at the El Campo and DAM prospects planned for late in the September Quarter 2025</li> </ul>