Locksley Resources

ASX RELEASE
29 November 2023

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TICKER
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LOCATION: Southern California, USA

Exploration Team Mobilised To Follow-Up The Highly Anomalous TREO Results At The Mojave REE Project In California, USA

Locksley Resources Limited completed mapping, rock-chip and stream sediment sampling in August this year at the Mojave REE project. Locksley received encouraging results in both rock-chip and stream sediment assays. The Company is pleased to announce that a follow-up work campaign has commenced for high-grade REE's on the North Block of the Mojave Project, California, USA. Stream sediment sampling on the North Block Claim has been designed to locate the source of the elevated REE anomalies.

Highlights:

- Multiple REE targets have been identified within the North Block of the Mojave Project post the field program in August 2023
- The recent stream sediment sampling program at the North Block returned highly anomalous total rare-earth oxide (TREO) results
- Six (6) catchment areas were identified in the North Block as prospective for ongoing REE exploration with assays ranging from 0.103% to 0.26% TREO[2]
- Follow-up sampling of the anomalous catchment areas has commenced and has potential to identify additional high-grade rare earths within the broader Mojave Project Area
- The North Block of the Mojave Project abuts the Mountain Pass Mine land area, the largest REE mine in the US and largest producer of high-grade rare-earth materials in the western hemisphere, delivering approximately 15% of global rare earth supply[1]

Locksley Resources Limited (ASX:LKY) ("Locksley" or "the Company") is pleased to announce commencement of a follow-up sampling program over the North Block at the Mojave Project which previously returned seven (7) anomalous results ranging from 0.103% (1,030ppm) to 0.26% (2,600ppm) TREO[2]. The previously reported results represent a new area of REE potential amongst Mojave's North Block, a large area of 164 claims totalling 14.9km² and highlights the potential for additional High-grade REE mineralisation in California, USA.

1. *Mountain Pass Mine website https://mpmaterials.com/what-we-do/-visited July 7, 2023*
2. *LKY Announcement 28 th September 2023*

Locksley Resources Limited Managing Director, Steve Woodham commented:

"The stream sediment sampling program completed at the North Block previously returned assays ranging from 0.103% to 0.26% TREO, highlighting the prospectivity for further REE discoveries in the North Block Claims.

The Company remains well funded and has commenced follow-up stream sediment and reconnaissance rock-chip sampling at the North Block, the Board look forward to reporting the results of the current program as soon as practicable."

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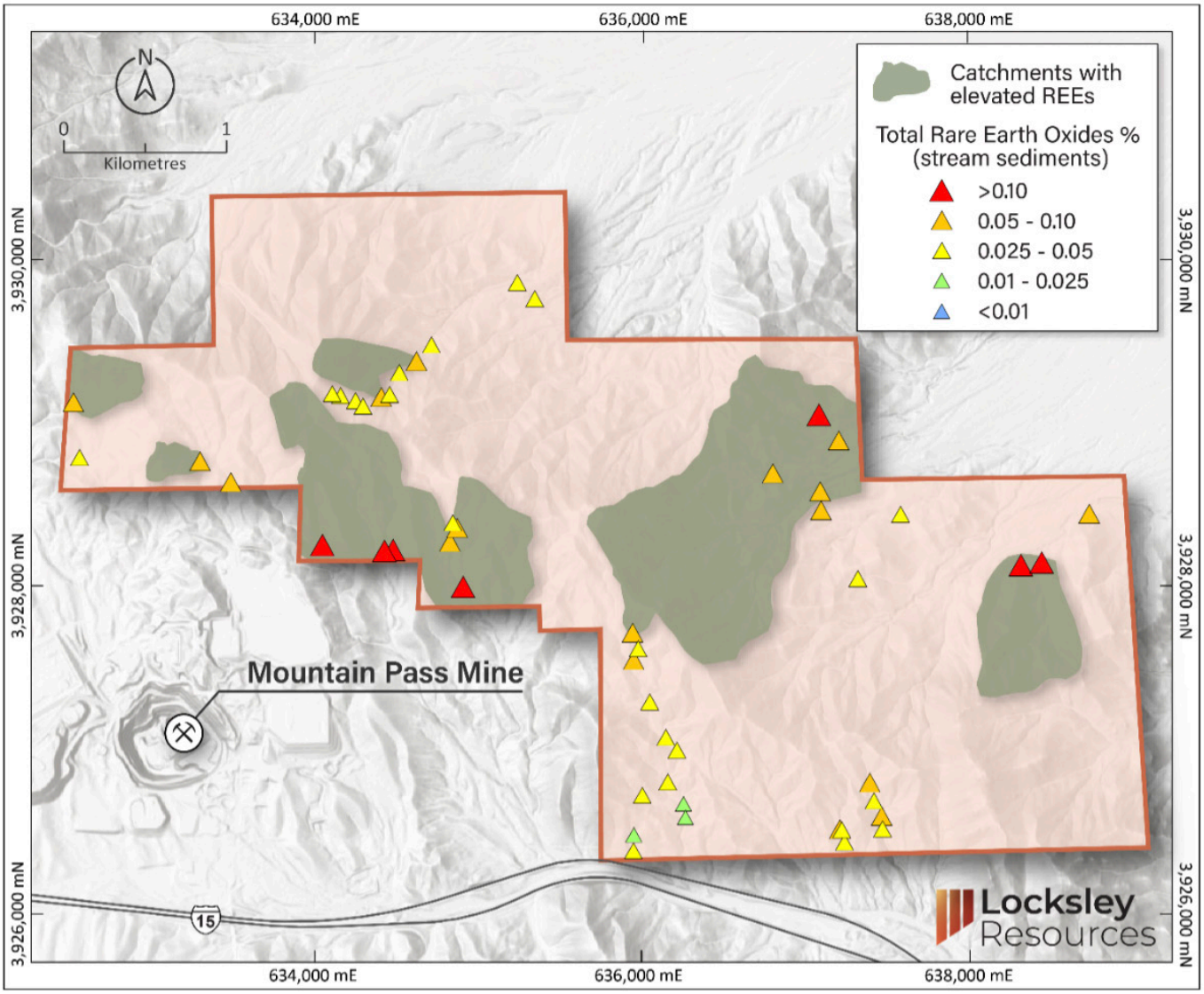

Figure 1: Catchments displaying highly anomalous REE mineralisation in stream sediment samples (LKY Announcement 28th September 2023)

Locksley Resources Limited through its 100% owned subsidiary Enigma Strategic Minerals LLC collected fifty-one (51) stream sediment samples within the Company's North Block Claim, located in San Bernardino Country, California. The first pass stream sediment sampling program was designed to collect samples from dry stream beds over a broadly spaced area within the North Block as an early exploration tool to cover large areas of the claims with the aim of identifying smaller areas of interest that require additional ground reconnaissance.

Six (6) catchment areas were identified as potential source areas for REE mineralisation in the North Block of the Mojave Project (Figure 1). Seven (7) stream sediment samples have identified highly anomalous REE potential, resulting in erosion from nearby surrounding outcrops. The sampling points with anomalous elevated REE geochemistry, indicate the possibility of a REE deposit upstream from where the samples were collected.

The current program is designed to follow-up the anomalous stream sediments results from the North Block to narrow down the potential outcropping source of the highly anomalous results. In addition to further stream samples, reconnaissance rock chip sampling will take place upstream from the already identified catchments shedding REE's.

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Figure 2: Locksley field staff actively sampling on the North Block

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The Board of Directors of Locksley Resources Limited authorised the release of this announcement.

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Compliance Statements

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. No representation is made that, in relation to the tenements the subject of this presentation, the Company has now or will at any time the future develop resources or reserves within the meaning of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.

Cautionary Statement

Visual estimates described in the announcement are a guide only and should never be considered a proxy or substitute for laboratory analysis. Only subsequent laboratory geochemical assay can be used to determine grade of mineralisation. LKY will always update shareholders when laboratory results become available.

Competent Persons

The information in this document that relates to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by David Ward BSc, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM), (Member 228604). David Ward is a shareholder of Locksley Resources Ltd. David Ward has over 25 years of experience in metallic minerals mining, exploration and development and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a 'Competent Person' as defined under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ward consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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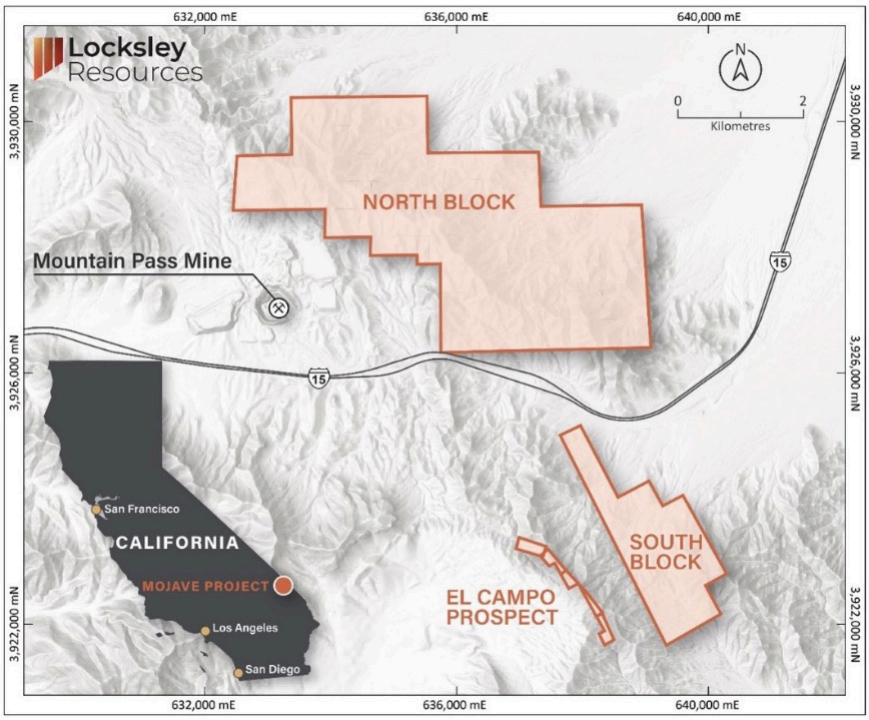
About Locksley Resources Limited

Locksley Resources Limited (ASX:LKY) is an ASX-listed minerals explorer with a focus on copper, gold and base metal assets throughout Australia. LKY is also active in exploring for Rare-Earth Element (REE) projects located in the United States of America (USA), positioning LKY as a player in the fast-growing REE exploration market. LKY aims to build shareholder wealth through the discovery and development of mineral deposits across various Australian and USA projects; being the Tottenham Project and Mojave Project.

Mojave Project

The Mojave Project is in the Mojave Desert, California, USA. Consisting of three areas: The North Block is comprised of 164 claims totalling 14.9 km², South Block comprising of 32 claims totalling 3.5 km², and El Campo Prospect comprising of 5 claims totalling 0.34 km².

The Mojave Project is positioned next to one of the highest-grade REE mines in the world and multiple significant carbonatite REE veins have been identified. The Mojave Project has returned high grade TREO rock-chip results of up to 9.49%.



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

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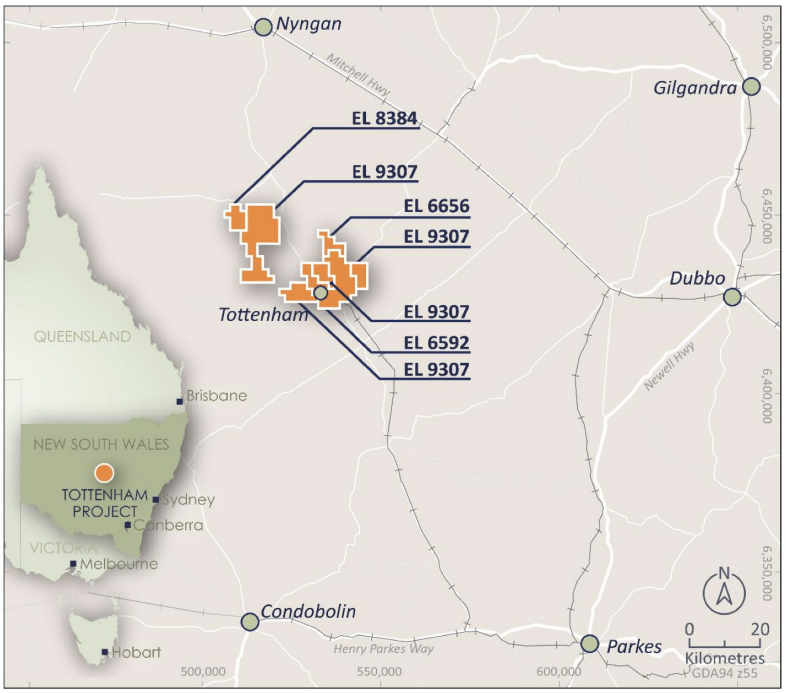
Tottenham Project

The Tottenham Project is an advanced Cu-Au exploration project that consists of four Exploration Licences, (EL6592, EL6656, EL8384, EL9307), covering 470km2, located in the Lachlan Fold Belt of central New South Wales.



TOTTENHAM PROJECT – Location of the Tottenham Project in central NSW, Australia

The Tottenham deposits are hosted within the Ordovician Girilambone Group that also host the Tritton and Girilambone Mines and Constellation Deposit, 110km to the north-northwest (Aeris Resources Ltd.), and is immediately along strike from the CZ Copper Deposit (Helix Resources Ltd). Resources have been defined at both the Mount Royal to Orange Plains and Carolina Deposits for a global inferred resource of:

9.86Mt @ 0.72% Cu, 0.22g/t Au, 2g/t Ag at a 0.3% Cu cut off

The Competent Person for the Tottenham Project 2022 Resource is Mr Jeremy Peters FAusIMM CP(Geo, Min), a Director of Burnt Shirt Pty Ltd. The Mineral Resource estimate is stated in accordance with the provisions of the JORC Code (2012). Mr Peters has more than five years' experience in the estimation and reporting of Mineral Resources for base metals mineralisation in Australia and overseas, 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 Peters consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

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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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• The stream sediment samples referred to in this release were stream sediment samples collected by MINEX, professional US based exploration consultants assisting the Company with geochemical surface sampling. A total of 51 stream sediment samples were collected and assayed for a suite of elements including gold, base metals, and rare earth elements. • Sample site selection was entered into a Garmin GPS for sample crew field location. • Verbal instructions on sample procedure were given to MINEX field crews. • Sample sites were dry intermittent stream bed with three holes dug 15-30cm in depth with a hole radius of 15 cm. Each hole was located approximately 1 meter apart. Material from each hole was screened through a 1mm screen into a gold pan. The material from the 3 holes was combined into one sample and bagged into a 5" x 8" olefin sample bag. • 37% to 50% of samples collected from 3-hole composites, and the remaining 36 samples were collected from single hole sample sites. • Sample weights of the minus 1mm stream sediment sand ranged between 0.354 kg to 1.05 kg with an individual average sample weight of 0.696 kg for the 51 samples. • Multi-element analysis was completed for all elements using fire assay (FA-ICP), inductively coupled plasma (M-ICP-35_4A) and rare earth M-ICPMS-RE-4A analysis by AAS for stream sediment analysis.
Drilling techniques	• *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).*	• No drilling reported.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• No drilling reported.

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Criteria	JORC Code explanation	Commentary
	• *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.*	
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• A digital database was constructed detailing the samples collected which included, sample ID, project name, sample location in X and Y coordinates with map datum noted, state, county, sampler, sample date, sample type, sample description, sample weight, lab certificate number, and analysis results. • Logging was qualitative or quantitative nature. • Stream sediment samples were all collected within the North Block claim boundary within the Mojave Project.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sub-sampling • Stream sediment samples were collected with the sample number written on each sample bag in permanent marker and a sample tag was placed in each bag. • Each sample was recorded with a paper card description, sample photo, and sample GPS location.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• The 51 stream sediment samples collected and referred to within this release were systematically sampled and numbered, and samples were submitted to American Analytical Services (AAS). Analysis was undertaken for Au by fire assay and a 48 multi-element ICP suite. • 2 certified reference materials were combined to the total amount of stream sediment samples submitted to AAS. A total of 53 stream sediment samples were submitted to AAS for analysis. • No geophysical tools were used in the determination of assay results regarding the samples highlighted in the press release.

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Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No sample pulps containing elevated REE have been re-assayed by either independent alternative company personnel for verification. • Data has been uploaded to the LKY geochemistry database. • Multielement results (REE) are converted to stoichiometric oxide (REO) using element to oxide stoichiometric conversion factors.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Methods used to obtain location of samples are a hand-held GPS with an accuracy of +-5m. • All stream sediment sample locations were obtained using Universal Transverse Mercator NAD83 Zone11 format.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Data spacing is variable. • Sampling is not sufficient to calculate a mineral resource estimate. • No sample compositing has been applied.

Element	Oxide	Conversion Factor
La	La2O3	1.1728
Ce	Ce2O3	1.1713
Pr	Pr2O3	1.1703
Nd	Nd2O3	1.1664
Sm	Sm2O3	1.1596
Eu	Eu2O3	1.1579
Gd	Gd2O3	1.1526
Tb	Tb2O3	1.151
Dy	Dy2O3	1.1477
Ho	Ho2O3	1.1455
Er	Er2O3	1.1435
Tm	Tm2O3	1.1421
Yb	Yb2O3	1.1387
Lu	Lu2O3	1.1371
Y	Y2O3	1.2699
Sc	Sc2O3	1.5338

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Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Samples were collected within the boundary of the North Block, South Block, El Campo Lease in catchment areas and dry stream beds located around low relief areas where surface run-off is likely to accumulate.
Sample security	• *The measures taken to ensure sample security.*	• The sample chain of custody has been managed by the employees of Locksley Resources Limited and US based MINEX. • Once collected, the samples were placed in a secure location and transported to the AAS laboratory in Osburn, Idaho. • Chain of Custody documentation was maintained. • QA/QC protocol was implemented for all samples collected.
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	• *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.* • *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.*	The Mojave Project combines to a total area of 18.74 km² and is a Rare Earth Element (REE) project located to the east and southeast of the Mount Pass Mine 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-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.*	• 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.
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

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Criteria	JORC Code explanation	Commentary
		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.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	• No drilling reported.
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data aggregation, all results mentioned in the body of the press release are reported.

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Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• No drilling reported. True widths of mineralisation cannot be interpreted from the results received to date. • 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.
Diagrams	• *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.*	• No drilling reported. Locations of all significant results are shown in the body of the announcement.
Balanced reporting	• *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.*	• All material results are shown in the body of the announcement. • Results of stream sediment samples mentioned in the body of the announcement were calculated using a stoichiometric conversion table of recently received assay results, with the intention of calculating total rare earth oxides (TREO).
Other substantive exploration data	• *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.*	• All material results are shown in the body of the announcement.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The stream sediment sampling program was a first pass exploration tool for previous explorers in the area, if elevated REE values are obtained from analysis within the stream sediment sampling program that has recently been conducted, further work may, but not limited to additional stream sediment sampling, geophysical surveys and drilling.