

## Metallurgical Testwork Highlights REO Potential at Eyre

### Highlights

- Initial results received from metallurgical testwork at Merivale South Prospect for Rare Earth Elements (REE)
- Results highlight that excellent upgrades of the REE can be achieved through simple sieving
- Positive upgrade factors of over 2:1, combined with a significant reduction in mass could significantly enhance the economics of the mineralisation
- Upgrades from 3767 to over 6769ppm TREO and from 595 to 1267ppm TREO achieved
- Further testwork underway to potentially refine a processing flowsheet that will determine the upside to the REE mineralisation at Merivale South

Larvotto Resources Limited (ASX: LRV, TGAT: K6X, 'Larvotto' or 'the Company') is pleased to advise it has received the results from initial metallurgical testwork on rare earth elements (REE) from the Merivale South Prospect at the Company's Eyre Project, located in Western Australia.

The metallurgical testwork results have proved that excellent upgrading of the REE mineralisation can be achieved by removing the >25µm fraction.

Upgrade factors of over 2:1 were achieved for TREO grade with up to 67% of the mass removed.

#### Managing Director, Ron Heeks commented,

*"We are pleased to report these are excellent results in from the initial metallurgical testwork at Merivale South. Extremely good upgrade factors of over 2:1, combined with a significant reduction in mass have the potential to enhance the economics of the mineralisation considerably.*

*There is a long way to go, but further work has now commenced to advance the metallurgy to determine potential processing options."*

### Testwork at Merivale South

Testwork on the Merivale South samples was conducted by Independent Metallurgical Operations (IMO), using five samples collected from six metre drill composites obtained from the initial drilling of the Merivale South REE mineralisation.

As was subsequently released, some of the six metre composites contained single metre intercepts of up to 1.26% (12,611ppm) Total Rare Earth Oxides (TREO).<sup>1</sup>

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<sup>1</sup> See ASX: LRV Announcement 18 April 2023 "Bonanza Rare Earth Drill Results at Merivale South"

The composite samples utilised for testwork represented a spread from lower to higher TREO grade to provide a range of results for evaluation.

Samples were wet sieved to above and below 25µm (micron) using a laboratory sieve. The samples were then dried and weighed with an external laboratory analysis on the total sample, minus and plus 25µm fractions. Samples were analysed by fusion and ICPMS. The upgrade factors and mass removal were then calculated. The results are provided in Table 1 below.

There was significant upgrade of REE minerals to the -25µm size fractions from the head samples in all tests. The maximum TREO upgrade to the -25µm size was 2.13:1 from sample LRV 53572.

Further testwork is currently underway to refine a potential path to developing a processing flowsheet that will determine the upside to the REE mineralisation at Merivale.

**Table 1.** Summary of the Results of the Particle Size Classifications at 25 µm (micron)

Sample	LRV53569	LRV53570	LRV53571	LRV53572	LRV53573
Calculated Head Grade TREO (ppm)	3810	1468	3767	595	927
<25µm Size Fraction Grade TREO (ppm)	5724	1956	6769	1267	1092
Mass Distribution to -25µm Size Fraction (%)	51.5	59.2	49.7	32.7	77.0
TREO Recovery to -25µm Fraction (%)	77.4	78.8	89.3	69.5	90.7
TREO Upgrade Ratio to -25µm Fraction	1.50	1.33	1.80	2.13	1.18

### Competent Persons Statement

The information in this presentation that relates to exploration results is based on information compiled by Mr Ron Heeks, who is a Member of the Australasian Institute of Mining and Metallurgy and who is Managing Director of Larvotto Resources Limited. Mr Heeks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, 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 Heeks consents to the inclusion in the release of the matters based on his information in the form and context in which it appears. The Company is not aware of any new information or data that materially affects the information included in this presentation. All material assumptions and technical parameters underpinning the estimates in the Announcements referred to continue to apply and have not materially changed.



This announcement was authorised for release by the Board of Larvotto Resources Limited.

## Reporting Confirmation

The information in this report that relates to exploration results is extracted from the Company's ASX announcements:

- Prospectus dated 18 October 2021; and
- ASX: LRV release titled "Bonanza Rare Earth Drill Results – Merivale South" dated 18 April 2023.

The Company confirms that it is not aware of any new information or data that materially affects the information included within the original market announcements.

## About Larvotto Resources Ltd

Larvotto Resources Limited (ASX: LRV) is actively exploring its portfolio of projects including the large Mt Isa copper, gold, and cobalt project adjacent to Mt Isa townsite in Queensland, an exciting gold exploration project at Ohakuri in New Zealand's North Island and the Eyre multi-metals and lithium project located some 30km east of Norseman in Western Australia. Larvotto's board is a mix of experienced explorers and corporate financiers. Visit [www.larvottoresources.com](http://www.larvottoresources.com) for further information.

## Forward Looking Statements

Any forward-looking information contained in this news release is made as of the date of this news release. Except as required under applicable securities legislation, Larvotto does not intend, and does not assume any obligation, to update this forward-looking information. Any forward-looking information contained in this news release is based on numerous assumptions and is subject to all of the risks and uncertainties inherent in the Company's business, including risks inherent in resource exploration and development. As a result, actual results may vary materially from those described in the forward-looking information. Readers are cautioned not to place undue reliance on forward looking information due to the inherent uncertainty thereof.



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Company Secretary

### PROJECTS

**Mt Isa Au, Cu, Co**

Mt Isa, QLD

**Ohakuri Au**

New Zealand

**Eyre Ni, Au, PGE, Li**

Norseman, WA

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## JORC Code, 2012 Edition – Table 1

### Section 1 Eyre Project Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Soil samples were collected by collecting a 2kg near surface sample and sieving to sub 2mm and collecting a 300g sample for laboratory submission.</li> <li>Aircore drilling samples were collected from 1m composite piles placed on the ground using a 40mm tube sample taken diagonally across the pile. The 1m piles were composited into 6m samples for laboratory submission except where blade refusal created a lesser interval. 1 in 20 field duplicates were taken.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was undertaken with an aircore drill rig and samples were collected from 1m runs and placed in piles on the ground adjacent to the drill rig for sampling</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was undertaken dry using an aircore blade bit except where near surface conditions required a RC hammer to penetrate harder layers. Recovery was deemed to be very good for the method.</li> </ul>
Logging	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Soil samples were logged for colour and type (residual vs transported). Basic geological observations were recorded.</li> <li>Drill samples we logged for a range of geological parameters including rock type, colour, texture and oxidation.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>The soil samples were sieved to -2mm and pressed into 1cm diameter pellets.</li> <li>Drill samples were 6m composites from 2m drill samples.</li> </ul>

<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For soil samples pXRF readings were conducted on a pressed pellet of the soil samples using the SciAps portable XRF analyser. pXRF measurements are a direct elemental analysis on the surface of the sample with high sensitivity to the element.</li> <li>• Each soil pellet sample was analysed a minimum of 3 times and the results averaged. The soil samples are non-homogenous and the results are semi-quantitative and are deemed to only provide an indication of the degree of base metal mineralisation.</li> <li>• Standard quality control procedures were put in place.</li> <li>• For drill samples <ul style="list-style-type: none"> <li>○ Samples were submitted to Intertek Genalysis Laboratories, where they were dried and pulverized and then analysed by Four Acid Digestion Multi-Element Analysis.</li> <li>○ Four acid digestion offers a “near total” dissolution of almost all minerals’ species, targeting silicates not dissolved in less aggressive aqua regia digests. Carefully staged digestion steps minimise losses due to volatilisation of some elements.</li> </ul> </li> </ul>
<p>Samples</p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No independent verification of results has been undertaken at this stage.</li> <li>• No adjustment to assay data has been undertaken.</li> </ul>
<p>Location of data points</p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole location were surveyed with a handheld GPS. RL’s were obtained from the government 1second DEM.</li> </ul>
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Soils- The surface sample spacing was nominally 40 and 80 metres along the lines and 160 and 320 metres which is considered appropriate at this early stage of exploration. This is infilled over zones of geological interest.</li> <li>• Drill samples were collected from 1 metre samples collected from drillholes angled 60 degrees to the east. Holes were drilled to blade refusal with spacing designed to provided 100% ground coverage where possible.</li> </ul>



Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Soil sampling was generally taken along north-south lines, which is approximately perpendicular to the strike of the stratigraphy.</li> <li>Drill holes were predominantly drilled to the east with some west orientated holes where interesting rock units were encountered</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No specific security measures were undertaken, apart from normal industry procedures.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Given the early stage of the exploration results, no audits or reviews have been undertaken.</li> </ul>

## 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 style="list-style-type: none"> <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 tenure is considered to be secure. It is held 100% under Exploration Licence E63/2008, by Eyre Resources Pty Ltd a wholly owned subsidiary of Larvotto.
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration was conducted on the project by Western Mining Corporation in the 1960's and 70's with a limited geochemistry program and several diamond drillholes. Anomalous copper was identified in the drilling over an intersection of several feet. Newmont Exploration undertook further geochemistry on a limited area around Mt Norcott in the 1980's.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	<ul style="list-style-type: none"> <li>The tenement package covers a very wide range of mineralisation styles The Company is seeking base metals</li> </ul>





		particularly Ni and PGE metals that may be associated. Lithium minerals and REE as ionic clays
Drill hole Information	<ul style="list-style-type: none"> <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: <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole details are provided in the text</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>No data aggregation was undertaken for soil geochemical exploration.</li> <li>Drill samples were composited in field into 6 metre composites and submitted for analysis.</li> <li>Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.</li> </ul>
Relationship between mineralization widths and intercept lengths	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>At this stage of exploration widths and extents are difficult to determine. Composite intervals may vary once they are submitted in 2 metre intervals.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Diagrams are provided in the body of the report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <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 Results.</li> </ul>	<ul style="list-style-type: none"> <li>The reporting is considered to be balanced taking into account the early stage of the exploration.</li> </ul>

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<i>Other substantive exploration data</i>	<ul style="list-style-type: none"><li><i>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.</i></li></ul>	<ul style="list-style-type: none"><li>The is no other substantive exploration data.</li></ul>
<i>Future work</i>	<ul style="list-style-type: none"><li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li></ul>	<ul style="list-style-type: none"><li>Resampling of significant intersections will be undertaken and RC drilling of anomalous zones will test the harder pegmatites and also Ni zones at depth.</li></ul>

