

## Initial TREO assays up to 2,200ppm at RGL's Mt Weld Project

## **Highlights**

- Initial composite RC drill samples assay up to 2,200ppm TREO at RGL's Mt Weld Project
- 52% of the planned initial ~2,000m RC programme completed to date
- The drilling program is on tenement P34/4489 immediately to the west of Lynas' globally significant Mt Weld rare earth oxide mine

**Riversgold Limited (ASX: RGL, Riversgold** or **the Company**) announces very encouraging total rare earth oxide (**TREO**) assay results from four composite RC drill samples from the drilling program on its Mt Weld Project exploration joint venture, located only 1.4km west-north-west of Lynas Rare Earths Limited's Mt Weld rare earth oxide (**REO**) mine near Laverton in Western Australia.

The Company has drilled 5 holes to date totalling 1,036m of an initial seven-hole (~2,000m) reverse circulation (**RC**) drilling program on the joint venture tenement P34/4489. The program was designed to test several magnetic features confirmed through both airborne and ground magnetic surveying<sup>1</sup>.

The interesting elevated rare earth element (**REE**) results from four composite samples are shown in Tables 1 and 3, with locations in Table 2. The results from all 1m samples from the drill holes will be submitted shortly.

Composite Sample Number	Drill Hole	From (m)	To (m)	TREO <sup>1</sup> ppm	TREO <sup>1</sup> %
MTW001	MWRC002	196	200	1,600	0.160%
MTW002	MWRC002	162	166	1,900	0.190%
MTW003	MWRC003	116	120	2,200	0.220%
MTW004	MWRC003	106	110	1,600	0.160%

## Table 1: Mt Weld – Material Intersection Elevated TREO Assay Results

Notes:

**1.** TREO are detailed in Appendix A, Section 1, "Verification of sampling and assaying"

**David Lenigas, Chairman of RGL**, said: "These 4 initial validation assays to confirm that rare earths are indeed present in these magnetic targets to the west of Mt Weld mine have pleasingly returned highly elevated and anomalous TREO results. We will now move to assay all of the metre-by-metre RC drill chips of the target lithologies and mineralisation of interest before considering next drill plans."

<sup>&</sup>lt;sup>1</sup> Riversgold Limited ASX release date 20 February 2023 - Carbonatite REE Targets - Mt Weld REE Project



The Mt Weld Project straddles the access road to Lynas' Mt Weld mine (see Figure 2). The tenement is predominantly covered by recent transported sediments obscuring the underlying geology, with four discrete undrilled magnetic features (T1-T4) (see Figures 1-3).

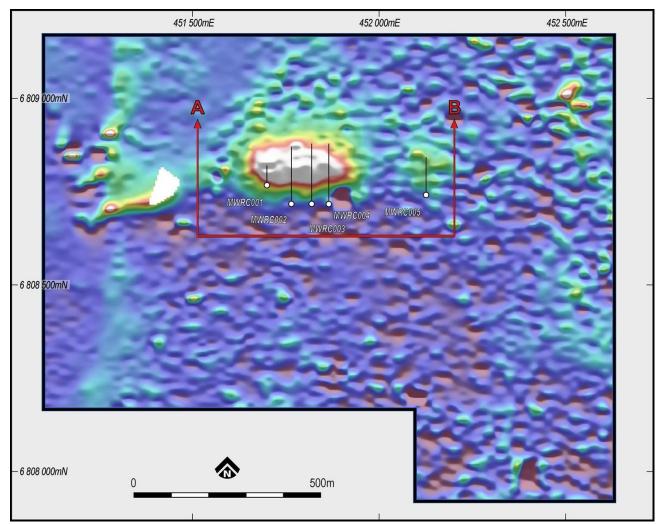


Figure 1: Drill Hole Locations completed to date at Mt Weld (P34/4489)

A farm-in and joint venture agreement with London-listed Corcel Plc enabling Riversgold to earn up to a 70% interest in the tenement was announced on 4 January 2023.

Hole MWRC001 was abandoned due to difficult ground conditions at 84m. All four remaining holes intersected the geophysical targets as modelled (Figure 2 and 3). The magnetic high was deemed to be highly magnetic black mafic volcanics.

To ascertain if REEs were indeed present, the Company prepared four composite 4 metre samples for holes 2 to 4 which had intersected highly magnetic, black mafic volcanics. These samples were dispatched to the assay lab for rush analysis prior to completing the drill program.



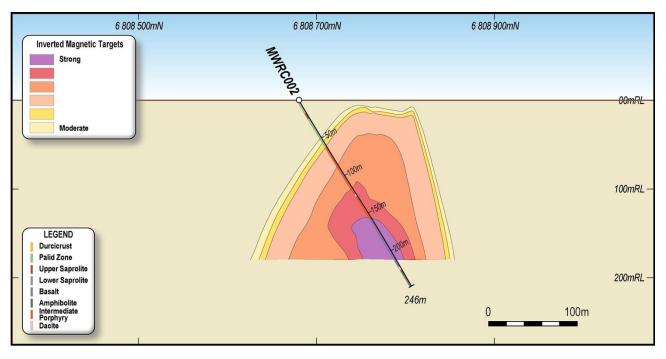


Figure 2: Cross section for drillhole MWRC002, showing drill hole trace and modelled geophysics target

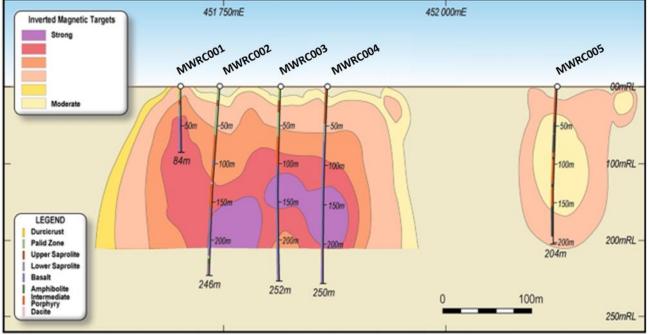


Figure 3: Long Section Showing 5 drill holes relative to the interpreted geophysics targets

The drilling in holes 4 to 5 was successful in intersecting the targeted interpreted magnetics, representing targets T2 and T3 in the RGL:ASX announcement dated 2 May 2023 and detailed in Figure 2. T1 was not drilled due to temporary flooding of the small creek where the target drill hole was located. On further assessment of the ground geophysics interpretation, T4 was downgraded to a be a secondary priority, although it is located closer to the Mt Weld Mine Site.



In hole 5, which was drilled after the *rush assay* was despatch but before the assay results were received, the drilling also intersected medium grained, pink intermediate porphyry interpreted as syenite. Syenite is the host rock at the neighbouring Wallaby Gold deposit currently being mined by Anglo American Gold.

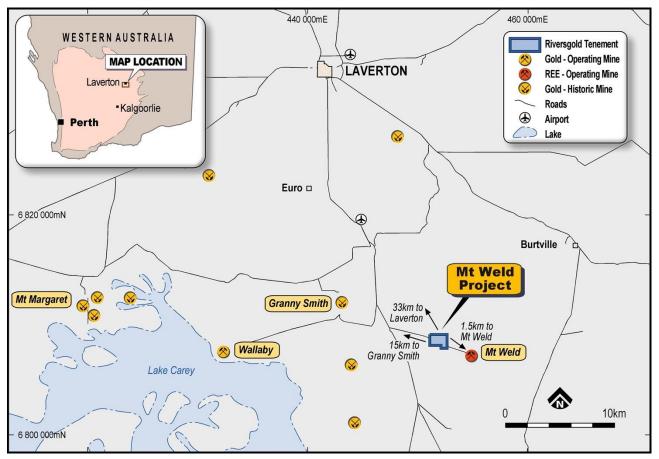


Figure 4: Location of RGL's Mt Weld programme relative to Mt Weld REE Project and Anglo Gold's Granny Smith / Wallaby Project

**Next Steps:** A further detailed analysis of the anomalous REE assays and minerology is currently underway. The Company will make further decisions once these assessments have been completed.

-ENDS-

This announcement has been authorised for release by the Board of Riversgold Ltd.

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#### **Competent Person's Statement**

The information in this document that relates to exploration is based on information compiled or reviewed by Edward Mead, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Mead is a Director of Riversgold Ltd. Mr Mead has sufficient experience that is relevant to the style of mineralisation 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 Mead consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **Table 2: Drill hole information**

Hole_ID	Hole Type	Azimuth	Dip	Max_Depth	Nat_East	Nat_North	Nat_RL
MWRC001	RC	353.44	-60.00	84	451702	6808730	423
MWRC002	RC	351.3	-59.86	246	451746	6808679	423
MWRC003	RC	355.17	-60.08	252	451814	6808680	423
MWRC004	RC	355.35	-62.63	250	451867	6808675	423
MWRC005	RC	353.96	-60.64	204	452125	6808705	423

#### Table 3: ALS reported assay results for the four composite samples. Only relevant REEs reported.

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Method	ME- XRF30	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61									
Analyte	CeO2	Dy2O3	Er2O3	Gd2O3	La2O3	Nd2O3	Pr6011	Sm2O3	Y	Ce	Hf	La	Nb	Y	
	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.1	0.5	0.1	0.1	TREO ppm
MTW001	0.05	0.01	0.02	0.01	0.03	0.02	0.01	<0.01	0.01	359	10.6	194	152.5	32.6	1,600
MTW002	0.07	0.01	0.01	0.01	0.04	0.03	0.01	<0.01	0.01	482	11.2	239	142	39.8	1,900
MTW003	0.08	0.01	0.02	0.01	0.04	0.03	0.01	0.01	0.01	503	7.5	281	162	32.5	2,200
MTW004	0.05	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.01	354	10.4	180	180	44.6	1,600

TREO = Lanthanide Oxides + Yttrium oxides + Scandium Oxides



#### Appendix : Table 1 JORC Tables

## 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.</li> </ul>	<ul> <li>Fine to -25mm rock fragments are obtained using Reverse Circulation drilling methods.</li> <li>Every metre drilled was sampled at the drill rig using a rig mounted static cone splitter to collect 2 – 3kg sub samples.</li> <li>Four standard samples, two duplicates and two blanks are inserted with every 100 samples submitted for analysis.</li> <li>A total of 4 composite samples were submitted to ALS laboratory.</li> <li>Four composite samples were taken using the spear sampling method, over 5m intervals per sample, to generate the four composites. Two composite samples were taken from drill hole MWRC002 and two composite samples from MWRC003.</li> <li>Collected samples were chosen using geological observation and represent logged magnetic basalt with magnetite/ titanomagnetite.</li> </ul>
Drilling techniques Drill sample	<ul> <li>Drill type (eg core, reverse circulation, openhole 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> <li>Method of recording and assessing core and chin sampla recovarias and results assessed</li> </ul>	<ul> <li>Reverse circulation drilling with 1m sample interval.</li> <li>Samples consisted of RC chips collected using an invorted 1m cone, to cample the</li> </ul>
recovery	<ul> <li>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>	<ul> <li>using an inverted 1m cone to sample the cyclone underflow .</li> <li>Cyclone was "air flushed" at the end of each sample and cleaned every 6m to avoid contamination.</li> </ul>
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a	<ul> <li>Collected chips were logged for geology, alteration, relative abundance of mineral</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <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>	<ul><li>species and mineralisation.</li><li>This logging is qualitative in nature.</li></ul>
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>Samples collected weighed approximately 2kg.</li> <li>Sample conditions were recorded by field crew during collection.</li> <li>At the laboratory, samples were dried at 105 degrees Celsius before being pulverized using a Tungsten Carbide bowl to avoid contamination.</li> <li>Pulverized samples were then split and a sub-sample used for ICP analysis.</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>Samples were submitted to ALS laboratory for analysis by Lithium borate fusion XRF and a 4-acid digest with MS/ICP finish for a 48 element suite.</li> <li>The methods utilized are appropriate and typical for the industry for Rare Earth and other tested elements.</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>Results have been verified by company personnel.</li> <li>The REE assay data were converted from reported elemental assays to the equivalent oxide compound as applicable to rare earth oxides. The oxides were calculated from the element according to the following factors:         <ul> <li>CeO2 1.1526</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>La2O3 1.1728</li> <li>Nd2O3 1.1664</li> <li>Pr6O11 1.2082</li> <li>Ho2O3 1.1455</li> <li>Lu2O3 1.1371</li> <li>Sm2O3 1.1596</li> <li>Tb2O3 1.1762</li> <li>Tm2O3 1.1421</li> <li>Y2O3 1.2699</li> <li>Yb2O3 1.1387</li> <li>Dy2O3 1.1477</li> <li>Er2O3 1.1435</li> <li>Eu2O3 1.1579</li> <li>Gd2O3 1.1526</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>The coordinate system used by the company is MGA zone 50 reference grid with geodetic datum GDA94.</li> <li>Drillholes were located using a handheld GPS received with a typical horizontal accuracy of +/-4m.</li> </ul>
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>Drillholes locations reported in this release do not have a regular spacing.</li> <li>The purpose of this drilling was regional exploration, and the reported results are not anticipated to be part of a resource estimate at this point.</li> <li>Compositing to 5m sample length was undertaken over areas where magnetite in basalt was visually identified in the logging</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>	• Drilling Azimuth was oriented perpendicular to the main strike of the magnetic anomaly that may have the potential to be spatially correlated with REE mineralisation.
Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples are collected in calico bags across a defined arc on the edge of the cone located under the cyclone. The calico bag features sample number and down hole interval data pre-written on it. Bags sent for analysis are collected by field technicians and placed in pre-numbered sample bag. Sample depth and number are recorded by field technician</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>and compared with the geologist's spreadsheet to assure accuracy of data. Samples collected are placed within biodegradable plastic bags, which in turn are delivered to the laboratory with detailed sample submission documentation.</li> <li>Laboratory assay samples feature a sample ID on the calico bag as reference.</li> <li>After assaying, sample pulps are placed in paper bags and stored for Riversgold to collect.</li> <li>All steps are supervised by a Riversgold geologist.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audits or reviews of the sampling techniques and data has been conducted.</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> <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>	<ul> <li>Tenement P 38/4489 is located approximately 28km South-Southeast of Laverton. It is accessed by the sealed road between the Mt Weld project and Laverton. The tenement is 1.4Km west-northwest of Lynas Mt Weld REO operations.</li> <li>The tenement is held by Corcel PLC and is currently subject to a farm in option by Riversgold.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>17 RAB and auger holes were drilled by Placer Exploration Ltd in 1993 targeting gold.</li> <li>1 hole of unknown type but probably RAB drilled by Torridon Exploration for gold and base metals</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Carbonatite hosted REE mineralisation and/or gold below cover.</li> </ul>
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>	Refer to Tables and Figures within the body of the release.



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>Intersections have been calculated using no cut off or internal waste and represent the results of compositing at the sampling stage for early test for REE mineralisation</li> <li>The results for the REE suite (lanthanide series) in ppm is reported for each element individually.</li> <li>TREO = Lanthanide Oxides + Yitrrium oxides + Scandium Oxides</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>Mineralisation down hole intersection width is reported as the geometry of the magnetic anomaly being tested is still uncertain. Therefore, true width cannot yet be estimated.</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>Diagrams have been incorporated in the body of this release.</li> </ul>
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.	• The assay results reported in the release are from 4 composite samples from a specific zone of geological interest and were fast tracked through the laboratory. The remaining 1 metre samples are to be assayed.
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,</li> </ul>	<ul> <li>No other substantive exploration data to be reported.</li> </ul>



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Criteria	JORC Code explanation	Commentary
	geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>A decision on any further work will be made once the bulk of the individual 1m intervals selected for further sampling have been analysed.</li> </ul>