

# Gold Target Zone Increased with Latest Northern Zone Drilling

### **Highlights**

- 27 aircore (AC) holes drilled to blade refusal have successfully more than doubled the prospective gold system by tagging basement geology at the Northern Zone Gold Project.
- The AC drilling targeted the oxide zone to fresh rock stratigraphy with the aim of expanding the mineralised porphyry footprint, which remains open.
- Further targeted drilling is being planned over the expanded footprint of the mineralised porphyry.
- Riversgold is fully funded to promptly begin the next phase of drilling operations at Northern Zone.
- A drilling rig has been contracted for the middle of August.
- Northern Zone Gold Project is 25km east of Kalgoorlie.
- Previously announced Exploration Target at Northern Zone Gold Project of 200Mt 250Mt at a grade of 0.4 g/t Au - 0.6 g/t Au for an Exploration Target of 2.5Moz - 4.8Moz of gold.<sup>1</sup>

David Lenigas, Chairman of RGL, said: "Hot off receiving the results from the recent, successful RC drill program at Northern Zone near Kalgoorlie, these aircore results show we have now more than doubled the porphyry footprint than we originally thought, with the full extent of these porphyries yet to be fully delineated. The vertical AC drill holes strategically targeted near-surface supergene mineralisation in areas distinct from previous diamond and RC drill sites within the oxide and fresh rock interface, revealing new target zones north and south of our existing RC and diamond drilling locations. A new drill program is expected to start around mid-August to infill supergene zones identified with the last round of drilling. We look forward to resuming drilling operations shortly with the view of testing and further expanding this large porphyry system."

The Northern Zone Project has an Exploration Target of 200 to 250 million tonnes at a grade of 0.4 g/t to 0.6 g/t Au for an Exploration Target of 2.5 to 4.8 million oz of gold, as announced by RGL to the ASX on the 9 May 2023.

**Cautionary Statement**: The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The reader is advised that an Exploration Target is based on existing drill results and geological observations from drilling as well as interpretation of multiple available datasets. The Exploration Target is based on historical and Oracle drilling results. It uses data from 53 historical drillholes drilled between 1998 and 2012, and 7 drillholes drilled by Oracle in 2021. Refer to Appendix 1 of the announcement dated 9 May 2023 for further information with respect to these exploration results.

**Riversgold Limited (ASX: RGL, Riversgold** or **the Company)** is pleased to announce that it has received the assay results from the recently completed aircore (AC) drilling program at the Northern Zone Intrusive Hosted Gold Project, located 25 km east of Kalgoorlie in Western Australia (refer to **Figure 1** for location).

Drilling contractor Australian Aircore Drilling (Mick Shorter) completed the 1,772m AC drilling at Northern Zone using a blade to drilling refusal, with the cuttings being logged by RGL geologists. The detailed logging and assays continue to show that a gold mineralisation event has occurred in the project area. The drilling aimed to expand the potential for supergene gold mineralisation and increase its spatial coverage across the project site. Mineralisation remains open in multiple directions, necessitating further testing of basement

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<sup>&</sup>lt;sup>1</sup> RGL ASX announcement 9 May 2023 "Farm into Significant Porphyry Hosted Gold Project".



geology in future drilling campaigns. Refer to **Figure 2** for drilling locations, and Tables 1-3 for location and assay results.

Conceptually, the Company draws parallels between Northern Zone and Saturn Metals' Apollo Hill Project, discerning similarities based on the PEA statement released by Saturn Metals (ASX 7 August 2023), which suggests the potential for a sizeable low-grade heap leach operation.

Saturn Metals Limited has released a Preliminary Economic Assessment (PEA) on the Apollo Hill Gold Project which is located 175km due north of Northern Zone. With a resource estimate of 105Mt at 0.54g/t gold, totalling 1.839Moz<sup>2</sup>, this development serves as a benchmark for our aspirations at Northern Zone, albeit with the potential for Northern Zone to be an even larger project.

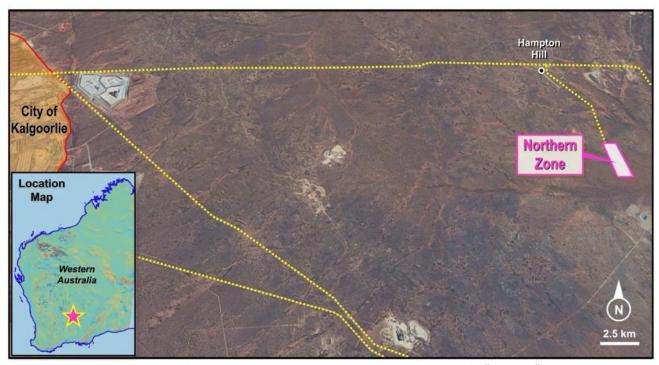


Figure 1: Northern Zone Project Map showing proximity to the Kalgoorlie "Super Pit".

On 9 May 2023, RGL disclosed an 80% earn-in to the Northern Zone Gold Project with London-listed Oracle Power Plc<sup>3</sup>. As part of this agreement, RGL completed a 4-hole diamond drill program in 2023 totalling 1,379m (including orientated core) to specifically evaluate the exploration model of +100m wide gold mineralisation. Results from RGL's drilling validated the original mineralisation model, confirming style, widths, and grades.

#### **About Northern Zone Gold Project:**

The Northern Zone Project is located 26km, east-south-east of the Kalgoorlie Super Pit and is readily accessed from the Bulong road, which is paved to within 9km of the prospect site. The last 9kms consists of 4km of a high-quality haul road with the last 5kms on a station road. The topography is flat lying, open scrub on 40-50m of transported overburden.

-ENDS-

<sup>&</sup>lt;sup>2</sup> STN ASX announcement 17 August 2023 "Updated Preliminary Economic Assessment".

<sup>&</sup>lt;sup>3</sup> RGL ASX announcement 9 May 2023 "Farm into Significant Porphyry Hosted Gold Project".





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 report that relates to exploration results, exploration targets, mineral resources or ore reserves is based on information compiled by Mr Edward Mead, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Mead is a director of Riversgold Ltd and a consultant to the company through Doraleda Pty Ltd. Mr Mead has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Mead consents to the inclusion of this information in the form and context in which it appears in this report.



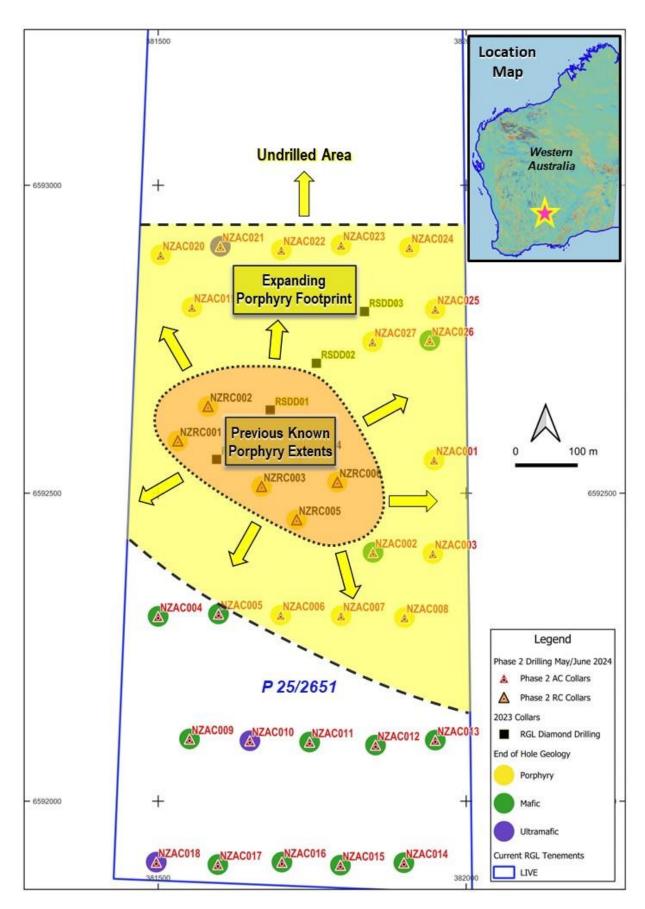


Figure 2: Recent drill collar plan illustrating the expanded porphyry footprint at Northern Zone.



## **APPENDIX 1: Drilling Information**

Table 1: Northern Zone Aircore Drill Collar Locations and Information

Hole_ID	East	North	RL	Dip	Azimuth
NZAC001	381948	6592554	358	-90	0
NZAC002	381849	6592404	358	-90	0
NZAC003	381946	6592402	358	-90	0
NZAC004	381500	6592300	358	-90	0
NZAC005	381598	6592304	358	-90	0
NZAC006	381699	6592302	358	-90	0
NZAC007	381797	6592301	358	-90	0
NZAC008	381900	6592298	358	-90	0
NZAC009	381551	6592101	358	-90	0
NZAC010	381649	6592098	358	-90	0
NZAC011	381746	6592096	358	-90	0
NZAC012	381853	6592091	358	-90	0
NZAC013	381950	6592099	358	-90	0
NZAC014	381899	6591900	358	-90	0
NZAC015	381796	6591896	358	-90	0
NZAC016	381701	6591901	358	-90	0
NZAC017	381597	6591897	358	-90	0
NZAC018	381497	6591901	358	-90	0
NZAC019	381555	6592802	358	-90	0
NZAC020	381504	6592887	358	-90	0
NZAC021	381601	6592901	358	-90	0
NZAC022	381700	6592895	358	-90	0
NZAC023	381797	6592903	358	-90	0
NZAC024	381908	6592899	358	-90	0
NZAC025	381950	6592799	358	-90	0
NZAC026	381941	6592748	358	-90	0
NZAC027	381848	6592746	358	-90	0

**Table 2: Northern Zone Significant Intercepts** 

Hole ID	From (m)	To (m)	Width (m)	Av Grade (g/t Au)	Intercept
NZAC001	45	51	6	0.2	6m @0.2g/ t Au.
NZAC002	30	33	3	0.78	3m @0.78g/ t Au
NZAC002	63	64	1	0.45	1m @0.45g/ t Au
NZAC003	72	80	8	0.13	8m @0.13g/ t Au
NZAC004	33	39	6	0.58	6m @0.58g/ t Au
NZAC005	75	81	6	0.26	6m @0.26g/ t Au
NZAC006	33	48	15	0.27	15m @0.27g/ t Au
NZAC007	60	61	1	0.54	1m @0.54g/ t Au
NZAC010	54	69	15	0.37	15m @0.37g/ t Au
NZAC011	63	67	4	0.87	4m @0.87g/ t Au
NZAC012	51	56	5	0.49	5m @0.49g/ t Au
NZAC023	42	45	3	0.51	3m @0.51g/ t Au
NZAC024	33	36	3	1.14	3m @1.14g/ t Au



Table 3: Northern Zone AC Composite Results > 0.3 Au Grade (g/t) Cutoff

Hole ID	From (m)	To (m)	Width (m)	Au Grade (g/t)
NZAC002	30	33	3	0.78
NZAC002	63	64	1 (EOH)	0.45
NZAC005	33	36	3	0.72
NZAC005	36	39	3	0.45
NZAC005	75	78	3	0.35
NZAC006	45	48	3	0.65
NZAC007	60	61	1 (EOH)	0.56
NZAC010	30	33	3	0.33
NZAC010	54	57	3	0.97
NZAC010	63	66	3	0.48
NZAC011	63	66	3	0.99
NZAC011	66	67	1(EOH)	0.5
NZAC012	51	54	3	0.46
NZAC012	54	56	2 (EOH)	0.54
NZAC023	42	45	3 (EOH)	0.51
NZAC024	33	36	3	1.14

#### **APPENDIX 2: JORC INFORMATION**

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at Northern Zone.

### Section 1: Sampling Techniques and Data

(Criteria in this section applies 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.	Every metre drilled was placed on the ground.  3m composites were collected using the pipe/spear method of sampling the coarse reject sample.  Standard reference material, sample duplicates and blanks, were undertaken at 25m sample intervals.  3m composite samples were sent to the laboratory for crushing, splitting and analysis.  Analysis was undertaken by ALS laboratories (Perth) for gold assay by 50g fire assay.
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).	Australian Aircore Drilling completed the program using a blade to refusal.





Criteria	JORC Code explanation	Commentary
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.  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.	Drill recovery was routinely recorded via estimation of the comparative percentage of the volume of the sample pile by the company geologist. The sample recovery was deemed excellent for representative assays.
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.	All holes have been geologically logged for lithology, mineralisation and weathering.  A brief description of each drilling sample was recorded and a permanent record has been collected and stored in chip trays for reference.
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.	A sub sample from the AC spoil piles of approximately 2-3 kilograms.  The use of fire assay with 50g charge for all AC drilling provides a level of confidence in the assay database. The sampling and assaying are considered representative of the in-situ material.  The sample size of 2-3 kilograms is appropriate and representative of the grain size and mineralisation style of the deposit
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.	ALS (Kalgoorlie) were used for all analysis of drill samples submitted by WCN. The laboratory techniques below are for all samples submitted to ALS and are considered appropriate for the style of mineralisation defined within the Reedy South Project area:  Samples above 3Kg were riffle split. Pulverise to 95% passing 75 microns 50-gram Fire Assay (Au-AA26) with ICP finish – Au Duplicates, Standards and Blanks were used for external laboratory checks by RGL.
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.	Intercepts were reviewed by 2 company personnel.
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.	The collar position of each hole was recorded using handheld GPS. The down hole survey data was taken at 30m using standard down hole gyro tools.
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.	The holes were drilled on a nominal 100m spacing on traverses 200m apart.
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.	The drill holes were designed to
Sample security	The measures taken to ensure sample security.	Company personnel delivered samples were to ALS Kalgoorlie yard where they were submitted for assay



Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Data reviews will be conducted on completion of further drilling

## 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 Northern Zone Project is comprised of one granted prospecting licence (P25/2651) which covers an area of 82 hectares, and is held in the name of Oracle Gold (WA) Pty Ltd. RGL are farming into the Tenement and have committed to spend \$600,000 in exploration expenditure on the tenement within the next two years. After Riversgold achieves 80% ownership, Oracle will be required to contribute pro-rata or dilute.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The majority of previous exploration in the area was by Northern Mining during 2007 to 2012 under the Blair North project, multiple small resource areas were identified at the George's Reward area to the south of P25/2651. Numerous gold intersections were recorded
Geology	Deposit type, geological setting and style of mineralisation.	The deposit sought is (Intrusion Related Gold System (IRGS) style of mineral deposit.
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.	Refer to Tables and Figures within the body of the release.
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.	Intersections are weighted average grades based on a 0.001 g/t Au cut-off with unlimited waste zones but with a targeted grade of 0.4-0.6g/t Au.
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').	The diamond drilling program in 2023 confirmed the apparent widths of mineralisation as being perpendicular to foliation and veining. We believe the step out RC drilling to be the same as the diamond drilling. The true width of mineralisation is still to be fully ascertained.  The Aircore drilling was vertical and not designed for true width.
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.	See body of the announcement for relevant diagrams and photos.





Criteria	JORC Code explanation	Commentary	
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 reporting of exploration results is considered balanced by the competent person.	
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.	See 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.	<ul> <li>Follow up phases of drilling to further test strike to be undertaken.</li> <li>Core from phase 1 to allow for further metallurgical studies.</li> </ul>	