



## RVR hits 14.5m @ 3.0 g/t gold and 1.1% antimony at Hillgrove

### Highlights:

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- **Further high-grade intercepts from four holes at Eleanora-Garibaldi at Red River's Hillgrove Gold Project, NSW**
  - **Results include broader mineralised zones which build confidence for the Hillgrove operations:**
  - **14.5m @ 3.0 g/t Au and 1.1% Sb from 22.5m downhole (ELG164)**
    - Including 6.5m @ 4.6 g/t Au and 1.9% Sb from 24.5m downhole
    - Including 3.5m @ 2.8 g/t Au and 1.0% Sb from 33.5m downhole
  - **26.0m @ 0.6 g/t Au and 0.1% Sb from 131.0m downhole (ELG161)**
    - Including 2.0m @ 2.7 g/t Au and 0.9% Sb from 131.0m downhole
    - Including 1.0m @ 4.4 g/t Au and 0.1% Sb from 142.0m downhole
  - **36.0m @ 0.6 g/t Au and 0.2% Sb from 7.0m down hole (ELG163)**
    - Including 2.0m @ 3.5 g/t Au and 0.5% Sb from 14.0m downhole
    - Including 0.7m @ 6.9 g/t Au and 7.0% Sb from 29.0m downhole
  - **RVR has eight holes completed awaiting assays and two rigs continue drilling at Hillgrove**
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Red River Resources Limited (ASX: RVR) is pleased to announce results of four holes at the Hillgrove Gold mine in NSW.

The planned drilling program at Eleanora-Garibaldi has been completed and the deposit remains open; drilling at Sunlight and Cosmopolitan is continuing. A further seven holes have been completed and are awaiting assays; results will be announced when they are received.

The high-grade intercepts within broader mineralised zones are encouraging and continue to build confidence to transition Hillgrove from a historical narrow vein project into a larger-scale gold operation.

Hillgrove has an existing JORC 2012 Mineral Resource of 7.23Mt @ 4.5 g/t Au & 1.2% Sb (1,037koz contained Au & 90kt contained Sb) and RVR continues build this resource for a larger-scale, longer life mining operation.

## Eleanora-Garibaldi Drilling

RVR has received assays for drill holes ELG161 to ELG164 in its follow-up Eleanora-Garibaldi drill program (Table 1). The drill holes intercepted three parallel lodes of structurally controlled gold-antimony dominated mineralisation. These north-south striking, near vertical lodes from west to east include the Main Lode, a southern continuation of the main Eleanora system, the Central Lode, and the East Lode. The drill holes intercepted lower grade gold mineralisation between and surrounding the dominant structures hence reporting of broad grade intervals.

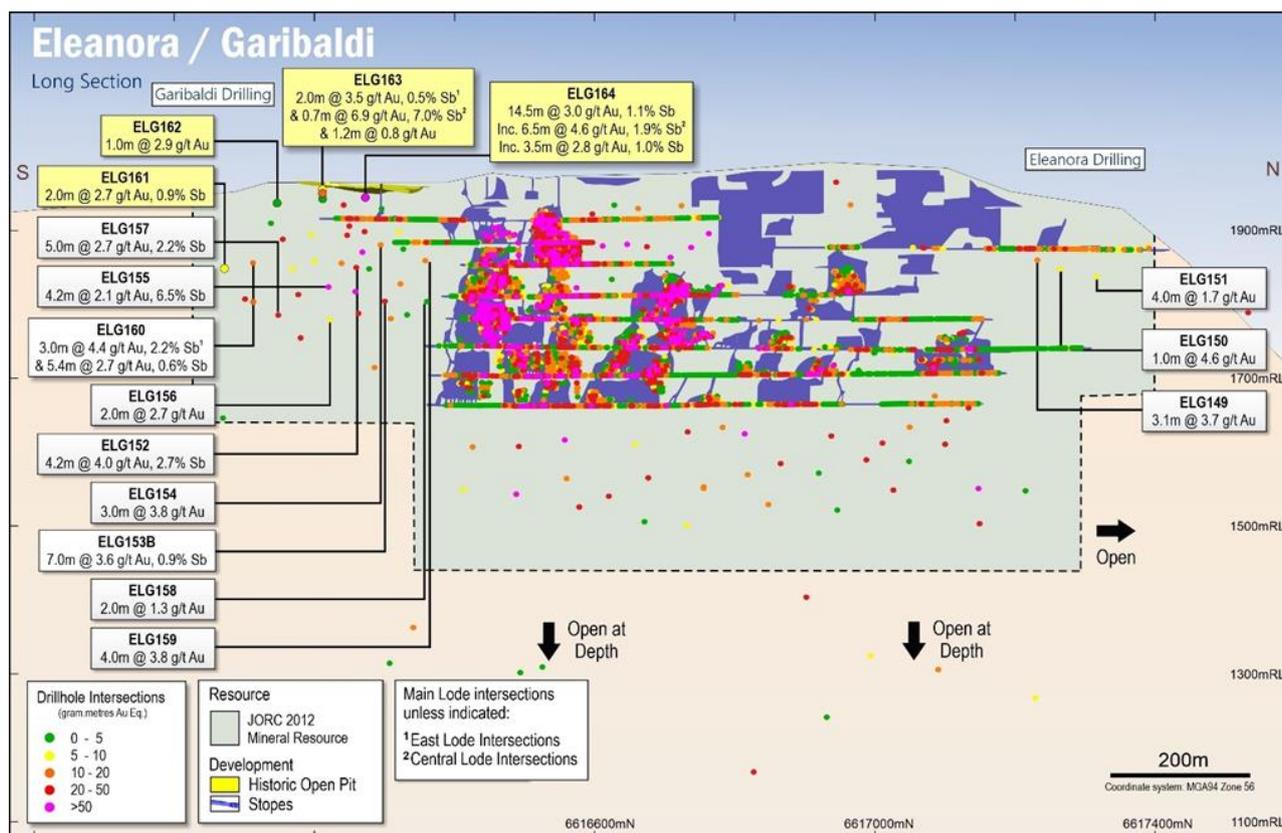


Figure 1: Assay results from latest Eleanora-Garibaldi program.

The Main Lode intervals of high-grade gold and antimony mineralisation include;

- **2m @ 2.7 g/t Au and 0.9% Sb from 131.0m downhole (ELG161)**
- **1m @ 2.9 g/t Au and 0.4% Sb from 58.0m down hole (ELG162)**
- **1.2m @ 0.8 g/t Au and 0.2% Sb from 39.0m down hole (ELG163)**
- **3.5m @ 2.8 g/t Au and 1.0% Sb from 33.5m down hole (ELG164)**

The Central Lode intervals of high-grade gold and antimony mineralisation include;

- **0.7m @ 6.9 g/t Au and 7.0% Sb from 29.0m downhole (ELG163)**
- **6.5m @ 4.6 g/t Au and 1.9% Sb from 24.5m down hole (ELG164)**

The East Lode intervals of high-grade gold and antimony mineralisation include;

- **1m @ 3.6 g/t Au from 56m downhole (ELG161)**
- **2m @ 3.5 g/t Au and 0.5% Sb from 14.0m downhole (ELG163)**

In hole ELG164 the merging of the Main and Central lodes forms a total high grade mineralised zone of

- **14.5m @ 3.0 g/t Au and 1.1% Sb from 22.5m downhole (ELG164)**

The southern Garibaldi area has undergone significant brittle deformation both pre-mineralisation and post mineralisation compared to the northern Eleanora area. This has had two fundamental impacts on the geology and mineralisation:

- The first is that the pre-mineralisation faulting has created pathways for significant lamprophyre dyke swarms, with holes drilled in this program containing anywhere from 1 to 11 lamprophyre intrusions.
- The second is that faulting has also created additional pathways for the mineralised hydrothermal fluids to flow through. This has affected the mineralisation by creating the additional and generally weaker parallel trends of mineralisation east of the main lode trend. There also exists weak mineralisation between the lodes creating wide zones (>20m) of halo gold mineralisation.

Historically, Garibaldi had a small open pit which is approximately 155m long, 40m wide and 10m deep to take advantage of the multiple gold lodes and bulk low-grade material.



**Figure 2: Stibnite Veining in ELG164**

**Table 1: Drill hole assay summary Eleanora-Garibaldi**

Hole ID	From (m)	To (m)	Downhole Interval (m)	Au (g/t)	Sb (%)	Lode
<b>ELG161</b>	56.0	77.7	21.7	0.5	-	
Inc	56.0	57.0	1.0	3.6	-	East Lode
<b>And</b>	131.0	157.0	26.0	0.6	0.1	
Inc	131.0	133.0	2.0	2.7	0.9	Main Lode
Inc	142.0	143.0	1.0	4.4	0.1	
<b>ELG162</b>	2.7	3.1	0.4	5.2	-	East Lode
<b>And</b>	53.5	59	5.5	1.0	0.1	
Inc	58.0	59.0	1.0	2.9	0.4	Main Lode
<b>ELG163</b>	7.0	43.0	36.0	0.6	0.2	
Inc	7.0	8.0	1.0	4.5	0.6	
Inc	14.0	16.0	2.0	3.5	0.5	East Lode
Inc	29.0	29.7	0.7	6.9	7.0	Central Lode
Inc	39.0	40.2	1.2	0.8	0.2	Main Lode
<b>ELG164</b>	22.5	37	14.5	3.0	1.1	
Inc	24.5	31.0	6.5	4.6	1.9	Central Lode
Inc	33.5	37.0	3.5	2.8	1.0	Main Lode

Note: All intervals of core loss (CL) have been assigned zero grade.

Red River is waiting on results from one additional hole at Eleanora-Garibaldi. The deposit remains open along strike and at depth. RVR will schedule more drilling here following review and the testing of other potential targets throughout the Hillgrove Project.

Currently two diamond drill rigs continue to target the Sunlight Mineral Resource area and the Cosmopolitan Prospect.

Results from the final Eleanora-Garibaldi hole, two holes drilled at the historic Freehold Mine area and five holes drilled at the current Sunlight Mineral Resource area are expected during the March 2022 quarter.

#### **Hillgrove Underground Restart Update:**

RVR continues to work towards the restart of underground mining at Hillgrove's Syndicate deposit, negotiations are progressing with potential mining partners.

Modifications of the antimony processing circuit are complete and ready to commission, and discussions with potential offtake partners is advancing.

## About Red River Resources (ASX: RVR)

RVR is building a multi-asset operating business focused on base and precious metals with the objective of delivering prosperity through lean and clever resource development. RVR's foundation asset is the Thalanga Base Metal Operation in Northern Queensland, which was acquired in 2014 and where RVR commenced copper, lead and zinc concentrate production in September 2017. RVR has commenced production at the high-grade Hillgrove Gold Operation in New South Wales which was acquired in 2019. The Hillgrove Operation is a key part of RVR's strategy to build a multi-asset operating business focused on base and precious metals.

On behalf of the Board,

**Mel Palancian**

**Managing Director**

Red River Resources Limited

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For further information please visit Red River's website or contact:

Mel Palancian

Managing Director

[mpalancian@redriverresources.com.au](mailto:mpalancian@redriverresources.com.au)

D: +61 3 9017 5380

Nathan Ryan

NWR Communications

[nathan.ryan@nwrcommunications.com.au](mailto:nathan.ryan@nwrcommunications.com.au)

M: +61 420 582 887

## Competent Persons Statement

### Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr Blake Larter who is a member of The Australasian Institute of Mining and Metallurgy, and a full time employee of Red River Resources Ltd., and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Larter consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### Gold Equivalent Calculation

The display of drill intersections contains gold equivalent (Au Eq.) values.

The use of a gold equivalent cut-off is appropriate for the multi-element mineralisation at Hillgrove, where value is obtained from antimony and/or gold.

The Au equivalent allows for a basic level of assessment of deposits and mineralisation styles within the Hillgrove group of deposits. The Au Eq. value was calculated using a gold price of US\$1,234/oz and an antimony price of US\$ 5,650 / tonne where:

$$\text{Au Eq. (g/t)} = (\text{Au g/t}) + (1.424 * \text{Sb \%})$$

## Appendix 1: Drill Hole Details

Table 2 Eleanora drill hole information summary, Hillgrove Gold Project. GDA94 MGA56

Hole ID	Depth (m)	Dip (°)	Azi (°)	Eastings (m)	Northings (m)	RL (m)	Lease ID	Hole Status
ELG161	211.7	-57	194	394885	6616464	1972	ML649	Complete
ELG162	82.8	-54	256	394861	6616451	1968	ML649	Complete
ELG163	78.6	-46	247	394843	6616508	1968	ML391	Completed
ELG164	68.8	-47	252	394815	6616563	1962	ML391	Completed
ELG165	133.5	-48	236	394810	6616758	1975	ML391	Completed awaiting assays.

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p>Nature and quality of sampling (e.g. 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 retrospectivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘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 (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>Diamond drilling (DD) techniques were used to obtain samples.</p> <p>Diamond core was placed in core trays for logging and sampling. Half core samples were nominated by the geologist from diamond core based on visual inspection of mineralisation. Intervals ranged from 0.25 to 1.4m based on geological boundaries</p> <p>Diamond samples were sawn in half using an onsite core saw.</p> <p>The drill core samples were sent to ALS Laboratories in Zillmere QLD.</p> <p>Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis.</p> <p>Analysis of the diamond drill samples consisted of a four-acid digest and Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) for the following elements: Ag, As, Cu, Pb, S, Sb, W &amp; Zn was undertaken. The samples were also assayed for Au using a 50g Fire Assay technique. If over detection on the ICP reached than the samples were assayed using XRF. Standards and blanks were inserted at a rate of 5%.</p> <p>The RC drilling was conducted by Straits Resources in 2004-2005. These samples were assayed by ALS Laboratories in Brisbane.</p>
<b>Drilling techniques</b>	<p>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</p>	<p>Diamond drilling (DD) and Reverse Circulation (RC) drilling techniques were used to obtain samples. The diamond drill core was NQ2 in size.</p>
<b>Drill sample recovery</b>	<p>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.</p> <p>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.</p>	<p>Sample recovery is measured and recorded by company trained geology technicians.</p> <p>Minimal sample loss has occurred.</p>
<b>Logging</b>	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p>	<p>Holes are logged to a level of detail that would support mineral resource estimation.</p> <p>Qualitative logging includes lithology, alteration and textures.</p> <p>Quantitative logging includes sulphide and gangue mineral percentages.</p> <p>All drill core was photographed.</p> <p>All drill holes have been logged in full.</p>

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	
<b>Sub-sampling techniques and sample preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>Core was sawn, and half core sent for assay.</p> <p>Sample preparation is industry standard, occurring at an independent commercial laboratory which has its own internal Quality Assurance and Quality Control procedures.</p> <p>Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis.</p> <p>Laboratory certified standards were used in each sample batch.</p> <p>The sample sizes are considered to be appropriate to correctly represent the mineralisation style.</p>
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</p>	<p>The assay methods employed are considered appropriate for near total digestion.</p> <p>Laboratory certified standards were used in each sample batch.</p> <p>Certified standards returned results within an acceptable range.</p> <p>One field duplicate are submitted for each diamond core hole.</p>
<b>Verification of sampling and assaying</b>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<p>Laboratory results have been reviewed by Company geologists and laboratory technicians.</p> <p>No twinned holes were drilled for this data set.</p>
<b>Location of data points</b>	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>Collars were surveyed with RTKGPS (+-0.1m).</p> <p>Down hole surveys conducted with digital magnetic multi-shot camera at 20-40m intervals. A portion of drill holes were surveyed by multi-shot survey.</p> <p>Coordinate system used is GDA94 MGA Zone 56.</p>
<b>Data spacing and distribution</b>	<p>Data spacing for reporting of Exploration Results.</p> <p>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</p>	<p>The current drill spacing is approximately 30-60m.</p> <p>No sample compositing has been applied.</p>

Criteria	JORC Code explanation	Commentary
	estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	
<i>Orientation of data in relation to geological structure</i>	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.	Drill holes are orientated perpendicular to the perceived strike of the host lithologies where possible. The orientation of the multiple lenses varies resulting in some holes resulting in less than perpendicular intersections. Drill holes are drilled at a dip based on logistics and dip of anomaly to be tested. The orientation of the drilling is designed to not bias sampling. Orientation of the NQ2 core was undertaken to define structural orientation.
<b>Sample security</b>	The measures taken to ensure sample security.	Samples have been overseen by company staff during transport from site to the SGS or ASL laboratories in West Wyalong or Brisbane respectively.
<i>Audits or reviews</i>	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out at this point.

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	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 drilling was conducted on the following mining leases; ML391 and ML649. These leases are held by Hillgrove Mines Pty Ltd. (a wholly owned subsidiary of Red River Resources).
<i>Exploration done by other parties</i>	Acknowledgment and appraisal of exploration by other parties.	The historic RC drilling was conducted by Straits Resources in 2004-2005.
<i>Geology</i>	Deposit type, geological setting and style of mineralisation.	The exploration model is orogenic gold/antimony.
<i>Drill hole Information</i>	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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length. If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.	See Appendix 1 – Drill Hole Details Assay Details – Eleanora Drilling Material Assay Results
<i>Data aggregation methods</i>	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.	Interval length weighted assay results are reported. No cutting of high grades has been done.
<i>Relationship between mineralisation widths and intercept lengths</i>	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 (e.g.	The mineralisation is interpreted to be dipping at approximately 90 degrees, drill holes have been designed to intercept the mineralisation as close to perpendicular as possible. Down hole intercepts are reported. True widths are likely to be approximately 30 to 80% of the down hole widths.

Criteria	JORC Code explanation	Commentary
	'down hole length, true width not known').	
<i>Diagrams</i>	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 plans and sections.	Refer to plans and sections within report.
<i>Balanced reporting</i>	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 accompanying document is considered to represent a balanced report.
<i>Other substantive exploration data</i>	Other exploration data, if meaningful and material, should be reported.	All meaningful and material data is reported.
<i>Further work</i>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further Drilling targeting the lateral extensions of the Eleanora lode is ongoing.

END