



## Red River Commences Production at Hillgrove Gold Operation

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### Highlights:

- Processing has commenced at the Hillgrove Gold Operation
  - Bakers Creek Stockpile mining and trucking activities commenced, with first ore delivered to Hillgrove ROM Pad on 23 December
  - First ore processed through the Hillgrove Mill on 29 December – plant is ramping up to steady state production
  - Workforce increased to 50+
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Red River Resources Limited (ASX: RVR) is pleased to announce that it has started production at its Hillgrove Gold Operation in New South Wales.

Figure 1 Bakers Creek Stockpile being hauled to Hillgrove Processing Plant



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Figure 2 Hillgrove ROM Pad



Figure 3 Feeding the primary crusher



Figure 4 Crushed ore being fed into ore bin



Figure 5 Ore being fed into ball mill



## Hillgrove Gold Operation

The Hillgrove Gold Operation is about 30km from Armidale in New South Wales. To date, Hillgrove has produced more than 730,000 ounces of gold (in bullion and concentrates), more than 50,000 tonnes of antimony (as metal and in concentrates) plus material amounts of by-product tungsten (in concentrates). The Hillgrove Gold Project has a substantial high-grade JORC 2012 Compliant Mineral Resource of 5.0Mt @ 4.3 g/t Au & 1.5% Sb (6.4 g/t Au Eq.) (692koz gold & 75kt antimony).

Figure 6 Hillgrove Gold Operation



The Hillgrove site includes a 250ktpa capacity processing plant, comprising a selective flotation circuit (capable of producing antimony-gold and refractory gold concentrates), an antimony leach/EW/refining & casting plant, a gold cyanide leach circuit & gold room plus a pressure oxidation circuit. The site also has a fully HDPE (high-density polyethylene) lined modern tailing storage facility, which was constructed in 2006 and has approximately two years of production storage capacity.

All of Hillgrove's electricity requirements are sourced from a 66kva grid connected power supply from Ergon Energy with 11kva site power reticulation. Water is sourced from storage dams and underground workings.

Hillgrove has all the office facilities required for operations, including an administration office, mining operations offices, maintenance offices, workshops (heavy vehicle, light vehicle and boilermaker's workshops), process plant offices, metallurgical laboratory building, first aid building, stores warehouse and core shed and yard.

The Hillgrove Gold Operation is a residential site, with the majority of the workforce residing in Armidale and the surrounding area.

Red River controls the known Hillgrove Mineral Field, which hosts more than 200 known gold-antimony (Au-Sb) deposits. The majority of these deposits are steeply dipping vein systems within NW to WNW striking fracture systems, where the vein systems transition to gold dominant at depth with increasing levels of free gold. All known vein systems are open at depth.

Figure 7 Hillgrove Mineral Field

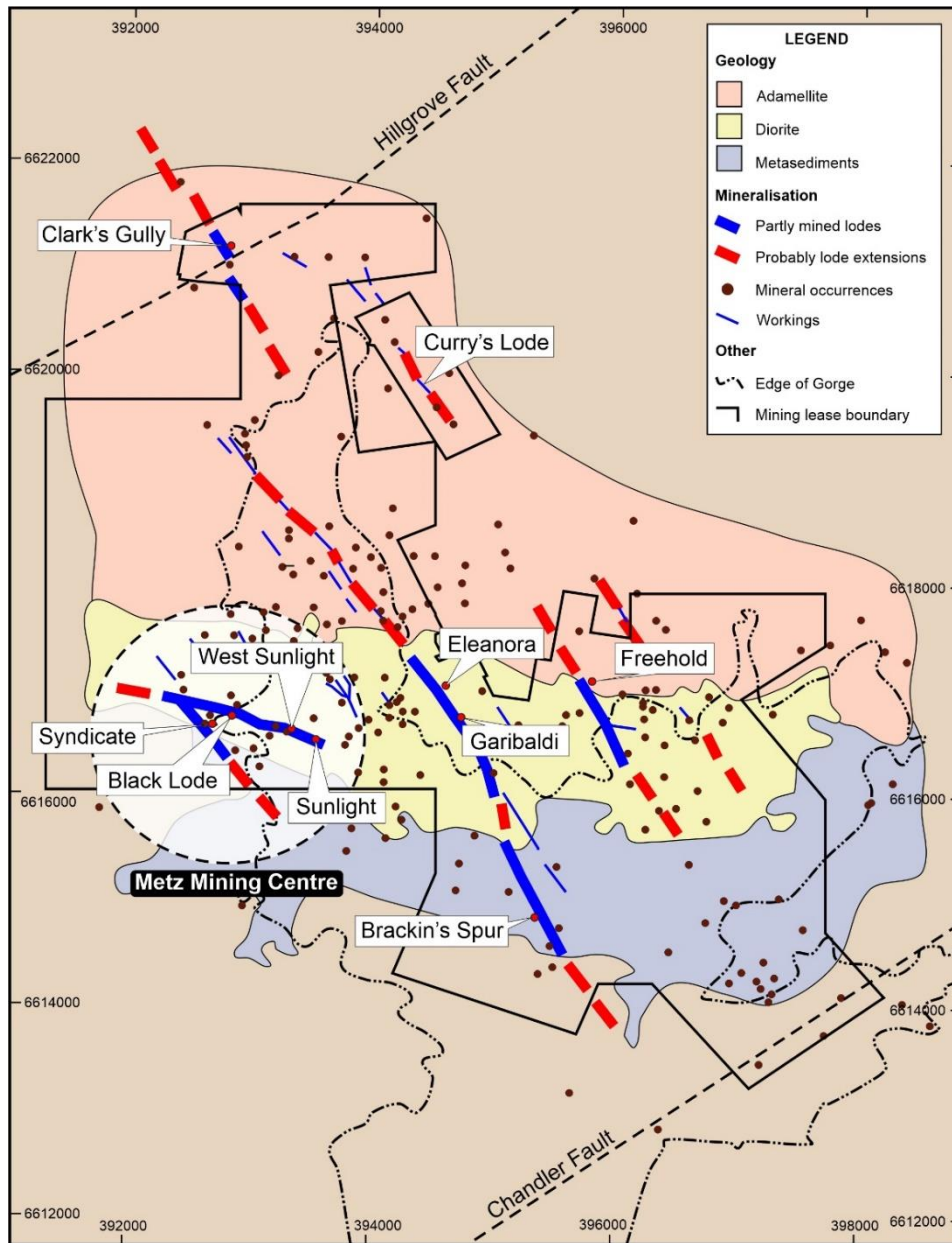


Table 1 Hillgrove Gold Project Mineral Resource

Lode	Classification	Tonnes	Gold	Antimony	Gold Equivalent (Au Eq.)	Contained Gold	Contained Antimony
		(kt)	(g/t)	(%)	(g/t)	(koz Au)	(kt Sb)
<b>Blacklode &amp; Sunlight</b>	Measured	-	-	-	-	-	-
	Indicated	1,511	5.3	1.3	7.1	255	20
	Inferred	1,136	3.6	0.9	4.9	131	10
	<b>Total</b>	<b>2,647</b>	<b>4.5</b>	<b>1.1</b>	<b>6.2</b>	<b>387</b>	<b>30</b>
<b>Brackin's Spur</b>	Measured	73	5.1	0.9	6.2	12	1
	Indicated	640	4.2	1.8	6.9	86	12
	Inferred	870	4.8	1.3	6.5	134	11
	<b>Total</b>	<b>1,583</b>	<b>4.6</b>	<b>1.5</b>	<b>6.6</b>	<b>232</b>	<b>24</b>
<b>Clark's Gully</b>	Measured	170	1.9	4.2	9.0	10	7
	Indicated	96	2.1	3.1	7.3	6	3
	Inferred	0	0.8	3.0	5.8	0	0
	<b>Total</b>	<b>266</b>	<b>2.0</b>	<b>3.8</b>	<b>8.4</b>	<b>16</b>	<b>10</b>
<b>Syndicate</b>	Measured	199	4.5	4.5	10.9	29	9
	Indicated	96	2.5	2.4	5.9	8	2
	Inferred	23	3.6	0.4	4.1	3	0
	<b>Total</b>	<b>318</b>	<b>3.8</b>	<b>3.6</b>	<b>8.9</b>	<b>39</b>	<b>11</b>
<b>Bakers Creek Stockpile</b>	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Inferred	225	2.5	-	2.5	18	-
	<b>Total</b>	<b>225</b>	<b>2.5</b>	<b>-</b>	<b>2.5</b>	<b>18</b>	<b>-</b>
<b>Total</b>	Measured	442	3.6	3.8	9.4	51	17
	Indicated	2,343	4.7	1.6	7.0	355	37
	Inferred	2,255	4.0	1.0	5.3	286	21
	<b>Total</b>	<b>5,039</b>	<b>4.3</b>	<b>1.5</b>	<b>6.4</b>	<b>692</b>	<b>75</b>

Syndicate Mineral Resource Source: Red River Resources Limited 24 September 2020  
 Blacklode & Sunlight Lode Mineral Resource is estimated at a cut-off grade of 3 g/t Au Eq.  
 Source: Red River Resources Limited 17<sup>th</sup> August 2020  
 Brackin's Spur & Clark's Gully Mineral Resources are estimated at a cut-off grade of 5 g/t Au Eq.  
 Source: AMC Consultants Pty. Ltd. Hillgrove Mineral Resource Estimate (August 2017)  
 Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.  
 Gold equivalent (Au Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in the AMC Estimate and included this announcement.

## **About Red River Resources (ASX: RVR)**

RVR is seeking to build 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:

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### **Competent Persons Statement Syndicate, Blacklode & Sunlight Mineral Resource**

The information in this report that relates to the estimation and reporting of the Syndicate, Blacklode & Sunlight Mineral Resource are based on and fairly represents, information and supporting documentation compiled by Mr Peter Carolan who is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Red River Resources Ltd.

Mr Carolan has sufficient experience 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 Carolan consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. The information in this report that relates to database compilation, geological interpretation and mineralisation wireframing, project parameters and costs and overall supervision and direction of the Syndicate, Blacklode & Sunlight estimation is based on and fairly represents, information and supporting documentation compiled under the overall supervision and direction of Mr Carolan.

### **Competent Persons Statement Brackin's Spur & Clark's Gully Mineral Resources**

The information in this report that relates to the reporting of the Brackin's Spur & Clark's Gully Mineral Resource Estimate reported in accordance with the JORC 2012 Code is based on and fairly represents, information and supporting documentation compiled by Rodney Webster who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Webster is independent of Hillgrove Mines Pty Ltd. and an employee of AMC Consultants Pty Ltd. Mr Webster has sufficient experience 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'.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original report and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original report.



## Gold Equivalent Calculation

### Syndicate, Blacklode & Sunlight Mineral Resources

It is Hillgrove Mines Pty Ltd opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold, based on previous mill production and sales. The gold equivalent (Au Eq.) and the cut-off are based on the following:

Metallurgical test work (carried out in 2016 and 2017) and mill production data demonstrate that total gravity & float recoveries of 91% Au and 86% Sb are achievable. The antimony recovery is applicable where Sb head grades are 1% or greater. The majority of the Sunlight Resource contains an antimony grade of less than 0.5% and therefore antimony recovery is not expected from this material.

The Au Eq. value was calculated using a gold price of US\$1,234 per oz and an antimony price of US\$ 5,650 per tonne where:

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

### Brackin's Spur & Clark's Gully Mineral Resources

It is Hillgrove Mines Pty Ltd opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold, based on previous mill production and sales. The gold equivalent (Au Eq.) and the cut-off are based on the following:

- Metallurgical test work (carried out in 2016 and 2017) and mill production data demonstrates that total gravity/float recoveries of 91% gold (Au) and 86% antimony (Sb) are achievable.
- Net smelter return calculations for the deposits indicate that Au Eq. grades above 4.8 g/t are economic, based on site costs, mill recoveries, off-site transportation and royalty costs.

Au Eq. was calculated based on commodity prices as of 18 July 2017. The individual grades, the assumed commodity prices and metal recoveries, and the Au Eq. formula are as follows:

- $Au\ Eq.\ (g/t) = (Au\ g/t * 91\%) + (2.0 * Sb\ \% * 86\%)$ 
  - Where  $2.0 = (US\$7,950/100) / (US\$1,234/31.1035)$
  - Gold price = US\$1,234/oz and gold recovery = 91%
- Antimony price = US\$7,950/tonne and antimony recovery = 86%