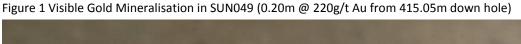


# **High Grade Gold Potential of Sunlight Lode at Hillgrove**

### Highlights:

- Sunlight Lode sampling demonstrates exceptional gold grades (0.95m @ 130 g/t Au & 8.0%
- Sunlight Lode Mineral Resource is 680kt @ 8.0 g/t Au & 0.3% Sb open down plunge and to the south east
- SUN049, the deepest hole drilled to date at Sunlight, intersected 22.95m @ 4.5g/t Au from 392.65m down-hole, including 3.30m @ 7.2g/t Au from 394.20m down-hole and a narrow high-grade intersection of 0.20m @ 220g/t Au from 415.05m down-hole containing abundant visible gold
- Metallurgical test work on Sunlight Lode bulk sample (20kg grading 122 g/t Au) confirms presence of coarse free gold - 84% of gold present as gravity recoverable gold
- Current underground development is only 40m away from first potential ore drive in Sunlight Lode







Red River Resources Limited (ASX: RVR), is pleased to report high-grade sampling results and initial metallurgical test work results from the Sunlight Lode, part of the Company's Hillgrove Gold-Antimony Project in New South Wales.

The Hillgrove Project is about 30km from Armidale in New South Wales. The site includes a 250ktpa capacity processing plant currently on active care & maintenance, comprising a selective flotation circuit (capable of producing antimony-gold and refractory gold concentrates), an antimony leach/electrowinning (EW)/refining & casting plant, a gold cyanide leach circuit & gold room and a pressure oxidation circuit.

The Sunlight Lode system was sampled in Sunlight Cross Cut 2 where it is exposed (area of historic mining in the upper levels of the Sunlight Lode).

Abundant visible gold was noted in the sampling, with a peak assay of 0.95m @ 130 g/t Au recorded. A 20kg bulk sample was taken and submitted to Consep Pty Ltd. for metallurgical testwork (to enable modelling of a gravity circuit) in September 2017. The Sunlight Lode bulk sample had a calculated head grade of 122 g/t Au with 84.2% of gold present as gravity recoverable gold (GRG).

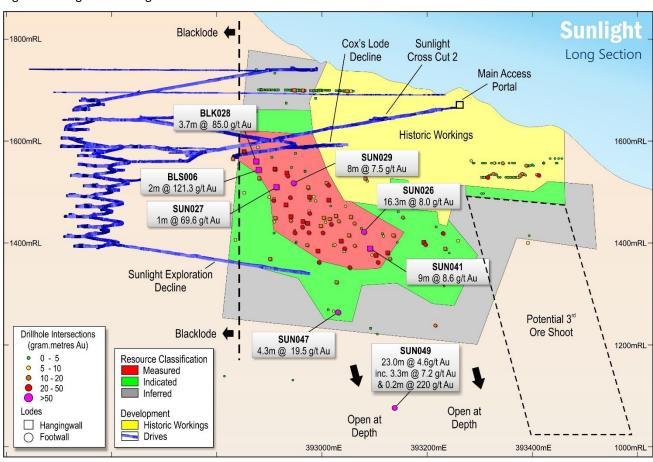


Figure 2 Sunlight Lode Long Section

The Sunlight Lode has a gold dominant Mineral Resource of 680kt @ 8.0 g/t Au (reported in accordance with 2012 JORC Code). The Sunlight Lode is open both down plunge and strike to the southeast, with potential for high grade gold resource extensions.

The deepest hole drilled (SUN049) confirmed that the Sunlight Lode was open at depth and high-grade. SUN049 intersected 22.95m @ 4.5 g/t Au from 392.65m down-hole, including 3.3m @ 7.2g/t Au from 394.20m down-hole and a narrow high-grade intersection of 0.20m @ 220g/t Au from 415.05m downhole.



All infrastructure is in place (ventilation, electricity, water) to support near term restart of exploration and development activities in the Sunlight Lode. The Cox's Lode Decline is connected to the Syndicate Decline with only 40m additional development required from the Cox's Lode Decline to begin the potential first Sunlight Lode ore drive. The Sunlight Exploration Decline was recently developed by the previous owner to provide drill platforms to target extensions of the Sunlight Lode at depth.

Table 1 Sunlight Mineral Resource (at a 5g/t Gold Equivalent cut-off)

Resource Class	Tonnage (kt)	Au (g/t)	Sb (%)	Au Eq. (g/t)	Cont. Au (koz)	Cont. Sb (kt)
Measured	270	9.4	0.2	9.0	82	1
Indicated	260	7.6	0.2	7.3	64	1
Inferred	150	6.1	0.5	6.3	29	1
Total	680	8.0	0.3	7.7	175	2

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.

Table 2 Material drill hole assay summary (current drilling), Sunlight Lode, Hillgrove Project

Hole ID	From (m)	To (m)	Intersection (m) <sup>(1)</sup>	Au (g/t)	Ag (g/t)	Sb (%)
SUN049	392.65	415.60	22.95	4.5	2	0.0
inc.	394.20	397.50	3.30	7.2	4	0.0
inc. 415.05 415.25 0.20 220.0 27 0.0						
1. Downhole width. True width = 78% of downhole width						

Table 3 Drill hole information summary, Sunlight Lode

Hole ID	Depth (m)	Dip	Azi	East (AGD66)	North (AGD66)	RL (AGD66)	Lease ID	Hole Status
SUN049	452.8	-52	25	392969	6616404	372.13	ML126	Completed



Figure 3 Sunlight Lode Exposed in Sunlight Cross Cut 2



Sunlight Lode mineralisation exposed in Cross Cut 2 consists of abundant visible free gold within the quartz. Significant amounts of gold are also associated with disseminated arsenopyrite mineralisation which occurs within and around the quartz breccia/shear zone.

Figure 4 Sunlight Lode Cross Cut 2 Sampling





Table 4 Sunlight Lode Cross Cut 2 Assay Results

Sample Number	Width	Au (g/t)	Sb (%)
G08024	0.95	0.17	0.0
G08025	0.95	130.0	8.0
G08026	0.85	0.81	0.0
G08027	0.8	0.98	0.0
G08028	0.7	0.22	0.0
G08029	0.8	10.9	0.1
G08030	0.9	0.55	0.0
G08031	0.9	3.13	0.0

Consep Pty Ltd. carried out metallurgical test work (Sept 2017) on a 20kg sample from Sunlight Cross Cut 2 to enable the modelling of a gravity circuit.

The Sunlight Lode bulk sample had a calculated head grade of 122 g/t Au with 84.2% of gold present as gravity recoverable gold (GRG).

Gravity Recoverable Gold (GRG) is the portion of gold in an ore that can be feasibly recovered by gravity concentration. Remaining gold, or non-gravity recoverable gold, is the portion which is too fine or inadequately liberated at the finest viable grind size to be recovered by gravity concentration.

Figure 5 First Stage Knelson Concentrate with abundant coarse visible gold





#### COMPETENT PERSON STATEMENTS

#### **Exploration Results**

The information in this report that relates to Exploration Results is based on information compiled by Mr Mitchell Tarrant 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 Tarrant consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

#### **Mineral Resources**

The information in this report that relates to the reporting of the Hillgrove 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.



#### **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 recently acquired the high-grade Hillgrove Gold-Antimony Project in New South Wales, which will enable RVR 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** 

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

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#### **Gold Equivalent Calculation**

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 testwork (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.
- The Sunlight deposit has a particle gold component that is amenable to gravity separation that represents 20% of total gold recovery.

Au Eq. was calculated based on commodity prices as at 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 = (U\$\$7,950/100) / (U\$\$1,234/31.1035)
  - Gold price = US\$1,234/oz and gold recovery = 91%
- Antimony price = U\$\$7,950/tonne and antimony recovery = 86%



### **SUN049 ASSAY DETAILS**

	l –	- ( )				al a/
Hole ID	From (m)	To (m)	Int (m) <sup>(1)</sup>	Au g/t	Ag g/t	Sb %
SUN049	392.65	392.85	0.20	3.82	3.20	0.0
SUN049	392.85	393.50	0.65	1.09	0.80	0.0
SUN049	393.50	394.20	0.70	2.60	1.60	0.0
SUN049	394.20	394.70	0.50	5.56	12.90	0.0
SUN049	394.70	395.30	0.60	7.28	1.20	0.0
SUN049	395.30	396.00	0.70	8.75	3.90	0.0
SUN049	396.00	396.50	0.50	8.53	1.70	0.0
SUN049	396.50	397.00	0.50	6.42	2.40	0.0
SUN049	397.00	397.50	0.50	6.02	2.20	0.0
SUN049	397.50	398.00	0.50	3.98	1.90	0.0
SUN049	398.00	398.50	0.50	1.10	1.10	0.0
SUN049	398.50	399.00	0.50	2.04	1.40	0.0
SUN049	399.00	399.50	0.50	0.30	0.50	0.0
SUN049	399.50	400.00	0.50	2.21	0.60	0.0
SUN049	400.00	400.50	0.50	0.63	0.70	0.0
SUN049	400.50	401.00	0.50	0.30	0.25	0.0
SUN049	401.00	401.50	0.50	0.31	0.70	0.0
SUN049	401.50	402.00	0.50	2.80	5.00	0.0
SUN049	402.00	402.50	0.50	4.56	2.30	0.0
SUN049	402.50	403.00	0.50	4.55	2.90	0.0
SUN049	403.00	403.50	0.50	4.41	1.10	0.0
SUN049	403.50	404.00	0.50	2.88	4.20	0.0
SUN049	404.00	404.70	0.70	1.17	1.00	0.0
SUN049	404.70	405.50	0.80	1.27	0.25	0.0
SUN049	405.50	406.00	0.50	1.19	0.25	0.0
SUN049	406.00	406.50	0.50	1.89	1.30	0.0
SUN049	406.50	407.00	0.50	1.10	0.60	0.0
SUN049	407.00	407.50	0.50	2.48	0.25	0.0
SUN049	407.50	408.00	0.50	1.92	0.25	0.0
SUN049	408.00	408.50	0.50	1.80	0.70	0.0
SUN049	408.50	408.90	0.40	2.98	1.00	0.0
SUN049	408.90	409.50	0.60	1.08	0.80	0.0
SUN049	409.50	410.00	0.50	1.06	0.25	0.0
SUN049	410.00	410.50	0.50	0.27	0.25	0.0
SUN049	410.50	411.00	0.50	0.31	0.25	0.0
SUN049	411.00	411.80	0.80	1.42	0.25	0.0
SUN049	411.80	412.15	0.35	4.77	1.50	0.0
SUN049	412.15	413.00	0.85	1.85	0.90	0.0
SUN049	413.00	413.50	0.50	2.41	0.70	0.0
SUN049	413.50	414.00	0.50	2.37	0.25	0.0
SUN049	414.00	414.50	0.50	1.64	1.00	0.0
SUN049	414.50	415.05	0.55	0.42	0.25	0.0
SUN049	415.05	415.25	0.20	220.00	27.40	0.0
SUN049	415.25	415.60	0.35	2.25	1.00	0.0
Downhole width only, true width = 78% of downhole width						



## JORC Code, 2012 Edition – Table 1 (SUN049 Drilling)

Section 1 Sampling Techniques and Data

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

	section apply to all succeeding sections.)	1.5
	·	
Criteria 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</li> </ul>	logging and sampling. Sampling intervals were designated by the geologist based on visual inspection of mineralisation. The core was cut in
	<ul> <li>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 types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	following elements; Ag, As, Cu, Fe, Pb, S, Sb, W and Zn. If elements As, Sb or W exceed their set triggers, then they are analysed using ME-XRF (X-Ray Fluorescence Spectroscopy) as well. Samples containing visible Au were also sent for Au-SCR22AA (Screen fire assay).
Drilling techniques	<ul> <li>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).</li> </ul>	system.
Drill sample recovery	<ul> <li>Method of recording and assessing core and 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>technicians.</li> <li>Normally only minimal core loss occurs.</li> <li>Recovery in ore zones is typically 100%.</li> </ul>
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.	<ul> <li>support mineral resource estimation.</li> <li>Qualitative logging includes lithology, weathering, alteration, texture, colour, structure and ore zone.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether logging is qualitative of</li> </ul>	All drill core is photographed dry and wet.
	quantitative in nature. Core (or costear	All drill holes have been logged in full.
	channel, etc) photography.	
	The total length and percentage of th	e
	relevant intersections logged.	
Sub-	<ul> <li>If core, whether cut or sawn and whether</li> </ul>	• Core was sawn in half and half core sent for assay
sampling	quarter, half or all core taken.	• Sample preparation is to industry standard (ALS).
techniques	• If non-core, whether riffled, tub	e Samples were crushed to sub 6mm, split and
and sample	sampled, rotary split, etc and whethe	r pulverised to sub 75μm in order to produce a
preparation	sampled wet or dry.	representative sub-sample for analysis.
	<ul> <li>For all sample types, the nature, qualit</li> </ul>	
	and appropriateness of the sampl	e sample batch
	preparation technique.	The sample sizes are considered to be appropriate
	<ul> <li>Quality control procedures adopted for</li> </ul>	
	all sub-sampling stages to maximis	e
	representivity of samples.	
	Measures taken to ensure that th	
	sampling is representative of the in sit	
	material collected, including for instanc	
	results for field duplicate/second-ha	If
	sampling.	
	Whether sample sizes are appropriate t	
	the grain size of the material bein	g
	sampled.	
Quality of	The nature, quality and appropriatenes	
assay data	of the assaying and laborator	.
and	procedures used and whether th	· · · · · · · · · · · · · · · · · · ·
laboratory	technique is considered partial or total.	sample batch
tests	For geophysical tools, spectrometers	
	handheld XRF instruments, etc, th	· · · · · · · · · · · · · · · · · · ·
	parameters used in determining th	
	analysis including instrument make an model, reading times, calibration	
	model, reading times, calibration factors applied and their derivation, etc.	
	<ul> <li>Nature of quality control procedure</li> </ul>	
	adopted (eg standards, blanks	
	duplicates, external laboratory checks	<b>'</b>
	and whether acceptable levels of	·
	accuracy (ie lack of bias) and precisio	
	have been established.	
Verification	The verification of significant	t • Laboratory results have been reviewed by
of sampling	intersections by either independent of	· · · · · · · · · · · · · · · · · · ·
and	alternative company personnel.	. Company geologists and laboratory technicians
assaying	The use of twinned holes.	
, ,	<ul> <li>Documentation of primary data, dat</li> </ul>	a
	entry procedures, data verification, dat	
	storage (physical and electronic	
	protocols.	´
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of	<ul> <li>Accuracy and quality of surveys used t</li> </ul>	Hole collars were surveyed using a total station by
data points	locate drill holes (collar and down-hol	· · · · · · · · · · · · · · · · · · ·
p	surveys), trenches, mine workings an	
	other locations used in Mineral Resourc	
	estimation.	Down hole surveys were conducted using a single
	Specification of the grid system used.	shot camera at 30m intervals.
	- in the great discontraction	5.100 Ca



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	
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>	The current drill hole spacing on the Sunlight resource is between 30m to 60m.
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>	<ul> <li>Drill holes are orientated as perpendicular to the perceived strike as possible.</li> <li>The orientation of the drilling is designed to not bias sampling.</li> <li>Orientation of the core was undertaken to define structural orientations.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples have been overseen by company geologists during transport from site to assay laboratories.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out at this point



## **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>The sampling was conducted on Mining Lease 1026</li> <li>ML1026 is held by Hillgrove Mines Pty Ltd. (a wholly owned subsidiary of Red River Resources)</li> <li>Native title does exist over ML1026.</li> <li>The Mining Lease is in good standing</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historic sampling was carried out in January 2016 by Hillgrove Mines Pty Ltd
Geology	Deposit type, geological setting and style of mineralisation.	Hillgrove is defined as an orogenic gold-antimony deposit. Mineralisation is developed in veins, vein breccias, sheeted veins, network stockworks and as alteration sulphide haloes to the main structures. The vast majority of fissures are sub-vertical and vary in widths of up to 20m in places. Paragenetic studies have previously indicated that the earliest mineralising event was a scheelite-bearing phase of quartz veining. Subsequent phases of arsenopyrite—pyrite—quartz—carbonate veining were accompanied by gold and minor base metal sulphides. Alteration is typically sericite—ankerite—quartz. Overprinting stibnite—quartz veining with gold-electrum, aurostibite and arsenopyrite form an important subsequent phase. Veining can be inferred from historical records to extend for vertical depths of over 1 km.
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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length.</li> <li>If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.</li> </ul>	Refer to report



Criteria	JORC Code explanation	Commentary
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>	No data aggregation was carried out
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>	Refer to report
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 plans and sections.	Refer to plans and sections within report
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.	represent a balanced report
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported.	All meaningful and material data is reported
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further drilling is planned to test depth and strike extensions of the Sunlight Lode



## JORC Code, 2012 Edition – Table 1 (Cross Cut 2 Channel Sampling)

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

	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 types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling consisted of 8 channel samples taken from the Sunlight exposure in the cross cut 2 drive.</li> <li>Sample weights ranged from 1.3 to 3.11kgs</li> <li>Samples were sent to ALS (Brisbane) for analysis</li> <li>Analysis consisted of 50g Fire Assay for Au &amp; four acid digest and Inductively Coupled Plasma Mass Spectrometry (ME-ICP) for the following elements; Ag, As, Cu, Fe, Pb, S, Sb, Se, Te, W. ME-XRF was used for results that exceeded the ME-ICP range.</li> </ul>
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).	No drilling was carried out.
Drill sample recovery	<ul> <li>Method of recording and assessing core and 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>	No drilling was carried out
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.	No drilling was carried out



Criteria	JORC Code explanation	Commentary
	• Whether logging is qualitative or	-
	quantitative in nature. Core (or costean,	
	channel, etc) photography.	
	<ul> <li>The total length and percentage of the</li> </ul>	
	relevant intersections logged.	
Sub-	<ul> <li>If core, whether cut or sawn and whether</li> </ul>	No drilling was carried out
sampling	quarter, half or all core taken.	Samples were dry and not split in the field
techniques	• If non-core, whether riffled, tube	
and sample	sampled, rotary split, etc and whether	the grain size of material being sampled
preparation	sampled wet or dry.	
	<ul> <li>For all sample types, the nature, quality</li> </ul>	
	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	
	sampling is representative of the in situ material collected, including for instance	
	results for field duplicate/second-halj	
	sampling.	
	<ul> <li>Whether sample sizes are appropriate to</li> </ul>	
	the grain size of the material being	
	sampled.	
Quality of	<ul> <li>The nature, quality and appropriateness</li> </ul>	The assay methods employed are considered
assay data	of the assaying and laboratory	·
and	procedures used and whether the	
laboratory	technique is considered partial or total.	sample batch
tests	<ul> <li>For geophysical tools, spectrometers,</li> </ul>	Certified standards returned results within an
	handheld XRF instruments, etc, the	acceptable range
	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.	
Verification	The verification of significant	Laboratory results have been reviewed by
of sampling	intersections by either independent or	- I
and	alternative company personnel.	zzpa, goologista and idoordeer, teerimeidila
assaying	• The use of twinned holes.	
	<ul> <li>Documentation of primary data, data</li> </ul>	
	entry procedures, data verification, data	
	storage (physical and electronic)	
	protocols.	
	Discuss any adjustment to assay data.	
Location of	<ul> <li>Accuracy and quality of surveys used to</li> </ul>	
data points	locate drill holes (collar and down-hole	
	surveys), trenches, mine workings and	•
	other locations used in Mineral Resource	Grid system used is AGD66 zone 56
	estimation.	
	Specification of the grid system used.	



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	
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>Sampling consisted of 8 channel samples taken from the sunlight exposure in the cross cut 2 drive.</li> <li>Sample weights ranged from 1.3 to 3.11kgs</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>	No drilling was carried out
Sample security	The measures taken to ensure sample security.	Samples have been overseen by company geologists during transport from site to assay laboratories.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out at this point



## **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>The sampling was conducted on Mining Lease 1026</li> <li>ML1026 is held by Hillgrove Mines Pty Ltd. (a wholly owned subsidiary of Red River Resources)</li> <li>Native title does exist over ML1026.</li> <li>The Mining Lease is in good standing</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historic sampling was carried out in January 2016 by Hillgrove Mines Pty Ltd
Geology	Deposit type, geological setting and style of mineralisation.	Hillgrove is defined as an orogenic gold-antimony deposit. Mineralisation is developed in veins, vein breccias, sheeted veins, network stockworks and as alteration sulphide haloes to the main structures. The vast majority of fissures are sub-vertical and vary in widths of up to 20m in places. Paragenetic studies have previously indicated that the earliest mineralising event was a scheelite-bearing phase of quartz veining. Subsequent phases of arsenopyrite—pyrite—quartz—carbonate veining were accompanied by gold and minor base metal sulphides. Alteration is typically sericite—ankerite—quartz. Overprinting stibnite—quartz veining with gold-electrum, aurostibite and arsenopyrite form an important subsequent phase. Veining can be inferred from historical records to extend for vertical depths of over 1 km.
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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length.</li> <li>If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.</li> </ul>	No drilling was carried out



Criteria	JORC Code explanation	Commentary
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>	No drilling was carried out
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>	No drilling was carried out.
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 plans and sections.	Refer to plans and sections within report
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.	represent a balanced report
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported.	All meaningful and material data is reported
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	No further work is planned in Cross Cut 2