



Red River acquires Hillgrove Gold-Antimony Project in NSW

Highlights:

- Red River to acquire 100% of the high-grade Hillgrove Gold-Antimony Project (Hillgrove) in NSW for a total acquisition cost of \$4 million, payable in Red River shares
- Hillgrove contains significant infrastructure with a historical cost of \$180 million (including existing processing plant, surface infrastructure, underground development, resource definition drilling and underground mining fleet)
- Historical production at Hillgrove exceeds 730,000 oz of gold (in concentrate and bullion) and 50,000 tonnes of antimony (in concentrate and metal) plus by-product tungsten
- Significant high-grade Mineral Resource at Hillgrove includes:
 - Mineral Resource of 2,800,000 tonnes @ 5.1 g/t Au & 1.7% Sb (7.5 g/t Au Eq.) (459Koz gold & 48Kt antimony), reported in accordance with the 2012 JORC Code; in addition to a
 - Mineral Resource of 3,935,000 tonnes @ 4.7 g/t Au & 1.3% Sb (597Koz gold & 50Kt antimony), reported in accordance with the 2004 JORC Code, with potential to convert to Mineral Resources reported in accordance with the 2012 JORC Code
- 425km² tenement holding contains over 200 known gold-antimony +/- tungsten occurrences, indicating significant exploration upside
- Cash backed environmental bonds of \$4.3 million will transfer to Red River on transaction completion
- Red River is well funded with \$21.2 million cash, \$8.5 million in financial assets (31 March 2019), and positive cash flows from Thalanga
- Conference call today at 10.45am EST. Call details on bottom of page five

The Hillgrove Mineral Resources reported under the 2004 JORC Code are not reported in accordance with the JORC Code 2012

A Competent Person has not done sufficient work to classify the estimates of Mineral Resources or Ore Reserves in accordance with the JORC Code 2012

It is possible that following evaluation and/or further exploration work the currently reported estimates may materially change and hence will need to be reported afresh under and in accordance with the JORC Code 2012

Nothing has come to the attention of Red River Resources that causes it to question the accuracy or reliability of the former owner's estimates

Red River Resources has not independently validated the former owner's estimates and therefore is not to be regarded as reporting, adopting or endorsing those estimates

Red River Resources Limited (ASX: RVR) (“Red River” or “the Company”) is pleased to announce that it has entered into a binding agreement with Bracken Resources Pty Ltd (**Vendor**) to acquire 100% of the shares in Hillgrove Mines Pty Ltd, which holds 100% of the Hillgrove gold-antimony project (**Acquisition**).

1 Hillgrove Project Overview

The Hillgrove Project is located approximately 30km from Armidale in New South Wales. Historic mining activity commenced at the site in 1857 and ceased in 1921 and recommenced in 1969.

Since 2004, over \$180 million has been invested in underground development, surface infrastructure and processing plant by Straits Resources Limited (2004 to 2009) and most recently by the current owner, Bracken Resources Pty Ltd (“Bracken”) which acquired Hillgrove from Straits in 2013 for \$33.2 million (plus the replacement of \$3.9 million in environmental bonds provided by Straits).

Bracken subsequently invested over \$40 million in upgrading and recommissioning Hillgrove with production of concentrates and antimony-gold concentrates commencing in 2014.

Hillgrove was placed on care & maintenance in 2016 due to low prevailing antimony prices.

Figure 1 Hillgrove Gold-Antimony Project Site, showing processing infrastructure and layout



Figure 2 Hillgrove Gold-Antimony Project Location



Red River's Managing Director Mel Palancian commented:

"We have been working on the acquisition of the Hillgrove Gold-Antimony Project for over six months and it's a great addition to our portfolio."

"We love gold and bringing mining assets back to life cheaply. It's rare to find a high-grade gold asset that is close to production with quality resources and infrastructure. We can fund near term commitments from our strong existing cash balance and ongoing cash flow."

"We will continue to focus on production and growth at Thalanga as there is an exciting future ahead with significant growth potential. For Hillgrove, we will ensure a smooth transition of the asset and evaluate the opportunities by upgrading and growing resources and developing an optimised restart study."

2 Infrastructure

Since 2004, there has been significant investment, totalling over \$180 million at Hillgrove, focussed on the processing plant, underground (UG) mine infrastructure and site infrastructure, but extending to other facets of the Project.

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/SXEW/refining & casting plant, a gold cyanide leach circuit & gold room and a pressure oxidation circuit.

The site also has a first aid/mine rescue centre & UG capable ambulance, plus on-site stores with ~ \$2.2 million worth of stock and associated maintenance, administration buildings and laboratory/on site assay facilities.

A fully HDPE (high-density polyethylene) lined modern tailing storage facility which was constructed in 2006, and has approximately 2 years of production storage capacity.

Figure 3 Hillgrove Gold-Antimony Project – Key Surface Infrastructure



Hillgrove currently has a care & maintenance workforce of 5 people. When previously in operation, the site was a residential site, with the workforce living in Armidale. The total workforce was approximately 120 people, with UG mining carried out on an owner-operator basis utilising a comprehensive fleet of UG mining equipment which remains on site.

Hillgrove is connected to a 66kV power line and power is supplied to site via a 11kV step down transformer. Water is sourced locally and there is a reverse osmosis/microfiltration water treatment plant on site enabling treated site water to be discharged.

The previous operator produced an antimony-gold concentrate and a refractory concentrate. The concentrate was trucked to Port of Brisbane (approximately 500km) in 1 tonne bulka bags for export.

3 Purchase Price

In consideration for the Acquisition, Red River has agreed to issue \$4.0 million in Red River fully paid ordinary shares (23.0m shares (**Acquisition Shares**)) to the Vendor or its nominee, which has been calculated at the 10 day Volume Weighted Average Price to 2 July 2019.

Red River has sufficient placement capacity available (current placement capacity under Rule 7.1 of 73.4898m shares and under Rule 7.1A of 48.9932m shares, for a total of 122.483m shares) to issue the Acquisition Shares without shareholder approval.

The Acquisition Shares will be held in escrow for a 12 month period commencing from the date that completion of the Acquisition occurs (**Voluntary Escrow Period**) and the Vendor (or its nominee as the case may be) has agreed not to, and to procure that its related bodies corporate do not, until the end of the Voluntary Escrow Period directly or indirectly, acquire any additional shares or securities in Red River without Red River's prior written consent.

4 Conditions Precedent

The transaction is subject to obtaining the New South Wales Minister for Energy and the Environment's written approval to the acquisition of four Exploration Licences held by Hillgrove Mines, as per the Conditions of Title of all Exploration Licences granted under the Mining Act 1992 (NSW) (**Mining Act**).

The requirement to get written approval is not specific to the Hillgrove Project but is common to many EL's held in NSW which will result in a change in the effective control of the holder.

It is anticipated that the Minister's written consent can be obtained within 4-6 weeks.

5 Other Information

The Hillgrove Project currently has a provision for mine site restoration and rehabilitation of approximately \$4.3 million. This provision is backed by a NAB Term Deposit of \$3.9 million and a \$0.4 million cash bond held by the New South Wales Department of Industry, Resources and Energy. The Term Deposit and cash bond are being acquired by Red River as part of the acquisition of Hillgrove.

It is anticipated that the mine closure plan will need to be updated following Completion and the closure cost estimate and associated security updated as part of this process.

6 Advisers

Hartleys Limited acted as corporate advisor to Red River in relation to the acquisition, with Piper Alderman acting as Red River's legal advisor on the acquisition.

7 Conference Call Details

Red River Managing Director Mel Palancian will host a conference call today at 10.45am to discuss the acquisition.

Dial in details

AUSTRALIA:	1800 908 299
ALT. AUSTRALIA:	1800 455 963

To participate, please request to join the Red River Resources call.

8 Hillgrove Mineral Resource Estimate

The Hillgrove Mineral Resource comprises a Mineral Resource reported in accordance with the 2012 JORC Code (refer to Table 2) and a Mineral Resource reported in accordance with the 2004 JORC Code (refer to Table 7).

Red River has reported the more recent Mineral Resource Estimate for the Sunlight, Syndicate, Brackin's Spur and Clarks Gully Deposits as these estimates take account of activity carried out by Hillgrove Mines Pty Ltd in the period since the earlier Mineral Resource estimate was reported.

Table 1 Hillgrove Mineral Resource Estimate Source

Deposit	Mineral Resource Estimates reported in accordance with the JORC Code	
	JORC Code 2004	JORC Code 2012
Austins	Straits Resources Limited (9 May 2011)	
Black Lode – Main Lode	Straits Resources Limited (9 May 2011)	
Black Lode – North Splay	Straits Resources Limited (9 May 2011)	
Black Lode – South Splay	Straits Resources Limited (9 May 2011)	
Black Lode – West Splay	Straits Resources Limited (9 May 2011)	
Prendergasts	Straits Resources Limited (9 May 2011)	
Cox's Reef	Straits Resources Limited (9 May 2011)	
Sunlight	Straits Resources Limited (9 May 2011)	AMC Consultants Pty. Ltd. (August 2017)
Syndicate	Straits Resources Limited (9 May 2011)	AMC Consultants Pty. Ltd. (August 2017)
Brackin's Spur	Straits Resources Limited (9 May 2011)	AMC Consultants Pty. Ltd. (August 2017)
Eleanora (Upper)	Straits Resources Limited (9 May 2011)	
Eleanora (Lower)	Straits Resources Limited (9 May 2011)	
Garibaldi	Straits Resources Limited (9 May 2011)	
Freehold	Straits Resources Limited (9 May 2011)	
Smiths	Straits Resources Limited (9 May 2011)	
Golden Gate	Straits Resources Limited (9 May 2011)	
Clarks Gully	Straits Resources Limited (9 May 2011)	AMC Consultants Pty. Ltd. (August 2017)
Cosmopolitan	Straits Resources Limited (9 May 2011)	
Damifino	Straits Resources Limited (9 May 2011)	
Lady Hopetoun	Straits Resources Limited (9 May 2011)	

Straits Resources Limited reported a Mineral Resource in accordance with the 2004 JORC Code for the Hillgrove Project (refer to Table 7) as at 9 May 2011. This is contained within the Emu Nickel NL Prospectus dated 23 March 2012 and is available at the following location (refer to Appendix B, page 233).

<https://www.asx.com.au/asxpdf/20120403/pdf/425f69vxkh0bbh.pdf>

9 Hillgrove Mineral Resource Estimate

AMC Consultants Pty. Ltd. (AMC) were engaged by Hillgrove Mines Pty Ltd in July 2017 to prepare an updated Mineral Resource estimate for Sunlight, Syndicate, Clark's Gully and Brackin's Spur to be reported in accordance with the 2012 JORC Code.

Table 2 Hillgrove Mineral Resource at a 5g/t Gold Equivalent cut-off

Deposit	Classification	Tonnes	Gold	Antimony	Gold Equivalent (Au Eq.)	Contained Gold	Contained Antimony
		(kt)	(g/t)	(%)	(g/t)	(Koz Au)	(Kt Sb)
Sunlight	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
Brackin's Spur	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
	Total	1,600	4.5	1.5	6.6	231	24
Clark's Gully	Measured	170	1.9	4.2	9.0	10	7
	Indicated	96	2.1	3.1	7.3	6	3
	Inferred	0.4	0.8	3.0	5.8	0	0
	Total	270	2.0	3.8	8.4	17	10
Syndicate	Measured	170	4.4	5.5	13.4	24	9
	Indicated	56	4.7	1.7	7.2	8	1
	Inferred	4	9.3	0.3	9.0	1	0
	Total	230	4.5	4.5	11.8	33	10
Total	Measured	690	5.8	2.6	9.8	129	18
	Indicated	1,100	4.9	1.5	7.0	173	17
	Inferred	1,000	5.0	1.1	6.5	161	11
	Total	2,800	5.1	1.7	7.5	459	48

Source: AMC Consultants Pty. Ltd. Hillgrove Mineral Resource Estimate (August 2017)

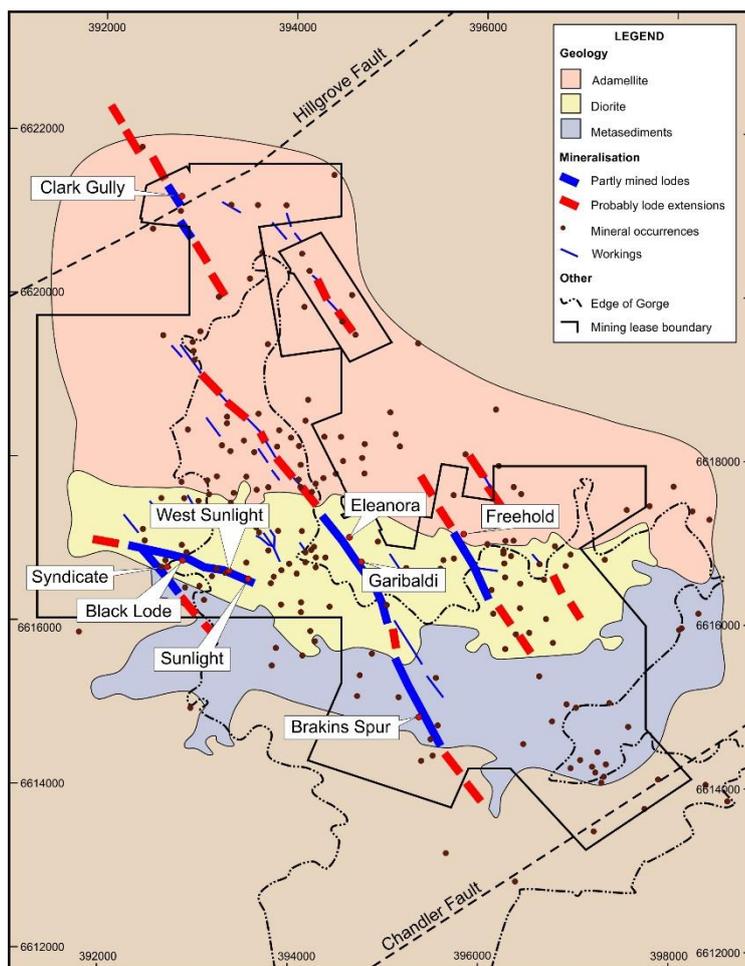
Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

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.

10 Geology and Geological Interpretation

The Hillgrove Mineral Field is cut by two regional scale faults of ENE strike, the Hillgrove Fault on the northern margin and the Chandler Fault on the southern margin (Figure 4). These faults have a sinistral (left lateral) throw, with interpreted displacements of up to 500m. Both faults pre-date the mineralisation, with late reactivation opening dilation zones along the shear structures between the bounding faults. These dilation zones provide favourable sites for mineralisation. Nearly all the mineralised shears at Hillgrove are associated with a NW trending structural belt between the two faults, with dips commonly 70° to vertical. A major structure running through the centre of the field from Brackin's Spur in the south, through the Garibaldi and Eleanora mines, to the Cosmopolitan deposits in the north can be traced over a strike length of 4kms.

Figure 4 Hillgrove Regional Geology Plan



Gold and antimony mineralisation at Hillgrove are structurally controlled. The deposits exhibit various styles of hydrothermal activity, with veining ranging from simple single veins through parallel stringers to quartz stockwork and wall rock breccias. All major veins have been intruded along shears with sinistral (left lateral) movement. The shears range in width from millimetre to multiple metre widths. Splits in the veins enclose high grade mineralised zones where tension gash type stringer veins cut across the enclosed rocks. Splay veins enclose similar zones that die out as the vein diverges away from the main lode.

The veins are the result of multi-phase fluid emplacement in the following sequence:

- Barren quartz veins
- Quartz – scheelite (CaWO_4) veining
- Quartz – arsenopyrite – pyrite – gold veining
- Quartz – stibnite (Sb_2S_3) – gold veining
- Quartz – stibnite – calcite veining
- Barren quartz-chlorite veining

All phases occur within ore bearing structures, with the first two phases often sealing structures in the granites resulting in restrictions to later phases. The arsenopyrite phase forms a broad halo of fine parallel veins in a siliceous-sericitic alteration. It appears that all wall rock alteration is associated with this phase, as there is little dispersion of stibnite into surrounding rocks. Alteration effects are commonly on the scale of metres around structures, occurring via pervasive fluid flow, with the more focused quartz-stibnite open space filling

phase following. The arsenopyrite phase is responsible for most of the refractory gold in the deposits with the particle free gold associated with the quartz-stibnite-gold phase.

Ore grade material in structures is restricted to vertical or steeply plunging 'ore shoots', caused by localised flexures forming dilational jogs. The ore shoots generally occupy up to 60% of the structures with good vertical continuity.

Sunlight

In the Metz mining centre, the Sunlight lode is a significant mineralised structure that has the potential for high grade (free and refractory) gold close to the Hillgrove Plant. The deposit is associated with an EW trending, cross linking, ductile shear in an area of predominately NW extensional shears (Syndicate, Cox's Lode and Bakers Creek). The lode has been historically mined to a depth of 300m below surface, with a drilled easterly strike length of 400m from the intersection with Black Lode.

Similar to other deposits in the Hillgrove Mineral Field, the shear has been subjected to multiple hydrothermal fluid events and structural reactivation. An initial phase of pervasive sericite-silica alteration has been overprinted with a broader ductile event consistent with the quartz-arsenopyrite-pyrite-gold phase. This has resulted in a wider zone of quartz stringer / individual veining to quartz breccias with disseminated refractory gold. Later reactivation causing narrow (up to 2m wide) of brittle deformation has produced distinct hanging wall and footwall breccias with high grade particle (free) gold. These breccias are continuous along strike and depth, potentially joining in a combined breccia zone on the western end of the lode. Unlike other deposits in the Metz area, Sunlight has low levels of antimony and tungsten and is more analogous to the Bakers Creek style of mineralisation to the east.

Brackin's Spur

The Brackin's Spur deposit is located on the southern end of the Central Eleanora Structure, a significant NW trending shear zone that can be traced through several workings for approximately 4km. Hosted in the Bakers Creek diorite, it includes a range of rock types including tonalites, granodiorites and diorites. Strong to intense hydrothermal alteration (predominately sericite) occurs in visibly deformed, veined and mineralised diorite. There is evidence of multiple phases of hydrothermal fluids within the Brackin's Spur shear and is summarised as:

- An initial phase of fine grained disseminated arsenopyrite +/- pyrite in very strongly sericitic altered and deformed host rock. Broad alteration zones up to 10m have been observed but usually have low to no gold.
- Deposition of scattered, medium to coarse grained scheelite in early veining and commonly associated with quartz
- Deposition of locally abundant stibnite in later veining and breccia infill
- Local comminution of sulphides and scheelite in late cataclastic breccias. These narrow (centimetre to tens of centimetre) 'black' shears are predominately very fine grained arsenopyrite / pyrite, containing high grade refractory gold. To date, no particulate gold has been observed in the deposit.

Clark's Gully

The Clark's Gully deposit is an advanced antimony project located in the northern most mining lease (ML 1332). A small open cut was excavated in 1994/1995 by New England Antimony Mines to access oxide gold. The deposit is adjacent to the broad confines of the Hillgrove Fault within the Hillgrove Adamellite, and its large width (up to 10m) is due to the intersection of two structural trends. A pre-existing, ENE trending mylonite zone associated with the Hillgrove Fault is cut by an array of NW striking veins, resulting in a significant dilation zone hosting a mineralised structural breccia. Mineralisation is associated with a network of quartz stringer veins, stockwork and sulphide matrix breccias with intense sericitic alteration of the adamellite. Auriferous arsenopyrite-pyrite-quartz-carbonate veins are overprinted with quartz-stibnite veins on a NW trend. Low grade refractory gold and the absence of free gold at Clark's Gully indicate low saturation levels in the arsenopyrite. Low grade tungsten, in the form of scheelite veins, is associated with and peripheral

to the main shear. The deposit is open along strike and at depth, with the current drilling having tested the mineralisation to a depth of 300m below surface. The position of the Hillgrove Fault and its effect on the mineralisation on the northern end of the deposit is untested and is a high priority exploration target.

Syndicate

The Syndicate deposit in the Metz mining centre is one of the more consistent mineralised shears in the Hillgrove area. The deposit is hosted in the Girakool metasediments, which are typically greenschist altered, weak to strongly foliated turbiditic rocks. Gold-antimony mineralisation is associated with a strong shear, which strikes NW and dips steeply to the southwest. The shear can be traced over a strike length of 300m and ranges in width from 0.1m to 5m. The structure appears to terminate at the northern end against the Black Lode and significantly thins and weakens in grade to the south as it continues into the Bakers Creek Diorite. Further exploration is required on both ends of the lode, with the best opportunity for extensions existing to the north of Black Lode.

An initial phase of quartz-scheelite mineralisation has resulted in weak tungsten grades (<0.3% W) occurring as small clasts and veinlets, proximal to the peripheries of the shear. An arsenopyrite phase forms a broad halo of fine parallel stringer veins in a siliceous-sericitic alteration within the shear and is responsible for much of the refractory gold in the deposit. A late phase of quartz-stibnite +/- minor free gold, occurs in reactivated areas of the shear, predominately on the hanging wall and footwall contacts. Aurostibite (AuSb₂) occurs as a minor component of the Syndicate stibnite veins.

10.1 Drilling, sampling and sub sampling techniques

Drilling programs have been conducted by numerous companies over the life of the Hillgrove Operations, with the bulk of the drilling conducted in the modern period (post 1980s). Prior to this, exploration was restricted to development on lode with minimal drilling. Exploration around the Hillgrove Field is challenging due to access issues with the steep gorge terrain, resulting in diamond drilling from underground positions being the preferred method. A combination of new development and rehabilitation of historical workings has been required to test most of the deposits. Diamond drilling, reverse circulation and percussion drilling methods have been used at Clark's Gully and Brackin's Spur, where access has been possible on the plateau and bottom of gorge respectively.

Face samples have been collected by collecting rock chip samples along horizontal channels. Face samples are spaced a nominal 3.5m along ore drives; for Syndicate where the majority of face samples have been collected, the ore drives are spaced 18m vertically.

Sunlight

The Sunlight deposit was diamond drilled from underground by Straits (2004 to 2009), initially with holes targeting the adjacent Black Lode. In 2016 and 2017, Hillgrove conducted an intensive underground diamond drilling program (51 holes) focussed on Sunlight as a potential high-grade gold opportunity. Of the 51 holes, 43 targeted the deposit to the west and below the old workings on a nominal 30m x 30m grid. The remaining holes were drilled below the 1300 mRL on a wide spaced grid to test the continuation of the high-grade gold mineralisation down dip.

Table 3 Sunlight drilling summary

Drillhole Prefix	Company	Year(s) Drilled	Drilling Method	Total Length (m)
BLS/SUN/BLK/CXL	Straits	2004-2009	Diamond	2,088
BLK/SUN	Hillgrove	2013-2017	Diamond	16,450

Brackin's Spur

At Brackin's Spur, a total of five significant drill programs have been undertaken over a 35 year period. From 1982 to 1984, Freeport Australia completed a program of diamond (11) and percussion (9) holes from the

surface along a strike length of 1.5km. Omega Mines followed in 1985/1986 with a further nine diamond holes from surface, which included the Chopper’s Gully extension to the south. Straits infilled the previous programs in 2007/2008 with 23 diamond drillholes from the surface, focusing on the northern end of the deposit, down-dip and below the historical workings. Recent diamond drilling by Hillgrove was completed from new underground development, to expand Straits drilling at depth and to test the continuity of mineralisation down dip.

Table 4 Brackin’s Spur drilling summary

Drillhole Prefix	Company	Year(s) Drilled	Drilling Method	Total Length (m)
DDBS1-DDBS11	Freeport Australia	1982/1984	Diamond (NQ, NQ3)	1,641
PDH1-PDH9	Freeport Australia	1982/1984	Percussion	695
DDBS12-DDBS20	Omega Mines	1986	Diamond (HQ3)	627
BRK001-BRK023	Straits	2007/2008	Diamond (BQ/NQ or HQ/NQ2)	7,514
BRK024-BRK040	Hillgrove	2016/2017	Diamond (NQ2)	3,499

Clark's Gully

Drilling at Clark's Gully is a combination of percussion, reverse circulation (RC) and diamond drilling carried out by three companies over a 27 year period. New England Antimony Mines (NEAM) completed 65 percussion holes to a maximum depth of 24m to define the trace of the main lode in 1990-1993. The results defined an oxide gold resource which was mined via a small open cut. From 2004-2005, Straits drilled 43 reverse circulation holes (7 with diamond tails) outlining an open pitable gold-antimony resource down to 250m depth. Recently Hillgrove infilled previous programs and extended the main zone of mineralisation along strike with 27 diamond drill holes from surface.

Table 5 Clark's Gully drilling and costean summary

Drillhole Prefix	Company	Year(s) Drilled	Drilling Method	Total Length (m)
HS	NEAM	1990-1993	Percussion	990
Costeans	NEAM	1991	-	176
CLG001-CLG043	Straits	2004-2005	RC	4,010
	Straits	2004-2005	RC & Diamond Tails	1,952
CLG044-CLG070	Hillgrove	2014-2016	Diamond	2,254

Syndicate

The Syndicate Lode in the Metz area was mined by Straits between 2007 and 2011 and is the most extensively drilled of the Hillgrove deposits. Straits drilled 4 reverse circulation (RC) holes from surface and 96 diamond holes (surface and underground) during a 5 year period from 2005 to 2009. The majority of diamond holes were drilled from underground drill positions for resource definition purposes. Hillgrove completed a further 31 diamond drill holes between 2013 and 2015.

Table 6 Syndicate drilling summary

Drillhole Prefix	Company	Year(s) Drilled	Drilling Method	Total Length (m)
162/165	NEAM	1996-1997	Diamond	810
BLS001	Straits	2004	RC	269
BLS/BLK/SYN	Straits	2005-2009	Diamond	10,420
SYN/SMW	Hillgrove	2013-2015	Diamond	4,404
Face Samples	NEAM/Straits/Hillgrove	1998-2015	-	5,200

10.2 Classification Summary

The Mineral Resources were classified based on confidence in geological grade and continuity, QAQC results and sample spacing.

Deposit	Classification Criteria
Sunlight	<p>Areas within Zone 5 or Zone 8 with samples on a nominal 30m x 30m grid were classified as Measured Resources</p> <p>Areas within Zone 5 or Zone 8 with samples on a nominal 60m x 60m grid were classified as Measured Resources</p> <p>Areas within Zone 5 or Zone 8 areas with samples a nominal 70m outside areas classified as Indicated Resources were classified as Inferred Resources</p> <p>Areas within Zone 2 or Zone 3 with samples on a nominal 30m x 30m grid were classified as Inferred Resources</p>
Brackin's Spur	<p>Areas sampled on a nominal 40m x 40m grid were classified as Measured Resources</p> <p>Areas within 20m of an oredrive were classified as Measured Resources</p> <p>Areas sample on a nominal 100m x 100m grid were classified as Indicated Resources</p> <p>Inferred Resources were classified by extrapolating a nominal 50m outside Indicated Resources</p>
Clark's Gully	<p>Areas with drillhole samples on a nominal 30m x 30m grid were classified as Measured Resources</p> <p>Areas with drillhole samples on a nominal 75m x 75m grid were classified as Indicated Resources</p> <p>Areas to the south in Zone 10 where the distance between the composites is less than the range of the variogram (275m) and geological continuity is inferred from limited drillhole intersections and surface mapping and sampling the estimated resources were classified as Inferred Resources</p> <p>Inferred Resources were classified in Zone 9 where limited drilling showed the mineralisation continued to the south</p>
Syndicate	<p>Areas near ore drives (extrapolated a nominal 18m) sampled on a 3.5m x 18m grid were classified as Measured Resources</p> <p>Areas with drillhole samples on a nominal 40m x 40m grid were classified as Indicated Resources</p> <p>Pillars in the domain Syn and areas in the domains Syn and Shear with drillhole samples on a nominal 150m x 150m grid were classified as Inferred Resources</p>

10.3 Sample Analysis Method

Diamond drilling was the preferred sampling method, with the intervals to be assayed determined by Hillgrove's geologists. Much of the core consists of barren metasediments and volcanics and was not sampled. Sample intervals were selected based on visual identification of the mineralisation, alteration, quartz veining style and all occurrences of sulphides.

All core processing was carried out on-site by geological staff. To provide a consistent sample, the core was cut in half using an Almonte diamond saw along the orientated core mark. Sampling within the ore zone was broken down by mineralisation style, with a minimum sample length of 20cm and a maximum not exceeding 2.0m. Samples average 1.0m length around the ore zones, and the core was usually sampled to a minimum of 5m away from the mineralisation to provide dilution grade information for potential mining purposes. The northern half of the core was sampled and each sample length was given a unique sample number and bagged separately before being dispatched to the laboratory.

Laboratory Procedure

Assaying was carried out by the external and independent Australian Laboratory Services (ALS) Brisbane facility, which is ISO 9001 accredited. ALS provide both sample preparation and chemical analysis service and undertake regular internal quality control checks on the assay data reported.

Hillgrove regularly tested for a group of ten elements (Ag, As, Au, Cu, Fe, Pb, S, Sb, W and Zn) over the known deposits. Sample preparation at ALS (Brisbane) uses the standard industry method as follows:

- Samples are received, weighed and dried (four hours at 105°C)
- Samples up to 3.3kg are jaw crushed to a nominal 70% passing 6mm. if weighing more than 3.3kg, the sample is split and 50% of the sample is used
- The entire sample is pulverised to 85% passing 75µm
- The sample is then split and 200g is used for analysis and the remainder is bagged and sent back to Hillgrove

Gold grades are determined by fire assay with an atomic absorption spectroscopy (AAS) finish, by the following procedure:

- A nominal 100g pulverised sample is dispatched to ALS (Townsville) for fire assay
- A 50g sample of pulp is fused with a mixture of flux, inquarted with 6mg of gold free silver, and cupelled to yield a metal bead
- The bead is digested in 0.5ml dilute nitric acid in a microwave oven. A 0.5ml aliquot of concentrate hydrochloric acid is then added and the bead is further digested in the microwave oven.
- The digested solution is cooled then diluted to a total volume of 10ml with water
- The solution is then analysed by AAS against matrix matched standards
- Core samples with visible gold and samples returning an assay greater than 10ppm Au, are also assayed using the screen fire assay method

Antimony, arsenic and tungsten grades are determined by acid digest and analysed by ICP-AES (inductively coupled plasma-atomic emission spectrometry) by the following procedure:

- A 0.25g pulverised sample is oven dried before pre-oxidation and decomposition by fusion with lithium borate flux containing 20% sodium nitrate as an oxidising agent. The resulting melt is poured to produce a fused disk
- The disk is analysed using a wavelength dispersive X-Ray fluorescence spectrometer

10.4 Estimation Methodology

The Mineral Resource for the different areas was estimated using either three-dimensional block modelling or two-dimensional accumulation for grade estimation using ordinary kriging.

10.5 Cut off grades(s), including the basis for selected cut-off grade(s)

The JORC 2012 Hillgrove Mineral Resource is reported above a gold equivalent (Au Eq.) cut-off of 5 g/t Au Eq. The use of a gold equivalent cut-off is appropriate for the multi-element mineralisation at Hillgrove, where value is obtained from both antimony and gold.

The Au Eq. value was calculated 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 = (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%

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.

10.6 Mining and metallurgical methods and parameters

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

Competent Person's Statement – 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.

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 = (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%

11 Hillgrove Mineral Resource Estimate Reported in Accordance with the JORC 2004 Code

As per ASX mining reporting – frequently asked questions (FAQ 37#)

The estimates have been reported by the former owner rather than the acquirer;

The Mineral Resource estimate was reported by Straits Resources Limited as at 9 May 2011 in accordance with the 2004 JORC Code.

The source and date of the reporting of the estimates – the announcement must attach a copy of the original report of the estimates of Mineral Resources or Ore Reserves by the former owner or state the location where the report can be viewed by interested readers;

Straits Resources Limited reported a Mineral Resource in accordance with the 2004 JORC Code for the Hillgrove Project (refer to Table 3) as at 9 May 2011. This is contained within the Emu Nickel NL Prospectus dated 23 March 2012, and is available at the following location (refer to Appendix B, pg. 233)

<https://www.asx.com.au/asxpdf/20120403/pdf/425f69vxkh0bbh.pdf>

The summary JORC 2004 Compliant Mineral Resource is available in the Straits Resources Limited Annual Report 2011 (refer to ASX Release dated 18 October 2011, ASX:SRQ)

A by deposit Mineral Resource breakdown was subsequently presented by Coffey Mining Pty Ltd (Coffey) as part of an Independent Technical Valuation which formed part of the Independent Technical Review contained in the Emu Nickel NL Prospectus dated 23 March 2012

Which edition of the JORC Code they were reported under and the fact that the reporting of those estimates may not conform to the requirements in the JORC Code 2012;

The Mineral Resources were reported under the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (“The JORC Code 2004 Edition) and as such the reporting of these estimates may not conform to the requirements of the JORC Code 2012.

If the former owner has reported an Ore Reserve without studies defined at the Pre-Feasibility or Feasibility level, the fact that the applicant will need to undertake the appropriate level of study to report an Ore Reserve under the JORC Code 2012 or else downgrade the Ore Reserve to a Mineral Resource;

The former owner has reported an Ore Reserve as per the JORC 2004 Code, however the Ore Reserve has subsequently been downgraded to a JORC 2012 Mineral Resource. The Hillgrove Project was placed on care & maintenance in 2016 due to low prevailing commodity prices (antimony) which rendered the Hillgrove Project uneconomic at that point in time.

The acquirer’s view on the reliability of the estimates, including by reference to any of the criteria in Table 1 of the JORC Code 2012 which are relevant to understanding the reliability of estimates (in the case of Ore Reserves, the acquirer must specifically comment on the continuing reliability of the applicable Modifying Factors, including the Economic Modifying Factor used by the former owner);

Red River believes that the Straits Hillgrove Mineral Resource estimates are reliable as they were prepared by a publicly listed company (Straits Resources ASX:SRQ) and reported under the JORC Code (2004 Edition).

The Straits Hillgrove Mineral Resource estimate was subsequently reviewed by Coffey Mining Pty Ltd (Coffey) as part of an Independent Technical Valuation which formed part of the Independent Technical Review contained in the Emu Nickel NL Prospectus dated 23 March 2012.

The Emu Nickel NL Prospectus is available at the following location:

<https://www.asx.com.au/asxpdf/20120403/pdf/425f69vxkh0bbh.pdf>

To the extent known, a summary of the work programs on which the estimates were based and a summary of the key assumptions, mining and processing parameters and methods used to prepare the estimates;

Black Lode

The Black Lode Resource Model was based on data derived from 1,051 underground face channel samples, 48 diamond drill holes and 7 reverse circulation (RC) drill holes. The bulk of the face sampling data was from historic New England Antimony Mines (NEAM) work with only 19 face samples taken by Straits. All drilling was completed by Straits. The RC holes were 5.25 inches in diameter and the diamond drilling consisted of 22 BQTK diameter holes, 15 LTK48 diameter holes and 11 NQ2 diameter holes. Logging and sampling were to geological boundaries of variable width.

Cox's Lode

The Cox's Lode Resource Model was based on data derived from 143 NEAM channel samples, 47 Straits channel samples and 93 Straits diamond drill core samples. The drill samples comprised 5 LTK48 (35mm diameter) core samples and 88 BQTK (40.5mm diameter) core samples.

NEAM channel sampling was restricted to the main shear or stibnite vein rather than the full exposure of the development face and samples were only assayed for Au and Sb. Straits created "dummy" channel samples in the database and assigned a zero grade for gold and antimony 10m each side of the NEAM sample in order to mitigate the influence of these high grade samples on grade interpolation.

Eleanora- Garibaldi

The Eleanora (Lower) Lode together with the Eleanora Upper and Garibaldi Lode, comprise one of the principal lodes in the Hillgrove Mining Field (refer to Figure 3). The lodes represent the longest mineralised structure in the Hillgrove Mineral Field, with the Garibaldi Lode being the southern strike extension.

The Eleanora (Lower) Resource Model was based on four data types: NEAM historic face channel samples taken from the faces of development drives and the backs of each successive lift in stopes, NEAM historic surface diamond drillhole data, Straits underground airleg sludge holes drilled into the walls of drives on 9 and 11 Levels (1745 and 1665m RL respectively) and Straits underground diamond drillholes including horizontal LTK48 holes drilled into the walls of 9 Level and a combination of HQ, NQ2 and BQTK drilled from cuddies on 9 and 11 Levels.

The Eleanora Upper and Garibaldi Resource model were based on historical NEAM face sampling and drilling data.

Any more recent estimates or data relevant to the reported mineralisation available to the entity;

AMC Consultants were engaged by Hillgrove Gold Pty Ltd in July 2017 to prepare an updated Mineral Resource estimate for Sunlight, Syndicate, Clark's Gully and Brackin's Spur. The AMC JORC 2012 Mineral Resource estimate, reported in accordance with the 2012 JORC Code, is disclosed in this release.

The evaluation and/or exploration work that needs to be completed to report the estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code 2012;

The Straits Hillgrove Mineral Resource estimates will be re-estimated and remodelled using updated input parameters. Where the historical resources are heavily reliant on historical NEAM face sampling data, this data will be duplicated either with drilling and/or face sampling (subject to access) to encompass the full width of the development to include the footwall and hangingwall where possible. All new sampling programs will incorporate a QAQC regime which is in compliance with the JORC 2012 Code, including insertion of site duplicates, certified standards and blanks in the sample stream prior to dispatch.

Cutoff grades for all resource estimates will be reviewed and updated using revised metal price forecasts, which are significantly higher than the historical prices used (predominately from the period 2004-2010).

Metal equivalence formulas will be updated to reflect the more recent metallurgical testwork and processing results, and where necessary, new samples will be taken for metallurgical testwork.

The proposed timing of any evaluation and/or exploration work that the acquirer intends to undertake and a comment on how the acquirer intends to fund that work;

The evaluation/exploration work required to re-estimate the Straits Hillgrove Mineral Resource will commence on close of the transaction and will be funded by Red River's current cash balances.

A statement by a named Competent Person(s) that the information in the market announcement provided is an accurate representation of the available data and studies for the material mining project; and

The information in this release that relates to Mineral Resources is based on information reviewed 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 in the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian 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 his information in the form and context in which it appears.

All Mineral Resource estimates were prepared and first disclosed under the JORC Code 2004 and are an accurate representation of the available data and studies for the Hillgrove Mining Project. This information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Work will commence on close of acquisition by the Company to bring each of the Mineral Resources into line with the JORC Code 2012.

Table 7 Hillgrove Mineral Resource (reported in accordance with 2004 JORC Code) at a 3 g/t Gold Equivalent cut-off (Straits Resources Limited, May 9 2011)

Deposit	Mineral Resource					Mineral Resource								
	Total					Measured			Indicated			Inferred		
	Tonnes (Kt)	Gold (g/t)	Antimony (%)	Contained Gold (Koz Au)	Contained Antimony (Kt Sb)	Tonnes (Kt)	Gold (g/t)	Antimony (%)	Tonnes (Kt)	Gold (g/t)	Antimony (%)	Tonnes (Kt)	Gold (g/t)	Antimony (%)
Austins	5	1.4	2.3	0	0	5	1.4	2.3						
Black Lode – Main Lode	1,013	4.1	1.7	134	17	105	4.4	2.8	487	4.4	1.5	421	3.6	1.7
Black Lode – North Splay	23	5.9	3.4	4	1	20	6.1	3.6	3	4.3	2.2			
Black Lode – South Splay	33	3.3	0.1	4	0				30	3.3	0.1	3	3.0	0.1
Black Lode – West Splay	126	3.2	3.2	13	4							126	3.2	3.2
Prendergasts	7	3.0	2.2	1	0	7	3.0	2.2						
Cox’s Reef	116	1.7	1.7	6	2	12	1.7	2.0	46	2.0	1.7	58	1.5	1.6
Eleanora (Upper)	787	6.4	1.0	162	8	507	6.6	1.0	280	5.9	0.9			
Eleanora (Lower)	868	4.8	0.3	134	3	47	6.3	1.0	589	4.9	0.3	232	4.1	0.1
Garibaldi	787	3.9	1.4	99	11				513	3.9	1.4	274	4.0	1.4
Freehold	74	6.3	3.5	15	3	3	4.1	3.0	34	6.7	3.6	37	6.1	3.4
Smiths	2	9.0	3.6	1	0				2	9.0	3.6			
Golden Gate	44	7.8	1.9	11	1				31	8.5	1.9	13	6.1	1.8
Cosmopolitan	15	10.1	0.5	5	0				15	10.1	0.5			
Damifino	6	6.8	3.7	1	0							6	6.8	3.7
Lady Hopetoun	29	8.0	1.0	7	0				3	9.1	0.6	26	7.9	1.0
Total	3,935	4.7	1.3	597	50	706	6.1	1.4	2,033	4.7	1.1	1,196	3.9	1.5

Source: Straits Resources Limited (9 May 2011)

Coffey Mining Pty Ltd (Coffey) Independent Technical Valuation contained in the Emu Nickel NL Prospectus dated 23 March 2012

Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

Sunlight, Syndicate, Brackin Spur and Clark’s Gully have been updated and reported by AMC as JORC 2012 Mineral Resources (refer to Table 2)

About Red River Resources (ASX: RVR)

RVR is the leading ASX base metal producer, with its key asset being the Thalanga Operation in Northern Queensland. RVR commenced copper, lead and zinc concentrate production at the Thalanga Operation in September 2017 and RVR is focused on maximising returns from the Operation by increasing plant throughput and extending mine life through increasing Mineral Resources and Ore Reserves at deposits currently in the mine plan (West 45, Far West and Waterloo), by potentially converting Mineral Resources into Ore Reserves at Lioneville and Orient and by continuing to aggressively explore our growing pipeline of high quality targets within the surrounding area.

On behalf of the Board,

Mel Palancian

Managing Director

Red River Resources Limited

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HILLGROVE MINERAL RESOURCE JORC 2012 TABLE 1

Section 1 Sampling Techniques and Data - JORC Code, 2012 Edition

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<p>The resource database contains the following sample types:</p> <ul style="list-style-type: none"> • Surface costean samples • Diamond drillcore samples • Reverse circulation (RC) chip samples • Percussion chip samples • Underground channel samples • Surface channel samples and rock chip samples • Drillcore samples range in length from 0.15 m to 2 m based on geology, alteration and mineralisation contacts. <p>Drilling program samples from January 2007 to February 2017 were as follows:</p> <ul style="list-style-type: none"> • Samples up to 3 kg were crushed to a nominal 6 mm, then pulverised to a nominal 75 µm. Samples (0.25 g) were digested and analysed by ICP with AES finish. Assays exceeding 10,000 ppm for arsenic; 10,000 ppm for antimony; or 500 ppm for tungsten were analysed by XRF. Samples weighing either 30 g or 50 g were assayed by fire assay. If coarse gold is identified visually in the sample, or if gold assay is greater than 10 ppm, the sample is analysed by screen fire assay.
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • Prior to 2016 drilling techniques were percussion drilling, diamond drilling, and diamond drilling with RC pre-collars. Diamond drilling techniques only were used for the 2016/2017 drilling program. • Drillcore sample data used for the grade estimation are from either whole-core or half-core samples from BQTK, NQ2, or HQ3 size drillcore. • Core orientation marks were attempted using a spear and crayon in mineralised zones from January 2007 and prior to 2015. From 2015 core orientation marks were obtained using the Boart Longyear Trucore electronic tool or the Reflex electronic tool for each core run from the estimated top of mineralisation to the end of the drillhole.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias</i> 	<p>Drilling programs from January 2007 to February 2017:</p> <ul style="list-style-type: none"> • Intervals of core loss were logged using a qualitative code and recorded in the acQuire database. Core recovery was measured, recorded on a digital device, and transferred to the acQuire database.

Criteria	JORC Code explanation	Commentary
	<p><i>may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> Drilling techniques were changed when drilling through highly fractured rock or gouge zones. Drilling muds were increased; water pressure was reduced and the weight on the bit was reduced. This change in technique decreased the likelihood of core loss. From 2016, whole core was sampled in mineralised zones to reduce potential loss of sample cuttings during the core cutting process. All drillcore photos, and geotechnical logs have been reviewed for each of the projects. The total number of mineralised intersections with core loss is two (one for Clark's Gully and one for Brackin's Spur). <p>Drilling programs prior to January 2007:</p> <ul style="list-style-type: none"> Core loss/core recovery measurements recorded on hard copies were transferred to the acQuire database. For intervals with no core loss logged or stated core recovery measurements, it is not clear if there was no core loss for these intervals or if the information wasn't collected. No bias is evident due to preferential loss of fines or sample recovery.
<p>Logging</p>	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<p>Drilling programs from January 2007:</p> <ul style="list-style-type: none"> Lithology, weathering, mineralisation, veining, alteration, and structure were logged. Core recovery and RQD were logged (quantitatively). In-situ bulk density measurements were recorded for most mineralisation intersections. Drillcore photos are available. <p>Drilling programs prior to January 2007:</p> <ul style="list-style-type: none"> Lithology, weathering, mineralisation, veining, alteration and structure were logged. Some core loss intervals have been logged qualitatively, and some core recovery intervals have been logged quantitatively. There are no records of bulk density measurements, or RQD measurements. There is sufficient logging to support mineral resource estimates, and mining studies. A geotechnical study by a qualified person is recommended. RQD logging data is available and mineralisation is exposed in underground workings. The logging is sufficient to support metallurgical testwork.
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and</i> 	<p>Drilling programs from 2007:</p> <ul style="list-style-type: none"> Samples up to 3kg were crushed to a nominal 85% passing 75µm. Sample intervals were adjusted within mineralisation to correspond with a change in mineralisation style, or by observed changes in

Criteria	JORC Code explanation	Commentary
	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>concentration of minerals of economic interest.</p> <ul style="list-style-type: none"> • Duplicate samples were collected following the coarse crush (up to 3kg) and following the pulverisation at a rate of 5%. Duplicate samples of pulverised material were sent to an umpire laboratory at a rate of approximately 5% for the mineralised zones. <p>Drilling programs prior to January 2007:</p> <ul style="list-style-type: none"> • There is limited available documentation for the sample preparation methods and QAQC procedures
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The laboratory procedures and assaying are appropriate and the laboratory is NATA certified. The analytical methods are considered total for the elements of interest. • Standards, blanks, duplicates and umpire assays have been used and acceptable levels of accuracy, precision and bias have been established.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • The Competent Person visited Hillgrove in June 2017 and inspected mineralised drillcore and checked the database. • Limited twinned holes have been drilled. • The data is stored in an acQuire database which is routinely backed up. Database backups are securely stored offsite. Standard data entry objects are set up within the database for importing data, and documented procedures for data entry are available. A spreadsheet contains documentation for the validation of the historical and recent drillhole data. • Assay data is not adjusted.
<p>Location of data points</p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Drillhole collars were surveyed and down-hole surveys are taken using appropriate tools. • For historic data, some information has been digitized from plans and sections. This is recorded in the acQuire database and a “hole confidence” value indicates the quantitative assessment of the quality of the survey. • Mine workings were surveyed for Syndicate, Brackin’s Spur, and Clark’s Gully. Sunlight stopes and ore drive locations have been estimated from plans and sections. • Grid system is AGD66. For Clark’s Gully a local grid was used. • Recent Lidar survey of topography was

Criteria	JORC Code explanation	Commentary
		<p>completed for Brackin's Spur, Syndicate and Sunlight areas. The quality of Clark's Gully topography is considered very good and adequate. Syndicate model was not updated with the recent Lidar survey – however this has no impact on the Mineral Resource estimates.</p>
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Sunlight drillhole intercepts are on a nominal 30 m x 30 m and up to 60 m x 60 m grid. Syndicate face samples are on a nominal 3.5 m spacing along ore drives and vertically 18 m between ore drives. Syndicate drillholes are on a nominal 50 m x 50 m grid. Clark's Gully samples are spaced on a nominal 30 m x 30 m grid. Brackin's Spur is on a 30 m x 30 m and up to 60 m x 60 m grid. • This distribution confirms a degree of geological continuity within the mineralised system such that Mineral Resource Estimation and Inferred classification is appropriate.
<p>Orientation of data in relation to geological structure</p>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The drillholes were drilled at varying angles to intersect the steeply dipping mineralisation at the best possible angle given the available locations for drill sites. The drillhole locations, and orientations relative to the mineralisation are considered appropriate.
<p>Sample security</p>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Samples are transported to the laboratory on a regular basis. Residual coarse rejects and pulps are returned to site and stored in a secure core-shed, or in a container located in an area which requires authorisation to gain access.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • An Independent Technical Valuation report prepared by Coffey Mining for Emu Nickel NL in 2012 noted that the quality of the NEAM face sampling data may have issues (unspecified), and that there was a lack of historical QAQC data. • An Independent Technical Review prepared by Snowden for Bracken Resources in 2014 noted that the data collection practices met industry standards and are appropriate for use in Mineral Resource estimation. The data obtained by NEAM should be confirmed through re-sampling where possible and submitting standards, blanks, and duplicates as per HGM's QAQC program.

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 style="list-style-type: none"> • <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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The Hillgrove operations are covered by 51 tenements (4 Exploration Leases, 33 Mining Leases, 6 Private Land Leases, 3 Gold Leases and 5 Mining Purpose Leases). There are no impediments to the tenements which are 100% owned by Hillgrove Mines. • All tenements are currently in good standing. Renewals for the Exploration Leases fall due in 2019-2021, while the Mining Leases expire in 2020. • The Exploration Leases are in good standing • There are no Joint venture agreements relevant to the area of interest
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • There have been numerous exploration programs conducted by various companies at Hillgrove. Where possible available data has been reviewed and incorporated into the onsite database. Hillgrove Mines has no reason to doubt the accuracy of any of the previous work conducted on the site.
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The Hillgrove mineralisation can be classified as orogenic style, antimony – gold deposits, that are hosted in a combination of the Mid Carboniferous Gurrakool Sediments and Late Carboniferous – Early Permian Granites. The setting is part of the New England Orogen, one of four which formed most of the east coast of Australia. The mineralised zones are structurally controlled within a NW trending shear corridor, formed from the movement of two regional faults (Hillgrove and Chandler). Multi-phase antimony – gold – tungsten mineralisation has been hydrothermally emplaced into narrow shears (0.1 m – 10 m wide), which have good strike and depth extents. Gold mineralisation is predominantly refractory (associated with arsenopyrite), and also occurs as aurostibite in stibnite, and as particle gold.
Drill hole Information	<ul style="list-style-type: none"> • <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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> 	<ul style="list-style-type: none"> • Drillhole collar coordinates and elevation have been accurately surveyed by a qualified surveyor. • Dip and azimuth of the drillholes have been recorded using a conventional downhole camera. A limited number of holes were also checked with a downhole gyrometer, with no significant difference from the downhole camera. • Hole length and downhole intervals have been recorded using the standard practice of drill

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> rod lengths and checked by geological staff.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results have been reported based on historic economic requirements for a standalone deposit at Hillgrove. Intercepts that have been bulked over multiple intervals use weighted averaging techniques to report the grades. No top-capping of the high grades has been carried out.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> All drillholes were designed to intersect the mineralised zones as close to true width as possible. Both downhole and true widths have been reported for drillhole intercepts. The dip and strike of the mineralised zones has been taken into consideration.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No exploration results reported
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No exploration results reported
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A Helimag airborne geophysical survey was flown over the Hillgrove tenements in 2007. Several exploration targets were generated from the resulting images. A Lidar survey was completed in 2017 over the Bakers Creek Gorge to provide 1m contours for topographic control and aerial photos for exploration.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of 	<ul style="list-style-type: none"> Further work is discussed under the Exploration Potential section in the accompanying Technical Report.

Criteria	JORC Code explanation	Commentary
	<i>possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> Procedures are available for loading data in the database and standard database import and export objects are used to upload and download data. The validation of collar and downhole survey, analytical method, and QAQC data is recorded in spreadsheets.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> The Competent Person visited the site in June 2017 and reviewed the sampling, analytical methods, QAQC, procedures, and the database.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The geological interpretation has a reasonable level of confidence. For areas where the level of confidence is uncertain due to lack of data or geological complexity this has been taken into consideration when assigning resource classification to the estimates. The mineralisation is hosted within shear structures. The higher grades may be within plunging ore shoots.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<p>Brackin's Spur:</p> <ul style="list-style-type: none"> Maximum 1.2 km along strike by 520 m below surface to lower limit. Upper limit approximately 20 m below surface. The oxidized zones have been excluded from estimates. Nominal 4 m width. <p>Clark's Gully:</p> <ul style="list-style-type: none"> 550 m along strike and 270 m below surface, upper limit approximately 20 m below surface. Nominal 7 m width. <p>Syndicate:</p> <ul style="list-style-type: none"> 600 m along strike, 820 m below surface to lower limit, 276 m to upper limit. Nominal 1.6 m width. <p>Sunlight:</p> <ul style="list-style-type: none"> 690 m along strike, lower limit 550 m below surface and upper limit 40 m below surface. The width of the breccias is 5m from hanging wall to footwall but the individual breccias are a nominal 1.5 m to 2 m width.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> Estimation techniques used are 2D accumulation method or 3D method using ordinary kriging for the estimation of antimony and gold. Extreme gold or antimony grade values were not top-capped and visual comparison of the composite grades compared to the model grades were used to check for smeared high grades. Domains are based on geology. For Sunlight, the zones of mineralisation are coded in the database based on the presence of quartz-arsenopyrite veining +/- quartz-breccia. For Syndicate, Clark's Gully and Brackin's Spur the mineralised zones are coded where stibnite veins are logged. The Syndicate mineralisation domain primarily constrains the stibnite veins, and the shear wireframe based on the shear contacts constrains gold mineralisation associated with quartz-arsenopyrite veining and less significant stibnite veins. CAE Studio (Datamine) software was used for the Brackin's Spur and Sunlight 2D estimation, the block centroids were exported and imported into a GEOVIA Surpac 3D block model. GEOVIA Surpac software was used for the 3d estimates including some Sunlight domains, Clark's Gully and Syndicate. For Brackin's Spur sample spacing is on a nominal 40 m x 40 m grid and the 2D estimates were into 18 m x 18 m blocks. Sunlight sample spacing is a nominal 30 m x 30 m grid up to 60 m x 60 m and estimated using 2D accumulation method into 18 m x 18 m blocks. For the Sunlight domains estimated using 3D block modelling the first pass gold and antimony estimates used a search ellipse of 150 m. The minimum number of samples was decreased and the search ellipse increased for the second pass estimates. For one domain with an insufficient number of samples for variography the average grade was assigned, this domain is unclassified. Syndicate and Clark's Gully were estimated using 3D models. Syndicate face sampling is spaced a nominal 3.5 m along strike. The drillhole intercepts are spaced on a 50 m x 50 m grid and estimated into blocks of dimensions 4 mN x 0.7 mE x 6 mRI and sub-blocks are of dimensions 1 mN x 0.175 mE x 1.5 mRI. The first pass estimates for the antimony face sample grades, and drillhole sample grades used a search ellipse of 80 m and 100 m respectively in the same orientation as the semivariogram direction of

Criteria	JORC Code explanation	Commentary
		<p>maximum continuity. For gold face samples and drillholes estimates the search ellipses were 50 m and 80 m respectively. The same ratio of the range of the semivariograms in the major to semi-major directions were used to obtain the search ellipse in the perpendicular directions. The minimum number of samples used was reduced and the search volume increased for second and third pass estimates.</p> <ul style="list-style-type: none"> Clark's Gully is sampled on a nominal 30 m x 30 m grid and estimated into parent blocks 10 mN x 1 mE x 10 mRI and sub-blocks are of dimensions 2.5 mN x 0.25 mE x 2.5 mRI. The search ellipses for the first pass antimony estimates for antimony domains 10, 20, and 30 are 300 m, 100 m, and 120 m respectively. The search ellipses for the first pass gold estimates are 120 m and 100 m for gold domains 10 and 20 respectively. The search ellipses are oriented in the same direction as the semivariogram direction of maximum continuity and use the ratio as the range of the semivariogram in the major/semi-major directions. Second and third pass estimates use a smaller minimum number of samples (3) and the search volume was increased. Mine production records are available for Syndicate, Clark's Gully mined oxide material; historical data for Sunlight and limited Brackin's Spur data is available. Syndicate production data shows antimony reconciles within 10 % and gold estimates are within 5% of the resource model. No allowance is made for the recovery of by-products. Underground mining methods assume a selective approach to limit dilution however the actual dimensions are not assumed in the resource models. The strong correlation between bulk density and antimony is used. Grades were not capped and the model validation process checked for smearing of high grades. Model validation was conducted by visually checking drillhole grades to block grades in plan and section view, and by reviewing swath plots.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Moisture content is not currently taken into consideration.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The gold equivalent cut-off is based on gold and antimony prices at July 18 2017 gold = \$US1,234 per ounce and antimony = \$US7,950

Criteria	JORC Code explanation	Commentary
		<p>per tonne and total gravity/float recoveries of 91 % gold and 86 % antimony.</p> <ul style="list-style-type: none"> The gold equivalent equation is $AuEq = Au * 0.91 + 2.0Sb * 0.86$. Hillgrove Mines Pty Ltd believe that both antimony and gold can be recovered and sold, based on previous mill production, and that the stated recoveries are achievable. The use of a 5 ppm AuEq cut-off is appropriate given the Net Smelter Return calculations show that grades above 4.8 ppm are economic.
<p>Mining factors or assumptions</p>	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Mining methods are assumed to be underground. Mining assumptions are based on historical site costs.
<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Metallurgical and petrological testwork is ongoing. Metallurgical testwork and production data through the Hillgrove mill, shows that total gravity / float recoveries of 91% Au and 86% Sb are achievable. Net smelter return (NSR) calculations for the deposits indicate that gold equivalent grades above 4.8 ppm 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 the total recovery.
<p>Environmental factors or assumptions</p>	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of 	<ul style="list-style-type: none"> No environmental impediments impact on the operations.

Criteria	JORC Code explanation	Commentary
	<i>the environmental assumptions made.</i>	
Bulk density	<ul style="list-style-type: none"> • <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> • <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> • Bulk density was measured by the water displacement method using buoyancy for drillcore samples from 2005. Density for Clark's Gully and Syndicate was estimated using a regression between bulk density and antimony. The modal density value based on sufficient data for Sunlight and Brackin's Spur was applied to the mineralised domains.
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> • <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<p>The Mineral Resources have been classified based on the density of sampling information and takes into consideration the confidence in the geological continuity, recovery, sample spacing and QAQC results.</p> <p>Sunlight:</p> <ul style="list-style-type: none"> • Areas sampled on a nominal 30 m x 30 m grid were classified as measured, except in an area where there is face sampling data with low confidence in the survey and unverified geology interpretation. • Areas sampled on a nominal 60 m x 60 m grid were classified as indicated. • Areas sampled on a nominal 120 m x 120 m grid were classified as inferred. • Areas approximately 50 m outside those classified as indicated were classified as inferred. <p>Brackin's Spur:</p> <ul style="list-style-type: none"> • Areas sampled on a nominal 40 m x 40 m grid were classified as measured. • Areas sampled on a nominal 80 m x 80 m grid were classified as indicated. • Areas sampled on a nominal 100 m x 100 m were classified as inferred. • Areas approximately 70 m outside those classified as indicated were classified as inferred. <p>Clark's Gully:</p> <ul style="list-style-type: none"> • Areas sampled on a nominal 40 m x 40 m grid were classified as measured. • Areas sampled on a nominal 75 m x 75 m grid were classified as indicated. • Areas sampled on a nominal 100 m x 100 m were classified as inferred. • Areas approximately 170 m outside those classified as indicated were classified as inferred. <p>Syndicate:</p>

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		<ul style="list-style-type: none"> • Areas approximately 9 m above or below an ore drive were classified as measured • Areas sampled on a nominal 40 m x 40 m grid below mined ore drives and containing drillhole samples were classified as indicated. • Areas sampled on a nominal 120 m x 120 m were classified as inferred. • Above the 1700 mRL, near stoped material, the area is unclassified.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • An Independent Technical Valuation report prepared by Coffey Mining for Emu Nickel NL in 2012 noted that the quality of the NEAM face sampling data may have issues (unspecified), and that there was a lack of historical QAQC data. • An Independent Technical Review prepared by Snowden for Bracken Resources in 2014 noted that the data collection practices met industry standards and are appropriate for use in Mineral Resource estimation. The data obtained by NEAM should be confirmed through re-sampling where possible and submitting standards, blanks, and duplicates as per HGM's QAQC program.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i> • <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • The Competent Person considers the global and local estimated tonnes and grade to be of a reasonable accuracy suitable for mine planning. Previous mining in two of the deposits and the use of channel samples to estimate the resource adds to the confidence of the estimate. Appropriate estimation techniques and parameters have been used. The Mineral Resource classification is appropriate based on the drilling density, surveying method, sampling and QAQC results.