

ASX Code: MOY

Corporate Details

Ordinary Shares: 791,747,847

Market Capitalisation: ~\$150.0 million

Cash and bullion at 31 March 2018: ~\$23.4 million

Debt: NIL

ASX Code: MOY

Board of Directors

Greg Bittar Non-Executive Chairman Bruno Lorenzon

Non-Executive Director Tim Kennedy Non-Executive Director

Peter Lester Non-Executive Director 0

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Management

Peter Cash Chief Executive Officer

Dean Will Chief Operating Officer

Ray Parry Chief Financial Officer and Company Secretary

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25 June, 2018

Millennium set to open new high-grade mining centre at Twenty Mile Sandy as drilling delivers grade uplift

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Latest drilling delivers grade increase in Redbeard oxide Resource; Mining set to begin next month as part of wider transition to higher grade ore sources to deliver 100,000kozpa run-rate

- First production from high-grade Redbeard oxide deposit scheduled for late July just 8 months from initial drilling with Redbeard expected to contribute to strong production growth in the second half of CY2018 towards a 100kozpa production run rate.
- Latest high-grade results from Redbeard include:
 - 14m @ 7.62g/t Au from 23m, incl. 11m @ 8.70g/t Au (RBGC00050)
 - 14m @ 7.27g/t Au from 24m, incl. 10m @ 9.33g/t Au (RBGC00052)
 - 15m @ 4.62g/t Au from 12m, incl. 7m @ 8.75g/t Au (RBGC00064)
 - 16m @ 4.00g/t Au from 15m (RBGC00043)
- o 13m @ 5.99g/t Au from 27m (RBGC00060)
 - 13m @ 4.95g/t Au from 11m, incl. 7m @ 7.95g/t Au (RBGC00061)
- Resource in-fill and extension drilling at Redbeard delivers positive uplift in Resource estimate, comprising:
- Increase in Resource grade to 2.8g/t Au double the average grade of the Nullagine global Resource base
 - *Updated Mineral Resource of 278,500 tonnes grading 2.8g/t Au for 25,200 ounces*
- Exploration at Redbeard will now transition to deeper drilling to assess the potential for a future underground mining operation
- First-pass drilling is delivering positive results from other areas within the Twenty Mile Sandy region, indicating potential to develop multiple high-grade ore sources. Latest results include:
 - Calico Jack:
- o 3m @ 11.68g/t Au from 15m, incl. 2m @ 17.00g/t Au (TMX371)

8m @ 1.23g/t Au from 17m (TMX384)

- Sunday (ASX announcement 11 May 2018):
- 9m @ 4.64g/t Au from 13m, incl. 1m @ 33.9g/t Au (TMX055)
- 7m @ 2.86g/t Au from 34m, incl. 2m @ 6.32g/t Au (TMX056)
- 8m @ 1.79g/t Au from 22m, incl. 1m @ 8.51g/t Au (TMX040)



Millennium Minerals Limited (Millennium or **the Company** – ASX: MOY) is pleased to advise that it is set to bring its sixth mining centre at the Nullagine Gold Project in WA (*Figure 1*) on stream next month, with mining scheduled to commence at the high-grade Redbeard oxide deposit, located within the Twenty Mile Sandy Mining Centre, in late July (*Figure 2*).

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The start of production at Redbeard is consistent with Millennium's focus on transitioning to larger, higher grade ore sources at Nullagine as it ramps up towards a 100,000ozpa production run rate by the end of this year.

Redbeard is one of the highest grade oxide deposits at Nullagine and forms part of what appears to be an emerging cluster of high-grade exploration targets within the Twenty Mile Sandy Mining Centre. Recent grade control drilling has delivered an increase in Resource grade at Redbeard. The Redbeard Mineral Resource now stands at 278,500 tonnes grading 2.8g/t Au for 25,200 ounces of contained gold – double the average grade of Millennium's global Resource base at Nullagine.

With mining on track to commence at Redbeard in July, drilling is now underway to expand the Twenty Mile Sandy region's high-grade Mineral Resource base, with outstanding first-pass results achieved from the nearby Calico Jack and Sunday targets and deeper RC drilling to commence shortly to test for extensions to the Redbeard deposit at depth.

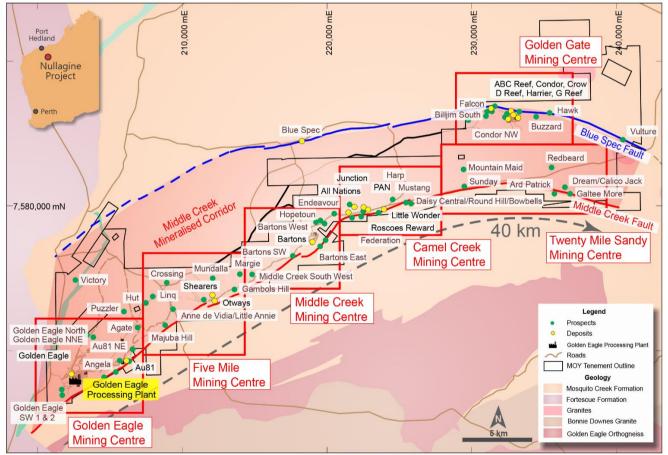


Figure 1: Nullagine Gold Project Location Plan showing key prospects, deposits and the six Mining Centres.

Redbeard – Drilling Results

The Redbeard deposit forms part of the Twenty Mile Sandy Mining Centre at Nullagine (*Figure 2*). A maiden Mineral Resource Estimate (MRE) for Redbeard was completed in January 2018, comprising an Indicated and Inferred Resource of 245,700t at 2.6g/t Au for 20,600oz.

Grade control drilling has since been completed in preparation for mining (99 RC holes for 3,076m – Figure 3), with a further three RC holes drilled with the aim of deepening the current pit design. Results from this drilling have further clarified the geometry of the ore shoots (*Figure 4*) and confirmed the continuation of the mineralisation down dip.



20 Mile Sandy
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Mountain Maid Viking Bunderbuss
Sunday Mine Cutty Sark Dream Calico Jack
Twenty Mile East Latest Surprise Ard Patrick Galtee Moore
Ard Patrick Galice Moore Middle-Greek Fault Potter
Rattler South East
2 Kilometers

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Figure 2: Twenty Mile Sandy Mining Centre location plan showing key prospects and deposits.

Full details of the grade control and extensional programs are provided in Table 3, with significant results including:

- 8m @ 7.07g/t Au from 9m including 2m @ 8.52g/t Au (RBGC00036)
- 9m @ 5.65g/t Au from 28m including 3m @ 10.75g/t Au (RBGC00046)
- 11m @ 6.89g/t Au from 1m including 9m @ 7.74g/t Au (RBGC00047)
- 14m @ 7.62g/t Au from 23m including 11m @ 8.70g/t Au (RBGC00050)
- 14m @ 7.27g/t Au from 24m including 10m @ 9.33g/t Au (RBGC00052)
- 11m @ 5.3g/t Au from 18m including 3m @ 10.75g/t Au (RBGC00056)
- 9m @ 5.99g/t Au from 3m including 6m @ 7.36g/t Au (RBGC00057)
- 8m @ 5.08g/t Au from 39m including 5m @ 7.37g/t Au from (RBGC00059)
- 13m @ 5.99g/t Au from 27m including 4m @ 8.28g/t Au (RBGC00060)
- 6m @ 6.22g/t Au from surface including 3m @ 10.83g/t Au (RBGC00062)

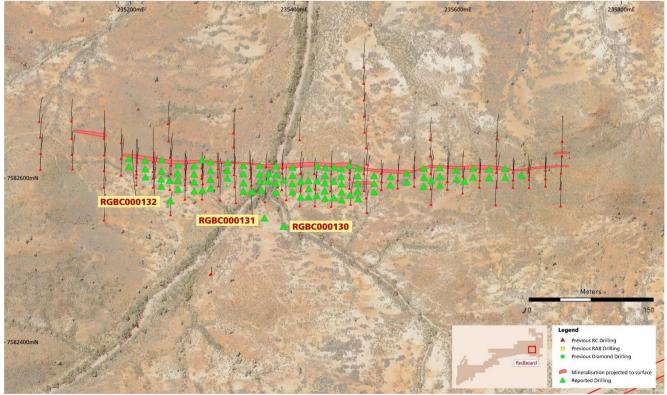


Figure 3 - Redbeard Plan view with latest drilling and mineralisation projected to surface

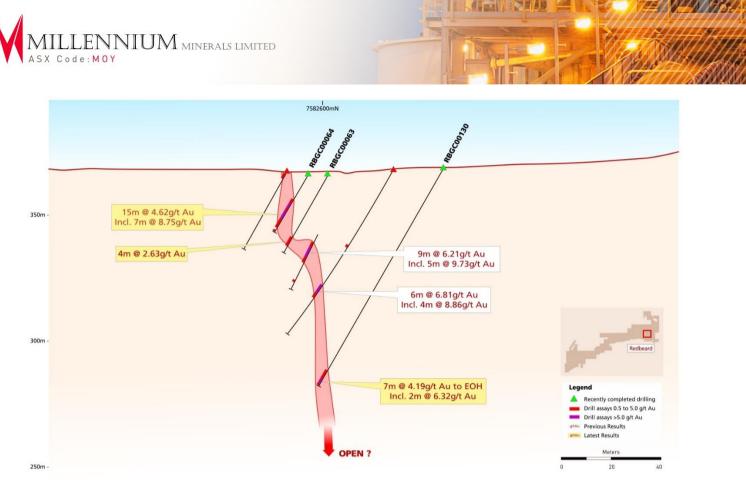


Figure 4 – Redbeard cross section showing geometry of the ore shoot

Results from the grade control and extensional drilling have been used to help design a deeper drilling program to assess the Redbeard deposit's underground potential.

This deep drilling is expected to total eight holes, with an initial four RC holes for 760m (*Figure*) to be completed on a nominal 80m x 80m spaced pattern at approximately 130 metres beneath surface. Drilling of these deep holes is expected to commence within the next few weeks.

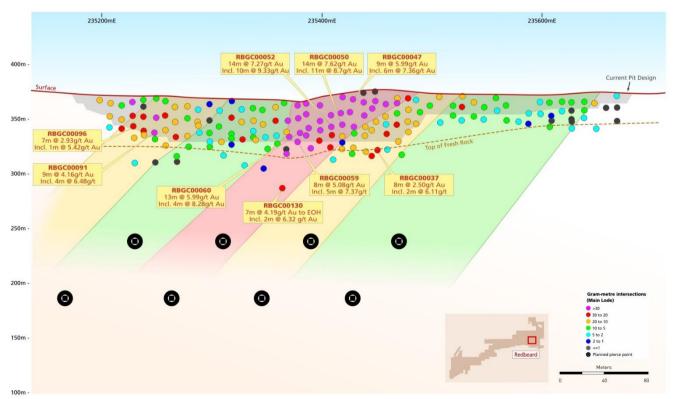


Figure 5 – Redbeard long section of the main lode showing latest drilling (grade control and extensional)



Redbeard – **Resource Update**

The assay results outlined above have been incorporated into the Redbeard Mineral Resource estimate, delivering an 8 per cent increase in Resource grade over the previous estimate announced on 22 January 2018 (Indicated and Inferred Resource of 245,700t at 2.6g/t Au for 20,600oz).

The updated MRE, which is reported using a 0.5g/t gold lower cut-off grade, is summarised in Table 1 below and further details are provided in Appendix 1 and Appendix 2.

Table 1 – June 2018 Redbeard MRE

Resource Category	Tonnes (000's)	Grade (g/t)	Ounces (000's)
Measured	167,600	3.6	19,600
Indicated	53,600	1.8	3,100
Inferred	57,300	1.4	2,500
Total	278,500	3.0	25,200

The Mineral Resource was estimated by Millennium Minerals Limited and is based on 318 RC holes from 16,222 metres of drilling completed up to 04 June 2018. Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding. Millennium's resource summary for the deposit is provided in Appendix 1, including details on the approaches and methodologies utilised in the derivation of reported Mineral Resources.

Mining of the high-grade Redbeard deposit is scheduled to commence in late July and is expected to contribute to a significant increase in gold production from Nullagine over the second half of CY2018.

Geology

The host geology at the deposit comprises fine to coarse grained interbedded sandstones and shales. Quartz vein outcrops have been mapped by MOY geologists. At the western end of the main lode a NNW trending, east dipping dextral fault appears to offset the mineralization by approximately 25m. East-West, strike slip movement along the strike of the mineralisation can be seen in surface outcrop by re-worked, boudinaged and sigmoidal attenuation of mineralised quartz veins.

The primary mineralisation is associated with an east-west trending, steeply south dipping, 2-5m quartz-sericite shear zone. The lodes vary from near vertical to a dip of -75° and trend due westeast over a discontinuous strike extent of 2km. The main lode (Domain 1) has been defined over a length of 490m and to a nominal vertical depth of approximately 108m. Minor lodes interpreted from single drill line intersections, show thin stacked, parallel lodes on each section.

Drilling

The Redbeard deposit has been defined by two diamond holes and 316 RC drill holes for a total of 16,222 metres. Drill holes were completed by MOY between September 2017 and May 2018. The main lode has been defined by drilling on 10m easting sections with drill holes spaced at 10m or 20m on each section. Exploratory drill lines at 160m spacing have been completed along strike. No drill holes were excluded from the estimate.

Sampling and Sub-sampling Techniques

RC drilling was carried out using a 5.5 inch face sampling bit. Samples were collected at 1m intervals through a cyclone and cone splitter to form a 2-3kg sub-sample. **Sample Analysis Method**

RC sub-samples were analysed at ALS Laboratories, Perth, Western Australia. Samples were fully pulverised at the laboratory to >85% passing 75um, to produce a 50g charge for Fire Assay with AAS finish.



Estimation Methodology

The Redbeard resource was estimated using Ordinary Kriging (OK) grade interpolation of 1m composited data within wireframes prepared using a nominal 0.5g/t Au envelope. A geostatistical analysis was completed on data within the main lode (Domain 1) and the internal high grade lode (Domain 100) with variogram model parameters applied to the minor lodes. Three search passes were used to estimate blocks within the model. A first pass search range of 15m was used with a minimum of 6 samples and a maximum of 10 samples. The search range was doubled to 30m and then 60m, and the minimum number of samples reduced to 4 and then 2 for successive passes. The majority of the main lode was estimated in the first and second pass.

High grade cuts ranging from 1.5g/t to 14.25g/t Au were applied to individual domains which resulted in a total of 40 composites being cut.

The block dimensions used in the Redbeard model were 5m EW by 5m NS by 2.5m vertical with sub-cells of 1.25m by 1.25m by 2.5m.

A total of 52 bulk density determinations have been reported at the deposit using the water immersion technique (or wax coating method). Average values were applied to the regolith profile based on material type which was defined by surfaces generated from drill hole logging of regolith. Bulk density values used in the resource were 2.37t/m³, 2.47t/m³ and 2.7t/m³ for oxide, transitional and fresh mineralisation respectively.

Mineral Resource Classification

The deposit has been classified based on data quality, drill spacing, lode continuity and geometry, and kriging parameters such as slope of regression and kriging variance. The deposit has been classified as Measured, Indicated and Inferred Mineral Resource. The Measured Mineral Resource was applied to the majority of Domain 1 (including the internal high grade Domains 100 and 101) where mineralisation continuity was robust and defined by 10m by 10m drill spacing. Blocks through this area were filled in the first or second estimation pass. The Indicated Mineral Resource was applied to Domain 1 (and internal high grade Domains 100 and 101) through areas having good continuity of mineralisation and defined by 20m spaced drilling. The Inferred Mineral Resource category was applied to the remainder of Domain 1, all of Domain 3, 13, and 103 where mineralisation continuity was defined by limited drilling and grades were more erratic across sections.

Cut-off Grades

The Mineral Resource has been reported at a 0.5g/t Au lower cut-off to reflect assumed exploitation by open pit mining. MOY has considerable experience mining similar style deposits across the Nullagine Project area.

Metallurgy

A total of 251 Leachwell assays have been completed across the deposit. Results suggest a gold recovery of 93% through oxide material. Average values have been assigned to the block model based on surfaces created by MOY geologists logging oxidation state of sulphides down hole.

Modifying Factors

No modifying factors were applied to the reported Mineral Resource estimate.

Twenty Mile Sandy Regional Exploration

Exploration drilling is also underway to test the in-situ mineralisation at both the Calico Jack and Sunday targets within the Twenty Mile Sandy Mining Centre (*Figure 2*).



Calico Jack

This target is an arcuate gold-in-soil anomaly of greater than 50pbb Au (peak value of 701ppb Au) and coincident arsenic anomalism over a strike length of \sim 3km (*Figure 6*). It is parallel to the Redbeard soil trend, but it is a broader and higher amplitude anomaly. Historical mining was carried out by artisanal miners at the nearby Dream workings, with recorded production of 62 ounces of gold from shallow shafts and trenches.

Mapping and rock chip sampling in early 2018, over the subdued topography returned results of 23.2g/t, 16.3g/t, 15.1g/t and 10.5g/t Au, coincident with the soil anomalism and old workings. A drill program on 320 to 160m x 20m spacing commenced in early May to test the rock chip and soil anomalism to determine the nature of the in-situ mineralisation. A total of 85 RC holes for 4,832m were drilled and all gold assay results have been received, with full details provided in Table 4.

The most significant results from this programme were:

- 2m @ 2.71g/t Au from 19m (TMX370)
- 3m @ 11.68g/t Au from 15m, including 2m @ 17.00g/t Au (TMX371)
- 8m @ 1.23g/t Au from 17m (TMX384)
- 4m @ 1.67g/t Au from 12m (TMX380)
- 6m @ 0.82g/t Au from 41m (TMX395)
- 1m @ 4.6g/t Au from 4m (TMX338)

These results are considered highly encouraging given that this was the first broad-spaced drill program targeting the coincident gold and arsenic-in-soils anomaly. Interpretation of these assays is currently underway to better understand the context, however it is noted that the better drill results are located in the eastern half of the program and away from the high-grade rock chip results, in areas of subdued topography.

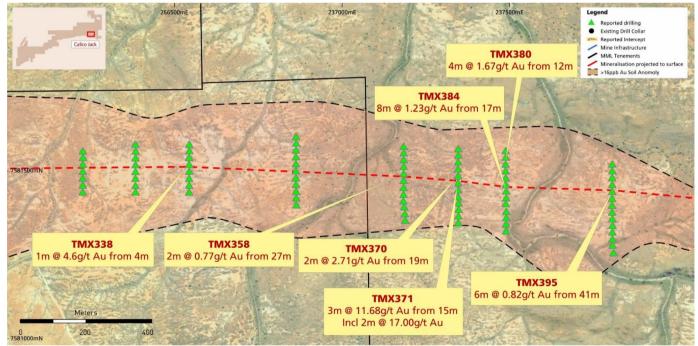


Figure 6 – Calico Jack target along with the completed drilling, most significant intersections and soil anomaly outline.

Sunday

Sunday is a north-east trending ~3.5km long gold (>25ppb Au – peak value of 121ppb Au) with coincident arsenic anomaly in previous soil samples. Previous mapping and rock chip sampling identified a relatively continuous quartz vein hosted in a sericite-bearing shear returning a number of samples of >1g/t Au (peak value of 8.2g/t Au). Drilling in the latter part of 2017 identified significant mineralisation associated with this shear zone (see ASX Announcement 11 May 2018). Results from this drilling included:

• 2m @ 7.32g/t Au from 17m including 1m @ 13.25g/t Au (TMX006)



- 8m @ 1.79g/t Au from 22m including 1m @ 8.51g/t Au (TMX040)
- 4m @ 2.77g/t Au from 23m including 1m @ 5.26g/t Au (TMX047)
- 9m @ 1.59g/t Au from 1m (TMX055)
- 9m @ 4.64g/t Au from 13m including 1m @ 33.9g/t Au (TMX055)
- 7m @ 2.86g/t Au from 34m including 2m @ 6.32g/t Au (TMX056)
- 3m @ 2.38g/t Au from 40m (TMX003)

In 2018, further mapping extended this anomalism more than 1km to the north-east of the 2017 RC drilling (Figure 7). Again, a number of rock chip results greater than 1g/t Au (peak value of 11g/t) were received.

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Drilling has recently been completed to infill the 2017 RC drilling and to extend the mineralisation to the north-east on 320 to 160m x 20m spacing. A total of 69 holes for 3,932m were drilled in this program, with all assays received (see Table 5 for full results).

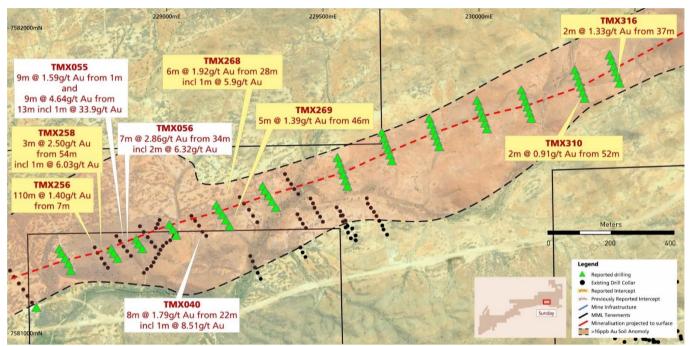


Figure 7 – Location of Sunday drill collars and most significant intersections.

The most significant results from this drilling were:

- 10m @ 1.40g/t Au from 7m (TMX256)
- 4m @ 1.46g/t Au from 53m (TMX257)
- 3m @ 2.50g/t Au from 54m, including 1m @ 6.03g/t Au (TMX258)
- 4m @ 1.25g/t Au from 76m (TMX258)
- 3m @ 3.61g/t Au from 52m, including 1m @ 6.45g/t Au (TMX265)
- 6m @ 1.92g/t Au from 28m, including 1m @ 5.9g/t Au (TMX268)
- 5m @ 1.39g/t Au from 46m (TMX269)

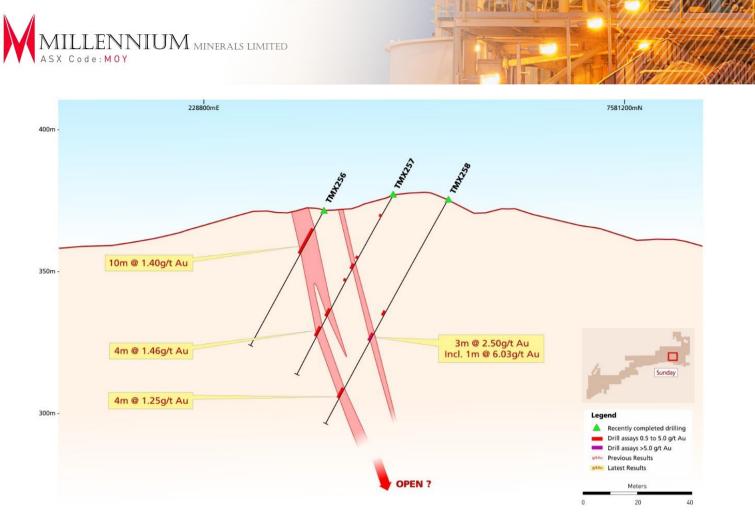


Figure 8 – Sunday Cross section indicating at least two parallel mineralised zones.

The results from this programme indicate that two parallel zones are present in the south-west portion of the drilling (Figure 8). Anomalous results were present in the broad spaced drilling along the trend to the north-east trending sericitic shear zone. A full interpretation of these results is underway to plan follow-up work.

Management Comment

Millennium Chief Executive Peter Cash said the latest results from the Twenty Mile Sandy Mining Centre showed that the Company's strategy of switching to larger, higher grade ore sources to underpin its transition to become a +100,000ozpa gold producer was well on track.

"In conjunction with the pre-strip underway to access a long-term source of higher grade ore at Golden Eagle, our exploration team is also now actively focusing on areas where we believe there is potential to discover additional new high-grade ore sources.

"Our recent success at Twenty Mile Sandy clearly demonstrates the potential to rapidly develop new higher-grade ore sources at Nullagine. The Redbeard oxide deposit – which continues to deliver exceptional high-grade results which have resulted in a pleasing uplift in resource grade – is due to start production within the next 7-8 weeks.

"We expect that this deposit will form an important source of high-grade ore feed in the second half of this year, helping to underpin our ramp-up towards a targeted annualised production runrate of 100,000oz per annum by the end of Q4 this year.

"In addition, with the Resource grade at Redbeard currently sitting at twice that of our global Resource base at Nullagine, we're now aggressively pursuing additional sources of high-grade ore feed from this new mining area.

"The very positive first-pass results from both Calico Jack and Sunday provide strong momentum for Twenty Mile Sandy's emergence as the Company's sixth production centre at Nullagine and an important source of high-grade ore for our future growth," he said.





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Competent Persons Statements – Exploration Results

Mr Andrew Dunn (MAIG), a geologist employed full-time by Millennium Minerals Limited, compiled the technical aspects of this Report. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.

Competent Persons Statement – Redbeard Mineral Resource

The information in the report to which this statement is attached that relates to the Estimation and Reporting of Gold Mineral Resources is based upon information compiled by Mr Graham de la Mare MSc., a Competent Person who is a Fellow of the Australian Institute of Geoscientists (FAIG 1556). Mr de la Mare is a Senior Resource Geologist at Millennium Minerals Ltd. Mr de la Mare has sufficient experience relevant to the style of mineralisation and deposit type 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 of Exploration Results, Mineral Resources and Ore Reserves". Mr de la Mare consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Table 3 – Redbeard significant intersections

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
RBGC00001	235678	7582604	374	0	-60	15		13	14	1	0.88	0.9
RBGC00002	235658	7582601	375	0	-60	22		15	16	1	0.88	0.9
RBGC00003	235658	7582612	375	0	-60	9		7	9	2	1.14	2.
RBGC00004	235638	7582600	374	0	-60	30		14	21	7	0.91	6.
								24	27	3	0.75	2.
RBGC00005	235638	7582612	374	0	-60	12		5	11	6	0.99	5.
RBGC00006	235618	7582601	374	0	-60	27		16	20	4	0.64	2.
RBGC00007	235618	7582612	373	0	-60	11		4	11	7	0.79	5.
RBGC00008	235608	7582597	374	0	-60	29		21	24	3	0.58	1.
								27	28	1	0.98	
RBGC00009	235598	7582599	373	0	-60	24		19	21	2	1	
RBGC00010	235598	7582610	373	0	-60	11		6	8	2	1.31	2.
RBGC00011	235578	7582592	374	0	-60	30		28	30	2	1.46	2.
RBGC00012	235578	7582602	374	0	-60	21		19	20	1	3.75	3.
RBGC00013	235578	7582613	373	0	-60	9		4	9	5	0.55	2.
RBGC00014	235568	7582598	374	0	-60	24		21	22	1	0.93	0.
RBGC00015	235558	7582591	374	0	-60	33		30	31	1	0.58	0.
RBGC00016	235558	7582602	373	0	-60	24		16	18	2	2.24	4.
RBGC00017	235558	7582612	373	0	-60	11		0	6	6	0.97	5.
RBGC00018	235538	7582595	373	0	-60	27		21	25	4	1.61	6.
RBGC00019	235538	7582606	373	0	-60	12		5	11	6	2.25	13.
							Incl.	8	9	1	5.52	5.
RBGC00020	235518	7582593	373	0	-60	27		19	24	5	1.91	9.
RBGC00021	235519	7582602	373	0	-60	17		10	13	3	1.98	5.
RBGC00022	235498	7582584	372	0	-60	18						NSA
RBGC00023	235498	7582594	373	0	-60	27						NSA
RBGC00024	235498	7582603	374	0	-60	15		11	13	2	2.62	5.
RBGC00025	235478	7582576	372	0	-60	33						NSA
RBGC00026	235478	7582584	372	0	-60	40		31	32	1	0.63	0.
								36	40	4	4.88	19.
							Incl.	37	38	1	10	1
RBGC00027	235478	7582593	374	0	-60	30		27	30	3	3.82	11.
							Incl.	28	29	1	6.1	6.
RBGC00028	235478	7582602	374	0	-60	23		15	19	4	3.83	15.
							Incl.	16	17	1	8.48	8.
RBGC00029	235478	7582612	375	0	-60	9		4	8	4	6.14	24.
							Incl.	5	8	3	6.57	19.
RBGC00030	235468	7582580	372	0	-60	54		0	1	1	0.5	0.
								45	50	5	2.09	10.
RBGC00031	235468	7582616	376	0	-60	9		6	9	3	4.66	1
							Incl.	8	9	1	6.71	6.
RBGC00032	235458	7582575	372	0	-60	60		54	57	3	1.2	3.
RBGC00033	235458	7582584	373	0	-60	51		38	44	6	3.44	20.
RBGC00034	235458	7582593	374	0	-60	36		31	33	2	1.52	
RBGC00035	235457	7582602	375	0	-60	28		23	26	3	4.24	12.
RBGC00036	235458	7582612	376	0	-60	21		9	17	8	7.07	56.

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
							Incl.	9	11	2	8.52	17
							Incl.	14	16	2	13.64	27.3
RBGC00037	235448	7582577	372	0	-60	60		52	60	8	2.5	20
							Incl.	52	54	2	6.11	12.2
RBGC00038	235448	7582597	374	0	-60	36		26	32	6	2.74	16.4
							Incl.	29	30	1	7.46	7.5
RBGC00039	235448	7582614	377	0	-60	18		0	1	1	0.58	0.6
								5	16	11	3.2	35.2
							Incl.	7	8	1	5.5	5.5
RBGC00040	235438	7582576	372	0	-60	60		9	11	2	0.58	1.2
							1 I	55	60	5	3.42	17.1
BBCC00044	225.420	7502506	272		60	40	Incl.	56	57	1	7.3	7.3
RBGC00041	235438	7582586	372	0	-60	48		39	44	5	2.63	13.2
RBGC00042	235438	7582595	373	0	-60	39	Incl.	31 33	36 34	5 1	2.22 5.66	11.1 5.7
RBGC00043	235438	7582604	374	0	-60	33	inci.	15	34	16	5.66	64
NBGC00045	255456	7582004	574	0	-00	55	Incl.	15	20	5	7.56	37.8
							Incl.	29	30	1	5.14	57.8
RBGC00044	235438	7582614	375	0	-60	21	inci.	0	1	1	0.98	1
	200.00	/001011	0,0					4	17	13	4	52
							Incl.	5	8	3	6.63	19.9
							Incl.	11	12	1	7.99	8
RBGC00045	235428	7582579	371	0	-60	57		50	55	5	3.5	17.5
							Incl.	52	53	1	7.67	7.7
RBGC00046	235428	7582597	372	0	-60	39		28	37	9	5.65	50.9
							Incl.	29	32	3	10.75	32.3
RBGC00047	235428	7582615	375	0	-60	21		1	12	11	6.89	75.8
							Incl.	2	11	9	7.74	69.7
RBGC00048	235418	7582578	371	0	-60	60		50	56	6	3.18	19.1
							Incl.	54	55	1	5.34	5.3
RBGC00049	235418	7582588	371	0	-60	48		38	44	6	2.85	17.1
								47	48	1	1.11	1.1
RBGC00050	235418	7582598	372	0	-60	39		23	37	14	7.62	106.7
							Incl.	23	34	11	8.7	95.7
RBGC00051	235408	7582578	370	0	-60	57		0	1	1	0.94	0.9
								47	55	8	3.07	24.6
							Incl.	49	51	2	6.71	13.4
RBGC00052	235408	7582597	371	0	-60	39	14-1	24	38	14	7.27	101.8
	225200	7502505	260		60	F 4	Incl.	26	36	10	9.33	93.3 20 F
RBGC00054	235398	7582585	369	0	-60	51	Incl.	40 40	47 42	7 2	4.21 9.63	29.5 19.3
RBGC00055	235398	7582593	369	0	-60	42		40	42	1	0.52	0.5
100000000	23338	1302333	203	U	-00	42		29	1 37	1	3.8	30.4
							Incl.	30	36	6	4.71	28.3
RBGC00056	235398	7582604	370	0	-60	30		18	29	11	5.3	58.3
	200000		0.0	Ũ	50	50	Incl.	19	22	3	10.75	32.3
RBGC00057	235398	7582613	370	0	-60	21		3	12	9	5.99	53.9
				Ĵ	20		Incl.	4	10	6	7.36	44.2

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
								18	19	1	0.55	0.6
RBGC00058	235388	7582598	368	0	-60	35		23	35	12	4.86	58.3
							Incl.	24	34	10	5.19	51.9
RBGC00059	235378	7582583	368	0	-60	51		0	1	1	1.27	1.3
								39	47	8	5.08	40.6
							Incl.	40	45	5	7.37	36.8
RBGC00060	235378	7582594	367	0	-60	40		27	40	13	5.99	77.9
							Incl.	27	31	4	8.28	33.1
							Incl.	34	36	2	5.4	10.8
							Incl.	39	40	1	8.8	8.8
RBGC00061	235378	7582605	367	0	-60	28		11	24	13	4.95	64.3
							Incl.	12	19	7	7.95	55.6
RBGC00062	235378	7582614	366	0	-60	11		0	6	6	6.22	37.3
							Incl.	2	5	3	10.83	32.5
RBGC00063	235368	7582598	366	0	-60	36		0	1	1	0.55	0.6
								29	33	4	2.6	10.4
RBGC00064	235369	7582606	366	0	-60	27	11	12	27	15	4.62	69.3
PROCODOCE	225250	7502507	267	0	<u> </u>	40	Incl.	14	21	7	8.75	61.3
RBGC00065	235359	7582587	367	0	-60	48		42	46	4	1.93	7.7
RBGC00066	235359	7582596	367	0	-60	39		0	1 5	1	1.22 0.54	1.2 0.5
								4 16	5 17	1	0.54	0.5
								35	37	2	1.34	2.7
RBGC00067	235358	7582606	368	0	-60	27		0	1	1	0.58	0.6
NBGC00007	233330	/ 382000	500	0	-00	27		17	25	8	2.99	23.9
							Incl.	19	21	2	6.21	12.4
RBGC00068	235358	7582615	368	0	-60	15		5	9	4	3.93	15.7
	200000	/002010		Ū		20	Incl.	7	8	1	7.43	7.4
RBGC00069	235349	7582584	367	0	-60	60		24	26	2	0.73	1.5
								48	52	4	2.26	9
RBGC00070	235338	7582585	368	0	-60	52		43	50	7	2.22	15.5
RBGC00071	235338	7582596	368	0	-60	41		8	9	1	0.92	0.9
								24	25	1	0.77	0.8
								30	35	5	0.57	2.8
								38	40	2	3.25	6.5
RBGC00072	235338	7582606	369	0	-60	29		4	5	1	0.63	0.6
								21	23	2	5.3	10.6
							Incl.	22	23	1	6.26	6.3
RBGC00073	235337	7582616	368	0	-60	15		7	10	3	2.57	7.7
							Incl.	8	9	1	5.46	5.5
RBGC00074	235318	7582601	368	0	-60	36		34	36	2	2.85	5.7
RBGC00075	235318	7582610	368	0	-60	21		16	21	5	4.93	24.6
							Incl.	17	19	2	9.1	18.2
RBGC00076	235318	7582619	369	0	-60	9		1	2	1	1.12	1.1
RBGC00077	235298	7582589	369	0	-60	51		43	44	1	2.04	2
								47	51	4	2.22	8.9
RBGC00078	235298	7582599	369	0	-60	39		33	38	5	1.3	6.5
RBGC00079	235298	7582609	369	0	-60	24		22	23	1	0.59	0.6

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
RBGC00080	235298	7582619	369	0	-60	9		5	6	1	1.3	1.3
RBGC00081	235288	7582585	369	0	-60	52						NSA
RBGC00082	235288	7582622	370	0	-60	6						NSA
RBGC00083	235278	7582586	370	0	-60	54		48	53	5	1.65	8.3
RBGC00084	235278	7582596	369	0	-60	42		35	42	7	2.12	14.8
RBGC00085	235278	7582605	370	0	-60	30		19	23	4	2.11	8.4
RBGC00086	235278	7582616	370	0	-60	15		6	11	5	2.03	10.1
RBGC00087	235258	7582588	370	0	-60	52		47	52	5	3.09	15.4
RBGC00088	235258	7582598	370	0	-60	39		30	36	6	2.69	16.1
RBGC00089	235258	7582607	371	0	-60	28		9	10	1	0.69	0.7
								15	23	8	2.58	20.6
RBGC00089	235258	7582607	371	0	-60	28	Incl.	20	21	1	5.12	5.1
RBGC00090	235258	7582617	371	0	-60	12		1	8	7	0.81	5.7
RBGC00091	235248	7582598	370	0	-60	41		31	40	9	4.16	37.4
							Incl.	35	39	4	6.48	25.9
RBGC00092	235238	7582591	371	0	-60	53		42	47	5	2.06	10.3
RBGC00093	235238	7582599	370	0	-60	40		30	38	8	2.75	22
RBGC00094	235238	7582609	371	0	-60	30		14	27	13	2.17	28.2
RBGC00095	235238	7582622	372	0	-60	15		1	6	5	1.38	6.9
								10	11	1	0.8	0.8
RBGC00096	235218	7582602	371	0	-60	41		29	36	7	2.93	20.5
							Incl.	32	33	1	5.42	5.4
RBGC00097	235218	7582611	372	0	-60	28		21	27	6	1.91	11.5
RBGC00098	235218	7582621	372	0	-60	15		6	14	8	0.91	7.3
RBGC00099	235198	7582615	372	0	-60	27						NSA
RBGC00100	235198	7582624	373	0	-60	15		0	11	11	1.16	12.8
RBGC00130	235364	7582551	372	0	-60	100		93	100	7	4.19	29.3
							Incl.	97	99	2	6.32	12.6
RBGC00131	235387	7582542	368	0	-60	100						NSA
RBGC00132	235249	7582573	371	0	-60	80		67	68	1	0.8	0.8
								76	77	1	0.74	0.7

Table 4 – Calico Jack significant intersections

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
TMX320	236226	7581555	379	0	-60	54						NSA
TMX321	236226	7581535	380	0	-60	54						NSA
TMX322	236226	7581515	379	0	-60	54						NSA
TMX323	236227	7581495	379	0	-60	54						NSA
TMX324	236226	7581474	380	0	-60	54						NSA
TMX325	236226	7581454	380	0	-60	54						NSA
TMX326	236227	7581433	381	0	-60	54						NSA
TMX327	236383	7581573	381	0	-60	54		34	35	1	0.57	0.6
TMX328	236382	7581553	381	0	-60	54						NSA
TMX329	236382	7581533	381	0	-60	54		21	22	1	0.81	0.8
TMX330	236382	7581513	381	0	-60	54						NSA
TMX331	236383	7581493	381	0	-60	54		50	51	1	0.56	0.6
TMX332	236383	7581473	381	0	-60	54						NSA
TMX333	236383	7581453	382	0	-60	54		41	42	1	0.7	0.7
TMX334	236383	7581434	383	0	-60	54						NSA
TMX335	236544	7581573	380	0	-60	54						NSA
TMX336	236543	7581555	381	0	-60	54						NSA
TMX337	236542	7581533	380	0	-60	54		39	40	1	0.8	0.8
TMX338	236543	7581514	378	0	-60	54		4	5	1	4.6	4.6
TMX339	236543	7581494	378	0	-60	54						NSA
TMX340	236543	7581473	378	0	-60	54						NSA
TMX341	236543	7581454	379	0	-60	54						NSA
TMX342	236543	7581433	378	0	-60	54						NSA
TMX343	236863	7581596	378	0	-60	54						NSA
TMX344	236863	7581576	377	0	-60	54		16	17	1	1.69	1.7
								47	48	1	0.79	0.8
TMX345	236864	7581557	378	0	-60	54		53	54	1	0.93	0.9
TMX346	236864	7581537	378	0	-60	54						NSA
TMX347	236864	7581516	378	0	-60	54						NSA
TMX348	236864	7581496	378	0	-60	54						NSA
TMX349	236864	7581476	377	0	-60	54						NSA
TMX350	236864	7581457	378	0	-60	54						NSA
TMX351	236864	7581436	378	0	-60	54		50	51	1	0.62	0.6
TMX352	236864	7581417	379	0	-60	54						NSA
TMX353	236864	7581397	378	0	-60	54		6	7	1	0.83	0.8
TMX354	237185	7581568	377	0	-60	54		-				NSA
TMX355	237184	7581547	377	0	-60	54						NSA
TMX356	237184	7581527	377	0	-60	54		49	50	1	0.51	0.5
TMX357	237183	7581507	377	0	-60	54		15	50	-	0.51	NSA
TMX358	237183	7581307	376	0	-60	54		27	29	2	0.77	1.5
TMX358	237183	7581467	376	0	-60	72		21	25	۲	0.77	NSA 1.5
TMX360	237183	7581407	378	0	-60	54						NSA
TMX360	237182	7581448	378	0	-60	54						NSA
				0								NSA
TMX362	237183	7581407 7581389	382	-	-60	54						
TMX363 TMX364	237186 237187	7581389	382 382	0	-60 -60	72 59	$\left \right $					NSA NSA

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
TMX365	237187	7581349	380	0	-60	54						NSA
TMX366	237347	7581561	384	0	-60	71		58	59	1	1.14	1.1
TMX367	237346	7581541	385	0	-60	65		28	29	1	0.72	0.1
								36	37	1	0.98	-
TMX368	237346	7581522	385	0	-60	59		39	40	1	0.67	0.3
TMX369	237346	7581502	384	0	-60	77		16	17	1	3.33	3.3
TMX370	237346	7581481	381	0	-60	54		19	21	2	2.71	5.4
								32	33	1	0.5	0.
TMX371	237346	7581461	379	0	-60	72		15	18	3	11.68	3
							Incl.	15	17	2	17	34
								21	22	1	0.9	0.9
TMX372	237347	7581442	379	0	-60	54		49	50	1	2.53	2.
TMX373	237347	7581421	381	0	-60	65		24	25	1	0.87	0.9
TMX374	237347	7581402	381	0	-60	54						NSA
TMX375	237347	7581381	382	0	-60	54						NSA
TMX376	237347	7581361	382	0	-60	72						NSA
TMX377	237348	7581342	381	0	-60	54						NSA
TMX378	237488	7581557	382	0	-60	54		29	30	1	1.58	1.
TMX379	237489	7581537	383	0	-60	54						NSA
TMX380	237489	7581516	383	0	-60	65		12	16	4	1.67	6.
TMX381	237489	7581496	382	0	-60	54						NSA
TMX382	237489	7581475	379	0	-60	54		39	40	1	1.54	1.
								47	48	1	0.55	0.0
TMX383	237489	7581454	376	0	-60	72		4	5	1	0.67	0.3
TMX384	237489	7581437	376	0	-60	54		17	25	8	1.23	9.8
								30	31	1	0.74	0.3
TMX385	237489	7581416	377	0	-60	54						NSA
TMX386	237489	7581398	377	0	-60	54						NSA
TMX387	237489	7581376	375	0	-60	54		26	27	1	0.92	0.9
TMX388	237489	7581357	374	0	-60	65		34	35	1	0.64	0.0
TMX389	237489	7581335	374	0	-60	72						NSA
TMX390	237489	7581320	374	0	-60	54						NSA
TMX391	237808	7581517	377	0	-60	54						NSA
TMX392	237807	7581497	377	0	-60	54						NSA
TMX393	237807	7581477	378	0	-60	65		38	39	1	1.09	1.
TMX394	237808	7581456	378	0	-60	54						NSA
TMX395	237807	7581437	379	0	-60	54		41	47	6	0.82	4.
TMX396	237807	7581415	380	0	-60	54						NSA
TMX397	237807	7581396	381	0	-60	54						NSA
TMX398	237807	7581375	381	0	-60	59						NSA
TMX399	237807	7581356	380	0	-60	65						NSA
TMX400	237807	7581335	379	0	-60	54						NSA
TMX400	237807	7581335	373	0	-60	54						NSA
TMX401	237808	7581317	376	0	-60	54						NSA
TMX402	237807	7581295	376	0	-60	54		35	36	1	0.72	NSA 0.1
				0	-60	54 66				1		
TMX404	237809	7581253 SA = No Signi	377				- colculat	52	53		0.57	0.

AA= Awaiting Assays and NSA = No Significant Assays. Intersections are calculated with 0.5g/t Au lower cut-off and a maximum of 2 consecutive metres of internal dilution. Higher grade intersections are calculated with 5g/t Au lower cut-off and a maximum of 2 consecutive metres of internal dilution.

Table 5 – Sunday significant intersections

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
TMX250	228579	7581105	352	325	-60	54						NSA
TMX250A	228581	7581103	352	325	-60	54						NSA
TMX251	228659	7581289	355	325	-60	54		6	7	1	0.83	0.8
TMX252	228668	7581274	358	325	-60	54		32	33	1	0.61	0.6
TMX253	228680	7581254	362	325	-60	54		33	35	2	1.80	3.6
TMX254	228688	7581236	365	325	-60	54						NSA
TMX255	228694	7581218	366	325	-60	54						NSA
TMX256	228824	7581287	371	325	-60	54		7	17	10	1.40	14.0
TMX257	228839	7581267	377	325	-60	72		8	9	1	0.86	0.9
TMX257	228839	7581267	377	325	-60	72		25	30	5	0.64	3.2
TMX257	228839	7581267	377	325	-60	72		34	35	1	1.45	1.5
TMX257	228839	7581267	377	325	-60	72		46	49	3	0.99	3.0
TMX257	228839	7581267	377	325	-60	72		53	57	4	1.46	5.8
TMX258	228849	7581251	375	325	-60	90		45	47	2	1.89	3.8
TMX258	228849	7581251	375	325	-60	90		54	57	3	2.50	7.5
TMX258	228849	7581251	375	325	-60	90	Incl.	55	56	1	6.03	6.0
TMX258	228849	7581251	375	325	-60	90		76	80	4	1.25	5.0
TMX259	228898	7581317	367	325	-60	54		2	3	1	0.62	0.6
TMX260	228906	7581301	362	325	-60	54					0102	NSA
TMX261	228922	7581285	366	325	-60	84		48	50	2	0.69	1.4
TMX262	229005	7581370	357	325	-60	54					0.005	NSA
TMX263	229015	7581354	358	325	-60	54						NSA
TMX264	229026	7581338	357	325	-60	54		36	37	1	0.64	0.6
TMX265	229034	7581326	357	325	-60	84		7	8	1	0.83	0.8
TMX265	229034	7581326	357	325	-60	84		52	55	3	3.61	10.8
TMX265	229034	7581326	357	325	-60	84	Incl.	54	55	1	6.45	6.4
TMX266	229159	7581428	361	325	-60	54	inci.	5	6	1	1.13	1.1
TMX266	229159	7581428	361	325	-60	54		33	36	3	1.13	3.8
TMX266	229159	7581428	361	325	-60	54		45	46	1	1.20	1.1
TMX267	229171	7581411	364	325	-60	54		7	11	4	0.68	2.7
TMX267	229171	7581411	364	325	-60	54		22		2	2.22	4.4
TMX267	229171	7581394	364	325	-60	54		22	24 34	6	1.92	4.4
TMX268	229180	7581394	364	325	-60	54	Incl.	32	34	1	5.90	5.9
TMX268	229180	7581394	364	325	-60	54 72		32 46	51	5	1.39	6.9
TMX289	229190	7581377	358	325	-60	54		40	71	5	1.35	NSA
TMX271	229308	7581487	358	325	-60	59						NSA
TMX272 TMX273	229321	7581469	358	325	-60	54		2	- -		0.91	NSA 1 R
	229331	7581455	357	325	-60	59		3	5	2	0.91	1.8
TMX274	229343	7581437	356	325	-60	66 50		F0	E0.	1	2.62	NSA 2.6
TMX275	229354	7581421	356	325	-60	59		58	59	1	2.63	2.6
TMX276	229550	7581580	360	340	-60	54						NSA
TMX277	229557	7581561	358	340	-60	54						NSA
TMX278	229564	7581542	358	340	-60	54						NSA
TMX279	229571	7581522	358	340	-60	59		1	2	1	0.57	0.6
TMX280	229578	7581504	359	340	-60	65		61	62	1	0.67	0.7

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)	From (m)	To (m)	Width (m)	Grade (g/t Au)	Gram- metres
TMX281	229584	7581487	358	340	-60	59					NSA
TMX282	229688	7581663	361	340	-60	65	61	62	1	0.56	0.6
TMX283	229694	7581646	361	340	-60	59					NSA
TMX284	229702	7581628	362	340	-60	54					NSA
TMX285	229710	7581606	365	340	-60	54					NSA
TMX286	229717	7581588	363	340	-60	54					NSA
TMX286	229717	7581588	363	340	-60	54					NSA
TMX287	229722	7581572	362	340	-60	54					NSA
TMX288	229841	7581711	367	340	-60	54					NSA
TMX289	229847	7581693	365	340	-60	54					NSA
TMX290	229853	7581675	365	340	-60	54	51	52	1	0.58	0.6
TMX291	229861	7581655	364	340	-60	54					NSA
TMX292	229869	7581636	362	340	-60	54					NSA
TMX293	229876	7581619	361	340	-60	54	45	46	1	0.95	0.9
TMX294	229994	7581766	369	340	-60	54					NSA
TMX295	230002	7581747	371	340	-60	54					NSA
TMX296	230009	7581728	375	340	-60	54					NSA
TMX297	230016	7581707	372	340	-60	54					NSA
TMX298	230023	7581689	370	340	-60	54					NSA
TMX299	230030	7581673	368	340	-60	54					NSA
TMX300	230138	7581804	364	340	-60	59					NSA
TMX301	230143	7581785	363	340	-60	59					NSA
TMX302	230149	7581766	364	340	-60	54					NSA
TMX303	230156	7581747	365	340	-60	54					NSA
TMX304	230163	7581733	367	340	-60	54					NSA
TMX305	230172	7581710	370	340	-60	54					NSA
TMX306	230307	7581859	364	340	-60	54					NSA
TMX307	230314	7581842	364	340	-60	54					NSA
TMX308	230322	7581823	365	340	-60	54					NSA
TMX309	230328	7581806	365	340	-60	54	6	8	2	0.53	1.1
TMX310	230336	7581785	367	340	-60	54	47	48	1	0.62	0.6
TMX310	230336	7581785	367	340	-60	54	52	54	2	0.91	1.8
TMX311	230341	7581767	372	340	-60	54	31	35	4	0.55	2.2
TMX312	230420	7581912	368	340	-60	54					NSA
TMX313	230426	7581892	369	340	-60	54					NSA
TMX314	230433	7581873	371	340	-60	54	21	22	1	0.64	0.6
TMX315	230441	7581854	371	340	-60	54	37	38	1	0.69	0.7
TMX316	230448	7581836	369	340	-60	54	37	39	2	1.33	2.7
TMX317	230455	7581817	370	340	-60	54					NSA

A= Awaiting Assays and NSA = No Significant Assays. Intersections are calculated with 0.5g/t Au lower cut-off and a maximum of 2 consecutive metres of internal dilution. Higher grade intersections are calculated with 5g/t Au lower cut-off and a maximum of 2 consecutive metres of internal dilution.

JORC 2012 Edition - Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representatively and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. 	Reserves.
Drilling techniques	• 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).	 Reverse circulation (RC) drilling was carried out with a 5.5-inch face-sampling bit. Diamond core holes (HQ3 size) were drilled from surface. The core was oriented using a Reflex ACT II orientation tool.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 A record of the RC sample recovery and moisture content was recorded by the rig geologists. Overall sample weight and quality were good to very good (2 to 3.5 kg). ALS records sample weights on receipt of samples. This was used to help track sample recovery. Core recoveries from diamond drilling are generally >98%. There is no correlation between sample recovery and gold grade.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All of the RC drilling has been captured in chip trays for reference. Geological logging is both qualitative and quantitative in nature. Logging is carried out for lithology, colour, grain size, regolith, alteration, weathering, veining and mineralisation. Sulphide and vein content were logged as a percentage of the interval In addition to the information collected for the RC drilling, RQD, structural and Specific Gravity (SG) measurements are taken from the oriented core.

Criteria	JORC Code Explanation	Commentary
		 RC chip trays are retained at site. All of the intersections were logged. All diamond core has been photographed for reference. HQ3 half-core from the diamond core will be retained onsite.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 One metre RC samples were split using a rig mounted cone splitter. The vast majority of the samples were dry with moist and wet samples were recorded. The sample sizes are industry-standard and considered to be appropriate to correctly represent mineralisation at the deposits based on: the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay ranges for gold. Field duplicates were taken from the second aperture of the cone splitter at a rate of 1 in 50 with additional field duplicates taken in the expected mineralised zones. Sampling of the diamond core was carried out to geological boundaries with a minimum sample interval of 0.3m. Samples were cut with a core saw with half-core submitted for analysis.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 The industry best practice standard assay method of 50g charge Fire Assay with AAS finish was used to determine total Au content. Commercially prepared, predominantly matrix-matched low, medium & high value certified reference QAQC standards were inserted at a rate of 1:50 into the sample stream. The QAQC results from this protocol were considered to be acceptable. No geophysical tools were used to determine any element concentrations used for these results. Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 microns was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. HQ3 size diamond core was sampled by using a core saw to cut the samples. Half of the core was submitted to the laboratory for the Au assaying with half core to be used for metallurgical test work. The sample was crushed, pulverised and subsampled at the laboratory to produce a 50 g charge for fire assay, as per industry standard methods. Results highlight that sample assay values are accurate.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Intersections were checked by alternative company personnel to check they were reported correctly. No twin holes were drilled in the programme. Previous significant intersections were verified with close spaced drilling. Sampling is directly uploaded to the LogChief software and it is synchronised to the database. Assay results were not adjusted.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Post completion of the drilling the RC collars were surveyed with a Real Time Kinematic (RTK) DGPS device to a ±10mm positional precision. All collars are then validated against planned positions as a cross check. Surveyed collar co-ordinates are uploaded into the Company SQL database. Grid datum is GDA94 51K (East Pilbara). Downhole surveys were completed on all holes at 30m maximum downhole intervals with a preference of an initial survey at ~12m downhole. Initially, surveys were taken using a single shot camera or via electronic multi-shot (EMS) survey tool (Reflex, Camprodual or Camteq), lithologies have negligible magnetic susceptibility (greywacke). Aerial Photogrammetry± LIDAR was produced by Fugro Surveys (±0.2m vertical & ±0.1m horizontal). Survey control points were marked out by licensed surveyor for the Fugro Survey. An error was noted in early RC drilling collar RL co-ordinates (ellipsoid not geoid model); these holes were adjusted to the Fugro DTM surface RL and recorded as DTM RL in the SQL database; the original survey RL was retained. Otherwise there was good agreement of surveyed collars and Fugro DTM.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 At Redbeard RC drilling was conducted at nominal 320m x 20m to 20m x 20m spacing. Thus far the tighter drill spacing (40mx20m to 20mx20m) has been sufficient to establish geological and grade continuity at Redbeard. None of the reported sample intervals were composited. In previous resource estimates some >1m RC assay composites were used. A small number of core composites were retained with a length of less than 1m (minimum 0.3m).
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Surface mapping at Redbeard confirms the interpreted orientation of mineralisation. No significant orientation bias has been identified in the data at this point.
Sample security	• The measures taken to ensure sample security.	• Samples were given an ID, cross checked by field personnel that they corresponded to the assigned interval. Samples were collected on completion of each hole and

Criteria	JORC Code Explanation	Commentary
		 delivered to the onsite assay laboratory for dispatch to Perth. Monitoring of sample dispatch is undertaken for samples sent from site and to confirm that samples have arrived in their entirety and intact at their destination. Sample security is managed with dispatch dates noted for each samples by the technician, this is checked and confirmed at the Perth laboratory on receipt of samples and discrepancies are corrected via telephone link up with the on-site and Perth laboratories.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data reviews.	• Internal lab audits conducted by Millennium have shown no material issues.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	 The Nullagine Gold Project prospects and deposits lie within fully granted Mining Leases within the Pilbara Gold Field (46), as detailed below. All the tenements are in good standing with no known impediments. Redbeard** - M46/433, M46/434, M46/275 & M46/278 (100% MML); *These tenements are located within the Njamal title claim (WC99/8). * A \$10/oz royalty payable to Tyson Resources Pty Ltd.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Exploration by other parties has been reviewed and taken into account when exploring. Millennium has re-drilled in areas that other parties had drilled to gain a greater confidence in those results.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Nullagine Gold Project deposits are structurally controlled, sediment-hosted, lode gold style deposits. They are all situated in the Mosquito Creek Basin that consists predominantly of Archean aged, turbidite sequences of sandstones, siltstone, shale and conglomerate units.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Provided in a table that relates exploration results to the drill hole information including: hole co-ordinates, RL, dip, azimuth, end of hole depth, downhole length and interception depths. All of the current drilling with results returned has been reported.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	 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. 	 All of the exploration prospects have their significant intersections reported with a lower cut-off of 0.5g/t Au and maximum of two consecutive metres of internal dilution. Higher grade intersections use a lower cut-off of 5g/t Au and maximum of two consecutive metres internal dilution. All RC samples reported were one metre in length. Weighted average grade aggregation method was used to derive the diamond core intersections. No metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 Only selected historic exploration data related to the included targets and prospects are presented. Most of the drilling is perpendicular to the mineralisation; however, in early exploration the dip direction is sometimes uncertain and thus holes some holes can be drilled sub-parallel to the mineralisation producing longer and higher-grade intersection than the true intercept. Quoted widths are down-hole widths. True-widths are likely to be approximately 60-90% of down-hole widths. The drill hole orientations relative to the ore zones have ensured accurate interpretations and 3D modelling.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Significant exploration results are tabulated in the release with drill hole plans to show them in context. Representative maps have been included in the report along with documentation.
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.	• All of the current drill results have been reported for the project.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Outcrops of quartz veins have been previously mapped at Redbeard. Mineralisation is primarily associated with a combination of quartz veining, moderate foliation, strong sericite alteration and strong limonite staining or pyrite-arsenopyrite content. Leachwell test work indicate that the Oxide ore is free-milling at Redbeard. Preliminary metallurgical test work at Redbeard is about to commence to establish recoveries of the sulphide ore through the proposed plant upgrade.
Further work	 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 possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	

JORC Table 1 Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	 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. 	 Logging data is captured electronically on Logchief data loggers and synchronised to the database. Data used for Mineral Resource estimation is stored within an SQL database and is managed using DataShed software. A database audit was run to compare drill hole collar locations to check survey locations and topographic survey. Validation also included a visual check of drill hole traces plotted on screen. Any suspect information is sent to the Database Administrator to correct.
Site visits	 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. 	• The Competent Person is a fulltime employee of MOY. A site visit was undertaken by the Competent Person in October 2017 to verify the extent of existing Nullagine mining operations, locate drill collars from previous drilling, review drilling and mining operations and to inspect existing open pits at the Nullagine operation.
Geological interpretation	 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 confidence in the geological interpretation is considered robust, with a continuous mineralised structure defined at surface by outcropping quartz vein, and at depth by close spaced, good quality RC and diamond drilling. The deposit consists of a linear main lode that dips steeply to the south, and various minor parallel lodes, which have been interpreted based on logging and assay data from samples taken at regular intervals from angled RC drill holes.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	 The nature of the interpreted lodes defined by current drilling does not allow for alternative interpretations. The primary lode at the deposit consists of a high grade quartz reef with a very distinct and sharp boundary between mineralised and non-mineralised material. Surface mapping of an outcropping quartz vein has verified dip and lode geometry and has been used to define the mineralisation wireframes. Lithological logging defines quartz veining associated with mineralisation.
	 The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Mineralisation interpretation was based on a 0.5 Au ppm cut-off grade. The surface outcropping quartz vein is mineralised along a 2km strike length and has been used to successfully target mineralisation at depth, as the influence of structure on the geological interpretation is well understood.
Dimensions	• 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.	• The Redbeard Mineral Resource area extends over a strike length of 600m and has a vertical extent of 108m from surface at 380mRL to 272mRL. All the lodes are encompassed within a N-S width of 80m.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	 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. 	 Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades within the deposit. In addition, Inverse distance squared (ID2) and nearest neighbour (NN) estimates were run in support of the kriging estimate. The OK interpolation technique is suitable as it allows the measured spatial continuity to be incorporated into the estimate and results in a degree of smoothing which is appropriate for the nature of the mineralisation. Drill hole sample data was coded using mineralisation wireframes. Samples were composited to 1m as all samples within the interpreted wireframes was conducted across 1m intervals. Three estimation passes were used in the model. Three estimation passes were used in the model. The first pass used a range of 15m, with a minimum of 6 samples. For the second pass, the range was extended to 30m, with a minimum of 4 samples. The third pass used a range 60m with a minimum of 2 samples. A maximum of 10 samples was used for each pass. A constraint of 4 samples per hole was used. The extrapolation distance from the end points was 5m along strike, half the drill hole spacing. Surpac software was used for the estimation. High grade cuts of between 1.5g/t and 14.25g/t were applied to 1m composite data. A total of 40 composites were cut. Mineralised domains were interpreted using a 0.5g/t Au cut-off. A maiden resource estimate was completed by MOY in January 2018 upon completion of first pass drilling. Completion of a 10m grade control infill drilling program has resulted in the reporting of this latest estimate. No assumptions have been made regarding recovery of by-products. No estimation of deleterious elements was carried out. Only Au was interpolated into the block model.
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	 with sub-cells of 1.25m by 1.25m by 2.5m. The parent block size was selected on the basis of results of a kriging neighbourhood analysis and equates to being approximately 50% of the closest drill spacing at the deposit. An orientated ellipsoid search was used to select data and was based on parameters derived from the variography.
	 The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). 	 Selective mining units were not modelled in the Mineral Resource model. The block size used in the model was based on drill sample spacing and lode orientation. At Nullagine, the open pit mining utilises 5m high benches and 2.5m flitches. The 1.25m NS and 1.25m EW sub-blocks are selected to best

Criteria	JORC Code explanation	Commentary
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 represent the narrow lodes and variable geometries. Only Au assay data was available, therefore correlation analysis was not possible.
	• Any assumptions behind modelling of selective mining units.	 The deposit mineralisation was constrained by wireframes constructed using a 0.5g/t Au cut-off grade in association with logged geology. The internal high grade domains were constructed using a nominal 3g/t Au cut-off. The wireframes were applied as hard boundaries in the estimate. High grade cuts were applied to some lodes based on statistical analysis. For validation, trend analysis was completed by comparing the interpolated blocks to the sample composite data for each lode. Visual verification of
	 Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 	sections was also used to confirm the block estimates.
	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	• Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The Mineral Resource has been reported at a 0.5g/t Au cut-off based on assumptions about economic cut-off grades for open pit mining. MOY has numerous operating open pits and the 0.5g/t Au cut-off has been determined as the most suitable economic cut-off grade.
Mining factors or assumptions	• 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.	 It is assumed that the deposit will be mined mechanically via open pit mining methods similar to the existing pits at the Nullagine Project. No mining parameters or modifying factors have been applied to the Mineral Resource.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• 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.	• Average Au recovery values were assigned to the block model using sulphide oxidation surfaces generated from drill hole logging of observed sulphides.
Environmental factors or assumptions	 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 the environmental assumptions made. 	including surface water assessments and flora and fauna required for ongoing approvals to be submitted across a number of new and existing areas. These assessments will compliment previous survey works and studies completed and include the submission of a Mining Proposal for the Redbeard deposit. As part of this submission all Heritage surveys have been conducted in line with Traditional Owners requests and current deeds of operation.
Bulk density	 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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 using the water immersion technique (or wax coating method). Average values were applied to the regolith profile based on material type which was defined by surfaces generated from drill hole logging of regolith. Bulk density values used in the resource were 2.37t/m3, 2.47t/m3 and 2.7t/m3 for oxide, transitional and fresh mineralisation respectively. Bulk density has not been estimated. Limited sampling locations have
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie 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). 	Indicated and Inferred Mineral Resource on the basis of data quality,

Criteria	JORC Code explanation	Commentary
	 Whether the result appropriately reflects the Competent Person's view of 	 mineralisation continuity was robust and defined by 10m by 10m drill spacing. Blocks through this area were filled in the first or second estimation pass. The Indicated Mineral Resource was applied to Domain 1 (and internal high grade Domains 100 and 101) through areas having good continuity of mineralisation and defined by 20m spaced drilling. The Inferred Mineral Resource category was applied to the remainder of Domain 1, all of Domain 3, 13, and 103 where mineralisation continuity was defined by limited drilling and grades were more erratic across sections. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	 the deposit. The results of any audits or reviews of Mineral Resource estimates. 	An internal audit of the Mineral Resource estimate was completed by
Addits of Teviews	• The results of any dualts of reviews of Mineral Resource estimates.	MOY's Senior Resource geologist.
Discussion of relative accuracy/ confidence	 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. 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The current Mineral Resource model provides a global estimate of the insitu Au mineralisation at the deposit with a high degree of confidence. No formal confidence intervals have been derived by geostatistical or other means; however, the use of quantitative measures of estimation quality such as the Kriging efficiency and the slope of regression allows the Competent Person to be assured that appropriate levels of precision have been attained within the relevant resource confidence categories. With respect to the Mineral Resource estimated at the deposit, the geological interpretation for geology, weathering and mineralisation domains is adequate for the estimation of Measured, Indicated and Inferred Mineral Resources. Mining of many of the similar style MOY deposits at the Nullagine operations and project reconciliation with the resource estimates, provides a further degree of assurance in the estimate results.