

ASX Code: MOY

Corporate Details

Ordinary Shares: 793,040,876

Market Capitalisation: ~\$150 million

Cash, bullion and available financing facilities at 31 December 2018: \$18.2 million

Debt at 31 December 2018: \$5 million

ASX Code: MOY

Board of Directors

Greg Bittar Non-Executive Chairman

Tim Kennedy Non-Executive Director

Peter Lester Non-Executive Director

Bruno Lorenzon Non-Executive Director

Management

Peter Cash Chief Executive Officer

Ray Parry Chief Financial Officer and Company Secretary

Contact Details

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ALEAN CONTACT

Outstanding new high-grade drill results at Golden Gate confirm potential for next underground mine

Drilling outlines potential new high-grade sources of both open pit and underground ore feed at Nullagine

- Recent drilling adds further weight to the emerging mining potential at Golden Gate, which is expected to become a key contributor to the impending Sulphide Plant Expansion at Nullagine.
- Thicker, high-grade intercepts encountered at ABC Reef, Condor and D Reef demonstrate future underground mining potential:

D Reef

- 16m @ 7.06g/t Au from 87m including 6m @ 16.6g/t Au from 94m (DRRD0027)
- 15m @ 4.83g/t Au from 70m including 2m @ 7.56g/t Au from 70m and 3m @ 13.26g/t Au from 77m (DRRD0021)

ABC Reef

- 10m @ 5.06g/t Au from 94m, incl. 1m @ 16.9g/t Au from 97m; and 1m @ 7.78g/t Au from 103m (ABCRD035)
- 9m @ 4.59g/t Au from 102m, incl. 3m @ 10.71g/t Au from 105m (ABCRD036)
- 4m @ 3.67g/t Au from 14m, incl. 1m @ 6.48g/t Au from 15m (ABCRD042)

<u>Crow</u>

- 4m @ 3.8g/t Au from 159m including 2m @ 6.87g/t Au from 161m (CROWRD0082)
- 4m @ 3.72g/t Au from 40m including 1m @ 11.6g/t Au from 40m (CROWRD0086)

Condor and Condor NW

- 5m @ 5.52g/t Au from 38m (CORD091)
- 6m @ 4.07g/t Au from 174m, incl. 3m @ 6.51g/t Au from 177m; 3m @ 5.16g/t Au from 183m incl. 1m @ 11.7g/t Au from 184m (CORD135)
- 6m @ 3.92g/t Au from 137m, incl. 2m @ 6.39g/t Au from 139m (CORD130)
- 4m @ 3.82g/t Au from 35m, incl. 1m @ 8.69g/t Au from 37m (CORD104)
- Resource modelling underway with results to be used to conduct a preliminary economic assessment of a potential second underground mine. This could potentially deliver significant high-grade feed to increase mine life at the 100koza production rate.

Millennium Minerals Limited (ASX: MOY) ("**Millennium**" or the "**Company**") is pleased to advise that it has received further outstanding high-grade results from drilling completed late last year at the Golden Gate Mining Centre, part of its 100%-owned Nullagine Gold Project in Western Australia (Figure 4).

The new results include thick, high-grade intercepts across several prospects, confirming the strong potential of this area, which is located approximately 36km north-east of the processing plant (see Figure 4), to host the next underground mine at Nullagine.

The assays reported in this announcement build on the initial results announced in December (see ASX Announcement, 6 December 2018) and also demonstrate that the open pit potential of this mining centre is continuing to grow.

The Company is targeting a Decision to Mine for the underground development at Golden Gate in Q1 2019, coinciding with the scheduled commissioning of the expanded sulphide plant in late Q1/early Q2 2019.

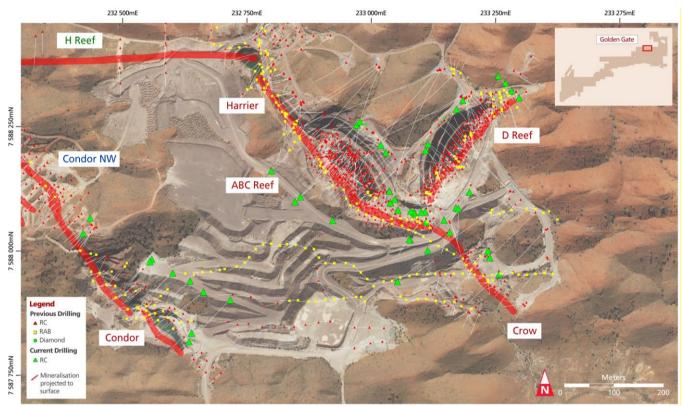


Figure 1: Plan view of Golden Gate Mining Centre showing key deposits and existing open pits.

Recent drilling has delivered further high-grade results from the Condor Northwest, Condor and ABC Reef deposits (Figure 1) as outlined below (refer to Appendix 1 for full list of significant results and hole details).

ABC Reef, D Reef and Crow

A nominal 20m x 20m program commenced in November 2018 with the drilling completed in December. A total of 53 RC holes for 4,983m were drilled to test for additional oxide mineralisation as well as the depth potential beneath the ABC Reef, Crow, D Reef and Harrier pits. This drilling tested the sulphidic material at depth and provided material for metallurgical test work. The drilling returned highly encouraging initial results from ABC Reef (see ASX announcement, 6 December 2018):

- 17m @ 1.83g/t Au from 52m (ABCRD030)
- 7m @ 6.13g/t Au from 96m including 3m @ 11.04g/t Au (ABCRD037)
- 9m @ 2.66g/t Au from 129m including 1m @ 16.4g/t Au (ABCRD037)
- 10m @ 2.67g/t Au from 94m including 2m @ 9.27g/t Au (ABCRD049)

Additional results have now been received from this programme as listed below:

ABC Reef

- 10m @ 5.06g/t Au from 94m including 1m @ 16.9g/t Au from 97m and 1m @ 7.78g/t Au from 103m. 2m @ 1.84g/t Au from 107m (ABCRD035)
- 9m @ 4.59g/t Au from 102m including 3m @ 10.71g/t Au from 105m (ABCRD036)
- 9m @ 2.42g/t Au from 48m including 4m @ 4.56g/t Au from 52m (ABCRD046)
- 4m @ 3.67g/t Au from 14m including 1m @ 6.48g/t Au from 15m (ABCRD042)

D Reef

- 16m @ 7.06g/t Au from 87m including 6m @ 16.6g/t Au from 94m. 2m @ 1g/t Au from 108m (DRRD0027)
- 15m @ 4.83g/t Au from 70m including 2m @ 7.56g/t Au from 70m and 3m @ 13.26g/t Au from 77m (DRRD0021)

Crow

- 4m @ 3.8g/t Au from 159m including 2m @ 6.87g/t Au from 161m (CROWRD0082)
- 4m @ 3.72g/t Au from 40m including 1m @ 11.6g/t Au from 40m (CROWRD0086)
- 4m @ 2.62g/t Au from 141m (CROWRD0084)

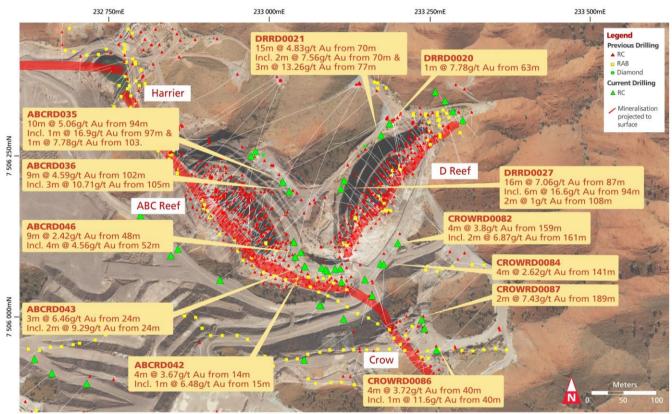


Figure 2: Surface projection of mineralisation and current drilling at ABC Reef, Crow and D Reef.

Condor (including Condor Northwest)

Drilling was completed in October and November 2018 to test the down-dip extensions to the Condor and Condor Northwest deposits, as well as the area between the two deposits.

This drilling was designed to potentially deepen and expand the proposed pit for Condor Northwest as well as to establish if there is potential for a cut-back on the Condor pit. Drilling was carried out on a nominal 20 x 20m spacing, with a total of 33 RC holes completed for 2,465m. Previously reported results from this drilling are listed below (see ASX announcement, 6 December 2018):

Condor Northwest

- 13m @ 7.13g/t Au from 57m including 2m @ 26.2g/t Au and 2m @ 13.64g/t Au (CORD120)
- 7m @ 3.02g/t Au from 22m including 1m @ 12.35g/t Au (CORD114)
- 7m @ 3.18g/t Au from surface including 2m @ 7.3g/t Au (CORD115)
- 4m @ 3.20g/t Au from 65m including 1m @ 7.35g/t Au (CORD102)
- 12m @ 1.43g/t Au from 27m (CORD112)

Condor

- 12m @ 3.07g/t Au from 98m including 4m @ 6.46g/t Au (CORD095)
- 5m @ 3.49g/t Au from 172m including 1m @ 10.65g/t Au (CORD129)
- 2m @ 4.35g/t Au from 65m including 1m @ 8.03g/t Au (CORD099)

Further significant drill results from this program were returned after the previous ASX announcement (6 December 2018).

Condor Northwest

- 4m @ 3.82g/t Au from 35m including 1m @ 8.69g/t Au from 37m (CORD104)
- 2m @ 3.47g/t Au from 79m including 1m @ 6.00g/t Au from 79m (CORD105)

A 5-hole Reverse Circulation drill program for 1,092m was subsequently completed in December to test the depth potential beneath the Condor deposit (see Figure 3). This drilling has returned the following significant results:

Condor

- 5m @ 5.52g/t Au from 38m (CORD091)
- 6m @ 4.07g/t Au from 174m including 3m @ 6.51g/t Au from 177m, 3m @ 5.16g/t Au from 183m and 1m @ 11.7g/t Au from 184m (CORD135)
- 6m @ 3.92g/t Au from 137m including 2m @ 6.39g/t Au from 139m (CORD130)
- 5m @ 2.9g/t Au from 26m including 1m @ 5.37g/t Au from 26m and 1m @ 5.85g/t Au from 30m (CORD090)
- 3m @ 2.81g/t Au from 192m (CORD136)

Two further RC holes for 340m have been planned to in-fill and better understand the distribution of gold at Condor.



Figure 3: Surface projection of mineralisation and current drilling at Condor and Condor NW.

The new drilling results from Golden Gate will be included in the updated Mineral Resource and Ore Reserve statement due in February 2019. The new Golden Gate Mineral Resource will also be utilised as the basis of underground mining studies to confirm the potential for a new underground mining operation.

Management Comment

Millennium Chief Executive Peter Cash said the Company's aggressive approach to exploration was continuing to pay dividends, with drilling completed at Golden Gate just before Christmas delivering a host of outstanding high-grade intercepts.

"We are very excited by what our recent drilling at Golden Gate has delivered," he said.

"This area has historically delivered some of the highest-grade gold mineralisation ever mined at Nullagine, and this trend looks set to continue. The thicker, high-grade intercepts encountered in deeper drilling at ABC Reef, Condor and D Reef clearly support the potential for future underground mining, and we are now actively evaluating both open pit and underground mining opportunities.

"The outstanding grades being generated by our drilling at Golden Gate are consistent with our overarching exploration and mining strategy at Nullagine – which is to target larger, higher grade ore sources at Nullagine capable of delivering high-grade material to support the Sulphide Expansion Project from both open pit and underground ore sources.

"The recent Golden Gate results show the huge exploration potential that can be unlocked across the Nullagine district as a result of deeper drilling being undertaken with the knowledge that there is a viable processing solution for all of the ore types that we potentially discover."

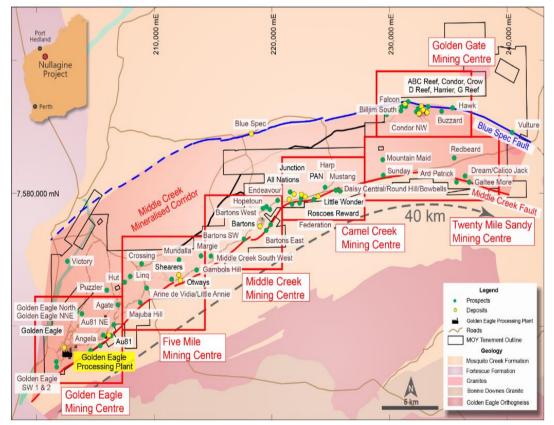


Figure 4: Nullagine Project Location Plan over regional geology

For further information:

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Kate Bell / Nicholas Read Read Corporate +61 8 9388 1474

Competent Persons Statements – Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr James Farrell (MAusIMM(CP), MAIG), a geologist employed full-time by Millennium Minerals Limited. Mr Farrell is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to this style of mineralisation 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 Farrell consents to the inclusion in the report of the matters in the form and context in which it appears.

Prospect	Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Widt h (m)	Grade (g/t Au)	Gram- metres
ABC Reef	ABCRD031	232956	7586266	432	225	-55	173		91	93	2	1.31	2.6
ABC Reef	ABCRD032	232970	7586253	430	225	-65	132		101	102	1	0.59	0.6
ABC Reef	ABCRD033	232977	7586260	430	225	-70	198		130	132	2	3.26	6.5
ABC Reef	ABCRD033	232977	7586260	430	225	-70	198	Incl	130	131	1	5.83	5.8
ABC Reef	ABCRD035	233019	7586213	430	225	-65	138		94	104	10	5.06	50.6
ABC Reef	ABCRD035	233019	7586213	430	225	-65	138	Incl	97	98	1	16.9	16.9
ABC Reef	ABCRD035	233019	7586213	430	225	-65	138	Incl	103	104	1	7.78	7.8
ABC Reef	ABCRD035	233019	7586213	430	225	-65	138		107	109	2	1.84	3.7
ABC Reef	ABCRD036	233029	7586198	430	225	-73	138		102	111	9	4.59	41.3
ABC Reef	ABCRD036	233029	7586198	430	225	-73	138	Incl	105	108	3	10.71	32.1
ABC Reef	ABCRD038	233108	7586079	431	225	-60	42				NSA		NSA
ABC Reef	ABCRD039	233088	7586075	428	189	-50	30				NSA		NSA
ABC Reef	ABCRD040	233085	7586077	428	225	-40	24		6	7	1	1.02	1
ABC Reef	ABCRD040	233085	7586077	428	225	-40	24		14	20	6	2.31	13.9
ABC Reef	ABCRD041	233079	7586080	427	225	-70	42		13	15	2	1.71	3.4
ABC Reef	ABCRD041	233079	7586080	427	225	-70	42		22	24	2	2.78	5.6
ABC Reef	ABCRD041	233079	7586080	427	225	-70	42		27	28	1	2.78	2.8
ABC Reef	ABCRD042	233053	7586082	425	225	-60	24		14	18	4	3.67	14.7
ABC Reef	ABCRD042	233053	7586082	425	225	-60	24	Incl	15	16	1	6.48	6.5
ABC Reef	ABCRD043	233053	7586082	425	225	-90	54		24	27	3	6.46	19.4
ABC Reef	ABCRD043	233053	7586082	425	225	-90	54	Incl	24	26	2	9.29	18.6
ABC Reef	ABCRD044	233038	7586097	423	225	-60	40		23	26	3	2.63	7.9
ABC Reef	ABCRD044	233038	7586097	423	225	-60	40	Incl	24	25	1	5.29	5.3
ABC Reef	ABCRD045	233038	7586097	423	225	-80	54		31	34	3	1.69	5.1
ABC Reef	ABCRD046	233047	7586104	424	225	-90	88		48	57	9	2.42	21.8
ABC Reef	ABCRD046	233047	7586104	424	225	-90	88	Incl	52	56	4	4.56	18.2
ABC Reef	ABCRD047	233036	7586120	420	225	-80	84		50	55	5	1.02	5.1
ABC Reef	ABCRD048	233036	7586120	420	225	-55	54		39	40	1	1.15	1.1
ABC Reef	ABCRD050a	232799	7586161	447	45	-35	60				NSA		NSA
ABC Reef	ABCRD051	232857	7586109	441	45	-30	60				NSA		NSA
ABC Reef	ABCRD052	232846	7586099	442	45	-30	72				NSA		NSA
ABC Reef	ABCRD053	232922	7586061	435	45	-35	60				NSA		NSA
Condor	CORD090	232633	7585817	390	225	-60	54		26	31	5	2.9	14.5
Condor	CORD090	232633	7585817	390	225	-60	54	Incl	26	27	1	5.37	5.4
Condor	CORD090	232633	7585817	390	225	-60	54	Incl	30	31	1	5.85	5.8
Condor	CORD091	232638	7585834	392	225	-60	54	1	38	43	5	5.52	27.6
Condor	CORD130	232558	7585983	426	225	-60	180		137	143	6	3.92	23.5
Condor	CORD130	232558	7585983	426	225	-60	180	Incl	139	141	2	6.39	12.8
Condor	CORD130	232558	7585983	426	225	-60	180		153	154	1	0.73	0.7
Condor	CORD130	232558	7585983	426	225	-60	180		162	163	1	0.57	0.6
Condor	CORD135	232554	7585978	427	225	-72	222		174	180	6	4.07	24.4
Condor	CORD135	232554	7585978	427	225	-72	222	Incl	177	180	3	6.51	19.5

Prospect	Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Widt h (m)	Grade (g/t Au)	Gram- metres
Condor	CORD135	232554	7585978	427	225	-72	222		183	186	3	5.16	15.5
Condor	CORD135	232554	7585978	427	225	-72	222	Incl	184	185	1	11.7	11.7
Condor	CORD136	232600	7585955	427	225	-62	226		6	7	1	0.5	0.5
Condor	CORD136	232600	7585955	427	225	-62	226		192	195	3	2.81	8.4
Condor	CORD137	232635	7585939	426	225	-71	210		2	3	1	1.46	1.5
Condor	CORD138	232662	7585917	420	225	-70	210		3	5	2	1.25	2.5
Condor	CORD139	232716	7585901	414	225	-64	224				NSA		NSA
Condor NW	CORD104	232420	7586035	474	225	-40	48		35	39	4	3.82	15.3
Condor NW	CORD104	232420	7586035	474	225	-40	48	Incl	37	38	1	8.69	8.7
Condor NW	CORD105	232434	7586066	471	225	-60	96		79	81	2	3.47	6.9
Condor NW	CORD105	232434	7586066	471	225	-60	96	Incl	79	80	1	6	6
Crow	CROWRD0080	233146	7586062	434	225	-62	88				NSA		NSA
Crow	CROWRD0081	233170	7586086	432	225	-60	126		7	8	1	2.42	2.4
Crow	CROWRD0081	233170	7586086	432	225	-60	126		15	17	2	1.32	2.6
Crow	CROWRD0082	233197	7586118	427	219	-60	168		159	163	4	3.8	15.2
Crow	CROWRD0082	233197	7586118	427	219	-60	168	Incl	161	163	2	6.87	13.7
Crow	CROWRD0083	233157	7586037	434	188	-77	112				NSA		NSA
Crow	CROWRD0084	233175	7586085	432	182	-67	156		16	17	1	0.75	0.8
Crow	CROWRD0084	233175	7586085	432	182	-67	156		125	128	3	0.76	2.3
Crow	CROWRD0084	233175	7586085	432	182	-67	156		134	136	2	1.63	3.3
Crow	CROWRD0084	233175	7586085	432	182	-67	156		141	145	4	2.62	10.5
Crow	CROWRD0085	233238	7585986	394	225	-60	184		53	54	1	3.51	3.5
Crow	CROWRD0085	233238	7585986	394	225	-60	184		66	67	1	4.57	4.6
Crow	CROWRD0086	233257	7585953	393	225	-60	180		0	3	3	1.02	3.1
Crow	CROWRD0086	233257	7585953	393	225	-60	180		40	44	4	3.72	14.9
Crow	CROWRD0086	233257	7585953	393	225	-60		Incl	40	41	1	11.6	11.6
Crow	CROWRD0087	233234	7586000	396	238	-60	196		60	64	4	0.58	2.3
Crow	CROWRD0087	233234	7586000	396	238	-60	196		71	73	2	2.26	4.5
Crow	CROWRD0087	233234	7586000	396	238	-60	196		152	155	3	0.63	1.9
Crow	CROWRD0087	233234	7586000	396	238	-60	196		158	159	1	1.46	1.5
Crow	CROWRD0087	233234	7586000	396	238	-60	196		189	191	2	7.43	14.9
Crow	CROWRD0088A	233052	7585938	380	45	-30	72			_	NSA	_	NSA
Crow	CROWRD0089	233113	7586001	429	225	-75	122		75	76	1	0.75	0.8
Crow	CROWRD0090	233078	7586022	430	225	-45	72				NSA		NSA
Crow	CROWRD0091	233076	7586022	430	225	-75	100		47	49	2	0.63	1.3
D Reef	DRRD0015	233297	7586308	422	135	-60	66		61	62	- 1	0.52	0.5
D Reef	DRRD0016	233282	7586322	417	135	-60	72		24	26	2	0.66	1.3
D Reef	DRRD0016	233282	7586322	417	135	-60	72		33	35	2	1.5	3
D Reef	DRRD0017	233270	7586338	420	135	-60	72		34	35	1	0.63	0.6
D Reef	DRRD0017	233270	7586338	420	135	-60	78		60	69	9	0.92	8.3
D Reef	DRRD0017	233270	7586338	420	135	-60	78		75	77	2	0.92	1.3
D Reef	DRRD0018	233255	7586352	423	135	-60	73		58	60	2	0.79	1.5
D Reef	DRRD0018 DRRD0020	233233	7586303	423	135	-00	72		63	64	1	7.78	7.8
D Reef	DRRD0020 DRRD0021	233184	7586285	412	135	-42 -52	90		70	85	15	4.83	7.8
	DINIDUUZI	2331/1	1300203	412	122	-32	90		70	65	15	4.85 8 P	

Prospect	Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Widt h (m)	Grade (g/t Au)	Gram- metres
D Reef	DRRD0021	233171	7586285	412	135	-52	90	Incl	70	72	2	7.56	15.1
D Reef	DRRD0021	233171	7586285	412	135	-52	90	Incl	77	80	3	13.26	39.8
D Reef	DRRD0025	233114	7586215	420	120	-55	120		89	90	1	3.04	3
D Reef	DRRD0025	233114	7586215	420	120	-55	120		95	96	1	1.83	1.8
D Reef	DRRD0027	233109	7586202	420	135	-55	120		87	103	16	7.06	113
D Reef	DRRD0027	233109	7586202	420	135	-55	120	Incl	94	100	6	16.6	99.6
D Reef	DRRD0027	233109	7586202	420	135	-55	120		108	110	2	1	2
D Reef	DRRD0028	233110	7586058	440	135	-60	54				NSA		NSA
D Reef	DRRD0029	233100	7586078	430	135	-60	72		27	30	3	1.33	4

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. 	 RC drilling. Weighing of the second sample split was undertaken to ensure that the sample splitter on the RC drill rig is set up appropriately. Standard samples were inserted to the RC sampling stream at a ratio of 1:50. RC drilling was carried out with a 5.5-inch face-sampling bit, 1m samples collected through a cyclone and cone splitter to form a 2-3.5kg sub-sample. All sub-samples were fully pulverised at the laboratory to >85% passing-75um, to produce a 50g charge for Fire Assay with AAS finish.
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).	• <i>Reverse circulation (RC) drilling was carried out with a 5.5-inch face-sampling bit.</i>
Drill sample recovery		recovery.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. 	 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. RC chip trays are retained at site. All of the intersections were logged.
Sub-sampling techniques and	 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 	• One metre RC samples were split using a rig mounted cone splitter. The vast majority of the samples were dry with the moist and wet samples were recorded.

Criteria	JORC Code Explanation	Commentary
sample preparation	 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. 	 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.
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. 	 finish was used to determine total Au content of the RC samples. Commercially prepared, predominantly matrix-matched low, medium & high value certified reference QAQC standards were inserted at a rate of 1:50 into the RC sample stream. The QAQC results from this protocol were considered to be acceptable.
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 into the LogChief software and it is synchronised to the SQL database. Assay results were not adjusted.
Location of data points	 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. 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,

Criteria	JORC Code Explanation	Commentary
		Camprodual or Camteq), lithologies have negligible magnetic susceptibility (greywacke).
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. 	 The 2018 RC drilling programmes at ABC Reef, Condor, Condor NW, Crow and D Harrier were conducted on 40 to 20m x 20 to 10m spacing. The drill spacing has been sufficient to establish geological and grade continuity. None of the reported sample intervals were composited. In previous resource estimates some >1m RC assay composites were used.
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/ pit mapping at ABC Reef, Condor, Condor NW, Crow and D Reef establish geological continuity and confirms the interpreted strike and dip 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 delivered to the onsite assay laboratory for dispatch to Perth. Monitoring of sample dispatch was 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 sample by the technician, this is checked and confirmed at the Perth laboratory on receipt of samples and discrepancies are corrected via telephone link up between 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 of material issues with third parties such as joint ventures, partnerships, overridin royalties, native title interests, historical sites, wilderness or national park an environmental settings. The security of the tenure held at the time of reportinalong with any known impediments to obtaining a licence to operate in the area.	 Mining Leases within the Pilbara Gold Field (46), as detailed below. All the tenements are in good standing with no known impediments. ABC Reef * - M46/47 & M46/129 (100% MML);
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 sandstone, siltstone, shale and minor 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 driholes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drihole 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 in 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. 	 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 of internal dilution. All RC samples reported were one metre in length. 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'). 	prospects are presented.
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 aforementioned deposits.
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 ABC Reef, Condor, Condor NW, Crow and D Reef. Mineralisation is primarily associated with a combination of quartz veining, moderate foliation and strong limonite staining or pyrite-arsenopyrite content. Samples from this drilling have been collected for metallurgical test work to gain a greater understanding of the Au recoveries in the current mill configuration and the proposed 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. 	• Two RC holes for 340m have been planned to in-fill and improve the understanding of the distribution of gold at Condor.