MILLENNIUM
MINERALS LIMITED

ASX Code: MOY

August 9, 2016

Latest drilling outlines high-grade gold over 850 m strike

Results of up to 19gpt highlight potential for single, large open pit at Nullagine's Little Wonder deposit

Key points

- **Millennium's strategy to grow mine life at its Nullagine project continues to deliver outstanding results, with substantial high-grade mineralisation intersected at the Little Wonder deposit. Results include:**
  - **31 m @ 3.44 g/t Au from 29 m including 4 m @ 18.89 g/t Au (LWRD0022)**
  - **15 m @ 4.75 g/t Au from 55 m including 5 m @ 12.2 g/t Au (LWRD0067)**
  - **14 m @ 2.02 g/t Au from 37 m (LWRD0018)**
  - **7 m @ 5.98 g/t Au from 30 m including 5 m @ 7.28 g/t Au (LWRD0025)**
  - **25 m @ 1.52 g/t Au from 41 m (LWRD0062)**
  - **15 m @ 2.18 g/t Au from 51 m (LWRD0068)**
- **Mineralisation now intersected over 850 m between and along strike from a series of small, shallow open pits with higher grade intercepts still open at depth**
- **Significant potential now exists to form one large open pit at Little Wonder**
- **In-fill and follow-up drilling set to commence within two weeks**
- **Results will form part of Millennium's Mineral Resource and Ore Reserve update due in October 2016**

Millennium Minerals Limited (**Millennium** or **Company** – ASX: MOY) is pleased to advise that it has intersected wide, high-grade mineralisation between, under and along strike from a series of small open pits at the Little Wonder deposit within its Nullagine Gold Project (**Project**) area in WA (***Figure 1***).

The results have outlined mineralisation over an 850 m strike length (***Figure 2***). Significantly, higher grade intercepts remain open at depth (***Figures 3, 4 and 5***).

Millennium will start infill and follow-up drilling at Little Wonder, where mining in the small pits finished last quarter, within the next few weeks with a view to establishing a single, larger open pit.

Corporate Details

Ordinary Shares:
756,695,372

Market Capitalisation:
~A$200 million

Cash at 30 June 2016:
~$A20.0 million

Debt
NIL

ASX Code: MOY

Board of Directors

Richard Procter
Non-Executive Chairman

Greg Bittar
Executive Director

Michael Chye
Non-Executive Director

Tim Kennedy
Non-Executive Director

Management

Glenn Dovaston
Chief Executive Officer

Richard Hill
Chief Financial Officer

Pierre Malherbe
Company Secretary

Peter Cash
GM Corporate Development

Hardy Cierlitza
Chief Geologist

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"These results are outstanding and again demonstrate that our strategy to grow the mineral inventory and mine life at Nullagine is delivering substantial results," Millennium Chief Executive Glenn Dovaston said.

"When combined with the strong results announced recently from the initial deep drilling campaign, it is clear that there is the potential to significantly extend the existing mine life."

Little Wonder

The Little Wonder deposit is located approximately 25 km north-east of the Project's processing plant and forms part of the Company's Camel Creek mining centre. Mining from a series of small, shallow open cut pits at Little Wonder commenced in August 2015 and was completed during the second quarter of 2016.

Upon completion of mining at the Little Wonder deposits, a detailed review of historical drilling information was undertaken. This review revealed that several high-grade mineralised structures remained open at depth (below the Little Wonder pits), between the pits as well as along strike.

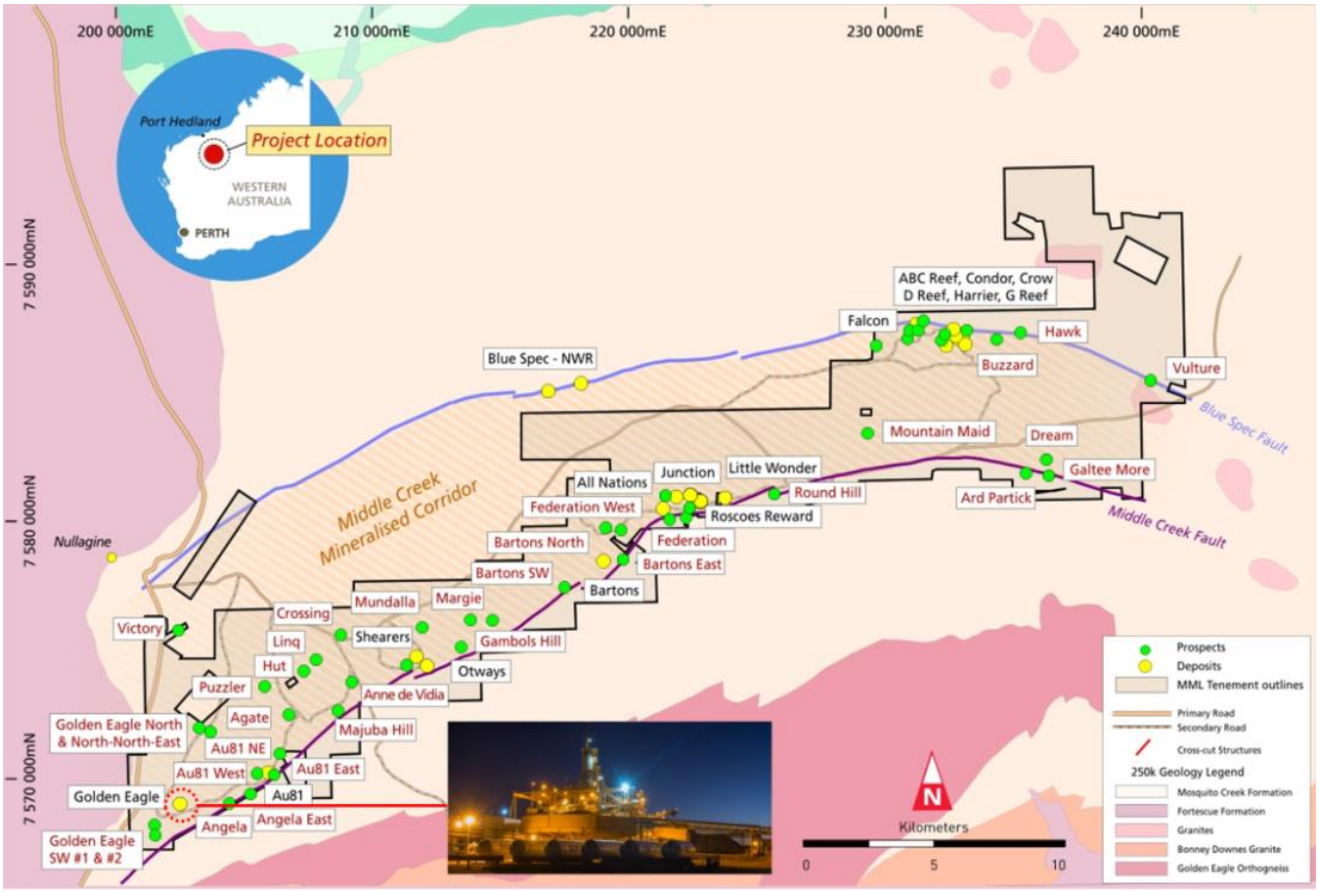

Figure 1: Nullagine Gold Project Location Plan over regional geology

A drilling program commenced during July 2016 to test highly promising targets down-dip and along-strike from the Little Wonder deposits. Several high-grade and broad intercepts have been returned, confirming mineralisation at Little Wonder for approximately 850 metres beneath and between the existing pits (***Figure 2*** and ***Appendix 2***). Results include:

- **14 m @ 2.02 g/t Au** from 37 m **(LWRD0018)**
- **31 m @ 3.44 g/t Au** from 29 m including **4 m @ 18.89 g/t Au (LWRD0022)**
- **7 m @ 5.98 g/t Au** from 30 m including **5 m @ 7.28 g/t Au (LWRD0025)**
- **25 m @ 1.06 g/t Au** from 35 m **(LWRD0060)**
- **25 m @ 1.52 g/t Au** from 41 m **(LWRD0062)**
- **15 m @ 4.75 g/t Au** from 55 m including **5 m @ 12.2 g/t Au (LWRD0067)**
- **15 m @ 2.18 g/t Au** from 51 m **(LWRD0068)**

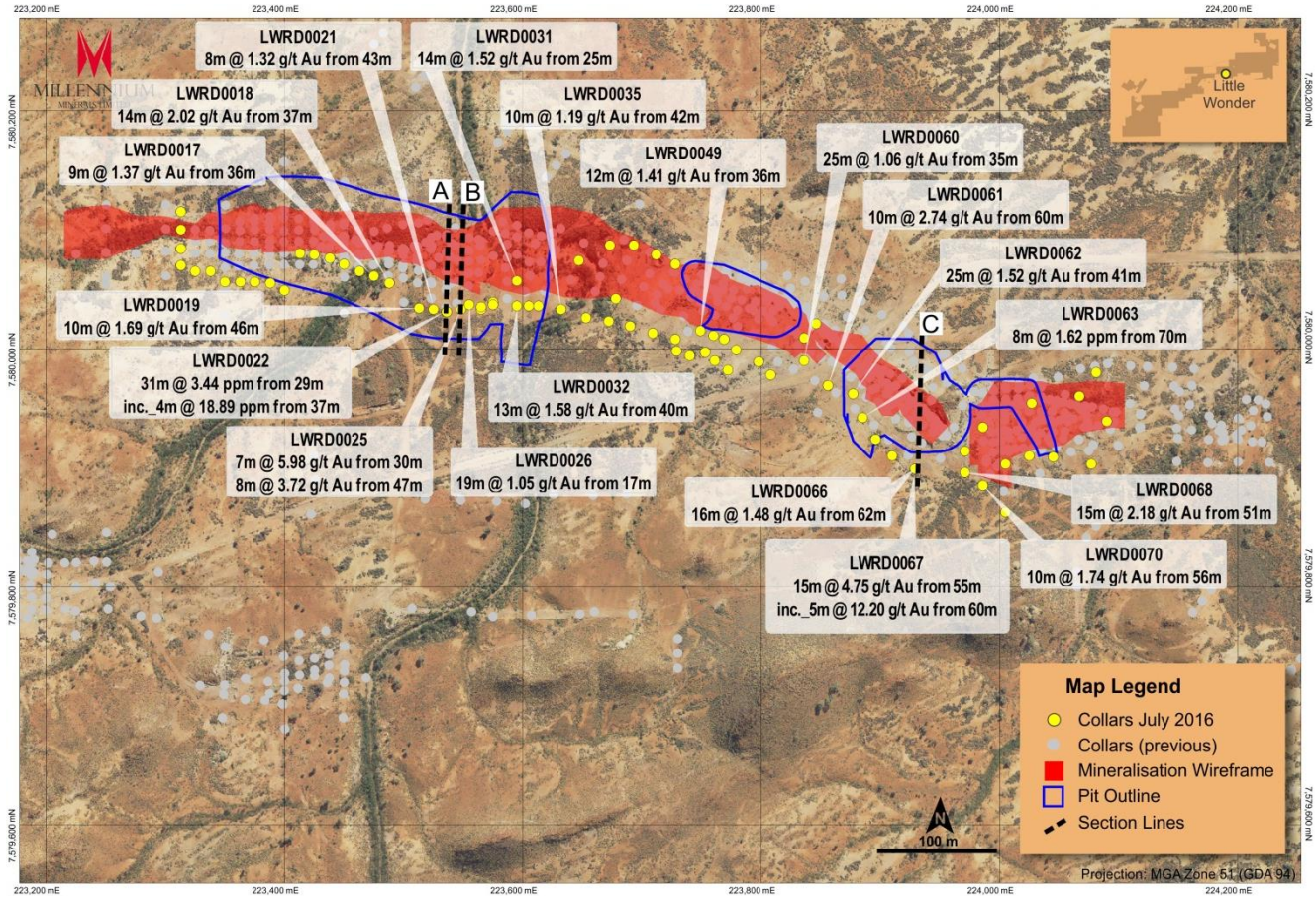

Figure 2: Little Wonder prospect location plan showing latest significant intercepts and section locations

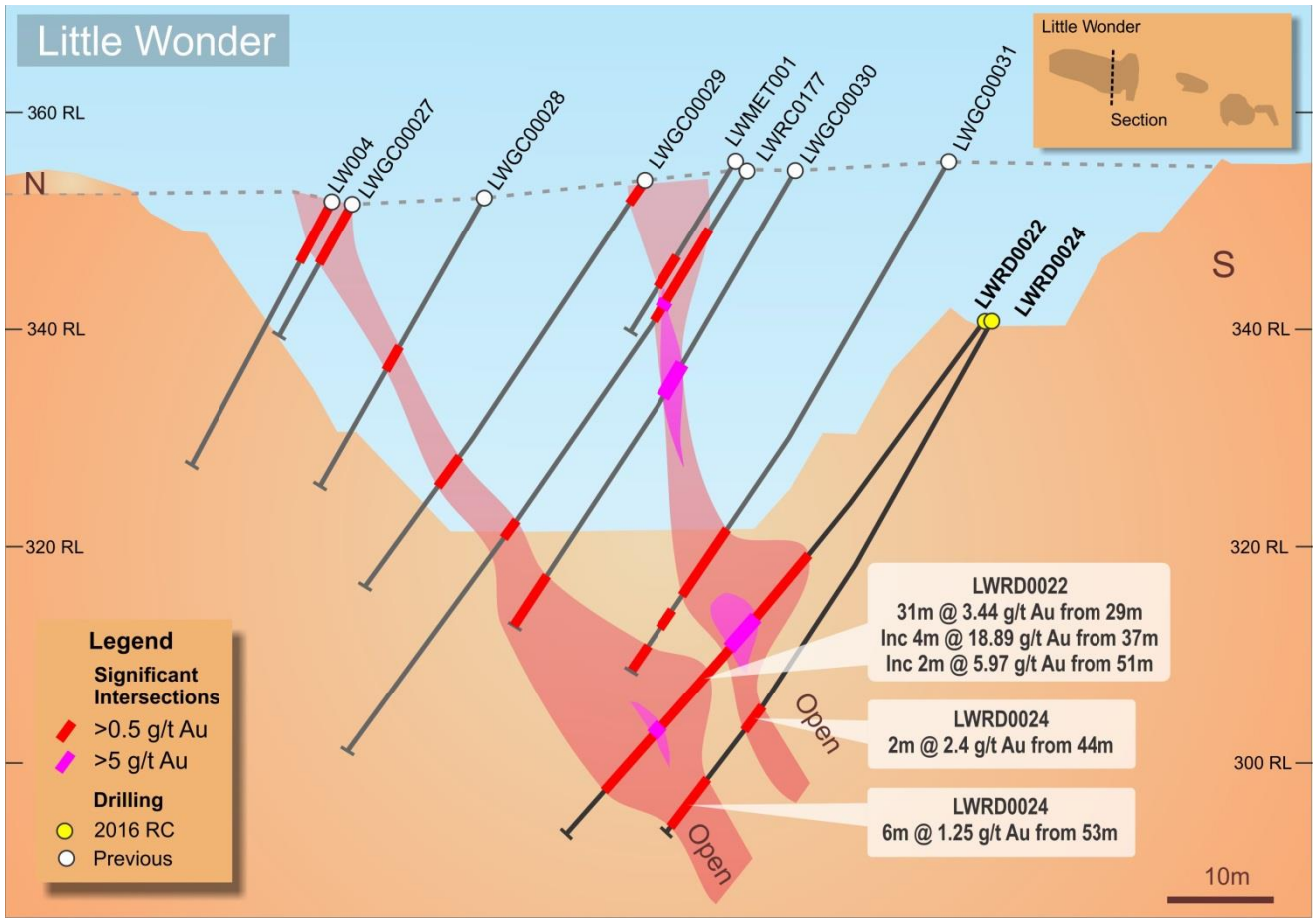

Figure 3: Section A - recent high grade intercepts beneath existing Pit at Little Wonder

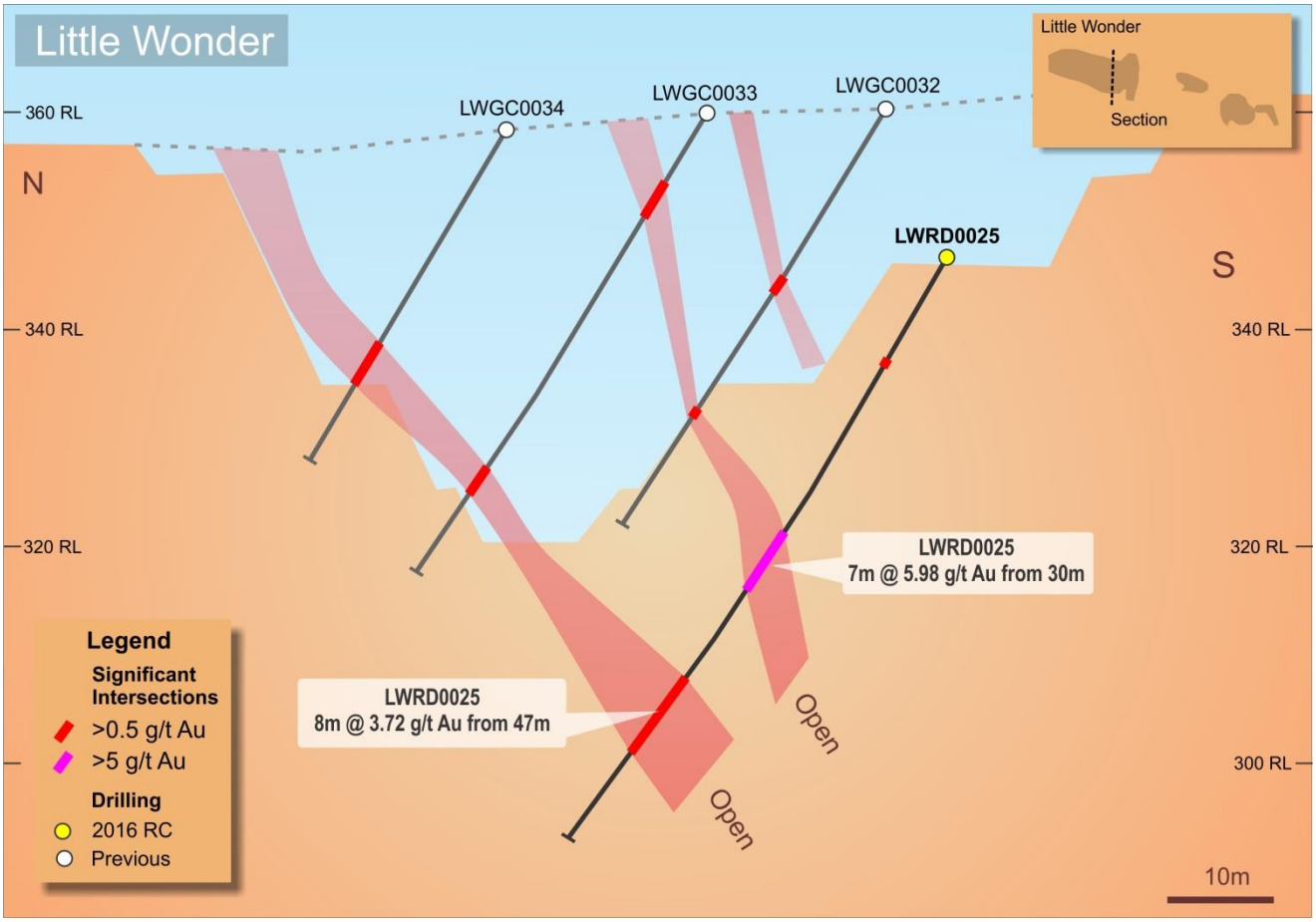

Figure 4: Section B - recent high grade intercepts beneath existing Pit at Little Wonder

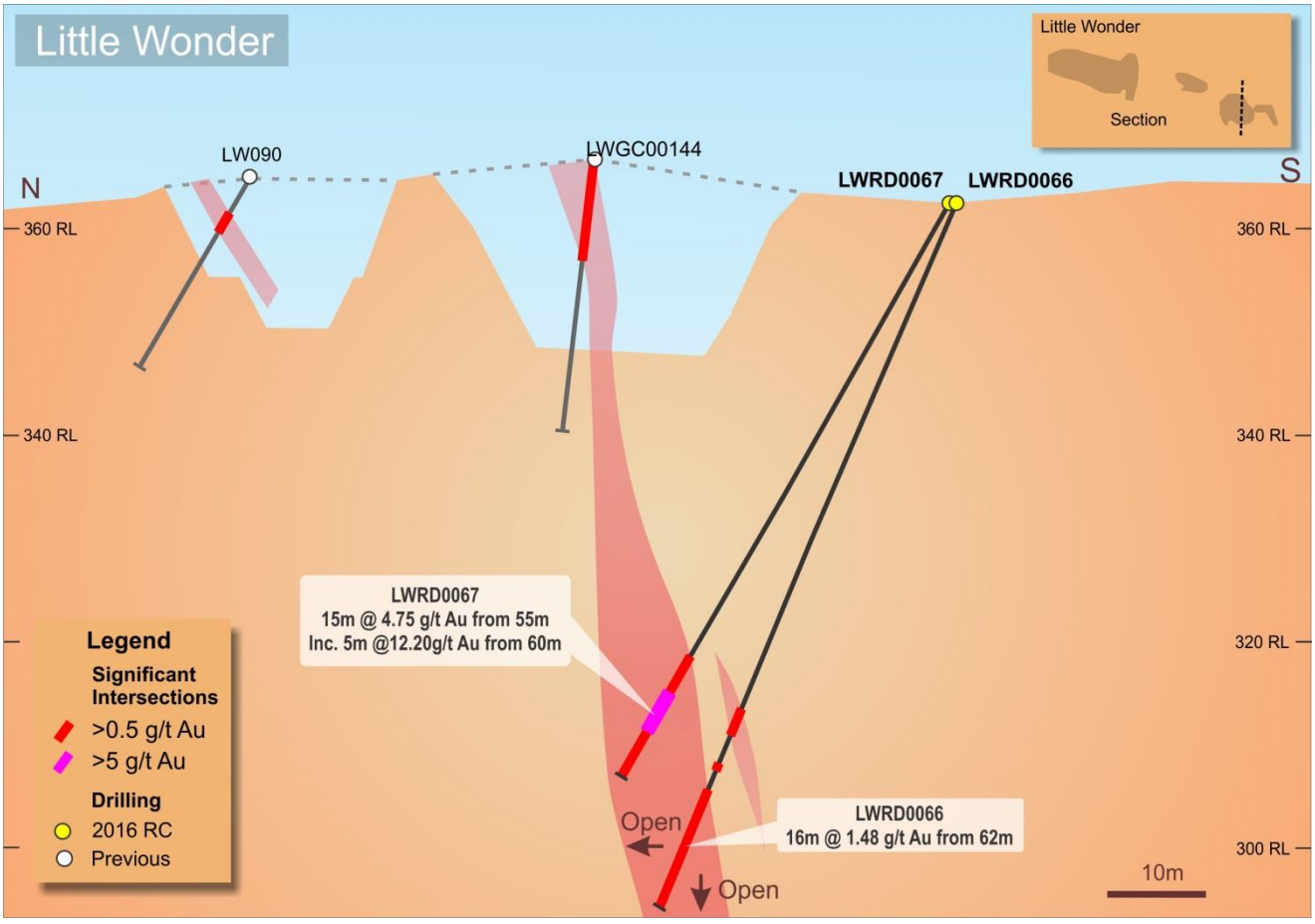

Figure 4: Section C - recent high grade intercepts beneath existing Pit at Little Wonder

These results demonstrate the potential to delineate one large open pit at Little Wonder with follow-up drilling set to commence within the next two weeks. Results from this drilling will form part of Millennium's Mineral Resource and Ore Reserve update due in October 2016

ENDS

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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

Appendix 1 - Table of significant results from Little Wonder drilling

Hole_ID	GDA East	GDA North	RL	Azi	Dip	Depth (m)		From (m)	To (m)	Interval (m)	Au Grade (g/t)	Gram Meters
LWRD0001	223313	7580115	361	0	-60	24		10	12	2	0.69	1.38
LWRD0002	223313	7580100	360	0	-60	48		35	37	2	0.58	1.16
LWRD0003	223313	7580084	361	0	-60	60		48	50	2	0.78	1.56
LWRD0004	223313	7580070	362	0	-60	78		23	25	2	0.98	1.96
LWRD0004	223313	7580070	362	0	-60	78		60	61	1	0.55	0.55
LWRD0005	223325	7580065	362	0	-60	78		35	36	1	0.72	0.72
LWRD0005	223325	7580065	362	0	-60	78		61	62	1	1.96	1.96
LWRD0005	223325	7580065	362	0	-60	78		67	68	1	0.91	0.91
LWRD0006	223338	7580065	362	0	-60	78		50	51	1	0.61	0.61
LWRD0006	223338	7580065	362	0	-60	78		57	62	5	0.79	3.95
LWRD0007	223350	7580056	362	0	-60	84		48	49	1	0.51	0.51
LWRD0007	223350	7580056	362	0	-60	84		54	56	2	3.24	6.48
LWRD0007	223350	7580056	362	0	-60	84	Incl.	54	55	1	5.37	5.37
LWRD0007	223350	7580056	362	0	-60	84		63	66	3	0.74	2.22
LWRD0007	223350	7580056	362	0	-60	84		69	71	2	0.81	1.62
LWRD0007	223350	7580056	362	0	-60	84		83	84	1	1.34	1.34
LWRD0008	223363	7580056	362	0	-60	84		47	48	1	0.5	0.50
LWRD0008	223363	7580056	362	0	-60	84		52	53	1	0.52	0.52
LWRD0008	223363	7580056	362	0	-60	84		66	70	4	0.87	3.48
LWRD0009	223375	7580056	361	0	-60	84		44	45	1	0.69	0.69
LWRD0009	223375	7580056	361	0	-60	84		65	71	6	0.81	4.86
LWRD0010	223388	7580055	361	0	-60	96		71	75	4	1.07	4.28
LWRD0011	223400	7580049	360	0	-55	96		4	6	2	2.55	5.10
LWRD0011	223400	7580049	360	0	-55	96		68	73	5	0.73	3.65
LWRD0012	223413	7580080	331	0	-70	42				NSA		NSA
LWRD0013	223425	7580079	332	0	-70	42				NSA		NSA
LWRD0014	223438	7580076	334	0	-65	42		41	42	1	1.24	1.24
LWRD0015	223450	7580071	335	0	-65	48		31	32	1	0.72	0.72
LWRD0016	223463	7580065	337	0	-65	48		8	9	1	1.06	1.06
LWRD0016	223463	7580065	337	0	-65	48		34	37	3	0.99	2.97
LWRD0016	223463	7580065	337	0	-65	48		42	43	1	0.7	0.70
LWRD0017	223475	7580061	338	0	-60	54		18	20	2	0.91	1.82
LWRD0017	223475	7580061	338	0	-60	54		29	30	1	1.37	1.37
LWRD0017	223475	7580061	338	0	-60	54		36	45	9	1.37	12.33
LWRD0018	223488	7580055	340	0	-55	54		25	26	1	0.63	0.63
LWRD0018	223488	7580055	340	0	-55	54		29	30	1	0.55	0.55
LWRD0018	223488	7580055	340	0	-55	54		37	51	14	2.02	28.28
LWRD0019	223513	7580034	343	0	-50	70		46	56	10	1.69	16.90
LWRD0019	223513	7580034	343	0	-50	70	Incl.	50	51	1	5.16	5.16
LWRD0019	223513	7580034	343	0	-50	70		59	62	3	0.91	2.73
LWRD0019	223513	7580034	343	0	-50	70		65	66	1	0.69	0.69
LWRD0021	223525	7580033	345	0	-50	75		39	40	1	0.85	0.85

LWRD0021	223525	7580033	345	0	-50	75		43	51	8	1.32	10.56
LWRD0021	223525	7580033	345	0	-50	75		61	62	1	0.57	0.57
LWRD0022	223536	7580031	346	0	-50	66		29	60	31	3.44	106.64
LWRD0022	223536	7580031	346	0	-50	66	Incl.	37	41	4	18.89	75.56
LWRD0022	223536	7580031	346	0	-50	66	Incl.	51	53	2	5.97	11.94
LWRD0024	223536	7580031	346	0	-60	60		44	46	2	2.4	4.80
LWRD0024	223536	7580031	346	0	-60	60		53	59	6	1.25	7.50
LWRD0025	223548	7580033	347	0	-60	66		11	12	1	1.63	1.63
LWRD0025	223548	7580033	347	0	-60	66		16	19	3	0.51	1.53
LWRD0025	223548	7580033	347	0	-60	66		30	37	7	5.98	41.86
LWRD0025	223548	7580033	347	0	-60	66	Incl.	31	36	5	7.28	36.40
LWRD0025	223548	7580033	347	0	-60	66		47	55	8	3.72	29.76
LWRD0025	223548	7580033	347	0	-60	66	Incl.	50	53	3	8.01	24.03
LWRD0025	223548	7580033	347	0	-60	66		60	63	3	0.66	1.98
LWRD0026	223555	7580037	348	0	-60	66		3	4	1	2.89	2.89
LWRD0026	223555	7580037	348	0	-60	66		9	14	5	0.52	2.60
LWRD0026	223555	7580037	348	0	-60	66		17	36	19	1.05	19.95
LWRD0026	223555	7580037	348	0	-60	66		49	58	9	2.55	22.95
LWRD0026	223555	7580037	348	0	-60	66	Incl.	50	51	1	5.16	5.16
LWRD0027	223565	7580033	348			70		29	32	3	1.35	4.05
LWRD0027	223565	7580033	348			70		47	62	15	1.76	26.40
LWRD0027	223565	7580033	348			70	Incl.	49	50	1	14.05	14.05
LWRD0028	223565	7580035	348			60		19	20	1	0.91	0.91
LWRD0028	223565	7580035	348			60		29	30	1	0.67	0.67
LWRD0028	223565	7580035	348			60		37	38	1	2.7	2.70
LWRD0028	223565	7580035	348			60		48	56	8	1.82	14.56
LWRD0028	223565	7580035	348			60	Incl.	49	50	1	10.65	10.65
LWRD0029	223575	7580039	351			66		15	16	1	1.13	1.13
LWRD0029	223575	7580039	351			66		22	23	1	1.06	1.06
LWRD0029	223575	7580039	351			66		45	56	11	1.17	12.87
LWRD0030	223575	7580037	351			70		1	2	1	0.52	0.52
LWRD0030	223575	7580037	351			70		28	29	1	0.85	0.85
LWRD0030	223575	7580037	351			70		33	35	2	0.82	1.64
LWRD0030	223575	7580037	351			70		38	39	1	0.64	0.64
LWRD0030	223575	7580037	351			70		45	61	16	1.09	17.44
LWRD0030	223575	7580037	351			70		65	66	1	0.54	0.54
LWRD0031	223595	7580057	353	0	-60	60		25	39	14	1.52	21.28
LWRD0032	223595	7580036	354	0	-60	66		40	53	13	1.58	20.54
LWRD0033	223605	7580036	354	0	-65	60		36	43	7	0.89	6.23
LWRD0034	223613	7580036	355	18	-60	60		36	37	1	0.66	0.66
LWRD0034	223613	7580036	355	18	-60	60		40	44	4	1.53	6.12
LWRD0034	223613	7580036	355	18	-60	60		48	52	4	0.62	2.48
LWRD0035	223632	7580033	360	18	-60	66		42	52	10	1.19	11.90
LWRD0036	223647	7580074	359	18	-60	36		12	18	6	0.88	5.28
LWRD0036	223647	7580074	359	18	-60	36		23	27	4	1.46	5.84
LWRD0036	223647	7580074	359	18	-60	36		31	32	1	0.63	0.63

LWRD0037	223653	7580026	358	18	-60	66		5	6	1	0.87	0.87
LWRD0037	223653	7580026	358	18	-60	66		32	33	1	2.06	2.06
LWRD0037	223653	7580026	358	18	-60	66		37	39	2	1.62	3.24
LWRD0037	223653	7580026	358	18	-60	66		44	45	1	0.83	0.83
LWRD0037	223653	7580026	358	18	-60	66		50	51	1	0.53	0.53
LWRD0038	223673	7580087	359	18	-60	30		12	13	1	0.51	0.51
LWRD0039	223672	7580023	359	18	-60	66		46	49	3	2.31	6.93
LWRD0040	223678	7580042	359	18	-60	48		36	38	2	1.14	2.28
LWRD0041	223693	7580087	359	18	-60	18		5	9	4	0.83	3.32
LWRD0042	223690	7580019	359	18	-60	66		45	53	8	1.22	9.76
LWRD0043	223712	7580079	361	18	-60	24		9	11	2	1.16	2.32
LWRD0043	223712	7580079	361	18	-60	24		15	16	1	0.7	0.70
LWRD0044	223709	7580013	359	18	-60	66		45	51	6	0.93	5.58
LWRD0045	223728	7580071	361	18	-60	24		7	8	1	0.5	0.50
LWRD0046	223728	7580008	361	18	-60	66		49	50	1	0.65	0.65
LWRD0047	223729	7579998	361	24	-60	66		55	56	1	5.72	5.72
LWRD0047	223729	7579998	361	24	-60	66	Incl.	55	56	1	5.72	5.72
LWRD0048	223740	7579994	361	24	-60	66		40	47	7	0.85	5.95
LWRD0048	223740	7579994	361	24	-60	66		55	58	3	1.11	3.33
LWRD0049	223749	7580015	361	24	-60	54		36	48	12	1.41	16.92
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LWRD0051	223760	7580011	362	24	-60	48		40	42	2	1.42	2.84
LWRD0052	223761	7579990	362	24	-60	72		60	65	5	0.51	2.55
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LWRD0053	223769	7580008	362	24	-60	54		48	50	2	1.15	2.30
LWRD0054	223772	7579982	362	24	-60	72		6	7	1	1.49	1.49
LWRD0054	223772	7579982	362	24	-60	72		60	63	3	0.64	1.92
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LWRD0055	223779	7579999	362	24	-60	60		58	59	1	0.83	0.83
LWRD0056	223798	7579989	363	43	-60	72		21	22	1	0.66	0.66
LWRD0056	223798	7579989	363	43	-60	72		45	46	1	0.85	0.85
LWRD0056	223798	7579989	363	43	-60	72		53	54	1	0.85	0.85
LWRD0057	223808	7579978	363	43	-60	72		34	35	1	1.27	1.27
LWRD0057	223808	7579978	363	43	-60	72		46	47	1	0.62	0.62
LWRD0057	223808	7579978	363	43	-60	72		56	58	2	0.77	1.54
LWRD0058	223836	7580009	365	43	-60	22		17	18	1	1.03	1.03
LWRD0058B	223836	7580009	365	43	-60	48		14	15	1	0.77	0.77
LWRD0059	223846	7580021	364	43	-60	30				NSA		NSA
LWRD0060	223836	7579990	364	43	-60	60		35	60	25	1.06	26.50
LWRD0061	223856	7579969	364	43	-60	78		16	17	1	0.53	0.53
LWRD0061	223856	7579969	364	43	-60	78		42	45	3	1.76	5.28
LWRD0061	223856	7579969	364	43	-60	78		54	55	1	1.3	1.30
LWRD0061	223856	7579969	364	43	-60	78		60	70	10	2.74	27.40
LWRD0062	223877	7579962	359	43	-60	66		35	37	2	1.5	3.00

LWRD0062	223877	7579962	359	43	-60	66		41	66	25	1.52	38.00
LWRD0063	223885	7579942	362	43	-60	78		0	1	1	4.51	4.51
LWRD0063	223885	7579942	362	43	-60	78		62	66	4	0.43	1.72
LWRD0063	223885	7579942	362	43	-60	78		70	78	8	1.62	12.96
LWRD0064	223896	7579924	363			70		54	55	1	0.97	0.97
LWRD0065	223910	7579910	363	43	-60	78		62	70	8	1.25	10.00
LWRD0066	223929	7579899	362	43	-60	78		56	59	3	0.71	2.13
LWRD0066	223929	7579899	362	43	-60	78		62	78	16	1.48	23.68
LWRD0067	223929	7579899	362	43	-50	70		55	70	15	4.75	71.25
LWRD0067	223929	7579899	362	43	-50	70	Incl.	60	65	5	12.2	61.00
LWRD0068	223971	7579896	362	0	-60	78		51	66	15	2.18	32.70
LWRD0068	223971	7579896	362	0	-60	78	Incl.	55	56	1	5.52	5.52
LWRD0068	223971	7579896	362	0	-60	78		70	71	1	0.67	0.67
LWRD0069	224027	7579954	364	0	-55	54		12	13	1	0.67	0.67
LWRD0069	224027	7579954	364	0	-55	54		39	42	3	0.89	2.67
LWRD0070	223986	7579885	361	0	-60	72		3	4	1	0.77	0.77
LWRD0070	223986	7579885	361	0	-60	72		36	38	2	1.77	3.54
LWRD0070	223986	7579885	361	0	-60	72		56	66	10	1.74	17.40
LWRD0071	223986	7579934	364	0	-60	42		26	27	1	1.55	1.55
LWRD0072	224005	7579863	362	0	-60	72				NSA		NSA
LWRD0073	224005	7579903	361	0	-60	72		24	25	1	0.68	0.68
LWRD0073	224005	7579903	361	0	-60	72		48	49	1	0.56	0.56
LWRD0073	224005	7579903	361	0	-60	72		52	59	7	1.26	8.82
LWRD0073	224005	7579903	361	0	-60	72		68	69	1	1.34	1.34
LWRD0074	224025	7579910	361	0	-60	72		53	54	1	0.67	0.67
LWRD0075	223971	7579914	363	0	-50	36		9	12	3	0.88	2.64
LWRD0076	224045	7579909	361	0	-60	72		26	27	1	0.57	0.57
LWRD0077	224077	7579903	360	350	-60	80		25	27	2	0.8	1.60
LWRD0077	224077	7579903	360	350	-60	80		61	63	2	0.81	1.62
LWRD0078	224090	7579939	363	350	-60	72		29	33	4	0.8	3.20
LWRD0078	224090	7579939	363	350	-60	72		69	71	2	3.15	6.30
LWRD0079	224081	7579980	364	350	-60	84		73	74	1	1.59	1.59
LWRD0080	224067	7579960	367	350	-60	24		2	4	2	1.13	2.26

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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.*	• *Sampling was carried out using the Reverse Circulation (RC) drill method.* • *No surface samples were used in any estimation of Mineral Resources or Ore Reserves.* • *Standard samples were inserted to the sampling stream at a ratio of 1:50.* *RC drilling was carried out with a 5.25 inch face-sampling bit, 1m samples collected through a cyclone and cone splitter to form a 2 – 3kg sub-sample. All sub-samples were fully pulverised at the onsite lab 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).*	• *Reverse circulation (RC) drilling was carried out with a 5.25 inch face-sampling bit.*
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 recent RC sample recovery and moisture content was recorded by on rig geologists. Overall sample weight and quality were good to very good (1.5-3.0 kg).* • *ALS records sample weights on receipt of samples. This was used to help track sample recovery.* • *There is no observed correlation between sample recovery and gold grade.*

Criteria	JORC Code Explanation	Commentary
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 drilling has been captured in chip trays.* • *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.*
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.*	• *No core was drilled.* • *The recent 1 metre RC samples were split using a rig mounted cone splitter. The vast majority of the samples were dry with moist and wet samples recorded on the sampling sheet.* • *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.*
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 (ALS) 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 micron 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.* • *Results highlight that sample assay values are accurate.*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• *Intersections were checked by alternative company personnel to check they were reported correctly.* • *No twin holes were drilled in the programme. Previous significant intersections*

Criteria	JORC Code Explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	*were verified with close spaced drilling.* • *Sampling is directly uploaded to the Logchief software and 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 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 ~10m downhole. Surveys were taken using a single shot camera or via electronic multi-shot survey tool (Reflex, Camprodual or Camteq), lithologies have negligible magnetic susceptibility (greywacke). Re-surveying was carried out to check the quality of measurements.* • *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. The DTM RL was used for Mineral Resource Estimates (MRE). 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.*	• *RC drill spacing varied from 20x20m to 10x10m.* • *Thus far 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. A small number of core composites were retained with a length of less than 1m (minimum 0.3m).*

Criteria	JORC Code Explanation	Commentary
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.*	• *Geological mapping and structural measurements have been taken from the Little Wonder pits and they confirm the orientation of mineralisation defined by the drilling. Based upon the above information the drilling was largely perpendicular to the 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 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 laboratory.*
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.*	• *All the deposits and prospects 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.* • *Little Wonder –M46/146[+], M46/198[+], & M46/442[@];* **These tenements are located within the Njamal title claim (WC99/8).* *[+] M46/146+, M46/198 (100% MML) – $10/oz royalty payable to Tyson Resources Pty Ltd.* *[@] M46/442 (100% MML) – gross revenue royalty of 6.44% payable to Royalty Stream Investments (WA Gold) Pty Ltd for up to 20koz then it reverts to 1.5% rate for gold mined beyond 20koz .*
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. Previous RAB & RC drilling. Millennium has re-drilled in areas that other parties had drilled to gain a greater confidence in those results. In areas where Millennium has not re-drilled the previous holes they were designated as Inferred or excluded from MRE.*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The Nullagine Project deposits are structurally controlled, sediment hosted, lode Au style of deposit. They are all situated in the Mosquito Creek Basin that consists predominantly of Archean aged, turbidite sequences of sandstones, siltstones and shales.*

Criteria	JORC Code Explanation	Commentary

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.*

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 2 metres of consecutive internal dilution. Higher grade intersections use a lower cut-off of 5g/t Au and maximum of 2 metres of consecutive internal dilution.* • *All samples reported were one metre in length. Thus no aggregation methods were required to derive 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 that are presented.* • *Most of the drilling is orthogonal 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 80-90% 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 presentation with a drill hole plans to show them in context.* • *A Representative map has been included in the report along with documentation.*

Criteria	JORC Code Explanation	Commentary
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.*	• *Mineralisation at Little Wonder is primarily associated with a combination of quartz veining, moderate foliation, strong sericite alteration and strong limonite/hematite staining.*