

ASX Release

# Mallina update

 $\gg$  2019 RC and diamond drilling results confirm shallow extensions with new lodes defined at Mallina

New resource estimate to be released shortly

Significant new RC and diamond results (>15gm \*m) from recent drilling include:

5m @ 4.1g/t Au from 109m in MLRC296 4m @ 4.8g/t Au from 31m in MLRC316 (incl 2m @ 8.5g/t Au from 32m) 30m @ 1.4g/t Au from 51m in MLRC319 (incl 6m @ 3.0g/t Au from 74m) 12m @ 2g/t Au from 88m in MLRC319 12m @ 1.7g/t Au from 34m in MLRC321 8m @ 9.2g/t Au from 79m in MLRC324 (incl 4m @ 17.7g/t Au from 80m) 9m @ 1.9g/t Au from 146m in MLRC333 12m @ 1.4g/t Au from 8m in MLRC355 11m @ 1.5g/t Au from 48m in MLRC361 4m @ 4.0g/t Au from 116m in MLRC365 10m @ 5.6g/t Au from 86m in MLRC366 (incl 3m @ 17.5g/t Au from 87m) 23m @ 2.4g/t Au from 48m in MLRC377 (incl 9m @ 4.6g/t Au from 60m)

Andy Beckwith, Technical Director commented:

"The recent Hemi discovery has been our primary focus during 2020 and further drilling results are expected to be released early next week.

At the Mallina gold deposit, our recent drilling completed late in the December 2019 Quarter, also continues to grow our shear zone hosted gold mineralisation. Mallina was one of the first gold mines in Western Australia and the drilling to date clearly indicates a large gold system over 7-8 kilometres in strike. We believe there is substantial resource potential remaining at Mallina as we step out drilling to cover the untested 5km portion to the west that still contains many old workings."

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De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to announce results of RC and diamond drilling completed at Mallina during late November to mid December 2019. Five diamond tails (totalling 561.9m) and ninety RC holes or extensions to existing holes (totalling 10,397m) were drilled on fences spaced at 50m or 100m, with holes generally spaced at 40m along lines (see Figure 2). Drilling targeted along strike and down dip extensions of the recent and previously released shallow high grade aircore intersections, in addition to areas of the current resource that remain open along strike and down dip.

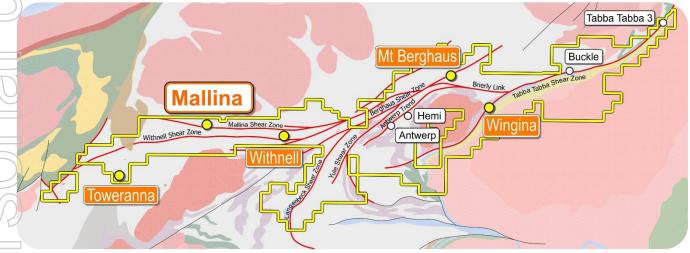
Recent detailed geological relogging has markedly improved understanding of the controls on mineralisation and alteration zonation which has assisted drill targeting. Limited deeper fences of RC drilling were also completed, targeting increased geological definition and resource extensions to 200m.

Mallina has a resource of 3.83Mt @ 1.3g/t for 160,700oz based on drilling to July 2018 (ASX release "2018 Total Gold Mineral Resource increase to 1.4M ounces" 3 October 2018). Several phases of drilling subsequent to the July 2018 resource estimation, including that reported here, have provided a substantial number of intersections outside the existing resource model (refer ASX releases: "Mallina drilling new targets and metallurgy update" 15 July 2019; "New High Grade Gold Zones at Mallina" 27 September 2019; and "Mallina continues to deliver", 11 November 2019). The updated resource estimate will be released shortly.

Table 1 provides a listing of all results (>2gm\*m) and Figures 2 to 6 provide a summary of the new drilling results.

#### Figure 1





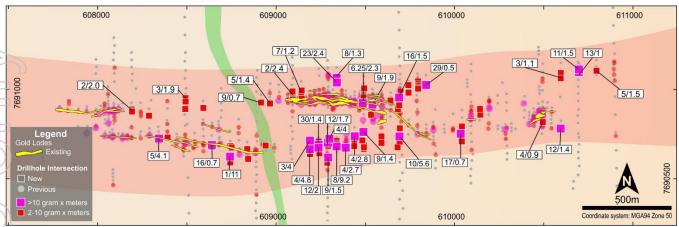
# Drilling results

The recent RC and diamond drilling (Figures 3, 4 & 5) has been successful in defining new lodes discovered by the 2019 aircore drilling, in addition to extending known lodes along strike and at depth. Previously reported encouraging aircore results intersected new parallel lodes not previously identified, comprising broad zones of shallow gold mineralisation from surface including **40m @ 3.9g/t Au, 28m @ 2.6g/t Au, 32m @ 1.6/t Au and 20m @ 1.7g/t Au** (*ASX release "New high grade gold zones at Mallina", 27 September 2019*).

Overall, the new aircore and RC drilling has defined three main structural corridors running east west through the Mallina deposit. The Central lodes currently form the most dominant lodes over approximately 2km strike length and the Southern lodes were previously defined over approximately 1km strike. The recent RC drilling has confirmed a material extension of approximately 500m strike extension of the Southern lodes. The Southern lodes are located approximately 250m south of the Central lodes (Figure 2). The new RC drilling has also confirmed a number of partially tested lodes approximately 100m north of the Central lodes. New lodes have also been defined around 300m NE of the eastern Mallina lodes.



# Figure 2: New intercepts showing the potential to extend resources at Mallina. Note strong mineralisation ~ 250m south of central lode (yellow lodes outline the previously announced resource model)



Mineralisation remains open along strike and at depth at many of the known lodes. Further upside remains to be drill tested in new areas to the west, where aircore drilling identified new zones of alteration and highly anomalous gold mineralisation extending over at least 3km of strike (Figure 6).

Significant new RC and diamond results (>15gm \*m) from recent drilling are shown on the front page.

The new RC and diamond drill results, coupled with other previous and significant intercepts from drill programs since the July 2018 resource estimate, all provide confidence further material resource increases can be expected.

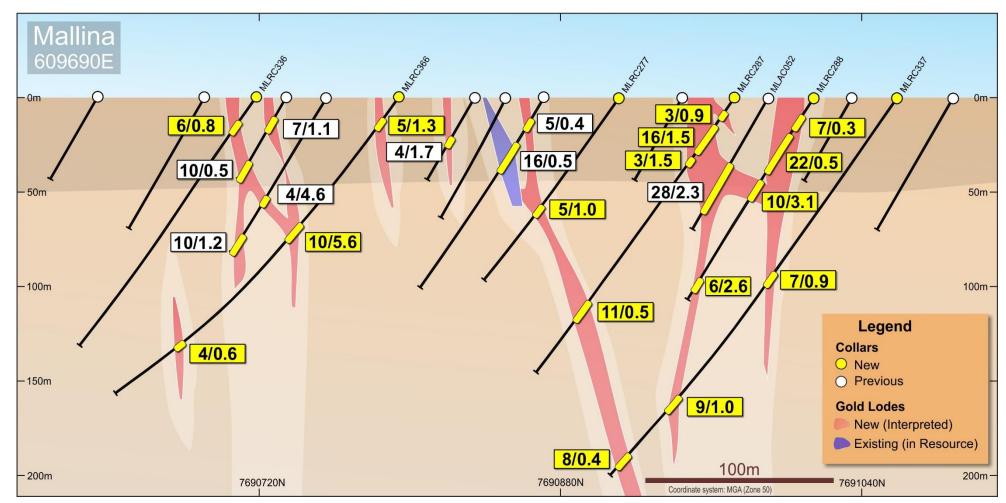
Aircore drilling completed in late 2019 targeted western extensions to mineralisation (west of 607,000E in Figure 6). This work defined significant extensions of mineralisation in the area, including 8m @ 1.1g/t Au, in widely spaced aircore drilling. A heritage survey has now been completed over this area, and additional follow up aircore drilling is planned, with future RC drilling as warranted.

# Follow up work

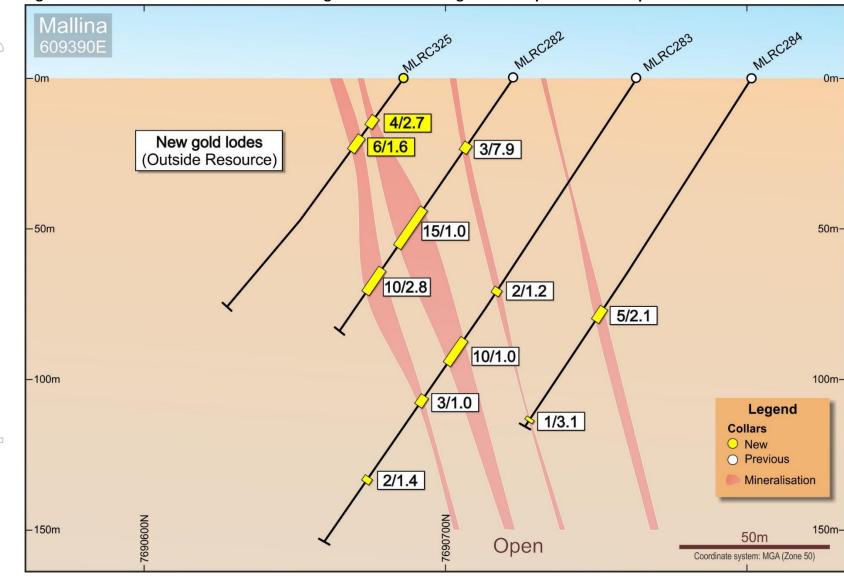
As noted, the recent Hemi discovery has overtaken in order of priority the next phase of work planned at Mallina. At a future date as yet to be determined, follow up RC and diamond drilling at Mallina will target extensions to resources whilst continue to drill towards the original Mallina mine to the west of existing resources.



**Figure 3: Mallina Section 609690mE showing** new RC results (yellow highlights) and previously reported drill intercepts. (Blue lodes are within the previous resource model, whilst Red lodes are new interpreted zones of mineralisation )







#### Figure 4 – Mallina Section 609390mE showing new RC holes and gold intercepts outside the previous resource



0m-

50m-

100m-

150m-

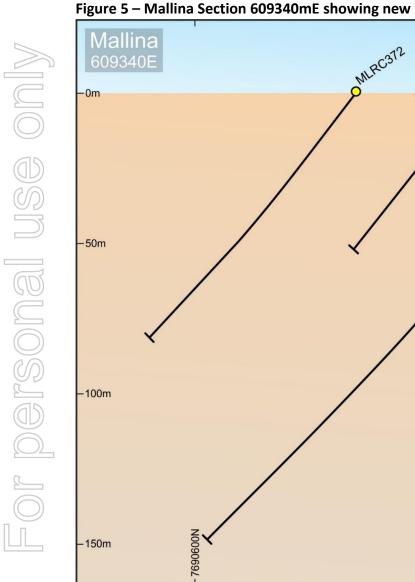
Legend

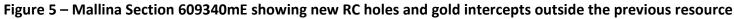
Mineralisation

Collars

New
Previous

50m Coordinate system: MGA (Zone 50)





OMLRC323

8/0.7

1/2.4

7690700N

8/9.2

3/1.4

OMRC324

New gold lodes

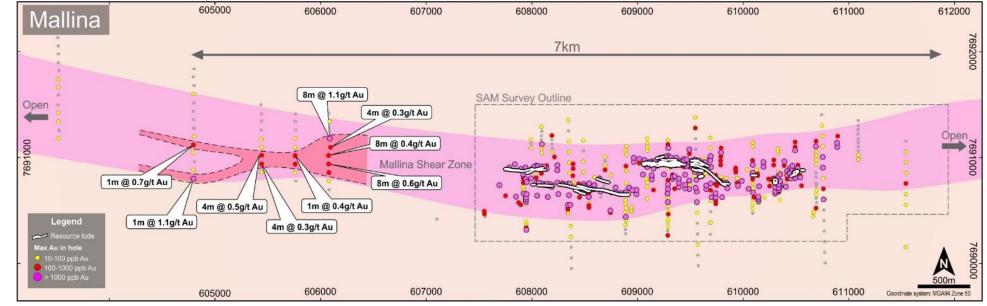
(Outside Resource)

2/5.0

Open

7/1.0





# Figure 6 - New aircore drilling results extend the prospective gold zones to the west of Mallina, highlight the exciting new exploration potential, now defined as a 7km long corridor and remains open



#### This ASX report is authorised for release by Simon Lill (Executive Chairman).

#### For further information please contact:

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#### **Competent Person Statements**

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Philip Tornatora, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Tornatora is an employee of De Grey Mining Limited. Mr. Tornatora has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr. Tornatora consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### \* Previously Released ASX Material References

The information in this report that relates to the Mallina Prospect and resources that has been previously released includes:

Exploration:

- New high grade gold zones at Mallina, 27 September 2019
- Mallina continues to deliver, 11 November 2019
- Expanded drilling program commences at Mallina, 26 November 2019
- New Gold Discoveries at Hemi and Antwerp, 17 Dec 2019

#### Resources:

- Pilbara Gold Project increases gold resources by >20% to over 1.2Moz, 28 September 2017;
- 2018 Total Gold Mineral Resource increases to 1.4Moz, 3 October 2018; and
- 2019 Total Gold Mineral Resource 21% increase to 1.7Moz, 16 July 2019.



# Table 1Significant Drill Intersections (>2gm)

	Hole Type	HoleID	Depth From (m)	Depth To (m)	Down hole Width	Au (g/t)	Collar East (GDA94	Collar North (GDA94)	Collar RL (GDA94	Dip (degrees )	Azimut h (GDA94	Hole Depth (m)
					(m)		)		)		)	
	DD	MLRC176D	60.50	62.10	1.60	2.6	608391	7690767	50	-56	178	13
>>	DD	incl	61.00	61.50	0.50	7.0	608391	7690767	50	-56	178	13
	DÐ	MLRC243D	73.42	78.08	4.66	1.7	609641	7690984	50	-55	181	16
	DD	incl	73.72	74.17	0.45	13.3	609641	7690984	50	-55	181	16
	DD	MLRC286D	170.12	173.07	2.95	2.0	609490	7691076	50	-56	178	32
	DD	MLRC286D	179.00	180.00	1.00	2.3	609490	7691076	50	-56	178	32
	DD	MLRC286D	183.02	189.00	5.98	0.7	609490	7691076	50	-56	178	32
)	DD	MLRC286D	195.90	203.25	7.35	0.4	609490	7691076	50	-56	178	32
	DD	MLRC286D	240.28	246.53	6.25	2.3	609490	7691076	50	-56	178	32
	RC	MLRC287	134	145	11	0.5	609688	7690972	50	-56	186	18
15	RC	MLRC293	64	66	2	1.3	608189	7690927	49	-56	175	12
JD	RC	MLRC293	76	77	1	3.1	608189	7690927	49	-56	175	12
	RC	MLRC293	90	92	2	1.9	608189	7690927	49	-56	175	12
$( \cap$	RC	MLRC294	66	71	5	0.5	608287	7690894	50	-55	180	7
リリ	RC	MLRC296	96	103	7	0.7	608338	7690792	50	-55	178	13
-	RC	MLRC296	109	114	5	4.1	608338	7690792	50	-55	178	13
	RC	MLRC296	129	131	2	2.3	608338	7690792	50	-55	178	13
	RC	MLRC297	19	22	3	0.8	608490	7690904	49	-55	177	e
	RC	MLRC299	17	33	16	0.7	608638	7690704	50	-56	179	e
	RC	incl	32	33	1	4.1	608638	7690704	50	-56	179	6
	RC	MLRC299	44	46	2	1.6	608638	7690704	50	-56	179	e
$ \cup$	RC	MLRC301	60	62	2	1.2	608742	7690633	50	-55	179	5
	RC	MLRC301	69	71	2	1.4	608742	7690633	50	-55	179	8
	RC	MLRC302	83	84	1	11.0	608742	7690673	50	-55	179	9
	RC	MLRC303	47	51	4	2.1	608742	7690712	50	-55	178	ç
	RC	MLRC305	26	29	3	1.6	608842	7690628	50	-55	177	6
	RC	MLRC306	65	71	6	0.6	608837	7690707	50	-55	178	12
$\sim$	RC	MLRC307	6	15	9	0.7	608914	7690934	49	-55	178	7
$  \cap$	RC	MLRC310	24	32	8	0.6	608940	7690703	50	-55	178	12
リビ	RC	incl	24	25	1	2.3	608940	7690703	50	-55	178	12
	RC	MLRC311	17	22	5	1.4	608964	7690934	49	-55	182	(
	RC	MLRC314	24	26	2	2.4	609091	7690994	49	-55	177	14
	RC	MLRC314	73	79	6	1.0	609091	7690994	49	-55	177	14
	RC	incl	73	74	1	4.5	609091	7690994	49	-55	177	14
	RC	MLRC315	31	38	- 7	0.4	609138	7691005	49	-55	176	- 14
	RG	MLRC315	96	101	5	1.9	609138	7691005	49	-55	176	14
	RC	incl	96	99	3	3.0	609138	7691005	49	-55	176	14
	RC	MLRC316	31	35	4	4.8	609188	7690686	50	-55	181	1
	RC	incl	32	34	2	8.5	609188	7690686	50	-55	181	1(
$\square$	RC	MLRC316	42	45	3	1.1	609188	7690686	50	-55	181	1(
)	RC	MLRC316	64	68	4	0.9	609188	7690686	50	-55	181	1
	RC	MLRC316	82	86	4	0.6	609188	7690686	50	-55	181	10
1	RC	MLRC317	19	22	3	4.0	609187	7690727	50	-55	101	17
		MLRC317	38	40	2	2.7	609187	7690727	50	-55	177	17
	RC	MLRC317	65	77	12	0.6	609187	7690727	50	-55	177	17
	RC	MLRC317	155	160	5	1.9	609187	7690727	50	-55	177	1
	RC	incl	155	159	2	3.9	609187	7690727	50	-55	177	1
	RC	MLRC318	42	49	7	0.7	609238	7690691	50	-55	177	10
	RC	MLRC318	42 78	83	5	1.0	609238	7690691	50	-55	177	10
	RC	incl	78	83 80	5	3.7	609238	7690691	50 50	-55	177	10



	Hole Type	HoleID	Depth From (m)	Depth To (m)	Down hole Width (m)	Au (g/t)	Collar East (GDA94 )	Collar North (GDA94)	Collar RL (GDA94 )	Dip (degrees )	Azimut h (GDA94 )	Hole Depth (m)
	RC	MLRC319	36	39	3	1.0	609236	7690732	50	-55	179	150
	RC	MLRC319	51	81	30	1.4	609236	7690732	50	-55	179	150
	RC	incl	74	80	6	3.0	609236	7690732	50	-55	179	150
$\rightarrow$	RC	MLRC319	88	100	12	2.0	609236	7690732	50	-55	179	150
	RC	incl	90	91	1	12.3	609236	7690732	50	-55	179	150
	RC	MLRC320	3	8	5	0.6	609289	7690694	50	-55	178	174
	RC	MLRC320	13	14	1	3.3	609289	7690694	50	-55	178	174
	RC	MLRC320	110	119	9	1.5	609289	7690694	50	-55	178	174
	RC	incl	112	114	2	4.1	609289	7690694	50	-55	178	174
	RC	MLRC320	125	129	4	1.1	609289	7690694	50	-55	178	174
	RC	MLRC321	34	46	12	1.7	609287	7690726	50	-56	178	126
	RC	incl	41	42	1	13.6	609287	7690726	50	-56	178	126
615	RC	MLRC323	4	12	8	0.7	609340	7690692	50	-55	178	66
	RC	MLRC323	22	25	3	1.4	609340	7690692	50	-55	178	66
	RC	MLRC324	31	33	2	5.0	609337	7690733	50	-55	178	198
(21M	RC	incl	31	32	1	8.1	609337	7690733	50	-55	178	198
O 2	RC	MLRC324	52	59	7	1.0	609337	7690733	50	-55	178	198
	RC	incl	57	58	1	6.2	609337	7690733	50	-55	178	198
	RC	MLRC324	71	72	1	2.4	609337	7690733	50	-55	178	198
	RC	MLRC324	79	87	8	9.2	609337	7690733	50	-55	178	198
	RC	incl	80	84	4	17.7	609337	7690733	50	-55	178	198
	RC	MLRC325	16	20	4	2.7	609388	7690686	50	-55	180	96
	RC	incl	17	18	1	9.0	609388	7690686	50	-55	180	96
60	RC	MLRC325	24	30	6	1.6	609388	7690686	50	-55	180	96
	RC	incl	28	29	1	7.6	609388	7690686	50	-55	180	96
	RC	MLRC326	12	15	3	0.9	609437	7690708	50	-55	182	66
	RC	MLRC326	34	39	5	1.2	609437	7690708	50	-55	182	66
	RC	MLRC327	46	51	5	1.6	609437	7690750	50	-55	180	138
	RC	MLRC327	84	85	1	5.0	609437	7690750	50	-55	180	138
ale	RC	MLRC327	109	112	3	0.8	609437	7690750	50	-55	180	138
(())	RC	MLRC328	85	89	4	2.8	609437	7690790	50	-55	178	120
U E	RC	MLRC329	11	18	7	0.7	609489	7690692	50	-55	180	72
	RC	MLRC329	40	41	1	4.8	609489	7690692	50	-55	180	72
615	RC	MLRC330	72	78	6	0.6	609489	7690733	50	-55	177	162
	RC	MLRC330	91	93	2	1.1	609489	7690733	50	-55	177	162
	RC	MLRC331	11	20	9	1.4	609487	7690773	50	-55	179	138
	RC	incl	18	19	1	5.6	609487	7690773	50	-55	179	138
	RC	MLRC331	25	36	11	0.4	609487	7690773	50	-55	179	138
	RC	MLRC332	178	180	2	3.9	609488	7690811	50	-58	176	251
5	RC	incl	178	179	1	7.4	609488	7690811	50	-58	176	251
	RC	MLRC333	125	136	11	0.4	609537	7691004	50	-55	176	252
	RC	MLRC333	146	155	9	1.9	609537	7691004	50	-55	176	252
	RC	incl	150	153	3	3.7	609537	7691004	50	-55	176	252
	RC	MLRC333	242	245	3	1.4	609537	7691004	50	-55	176	252
	RC	MLRC334	14	22	8	1.0	609588	7690713	51	-55	180	96
	RC	MLRC335	24	29	5	0.5	609588	7690754	51	-55	180	90
	RC	MLRC336	17	23	6	0.7	609689	7690719	51	-55	175	162
	RC	MLRC337	114	121	7	0.9	609690	7691059	50	-55	178	252
	RC	MLRC337	197	206	9	1.0	609690	7691059	50	-55	178	252
	RC	incl	199	200	1	3.1	609690	7691059	50	-55	178	252
	RC	MLRC337	238	246	8	0.4	609690	7691059	50	-55	178	252
	RC	MLRC338	34	40	6	1.1	609741	7691008	50	-54	178	132
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	Hole Type	HoleID	Depth From (m)	Depth To (m)	Down hole Width (m)	Au (g/t)	Collar East (GDA94 )	Collar North (GDA94)	Collar RL (GDA94 )	Dip (degrees )	Azimut h (GDA94 )	Hole Depth (m)
	RC	MLRC339	32	55	23	0.5	609738	7691049	50	-55	178	138
	RC	MLRC339	114	123	9	0.6	609738	7691049	50	-55	178	138
	RC	MLRC341	44	45	1	2.2	609792	7691073	50	-55	177	126
	RC	MLRC341	70	77	7	0.6	609792	7691073	50	-55	177	126
	RC	MLRC341	87	91	4	0.6	609792	7691073	50	-55	177	126
	RC	MLRC341	103	111	8	0.5	609792	7691073	50	-55	177	126
$\square$	RC	MLRC341	115	123	8	1.0	609792	7691073	50	-55	177	126
	RC	MLRC343	90	119	29	0.5	609837	7691083	50	-58	179	120
	RC	incl	105	106	1	2.8	609837	7691083	50	-58	179	120
	RC	MLRC344	33	36	3	1.3	610040	7690804	50	-55	180	84
	RC	MLRC345	78	80	2	2.1	610039	7690843	50	-55	177	168
	RC	MLRC345	127	144	17	0.7	610039	7690843	50	-55	177	168
615	RC	incl	134	135	1	2.7	610039	7690843	50	-55	177	168
	RC	MLRC346	10	16	6	0.6	610142	7690867	50	-56	179	48
<u> </u>	RC	MLRC347	28	33	5	0.9	610139	7690909	50	-57	178	90
RIN	RC	MLRC353	10	14	4	0.9	610491	7690826	50	-54	180	109
02	RC	MLRC355	8	20	12	1.4	610592	7690791	51	-54	181	60
	RC	incl	12	14	2	4.3	610592	7690791	51	-54	181	60
	RC	MLRC357	2	5	3	1.1	610592	7691071	49	-54	179	78
	RC	MLRC357	10	15	5	0.4	610592	7691071	49	-54	179	78
	RC	MLRC358	23	29	6	0.7	610592	7691110	49	-53	178	84
	RC	incl	23	24	1	3.0	610592	7691110	49	-53	178	84
	RC	MLRC358	67	70	3	0.9	610592	7691110	49	-53	178	84
UU	RC	MLRC360	14	27	13	1.0	610692	7691111	49	-54	181	48
	RC	incl	15	17	2	3.5	610692	7691111	49	-54	181	48
	RC	MLRC361	48	59	11	1.5	610692	7691148	49	-55	177	108
	RC	incl	50	52	2	4.7	610692	7691148	49	-55	177	108
$\square$	RC	MLRC361	65	76	11	0.9	610692	7691148	49	-55	177	108
	RC	incl	72	73	1	3.0	610692	7691148	49	-55	177	108
aG	RC	MLRC363	37	42	5	1.5	610790	7691129	49	-55	178	78
(U/)	RC	MLRC365	116	120	4	4.0	609291	7690794	50	-57	174	252
A L	RC	MLRC365	161	165	4	0.7	609291	7690794	50	-57	174	252
	RC	MLRC366	15	20	5	1.3	609690	7690794	50	-55	177	220
615	RC	MLRC366	86	96	10	5.6	609690	7690794	50	-55	177	220
(UD)	RC	incl	87	90	3	17.5	609690	7690794	50	-55	177	220
	RC	MLRC366	175	179	4	0.6	609690	7690794	50	-55	177	220
$(\bigcirc)$	RC	MLRC369	67	69	2	1.1	608590	7690938	49	-55	177	120
	RC	MLRC370	139	142	3	1.1	608741	7690769	49	-50	171	161
	RC	MLRC371	87	90	3	1.2	609289	7690648	50	-56	181	108
(	RC	MLRC371	94	96	2	1.2	609289	7690648	50	-56	181	108
	RC	MLRC373	72	76	4	0.6	610039	7690766	51	-56	182	120
$\square$	RC	MLRC373	93	96	3	2.0	610039	7690766	51	-56	182	120
	RC	MLRC374	61	63	2	1.4	609087	7691027	49	-55	173	180
	RC	MLRC374	131	134	3	1.3	609087	7691027	49	-55	173	180
	RC	MLRC375	88	95	7	1.2	609139	7691046	49	-55	178	180
	RC	incl	93	94	1	5.9	609139	7691046	49	-55	178	180
	RC	MLRC376	36	39	3	1.9	608490	7690975	49	-55	178	168
	RC	MLRC376	68	71	3	0.8	608490	7690975	49	-55	178	168
	RC	MLRC377	12	20	8	1.3	609337	7691076	49	-54	175	90
	RC	MLRC377	25	27	2	1.2	609337	7691076	49	-54	175	90
	RC	MLRC377	48	71	23	2.4	609337	7691076	49	-54	175	90
	RC	incl	60	69	9	4.6	609337	7691076	49	-54	175	90



# JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>All drilling and sampling was undertaken in an industry standard manner</li> <li>Samples were collected with a diamond drill rig drilling NQ2 diameter core.</li> <li>After logging and photographing, NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis.</li> <li>Sample weights ranged from 2-4kg</li> <li>RC samples were collected with a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m basis</li> <li>Industry prepared independent standards are inserted approximately 1 in 20 samples.</li> <li>The independent laboratory then take the samples which are dried, split, crushed and pulverized prior to analysis as described below.</li> <li>Sample sizes are considered appropriate for the material sampled.</li> <li>The samples are considered representative and appropriate for this type of drilling and for use in a resource estimate.</li> </ul>
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.).	<ul> <li>NQ2 diamond drill holes comprised NQ2 core of a diameter of 51mm.</li> <li>Reverse Circulation(RC) precollars were drilled with a 5 1/2-inch bit and face sampling hammer.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core recovery is measured for each drilling run by the driller and then checked by the Company geological team during the mark up and logging process.</li> <li>RC samples are visually assessed for recovery</li> <li>Samples are considered representative with generally good recovery.</li> <li>No sample bias is observed</li> </ul>
	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The entire hole has been geologically logged and core was photographed by Company geologists, with systematic sampling undertaken based on rock type and alteration observed</li> <li>The sample results are appropriate for a resource estimation</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples were collected with a diamond drill rig drilling NQ2 diameter core. After logging and photographing, NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis.</li> <li>RC samples were collected with a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m and 4m basis</li> <li>Industry prepared independent standards are inserted approximately 1 in 20 samples.</li> <li>Each sample was dried, split, crushed and pulverised.</li> <li>Samples are considered representative and appropriate for this type of drilling and for use in a resource estimate.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The samples were submitted to a commercial independent laboratory in Perth, Australia.</li> <li>Au was analysed by a 50gm charge Fire assay fusion technique with an AAS finish.</li> <li>The technique is considered quantitative in nature.</li> <li>Certified reference standards were inserted by the Company and the laboratory also carries out internal standards in individual batches</li> <li>The standards and duplicates were considered satisfactory</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Sample results have been merged by the company's database consultants</li> <li>Results have been uploaded into the company database, checked and verified</li> <li>No adjustments have been made to the assay data.</li> <li>Results are reported on a length weighted basis</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drill hole collar locations are located by DGPS to an accuracy of +/- 10cm.</li> <li>Locations are given in GDA94 zone 50 projection</li> <li>Diagrams and location table are provided in the report</li> <li>Topographic control is by detailed mine survey pickups and Differential GPS data.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drilling is on a nominal 50m to 100m x 40m grid spacing</li> <li>All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation.</li> <li>Data spacing and distribution of RC drilling is sufficient to provide support for the results to be used in a resource estimate.</li> <li>Sample compositing has not been applied except in reporting of drill intercepts, as described in this Table</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation</li> </ul>	<ul> <li>The drilling is approximately perpendicular to the strike of mineralisation and therefore the sampling is considered representative of the mineralised zone.</li> <li>In some cases, drilling is not at right angles to the dip of mineralised structures and as such true widths are less than</li> </ul>



Criteria	JORC Code explanation	Commentary
	and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	downhole widths. This will be allowed for in resource estimates when geological interpretations are completed.
Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits have been completed. Review of QAQC data has been carried out by database consultants and company geologists.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>Mallina is on E47/3504 and is located approximately 80km south of Port Hedland. The tenements are held by Indee Gold Pty Ltd, which is a 100% subsidiary of De Grey Mining.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Mallina prospect includes small scale historic mining and has had previous drilling undertaken over a period of many years. Most previous work was completed by Resolute and Indee Gold, and more recently by NNMA and De Grey Mining.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The mineralisation targeted is hydrothermally emplaced and sediment/quartz hosted gold mineralisation within a shear zone and is similar in style to many other Western Australian gold deposits.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	Drill hole location and directional information provide in the report.
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.	<ul> <li>Results are reported to a minimum cutoff grade of 0.3g/t gold for Mallina with an internal dilution of 3m maximum for RC and 4m for aircore. Intervals over 0.5g/t Au and 2gm metal content are reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Intercepts are length weighted averaged.</li> <li>No maximum cuts have been made.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The drill holes are interpreted to be approximately perpendicular to the strike of mineralisation.</li> <li>Drilling is not always perpendicular to the dip of mineralisation and true widths are less than downhole widths. Estimates of true widths will only be possible when all results are received, and final geological interpretations have been completed.</li> </ul>
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.	<ul> <li>Plans and sections are provided in the report.</li> </ul>
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.	<ul> <li>All significant results are provided in this report.</li> <li>The report is considered balanced and provided in context.</li> </ul>
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.	<ul> <li>The Mallina Gold deposit has an existing 2012 JORC gold resource of 160,700oz recently reported by De Grey, with an upgrade imminent.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Programs of follow up RC and diamond drilling aimed at extending resources at depth and laterally will be undertaken in future.</li> <li>Follow up aircore drilling will be undertaken to test for strike extensions to mineralisation.</li> </ul>