

"Developing the +1.2Moz Pilbara Gold Project"

### Quarterly Activities Report for the Period ending 30 June 2018

#### ASX Announcement

31 July 2018

ASX Code DEG FRA Code WKN 633879

ABN 65 094 206 292

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### **EXPLORATION**

De Grey continues to advance the Pilbara Gold Project, with significant increase in exploration activities undertaken during the period:

- Completed substantial 21,250m RC drilling program across Mt Berghaus, Mallina, Toweranna and Amanda gold deposits. Results provide added confidence for improved near term open pit mining extensions and longer term higher grade underground lode potential.
- Encouraging new higher-grade gold lodes were discovered at the Mt Berghaus - Northern Lode and at Toweranna - Southern Zone:

#### Mt Berghaus - new high grade gold lodes

- 15m @ 5.3g/t from 34m including 3m @ 19.2g/t
- 12m @ 7.3g/t from 36m including 2m @ 35.5g/t
- 8m @ 12.1g/t from 4m including 2m @ 31.2g/t and 2m @ 16.9g/t

19m @ 5.2g/t from 4m including 9m @ 9.8g/t

#### Toweranna - new high grade gold lodes

- 5m @ 15.17g/t from 33m including 2m @ 37.14g/t
- 22m @ 4.82g/t from 44m including 3m @ 23.28g/t
- 7m @ 17.29g/t from 101m including 3m @ 37.82g/t
- 1,762m of diamond drilling program completed at Toweranna (Au), King Col (Li-Cs) and Withnell underground target. All results pending.
- Detailed metallurgical activities, environmental and surface water studies continued as part of the ongoing Preliminary Feasibility Study ("PFS").
- New data acquisition and integration is establishing a strong pipeline of priority gold and base metal targets for drill testing.

Planned exploration activities for the September Quarter aims to advance resource definition, feasibility studies and testing of the priority exploration targets including:

- Conglomerate Gold Targets diamond drilling and bulk testwork.
- Resource diamond drilling at Mallina, Mt Berghaus. Toweranna and Wingina and aircore/RAB program commencing to test priority gold anomalies throughout the project.
- Heritage surveys covering numerous gold targets

### CORPORATE

- Cash at the end of the quarter of \$1.15M with a subsequent \$5M capital raising completed on 11 July 2018 to DGO Gold Limited;
- Top Drill Pty Ltd agreed to subscribe for up to \$1.0M of drilling for equity; and
- The overall net funding positions the company well to advance exploration and feasibility activities at an increased pace.

### Pilbara Gold Project – Unlocking Shareholder Value



# Pilbara Gold Project, Port Hedland in Western Australia

De Grey Mining Limited (ASX: DEG, "De Grey", "Company") is pleased to report on activities completed during the June Quarter 2018.

The Company is focussed on advancing exploration and significantly increasing the existing +1.2Moz gold resources across the Pilbara Gold Project (Figure 1) with the goal of developing a new stand-alone gold production centre based on initial near term open pit mining of the well-established shallow existing resources and longer term discovery of new deposits and higher grade underground mining.

The Company is actively ramping up exploration throughout the tenement package in a drive to upgrade and expand known resources, as well as discover new deposits. There are over 40 identified yet untested gold anomalies along the highly prospective regional scale shear zones and newly recognised conglomerate gold targets.

Overall, the Pilbara Gold Project has excellent potential to define significant additional resource ounces along the 200 km plus strike length of mineralised shears zones throughout the large 1,480 km<sup>2</sup> landholding. To date, approximately 10% of the shear zones have received detailed shallow RC and diamond drilling to a nominal depth of 100-150m defining +1.2Moz (JORC 2012\*) of gold resources. The extensive strike length of untested and gold anomalous shear zones together with the discovery of gold nuggets associated with previously unrecognised conglomerate targets is considered one by De Grey as one of the most under explored and prospective regions of Australia.

Pilbara Gold Project – Existing Gold Resources

Total Resource	23.88Mt @ 1.6g/t Au (1,210,000oz)
Measured & Ind. (49%)	11.61Mt @ 1.6g/t Au (590,500oz)
Inferred (51%)	12.26Mt @ 1.6g/t Au (619,600oz)
Oxide (38%)	9.51Mt @ 1.5g/t Au (459,600oz)
Fresh (62%)	14.37Mt @ 1.6g/t Au (750,400oz)

(\* ASX release "Pilbara Gold Project increases gold resources by >20% to over 1.2Moz", 28 September 2017)

### June Quarter Activities

De Grey continues to advance the Pilbara Gold Project, with significant increase in exploration activities undertaken during the period.

- Completed substantial 21,250m RC drilling program across Mt Berghaus, Mallina, Toweranna and Amanda gold deposits. Results provide added confidence for improved near term open pit mining extensions and longer term higher grade underground lode potential.
- Encouraging new higher-grade gold lodes and extensions were discovered at the Mt Berghaus -Northern Lode and at Toweranna - Southern Zone.
- 1,762m of diamond drilling program completed at Toweranna (Au), King Col (Li-Cs) and Withnell underground target. All results pending.
- Detailed metallurgical activities, environmental and surface water studies continued as part of the ongoing PFS.
- New data acquisition and integration is establishing a strong pipeline of priority gold and base metal targets for drill testing.

Overall, work programs have focused on RC and diamond drilling at various gold deposits to infill and improve existing resources, particularly within the 2017 scoping study pit optimisations, and to define additional extensions to mineralisation. The infill RC drilling was designed to convert inferred resources within these pit shells to the level of Indicated (JORC 2012) that will allow for later conversion to reserves.





### Figure 1 Pilbara Gold Project – Drilling areas highlighted



# DRILLING PROGRAMS

During the quarter, the RC drilling program was a major focus of the exploration efforts. The results from this program yielded significant gold mineralisation as highlighted in the following table.

Prospect	RC holes	Holes with results > 2gm*m	Holes with results > 10gm*m	Holes with results > 20gm*m	Results pending
Mt Berghaus Phase 1	58	38	27	16	
Mt Berghaus Phase 2					Pending
Mallina	82	49	31	13	
Toweranna	41	37	23	10	
Amanda					Pending

## Mt Berghaus – current resources 3.52Mt @ 1.2g/t Au for 140,800oz

In March 2018, the Company commenced an infill and extensional RC drilling program, targeting improved and additional resources at Mt Berghaus. The infill drilling focused on the existing resource areas within and adjacent to the 2017 open pit mining pit optimisations and aimed to improve resource category definition and future reserve definition. The drilling also targeted new extensions to mineralisation along strike and at depth.

At Mt Berghaus, a total of 8,459m of RC drilling was completed during the period. The Company released results of the Phase 1 program (3,168m) on 28 May 2018 (*ASX release "Shallow high-grade gold at Mt Berghaus", 28 May 2018*). The remaining Phase 2 drilling results remain pending and are anticipated by end of August 2018.

Results of the Phase 1 program are considered encouraging, with numerous broad zones of gold mineralisation confirming continuity of mineralisation in the Main Zone (Figure 2 and 3) and importantly high-grade intersections occurring both within the resource infill areas but also defining new extensions of mineralisation outside of the existing resource block model at the North Zone (Figure 2 and 4). Historic aircore/RAB drilling also suggests possible extensions of this mineralisation may extend at least 400m to the east.



### Figure 2 Mt Berghaus – Drilling Plan (local grid)

\*Note blue Phase 2 RC drill holes now completed, results pending



Metallurgical diamond core sampling on a previously drilled diamond hole, achieved a peak value of 242g/t Au over a 1m interval. A repeat assay from this same sample interval returned a value of 371g/t Au. Visible gold had been noted in this sample during logging. Detailed metallurgical testwork remains on-going from the various deposits as part of the PFS. Early indications are that the metallurgy of Mount Berghaus will be favorable.

The initial Phase 1 RC drilling results were considered positive such that the Company chose to immediately return the RC rig to Mt Berghaus and has since completed the Phase 2 infill and extension drilling.

Resource modelling will be undertaken on receipt of all Phase 1 and Phase 2 RC drilling results. A Pilbara Gold Project resource update is also planned to be completed once the results from Amanda RC drilling and Toweranna diamond drilling are received. The resource update is anticipated during the September 2018 quarter.





\*Note blue Phase 2 RC drill holes now completed, results pending

### Figure 4 Mt Berghaus – North Lode Drilling Plan (local grid)



\*Note blue Phase 2 RC drill holes now completed, results pending



Once the new resource block models are finalised, updates to the open pit optimisations will be undertaken as part of the PFS. Importantly a number of the new drilling intersection already received provide potential to expand the open pit mining potential. This potential is demonstrated in various cross-sections where drilling adjacent to or below the 2017 open pit mining shells clearly extends mineralisation beyond the pit shells (6 and 7).

Additional diamond drilling is also planned for the September 2018 quarter, targeting geological controls on mineralisation and extensions to mineralisation.

# Figure 5 Mt Berghaus – Main Zone Cross section 50460E showing significant new mineralisation below the 2017 Scoping Study pit shell.



Figure 6 Mt Berghaus – North Lode Cross section





# Table 1Main Zone - Significant drill intersections (>20gm\*m).

HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	Gram * metres	
BGRC203	44	47	3	1.33	3.99	
incl	46	47	1	3 29	3 29	
BGRC204	12	15	3	0.92	2.76	
BGRC206	36	48	12	7.34	88.08	
incl	36	38	2	35.45	70.9	
incl	45	47	2	6.56	13.12	
BGRC208	14	16	2	4 49	8.98	
incl	14	15	1	8 56	8 56	
BGRC213	33	43	10	3 74	37.4	
incl	39	41	2	15.62	31.24	
BGRC214	1	17	16	1.14	18.24	
incl	9	10	1	4.41	4.41	
BGRC215	53	70	17	0.69	11.73	
BGRC219	1	18	17	2.09	35.53	
incl	7	9	2	7.15	14.3	
BGRC220	54	62	- 8	6.55	52.4	
incl	54	57	3	12 52	37.56	
incl	60	61	1	12.52	12.85	
BGRC221	20	33	13	1 87	24 31	
incl	20	24	4	3.62	14 48	
incl	20	29	2	3.66	7 32	
BGRC222	18	23	6	2.50	15	
BGRC222	28	24	5	1.8/	9.2	
incl	20	33	1	6.05	6.05	
BGRC224		12	9	12 11	96.88	
incl	5	7	2	31 15	62.3	
incl	10	12	2	16.88	33.76	
BGRC226	10	16	2	0.64	2.56	
BGRC228	12	22	10	5.22	99.19	
incl	4	23	9	9.77	97.03	
BGRC229	25	//8	23	2 27	52 21	
incl	46	48	25	10 50	21	
BGBC230	40	18	18	1 29	23 22	
BGRC230	20	32	10	3 73	44.76	
incl	20	28	4	8 20	37.8	
BGRC231	36	/8	12	3.49	/1 88	
incl	36	40	12	8.67	34.68	
BGRC231	52	56	4	1.02	4.08	
BGRC232	JZ	12	8	0.53	4.00	
BGRC232	4	8	4	0.96	3.84	
BGRC237	4	24	20	2 26	45.2	
incl	4	8	4	4 57	18 28	
incl	20	24	4	3.68	14 72	
BGRC238	20	24	4	0.77	3.08	
BGRC238	36	28	8	0.75	6	
BGRC238	/8	52	4	0.98	3 92	
BGRC230	40	24	20	0.90	19	
BCRC220		27	1	0.53	2 12	
BGRC240	20	22		0.55	<u> </u>	
BGRC240	20	11	12	1 32	15.84	
BGRC240	52	68	16	0.90	14.4	
BGRC240	0	2/	24	1 72	41.52	
incl	12	16	24	6.12	24 52	
BCBC242	12	52	12	2.46	29.52	
	40	0	2	121 76	29.52	
incl	, x	<u> </u>	1	242	243.328	



HoleID	Depth From	Depth To	Downhole	Au (g/t)	Gram *
	(m)	(m)	Width (m)		metres
BGRC190	25	31	6	0.85	5.1
BGRC191	20	22	2	1.10	2.2
BGRC191	29	36	7	0.74	5.18
BGRC191	45	51	6	1.36	8.16
BGRC191	56	60	4	2.89	11.56
incl	56	58	2	5.32	10.64
BGRC193	6	38	32	1.70	54.4
incl	14	15	1	3.46	3.46
incl	22	23	1	13.25	13.25
incl	32	35	3	8.18	24.54
BGRC194	3	16	13	0.94	12.22
incl	3	4	1	4.07	4.07
BGRC194	25	28	3	0.98	2.94
BGRC195	36	39	3	2.02	6.06
incl	36	37	1	4.94	4.94
BGRC196	35	43	8	5.18	41.44
incl	36	39	3	13.18	39.54
BGRC196	52	74	22	1.29	28.38
incl	63	66	3	4.00	12
BGRC197	14	18	4	0.98	3.92
BGRC197	23	30	7	0.96	6.72
BGRC197	34	49	15	5.26	78.9
incl	37	40	3	19.17	57.51
incl	42	44	2	6.62	13.24
BGRC200	4	9	5	9.77	48.85
incl	5	6	1	46.90	46.9
BGRC200	13	17	4	5.14	20.56
incl	14	16	2	9.34	18.68
BGRC242	40	52	12	2.46	29.52
BGRC243	64	68	4	1.28	5.12
BGRC244	0	12	12	1.21	14.52
BGRC245	0	8	8	2.36	18.88
BGRC245	12	16	4	1.39	5.56
BGRC245	56	64	8	2.04	16.32
incl	60	64	4	3.20	12.8
BGRC246	32	36	4	1.05	4.2
BGRC246	60	64	4	0.61	2.44

### Table 2 North Lode - Significant drill intersections (>20gm\*m).

### Mallina - current resources at 3.74Mt @ 1.2g/t Au for 147,100 oz.

At Mallina, the 2018 RC drilling program (BGRC172-253) has focused on the 3km strike length of known mineralisation including:

- infilling existing resource areas to improve the geological understanding and continuity of mineralisation to allow for improved modelling and upgrade resource categories, and
- additional extensions beyond the current resources and 2017 Scoping Study Open Pit Shells.

A total of 82 holes for 4,827m of RC drilling (Figure 7) have been completed at the Central Lodes, Alfred-Argyle and Lode 8 zones, with additional diamond drill holes planned based on the positive results of this Phase 1 program. Table 3-5 provide overall significant intercept information and location data for all holes.



### Figure 7 – Mallina – Overall Drilling Plan



Drilling on the Central Lodes (Figure 8) has intersected significant zones of new shallow and high-grade gold mineralisation immediately adjacent and external to the 2017 scoping study pit shells with new extensions also intersected at the western end of the zone, providing additional upside. The mineralisation remains open both at depth and along strike.



#### Figure 8 Mallina – Central Lodes Drilling Plan, showing recent intersections >10gm

Section 609315E (Figure 9) clearly demonstrates the impact the infill and extensional drilling can make. This new and significant zone of mineralisation in MLRC214 falls outside of the 2017 scoping study pit optimisation shells and will likely increase the dimensions of the new pit optimisations. Importantly, the new strong zone includes 26m @ 5.35g/t and the hole finished in strong mineralisation.

A series of diamond holes have been planned to test this mineralisation further and understand this significant zone of mineralisation. This drilling is planned to be completed in the September 2018 quarter, after the conglomerate gold drilling program, subject to the pastoral station mustering access.

The updated resource estimate will use the recently completed RC drilling results prior to pit optimisations being undertaken.





### Figure 9 Mallina– Central Lodes Cross section 609315E (individual 1m assays shown)

#### Table 3 Central Lodes, significant intercepts >10gm\*m

Ducanat	UslaiD	Depth	Depth To	Downhole	A ( ~ /+)
Prospect	HoleiD	From (m)	(m)	Width (m)	Au (g/t)
MALLINA_CE	MLRC200	8	14	6	1.72
MALLINA_CE	MLRC201	4	14	10	1.19
MALLINA_CE	MLRC204	20	46	26	1.09
MALLINA_CE	Incl	42	44	2	7.40
MALLINA_CE	MLRC208	20	35	15	0.68
MALLINA_CE	Incl	20	21	1	2.58
MALLINA_CE	MLRC209	16	30	14	0.91
MALLINA_CE	Incl	18	20	2	3.69
MALLINA_CE	MLRC212	5	12	7	1.82
MALLINA_CE	Incl	7	10	3	2.62
MALLINA_CE	MLRC213	7	18	11	0.91
MALLINA_CE	Incl	13	14	1	3.60
MALLINA_CE	MLRC214	14	60	46	3.26
MALLINA_CE	Incl	34	60	26	5.35
MALLINA_CE	MLRC215	32	48	16	3.00
MALLINA_CE	Incl	42	48	6	4.66
MALLINA_CE	MLRC217	17	45	28	0.58
MALLINA_CE	Incl	22	23	1	3.01
MALLINA_CE	MLRC218	9	21	12	1.33
MALLINA_CE	Incl	12	15	3	3.18
MALLINA_CE	Incl	16	19	3	5.81
MALLINA_CE	MLRC221	29	45	16	1.28
MALLINA_CE	Incl	31	33	2	6.73
MALLINA_CE	MLRC221	77	96	19	1.65
MALLINA_CE	Incl	83	92	9	2.72
MALLINA_CE	MLRC226	44	48	4	5.22
MALLINA_CE	MLRC227	56	62	6	2.34
MALLINA_CE	MLRC244	46	57	11	1.52
MALLINA CE	Incl	54	56	2	4.86



At the Alfred-Argyle area, further positive infill drilling results have also been received mostly within the resource block model. Section 608065E (Figure 10) shows intercepts between older drilling which was wide spaced due to previous access limitations from old workings. This drilling clearly demonstrates the need for detailed overlapping drilling to sufficiently test the generally vertical nature of the lodes.

MLRC238, to the south of the main line of old workings, intersected 13m @ 1.87g/t Au in a new lode that is open in all directions and outside current pit shells.



### Figure 10 Mallina– Alfred-Argyle Cross section 608065E

Table 4Alfred-Argyle, significant intercepts >10gm\*m

Prospect	HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)
MALLINA_AA	MLRC173	32	36	4	3.07
MALLINA_AA	MLRC196	0	10	10	1.50
MALLINA_AA	Incl	6	9	3	3.54
MALLINA_AA	MLRC198	24	36	12	1.37
MALLINA_AA	Incl	29	34	5	2.67
MALLINA_AA	MLRC233	27	38	11	2.09
MALLINA_AA	Incl	28	31	3	5.56
MALLINA_AA	MLRC234	51	64	13	3.80
MALLINA_AA	Incl	51	57	6	7.35
MALLINA_AA	MLRC234	68	71	3	3.73
MALLINA_AA	MLRC235	75	88	13	1.09
MALLINA_AA	Incl	75	78	3	2.49
MALLINA_AA	MLRC236	64	67	3	3.89
MALLINA_AA	Incl	65	66	1	10.45
MALLINA_AA	MLRC237	36	41	5	2.80
MALLINA_AA	MLRC238	5	18	13	1.87
MALLINA_AA	Incl	10	17	7	2.64
MALLINA_AA	MLRC241	22	34	12	0.84



At Lode 8, the drilling has focused on infilling previous drilling to better define internal high-grade mineralisation. This new drilling supports higher grade mineralisation extending between sections in the 2017 resource model. This is a prime example of where detailed drilling is likely to enhance the new resource model with stronger mineralisation and increase the influence of the high-grade zones which will also drive revised 2018 open pit optimisations.



### Figure 6 Mallina– Lode 8 Cross section 610440E

#### Table 5 Lode 8, significant intercepts >10gm\*m

Prospect	HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)
MALLINA_L8	MLRC189	45	50	5	2.48
MALLINA_L8	MLRC230	35	54	19	2.44
MALLINA_L8	MLRC231	31	51	20	2.18
MALLINA_L8	MLRC232	23	36	13	1.99
MALLINA_L8	Incl	27	29	2	5.78
MALLINA_L8	Incl	33	35	2	5.66
MALLINA_L8	MLRC252	28	59	31	1.54
MALLINA_L8	Incl	33	39	6	2.70
MALLINA_L8	Incl	49	51	2	6.72

# Toweranna - current resources at 0.43Mt @ 2.9g/t Au for 40,700 oz.

The 2018 Phase 1 RC drilling program totalled 41 RC holes for 3,192m as well as a further 9 diamond tails to extend selected holes for an additional total of 555.8m of diamond core, including 3 diamond tails on earlier 2017 RC drill holes.

The RC and diamond drilling has targeted infill and extensions of the Western Zone (existing resource area) and new resource extensions along the Southern Zone. Selected reconnaissance drilling also targeted new mineralisation along the Eastern and Northern Zones

Drilling has been successful on all fronts with a large number of intersections greater than 20gram\*metres. The results confirm and extend previous gold mineralisation along the Western Zone and define new mineralisation along the Southern Zone. The reconnaissance drilling along the Eastern and Northern Zones has also intersected high grade gold mineralisation which will require further drilling to better define extent and continuity.





The latest drilling results, together with results from the November 2017 RC program, are expected to significantly upgrade and expand gold resources on the Western Zone and lead to the definition of an initial resource along the Southern Zone, where the most detailed drilling was completed. Resource modelling for the Western and Southern zones will be undertaken upon receipt of all diamond drilling results, which are anticipated during July. Pit optimisations will then be undertaken as part of the economic assessment under the PFS.

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# Table 2 Toweranna – Significant Drill Intersections (>20gm\*m)

Prospect	HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)
TOWERANNA E	TRC107	26	29	3	7.45
	TRC107	19	21	2	2.83
	TRC107	5	15	10	1.29
	Incl	9	10	1	7.11
	TRC108	80	83	3	1.36
	TRC108	63	64	1	3.07
	TRC108	31	33	2	2.97
	TRC108	0	8	8	1.01
	TRC112	112	126	14	1.23
	Incl	116	117	1	6.17
TOWERANNA N	TRC110	73	79	6	1.01
	TRC110	13	19	6	3.72
	Incl	18	19	1	15.70
	TRC110	6	8	2	3.42
	TRC115	140	141	1	3.44
	TRC115	94	98	4	11.66
	TRC115	70	71	1	6.04
	TRC115	51	52	1	16.55
	TRC115	24	25	1	3.52
	TRC116	101	108	7	17.29
	Incl	101	104	3	37.82
	TRC116	35	38	3	13.10
	Incl	35	36	1	38.20
TOWERANNA S	TRC087D	33	38	5	15.17
	Incl	33	35	2	37.14
	TRC090	20	21	1	4.46
	TRC090	13	15	2	3.39
	TRC091	70	80	10	1.58
	Incl	77	78	1	4.66
	TRC091	48	57	9	1.84
	Incl	54	55	1	6.04
	TRC092	25	26	1	5.23
	TRC092	13	15	2	5.80
	Incl	13	14	1	10.30
	TRC092	7	9	2	1.58
	TRC093	4	6	2	1.50
	TRC094	44	66	22	4.82
	Incl	54	57	3	23.28
	TRC094	7	10	3	1.66
	TRC095	33	35	2	2.05
	TRC095	22	28	6	1.39
		24	25	1	5.99
	IRC095	4	8	4	1.22
	1RC098D	36	40	4	2.02
		36	37		4.20
	IRC099	78	89	11	2.24
		79	82	3	5.53
	IRC099	61	66	5	13.00
		63	65	2	30.85
		33	37	4	1.02
	TRC099	16	22	6	2.24



Prospect	HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)	
	Incl	16	18	2	5.71	
	TRC099	2	5	3	1.14	
	TRC100	47	52	5	1.77	
	Incl	51	52	1	5.04	
	TRC100	37	40	3	1.25	
	TRC100	27	30	3	3.28	
	TRC100	21	22	1	3.98	
	TRC100	8	9	1	2.12	
	TRC101	69	74	5	1.36	
	TRC101	33	36	3	3.55	
	Incl	33	34	1	7.79	
	TRC101	24	27	3	2.94	
	TRC102	38	47	9	1.49	
	Incl	39	41	2	4.13	
	TRC102	1	3	2	3.70	
		43	44	1	5.25	
		43	44	1	5.25	
	IRC103	27	34	1	1.78	
		29	30	1	6.38	
	TRC103	15	16	1	1.47	
	TRC104	80	83	3	1.52	
	IRC104	37	45	8	2.03	
		43	45	2	0.00	
		57	60 50	3	13.33	
		57 20		2	19.55	
		20	22	2	22.4	
		20	21	2	1 36	
	TRC103	10	12	2	1.30	
	TRC124	66	68	2	1.01	
	TRC124	41	42	1	2 19	
	TRC124	30	37	7	1 11	
	TRC124	14	16	2	1.70	
	1110121		10	_		
TOWERANNA W	TRC086D	43	48	5	1.94	
	Incl	46	47	1	6.87	
	TRC088	53	54	1	15.35	
	TRC088	47	49	2	1.36	
	TRC088	25	27	2	5.18	
	TRC096	10	20	10	1.23	
	Incl	11	12	1	6.13	
	TRC096	1	5	4	1.08	
	TRC097	89	90	1	4.32	
	TRC097	55	56	1	2.87	
	TRC097	25	26	1	2.94	
	IRC097	/	9	2	14.26	
		1	8	1	27.30	
		0	1	1	2.35	
		21	30	3	2.23	
		10	1Z 6	<u> </u>	1.72	
		1	0	5	3.4U 7.26	
		70	় হ০	2	1.20	
		70	12	<u> </u>	2.Uð	
	TPC112	00 70	00 77	5	2.07	
		72	72		4.10	
	TRC113	21	73 36	5	1 4.00	
	11/0113	51	50	5	1.40	

Prospect	HoleID	Depth From (m)	Depth To (m)	Downhole Width (m)	Au (g/t)
	TRC113	4	5	1	2.83
	TRC114	107	108	1	4.66
	TRC114	68	70	2	3.42
	TRC118	48	49	1	2.76
	TRC118	34	39	5	1.80
	Incl	38	39	1	5.61
	TRC118	25	26	1	2.74
	TRC119	0	2	2	1.97
	TRC120	24	25	1	2.71
	TRC120	5	13	8	1.68
	Incl	5	6	1	7.79
	TRC121	36	37	1	2.95
	TRC122	45	54	9	1.78
	Incl	50	51	1	10.30
	TRC123	22	25	3	1.79
	TRC123	14	18	4	2.91
	Incl	14	15	1	8.76

# **Conglomerate Gold**

During the period, necessary heritage surveys were undertaken at the Jarret Well, Steel Well and Loudens Patch conglomerate gold targets.

Subsequent to the June 2018 quarter end, diamond drilling commenced initially at the Jarret Well area and drilling continues at the Steel Well area. Both the Jarret Well and Steel Well areas have thick conglomerate sequences of up to 50m and 80m respectively.

This drilling program is aimed at providing a detailed stratigraphic assessment of the overall sequence prior to undertaking detailed bulk sampling.

The drilling at Jarret well has intersected variable conglomerates with an 11.6m pyritic conglomerate intersected. This unit is interpreted to represent the downdip extension of the ferruginous conglomerate mapped at surface and in close proximity to where 3 gold nuggets were previous found.

(ASX Release "Jarrett Well - 11.6m Pyritic Conglomerate intersected in drilling", dated 23 July 2018).

Geological mapping continues with small conglomerate outcrops recently discovered amongst the large basalt scree slopes over a further 1km strike length to the north west of Jarret Well. This now provides for a total strike length of 1.5km of conglomerate beds discovered at Jarret Well.

Further mapping and detailed stream sediment sampling is planned to be undertaken along the remaining ridge lines to the northwest of Jarret Well and north of Steel Well.

Bulk sampling of each of the geological units at the three conglomerate gold targets, Jarret well, Steel Well and Loudens Patch, will be progressively undertaken once a detailed geological logging of the diamond core has been completed and specialised equipment arrives on site. This sampling is likely to commence in August 2018.





#### Photograph - Pyrite bearing conglomerate

(Field of view ~ 6.5cm x 8cm)

Figure 8 Jarret Well – Schematic cross-section showing simplified outcrop and correlation with new drill hole geology





# **Regional Data Acquisition**

As the Company increases exploration across the project area, substantial effort has gone into assessing past exploration data, including a large database of geophysical and geochemical sampling. This review has led to extensive consolidation and integration of the databases. Two areas of new data acquisition resulted from the review.

Infill aeromagnetic and radiometric surveys were flown to provide a more comprehensive and consistent dataset. This data was flown in July 2018 (subsequent to quarter end) and is currently being processed and integrated with the previous data.

Additional new and georeferenced detail aerial photography was flown across the entire project area.

Geochemical data assessment is currently underway to prioritise the numerous gold and base metal anomalies for aircore/RAB drill testing.

### **Base Metals**

#### Discovery and Orchard Tank Base Metals Resources

A detailed review of the base metal potential along the entire 60km of Tabba Tabba thrust and associated greenstone belt was undertaken during the June 2018 quarter by an independent consultant.

The review highlighted further potential for resource extensions highlighted by distinct geophysical targets and drill hole information vectoring open alteration zones at depth. The review has demonstrated significant strike length (>40km) remains either poorly tested or completely untested in areas of thin sand cover where past surface sampling has been assessed as ineffective.

The Company is currently assessing the new targets and preparing programs to test the priority targets.

### Lithium

#### King Col

The Company has completed two diamond holes twinning the previous positive RC drill holes at the King Col lithium prospect. The core has been processed and results remain pending. Once the assays results are received further mineralogical assessment is planned.

### Beyondie

The magnetite iron ore project at Beyondie is under the management of joint venture partner Emergent Resources Ltd (ASX: EMG, "Emergent"), who have earned an 80% interest in the iron ore mineral rights (iron ore, vanadium and manganese) of the project. Emergent have advised De Grey that there has been no change to their current status on this tenement.

De Grey retains 20% interest in the iron ore, vanadium and manganese rights and continues to hold 100% of gold and all other minerals.

### Sands Royalty

De Grey generated royalty revenues of \$3,759 for the current quarter. This quarter the royalty represents an increase on the March Quarter 2018 of \$806 and reflects both seasonal and increasing construction activities in the Pilbara region.



# Future Work Programs on Gold Targets

De Grey intends to continue increasing the exploration activities throughout the September and December quarters of 2018.

The focus of work will target RC and diamond drilling for both shallow and potentially open pit gold resource extensions at Mt Berghaus, Mallina, Toweranna and Amanda and deeper higher grade and potential underground resources at Withnell and Wingina.

On the regional targets, detailed project assessment will continue to prioritise gold targets and carry out first pass reconnaissance aircore/RAB drilling. This drilling will to define large new mineralised bedrock gold systems capable of hosting shallow open pit gold resources. RC drilling will then be undertaken to define initial inferred resources.

The conglomerate gold targets will continue to be assessed initially with diamond core drilling to provide detailed geological knowledge prior to bulk testing for gold mineralisation.

#### Planned programs for September 2018 quarter

#### STRUCTURAL and CONGLOMERATE GOLD

- Follow-up RC and/or diamond drilling at Toweranna, Mt Berghaus, Mallina and Amanda deposits
- Diamond drilling targeting the higher grade underground lodes at Withnell and Wingina
- Aircore/RAB drilling to test the priority regional gold anomalies
- Detailed aeromagnetic survey in the Southern Areas (Farno JV, Vanmaris and Blue Moon areas), infill areas along the Tabba Tabba Thrust and over the conglomerate gold targets in the west.
- Diamond drilling for geological and stratigraphic definition at the conglomerate gold targets
- Bulk sampling of the conglomerate gold targets to define the geological units which host gold mineralisation.
- Heritage surveys across the regional targets where required including the Southern Areas (*Farno McMahon Joint Venture and Vanmaris tenements*) and the Mallina Shear Zone.
- Pilbara Project Resource update

PFS

- Finalise detailed metallurgical testwork on fresh and oxide mineralisation at Withnell, Calvert, Mt Berghaus, Camel, Roe and Dromedary.
- Undertake initial metallurgical testwork on the Toweranna, Mallina and Amanda gold deposits
- Completion of Level 1 environmental reviews
- Revised Open Pit optimisations
- Finalise preferred processing plant flowsheet.

#### LITHIUM

• Mineralogical assessment of the King Col lithium and caesium mineralisation.

The Company will provide further program results updates progressively through the quarter.



# Corporate

Cash at the end of the quarter of \$1.15M with subsequent capital raising in July of \$5.0M settled with DGO Gold Limited and Top Drill Pty Ltd agreeing to subscribe for up to \$1.0M of drilling for equity.

The overall net funding **\$6.15M** positions the company well to advance exploration activities at an increased pace.

On 22 May 2018, De Grey announced that the Company had entered into a subscription agreement with Pilbara neighbour DGO Gold Limited ("DGO") to raise \$5.0M. Under the agreement DGO would subscribed to 25M shares at \$0.20 per share, raising \$5.0M cash and DGO would also receive 12,500,000 options exercisable at \$0.25 by 30 November 2019; and 12,500,000 options exercisable at \$0.30 by 30 May 2021. The DGO shares are subject to a 12 month escrow from the date of subscription. The allotment was settled on 11 July 2018, subsequent to the end of the quarter.

An agreement was entered into with Top Drill Pty Ltd, that from 1 June 2018, 30% of every invoice will be paid in DEG equity, with an equity calculation based on a 10% discount to the 5 days VWAP preceding the invoice. The shares will be subject to a 6 month escrow from the date of invoice, and allotted from the Company's existing LR7.1 placement capacity. Equity will be issued up to a total of \$1.0M, equivalent to approximately \$3.0M of drilling.

No transaction fees were payable on the DGO or Top Drill funding.

For further information:

Simon Lill (Executive Chairman) or

Andy Beckwith (Technical Director and Operations Manager)

De Grey Mining Ltd

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admin@degreymining.com.au

### COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Phil Tornatora, a Competent Person who is a Member of The Australian Institute of Geoscientists. 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.



### **Appendix 1: Resources Statement**

(\* ASX release "Pilbara Gold Project increases gold resources by >20% to over 1.2Moz", 28 September 2017)

#### **Total Mineral Resource - Gold, September 2017**

All deposits reported at 0.5g/t Au cut-off grade with the exception of Withnell and Wingina Deposits which are reported at 0.5g/t Au above -100mRL, and 1g/t Au below -100mRL. Leach Pad resource reported at zero cut-off grade.

Deposit	Туре	Measured				Indicat	ted		Inferre	d		Total	
Deposit	Type	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz
Calvert	Oxide				0.43	1.3	17,900	0.05	0.8	1,400	0.48	1.3	19,300
	Fresh				0.56	1.3	23,800	0.23	1.2	9,300	0.79	1.3	33,100
	Total				0.99	1.3	41,700	0.28	1.2	10,700	1.27	1.3	52,400
Camel	Oxide	0.14	3.1	14,000	0.26	3.0	25,100	0.11	1.6	5,500	0.51	2.7	44,600
	Fresh				0.03	1.7	1,600	0.20	1.7	11,200	0.23	1.7	12,800
	Total	0.14	3.1	14,000	0.29	2.9	26,700	0.31	1.7	16,700	0.74	2.4	57,400
Roe	Oxide	0.04	2.8	3,700	0.05	2.5	4,400	0.11	1.5	5,400	0.20	2.0	13,500
	Fresh	0.07	3.5	8,000	0.03	3.4	3,100	0.09	1.9	5,400	0.19	2.7	16,400
	Total	0.11	3.2	11,700	0.08	2.8	7,500	0.20	1.7	10,700	0.39	2.4	29,900
Dromedary	Oxide	0.10	2.2	7,200	0.03	1.6	1,400	0.04	1.6	2,200	0.17	1.9	10,800
	Fresh				0.03	1.6	1,700	0.08	1.8	4,700	0.12	1.7	6,400
	Total	0.10	2.2	7,200	0.06	1.6	3,200	0.12	1.7	6,900	0.29	1.9	17,200
Withnell	Oxide	0.57	1.3	23,300	0.22	1.6	11,400	0.15	1.1	5,400	0.94	1.3	40,000
	Fresh	0.45	1.4	20,900	2.57	1.8	145,200	2.41	2.2	171,200	5.43	1.9	337,300
	Total	1.02	1.3	44,100	2.79	1.7	156,600	2.56	2.1	176,600	6.37	1.8	377,300
Hester	Oxide							0.07	1.6	3,500	0.07	1.6	3,500
	Fresh							0.03	1.2	1,300	0.03	1.2	1,300
	Total							0.10	1.5	4,800	0.10	1.5	4,800
Mallina	Oxide				0.18	1.2	6,700	0.85	1.2	34,000	1.02	1.2	40,700
	Fresh				0.72	1.0	23,700	2.00	1.3	82,800	2.72	1.2	106,400
	Total				0.90	1.1	30,300	2.85	1.3	116,800	3.74	1.2	147,100
Toweranna	Oxide							0.14	2.7	12,500	0.14	2.7	12,500
	Fresh							0.29	3.1	28,300	0.29	3.1	28,300
	Total							0.43	2.9	40,700	0.43	2.9	40,700
Leach Pad	Oxide				0.86	0.7	19,300				0.86	0.7	19,300
	Fresh												
	Total				0.86	0.7	19,300				0.86	0.7	19,300
Indee Total	Oxide	0.85	1.8	48,100	2.02	1.3	86,200	1.51	1.4	69,800	4.39	1.4	204,100
	Fresh	0.52	1.7	28,800	3.93	1.6	199,100	5.34	1.8	314,100	9.80	1.7	542,000
	Total	1.38	1.7	76,900	5.95	1.5	285,300	6.85	1.7	384,000	14.19	1.6	746,200

#### Indee Project Mineral Resources - Gold

**Turner River Project Mineral Resources - Gold** 

Donosit	Turno	Measured				Indicated			Inferre	d	Total		
Deposit	Type	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz
Wingina	Oxide	2.68	1.76	152,100	0.65	1.3	27,000	0.34	1.3	14,400	3.67	1.6	193,500
	Fresh	0.40	1.59	20,500	0.34	1.5	16,300	1.08	1.7	57,400	1.82	1.6	94,200
	Total	3.08	1.74	172,700	0.99	1.4	43,300	1.42	1.6	71,700	5.49	1.6	287,700
Mt Berghaus	Oxide				0.07	2.0	4,400	1.24	1.3	50,000	1.30	1.3	54,400
	Fresh				0.14	1.7	7,900	2.07	1.2	78,500	2.21	1.2	86,400
	Total				0.21	1.8	12,300	3.30	1.2	128,500	3.52	1.2	140,800
Amanda	Oxide							0.15	1.6	7,600	0.15	1.6	7,600
	Fresh							0.54	1.6	27,800	0.54	1.6	27,800
	Total				0.86	0.7	19,300	0.69	1.6	35,400	0.69	1.6	35,400
Turner River	Oxide	2.68	1.8	152,100	0.72	1.4	31,400	1.72	1.3	72,000	5.12	1.6	255,500
Total	Fresh	0.40	1.6	20,500	0.48	1.6	24,200	3.69	1.4	163,600	4.57	1.4	208,400
iotai	Total	3.08	1.7	172,700	1.20	1.4	55,600	5.41	1.4	235,600	9.69	1.5	463,900

### De Grey Mining Total Mineral Resources - Gold

	Туре	Measured		Indicated			Inferred			Total			
		Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz
Do Grov	Oxide	3.53	1.8	200,200	2.74	1.3	117,600	3.23	1.4	141,800	9.51	1.5	459,600
Total	Fresh	0.93	1.7	49,400	4.42	1.6	223,300	9.03	1.6	477,800	14.37	1.6	750,400
TOLAT	Total	4.46	1.7	249,600	7.15	1.5	340,900	12.26	1.6	619,600	23.88	1.6	1,210,000



# Total Mineral Resource – Base Metals, September 2017 All deposits reported at 0.5% Zn cut-off grade.

Deposit	Class	Tonnes	Zn	Pb	Cu	Au	Ag	Zn	Pb	Cu	Au	Ag
	0,000	Mt	%	%	%	ppm	ppm	М	Metal Tonnes			kOz
Discovery	Indicated	0.27	5.2	2.4	0.2	1.9	192	13,900	6,400	600	16,300	1,600
Massive	Inferred	0.35	5.2	2.1	0.2	1.3	196	18,200	7,100	600	14,100	2,200
Sulphide	Total	0.61	5.2	2.2	0.2	1.5	194	32,100	13,500	1,200	30,400	3,800
Discovery	Indicated	0.15	0.9	0.5	0.1	0.9	47	1,300	700	100	4,300	200
Deposit Halo	Inferred	0.63	1.1	0.5	0.1	0.6	60	6,900	2,900	400	11,700	1,200
Mineralisation	Total	0.78	1.0	0.5	0.1	0.6	57	8,200	3,600	400	16,000	1,400
	Indicated	0.41	3.7	1.7	0.2	1.6	140	15,200	7,100	700	20,600	1,900
Discovery Deposit Total	Inferred	0.98	2.6	1.0	0.1	0.8	108	25,100	10,000	900	25,800	3,400
Deposit Total	Total	1.39	2.9	1.2	0.1	1.0	118	40,300	17,100	1,700	46,400	5,300
	Indicated											
Orchard Tank	Inferred	2.08	3.4	1.4	0.1	0.7	105	70,800	28,900	2,400	45,500	7,000
Deposit rotar	Total	2.08	3.4	1.4	0.1	0.7	105	70,800	28,900	2,400	45,500	7,000
Turner River Total Base Metal Mineral Resources												
	Class	Tonnes	Zn	Pb	Cu	Au	Ag	Zn	Pb	Cu	Au	Ag

### Turner River Project Base Metal Mineral Resources - 0.5% Zn Cut-off

	Class	Tonnes	Zn	Pb	Cu	Au	Ag	Zn	Pb	Cu	Au	Ag
		Mt	%	%	%	ppm	ppm	M	etal Tonno	es	Oz	kOz
De Grey Total	Indicated	0.41	3.7	1.7	0.2	1.6	140	15,200	7,100	700	20,600	1,900
	Inferred	3.06	3.1	1.3	0.1	0.7	106	95,800	39,000	3,400	71,300	10,400
	Total	3.47	3.2	1.3	0.1	0.8	110	111,000	46,100	4,100	91,900	12,300



### Appendix 2: Tenement Holdings and Movements Schedule of Mining Tenements and Beneficial Interests Held as at the end of the June 2018 Quarter

_	•					
	Project/Location	ion Country Tenement		Percentage held/earning		
	Beyondie	Australia	E52/2215	20% <sup>1</sup>		
	Turner River	Australia	E47/891	100%		
	Turner River	Australia	E45/2533	100%		
	Turner River	Australia	E45/2364	100%		
	Turner River	Australia	E45/2995	100%		
	Turner River	Australia	E45/3390	100%		
	Turner River	Australia	E45/3391	100%		
	Turner River	Australia	E45/3392	100%		
	Turner River	Australia	P47/3552	100%		
	Turner River	Australia	P47/3553	100%		
	Turner River	Australia	P47/3554	100%		
	Turner River	Australia	P47/3750	100%		
	Turner River	Australia	P45/3028	100%		
	Turner River	Australia	P45/3029	100%		
	Turner River	Australia	P47/1827	100%		
	Turner River	Australia	P47/1886	100%		

• <sup>1</sup> De Grey retains 100% rights to all non-iron ore related minerals under a Split Commodity Agreement.

### Schedule of Mining Tenements and Beneficial Interests Acquired during the June 2018 Quarter

Country	Tenement	Granted Date
Australia	E47/3750	17 Apr 2018
Australia	P47/1866	18 May 2018
	Country Australia Australia	CountryTenementAustraliaE47/3750AustraliaP47/1866

### Schedule of Mining Tenements and Beneficial Interests Disposed of during the June 2018 Quarter

Project/Location	Country	Tenement	Withdrawal Date
Nil			