DE GREY MINING LTD

ASX: DEG

ASX ANNOUNCEMENT

23 June 2021

6.8Moz Hemi Maiden Mineral Resource drives Mallina Gold Project

Highlights

- **Hemi – Tier 1 scale maiden Gold Mineral Resource confirmed at 6.8Moz**

Hemi Total Mineral Resource Estimate (JORC 2012)	**192Mt @ 1.1g/t Au (6.8Moz)**
Indicated (41% of ounces)	66Mt @ 1.3g/t Au (2.8Moz)
Inferred (59% of ounces)	127Mt @ 1.0g/t Au (4.0Moz)

(0.3g/t Au Cut-off above 370m depth, 1.5g/t Au Cut-off below 370m depth, assays to 17 May 2021)

- **Mallina Gold Project – Global Mineral Resources, including Hemi, increase to 9.0Moz**

MGP Mineral Resource Estimate (JORC 2012)	**230Mt @ 1.2g/t Au (9.0Moz)**
Measured & Indicated (43% of ounces)	85Mt @ 1.4g/t Au (3.8Moz)
Inferred (57% of ounces)	145Mt @ 1.1g/t Au (5.1Moz)

- Measured and Indicated Mineral Resources across the MGP comprise **3.8Moz @ 1.4g/t Au** including **2.8Moz @ 1.3g/t Au** at Hemi. These Mineral Resources provide a strong platform for a scoping study targeted for completion in the September quarter 2021.
- There is clear potential for the maiden Hemi and Global MGP Mineral Resources to grow along strike and at depth. Substantial drilling programs have continued at Hemi since the Mineral Resource assay cutoff date of 17 May 2021.
- Hemi contains over **25,000** ounces per vertical metre (oz/Vm) in the shallow, better drilled portions of the Mineral Resource.
- Overall Hemi "Finding Cost" is ~$8.50/oz, which is well below the industry average of $20/oz.

De Grey Technical Director, Andy Beckwith, commented:

"*Hemi is an exceptional new Western Australian gold discovery which is redefining the gold potential of the Pilbara and has changed the future for De Grey and our shareholders.*

De Grey's exploration team has taken Hemi from discovery to a Tier 1 scale 6.8Moz gold deposit in a short timeframe. RC and diamond drilling commenced only 15 months ago and further extensions are expected at each deposit as drilling continues.

Twelve drill rigs are currently focused on expanding Hemi as well as testing numerous targets within our large 100% owned, 150km long land package. I have no doubt we will be drilling and finding additional resources for many years to come."

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De Grey Managing Director, Glenn Jardine, commented:

"The Company has delivered on its commitment to deliver a maiden Hemi Mineral Resource to shareholders by mid-2021. The 6.8Moz Hemi Mineral Resource is substantial and exceeds our initial expectations. We are committed to increasing the resource base with ongoing drilling programs. This achievement would not have been possible without the enthusiasm and dedication of our employees and contract personnel and the Company thanks everyone involved for their efforts.

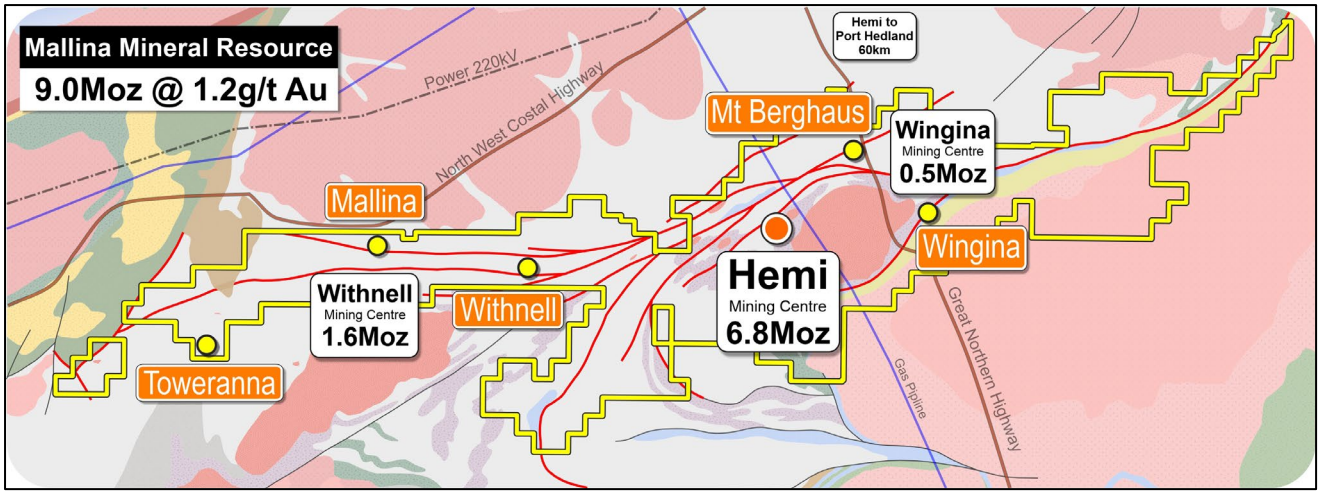
Project studies, including metallurgy, geotechnical, mining, environmental, infrastructure and hydrogeology are continuing in parallel with the exploration drilling. These studies aim to provide information to define the development and production opportunities this scale of resource brings. The Company expects to be able to provide production potential for Hemi and the overall Mallina Gold Project to shareholders in the September quarter 2021 through the completion of a scoping study."

De Grey Mining Limited (ASX: DEG, "De Grey" or the "Company") is pleased to report that the Global Mallina Gold Project (MGP) Mineral Resource has significantly increased from 2.2Moz to 9.0Moz, with the addition of the 6.8Moz Hemi Maiden Mineral Resource.

Hemi Maiden Mineral Resource

The Hemi discovery occurs in the central portion of De Grey's large Mallina Gold Project (MGP). The Mallina Gold Project (MGP) comprises a package of over 1,500km^2 of contiguous landholding and is located approximately 60km south of Port Hedland in the northern Pilbara region of Western Australia (Figure 1). Port Hedland is Australia's largest export port for iron ore and the town hosts a large mining service industry and major infrastructure network, including major highways, international airport, power station and port facilities.

Figure 1: Mallina Gold Project showing main gold deposits and the Hemi Discovery.



Hemi was first discovered in aircore drilling in November 2019 and confirmed by RC drilling in March 2020. Hemi comprises a cluster of six individual gold deposits: Brolga, Aquila, Crow, Falcon and the more recent discoveries of Diucon and Eagle. The maiden resource estimate is based on 688 RC holes (134,166m) and 169 diamond holes (69,061m including RC pre-collars) for a total of 203,228m. Overall, drilling at Hemi including aircore drilling exceeds over 400,000m with substantial aircore, RC and diamond drilling programs continuing.

Gold mineralisation at Hemi is hosted in a series of intermediate intrusions associated with sulphide (pyrite and arsenopyrite) stringers and disseminations within brecciated and altered quartz diorites

that intrude into the surrounding Archaean aged Mallina Basin sediments. The Archaean basement is eroded and truncated by a 25m to 45m thick horizon of recent transported sediments that are barren of gold mineralisation. The Hemi style of mineralisation is new to the Pilbara region and shows a scale of gold mineralisation not previously seen in the Mallina Basin.

Hemi Maiden Mineral Resource Estimate (JORC2012) by Deposit, June 2021

Deposit	Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
Brolga	28.1	1.3	1.21	34.7	0.9	1.05	62.8	1.1	2.26
Aquila	10.6	1.5	0.52	7.4	1.3	0.32	18.1	1.4	0.84
Crow	9.8	1.1	0.35	19.5	1.1	0.68	29.3	1.1	1.03
Falcon	17.0	1.3	0.70	16.6	1.0	0.53	33.7	1.1	1.23
Diucon/Eagle				48.5	0.9	1.45	48.5	0.9	1.45
Total Hemi	**65.5**	**1.3**	**2.78**	**126.9**	**1.0**	**4.02**	**192.4**	**1.1**	**6.80**

(0.3g/t Au Cut-off above 370m depth, 1.5g/t Au Cut-off below 370m depth, assays to 17 May 2021. Differences may occur due to rounding)

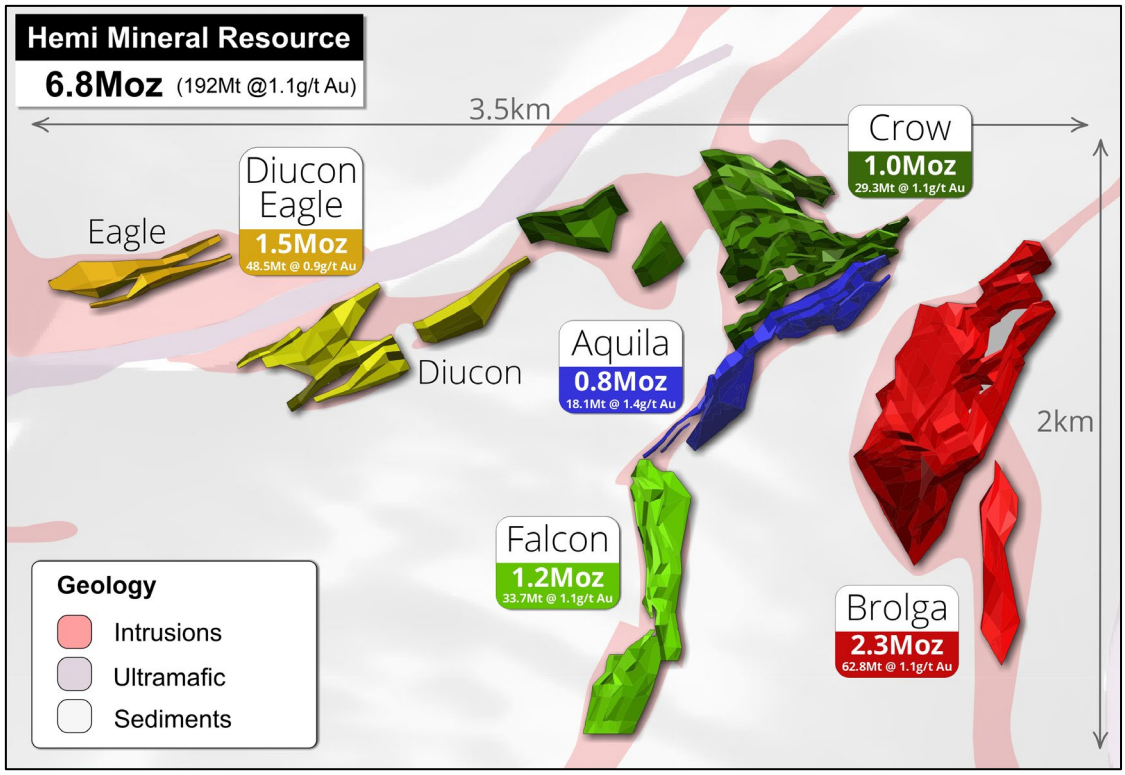
Hemi Maiden Mineral Resource Estimate (JORC 2012) by Depth, June 2021

Region	Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
Above 370m depth	65.5	1.3	2.78	122.4	0.9	3.61	188.0	1.1	6.39
Below 370m depth				4.4	2.9	0.41	4.4	2.9	0.41
Total Hemi	**65.5**	**1.3**	**2.78**	**126.9**	**1.0**	**4.02**	**192.4**	**1.1**	**6.80**

(0.3g/t Au Cut-off above 370m depth, 1.5g/t Au Cut-off below 370m depth, assays to 17 May 2021. Differences may occur due to rounding)

Full details are provided in Appendix 1

Figure 2: Hemi gold deposits

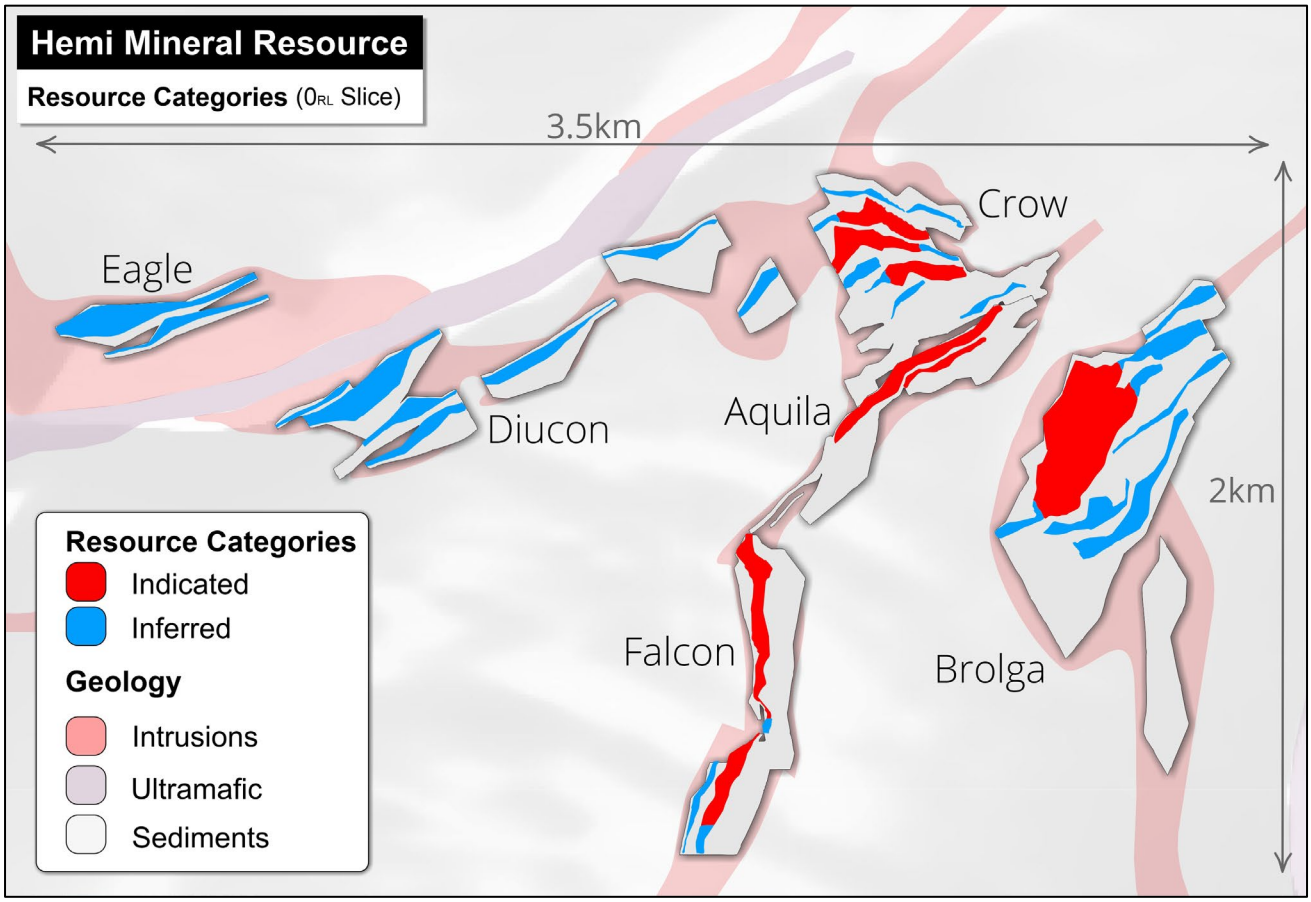


Opportunities to increase resources across the entire Mallina gold project area are plentiful. All deposits remain open at depth and along strike with significant drill programs continuing at each Hemi deposit targeting further extensions and infill drilling to improve JORC 2012 resource categories.

The quality of the individual deposits is demonstrated by the high percentage of Indicated Mineral Resource within the upper portions of the deposits where the highest concentration of drilling has occurred to date (Figure 3).

Brolga	**77% Indicated** to 140m below surface and 53% overall
Aquila	**84% Indicated** to 220m below surface and 62% overall
Crow	**46% Indicated** to 140m below surface and 34% overall
Falcon	**77% Indicated** to 140m below surface and 57% overall

Figure 3: Hemi gold deposits showing Indicated and Inferred Mineral Resource categories.



The robust nature of the maiden Hemi Mineral Resource is demonstrated in the following summary of higher cut off grades:

Hemi Project Mineral Resource at Various Cut-off grades

Cut-off Grade Above 370m (Au g/t)	Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
0.3	65.5	1.3	2.8	126.9	1.0	4.0	192.4	1.1	6.8
0.4	61.5	1.4	2.7	110.3	1.1	3.8	171.8	1.2	6.6
0.5	56.5	1.5	2.7	94.0	1.2	3.6	150.5	1.3	6.3
0.6	51.5	1.6	2.6	79.1	1.3	3.3	130.6	1.4	5.9
0.7	46.8	1.6	2.5	67.2	1.4	3.1	114.0	1.5	5.6

Note: Above 370m depth, cut-off grades as shown above. Below 370m depth a 1.5g/t cut-off was applied.

A striking aspect of each deposit is the high average gold endowment, shown as ounces per vertical metre (oz/Vm). This high endowment is most evident in the shallow, portions of each deposit where the highest concentration of drilling has been completed.

Brolga	9,000oz/Vm (above 200m depth)
Aquila	2,500oz/Vm (above 240m depth)
Crow	4,000oz/Vm (above 180m depth)
Falcon	3,800oz/Vm (above 260m depth)
Diucon/Eagle	6,000oz/Vm (above 240m depth)

Hemi comprises a cluster of mineralised intrusions within a large intrusive complex spanning a structurally prepared corridor of 20km x 10km dimensions, termed the Greater Hemi region. This large intrusive complex remains only partially drill tested at surface, mostly with shallow aircore drilling (Figure 4).

At Brolga, Aquila, Crow and Falcon gold mineralisation is known to extend to at least 500m depth. Only limited drilling has been completed beyond 300m depth at Diucon and Eagle and elsewhere in the Greater Hemi area (Figure 5). Drilling during the next 12 months will aim to improve coverage throughout Greater Hemi for new discoveries and test the known deposits at depth and along strike.

The 6.8Moz Hemi Mineral Resource has been rapidly achieved over a period of only 15 months since detailed RC and diamond drilling commenced. This equates to a resource discovery rate of approximately 450,000 ounces per month, including a significant proportion to Indicated classification.

Overall, the total discovery and resource definition costs (Finding Costs) are estimated to be $8.50/oz, well below the industry average of $20/oz. Strong drilling results continue to be reported external to the resource boundaries providing excellent potential to increase resources at each deposit. Additional drilling continues to expand the mineralised footprint elsewhere in the Greater Hemi region and the Company expects to continue this low discovery cost trend.

The ability to go from the recognition of highly prospective altered intrusion in early aircore drilling to the rapid deployment of RC and then diamond drilling has reduced the time to follow-up positive results.

This quick advance in drilling has reduced the timeframe to define the scale of the deposit with wide-spaced (160m x 80m spaced) definition drilling. Subsequent infill drilling has therefore been very focused from an early stage.

Falcon is an example of the recognition of encouraging altered intrusion in early aircore drilling leading to infill drilling. This rapid program change resulted in the discovery of a 1.2Moz resource in a matter of months. Similarly, the Diucon and Eagle discoveries were based on early geological recognition of highly altered intrusion in aircore drilling which was followed up by RC. This growing +1.4Moz resource remains open and was only discovered in January 2021.

Brolga

The Brolga deposit is the largest resource to date with dimensions of mineralisation spanning over 1000m x 300m and to at least 500m depth. The deposit remains open down plunge (Figure 5) to the southwest and down dip to the south into Brolga South (Figure 6).

Drilling has been generally completed to 40m x 40m and 80m x 40m in places with limited further infill drilling planned in the second half of 2021. Drilling at Brolga over the next 12 months will focus on testing the down plunge and down dip potential.

Figure 4: Greater Hemi Region showing all drilling at surface to date

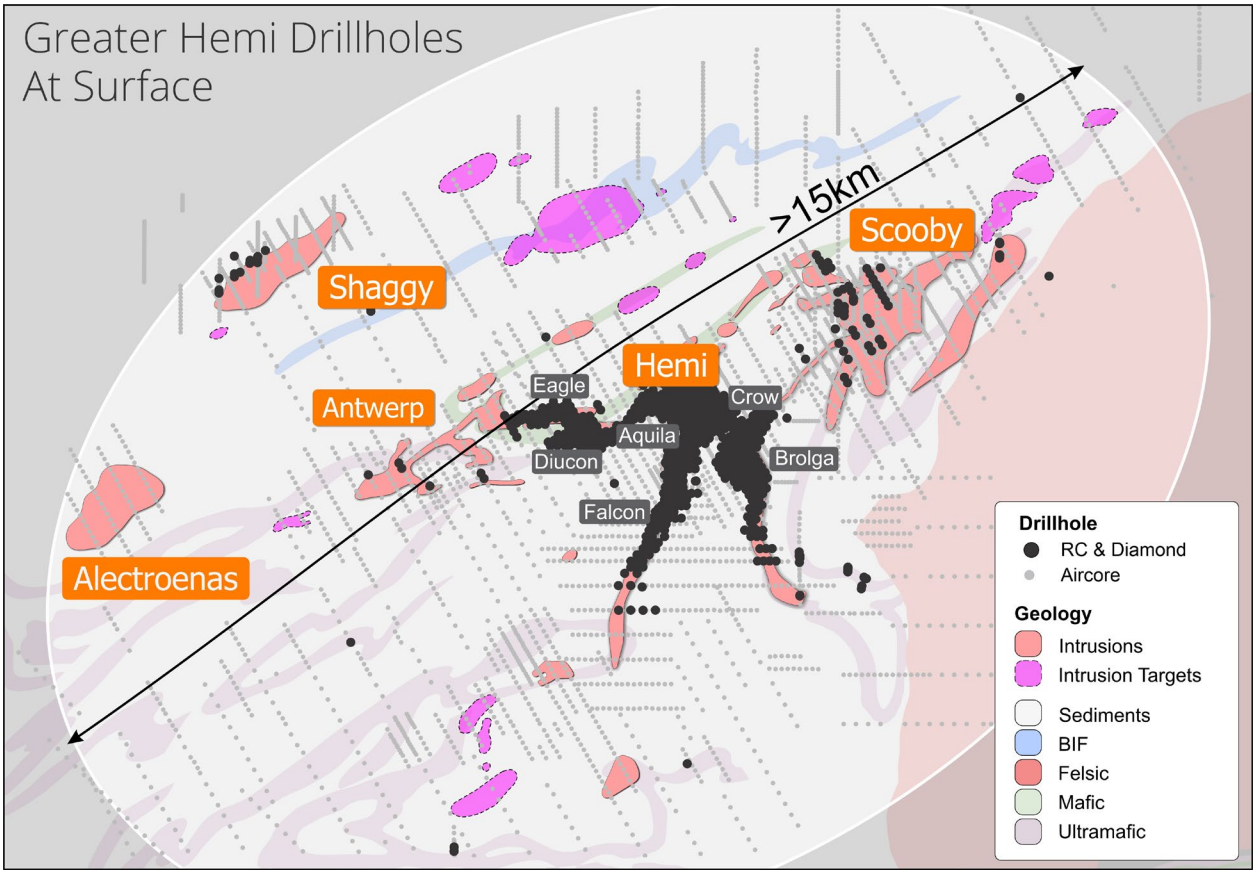


Figure 5: Greater Hemi Region showing all drilling below 300 metres depth.

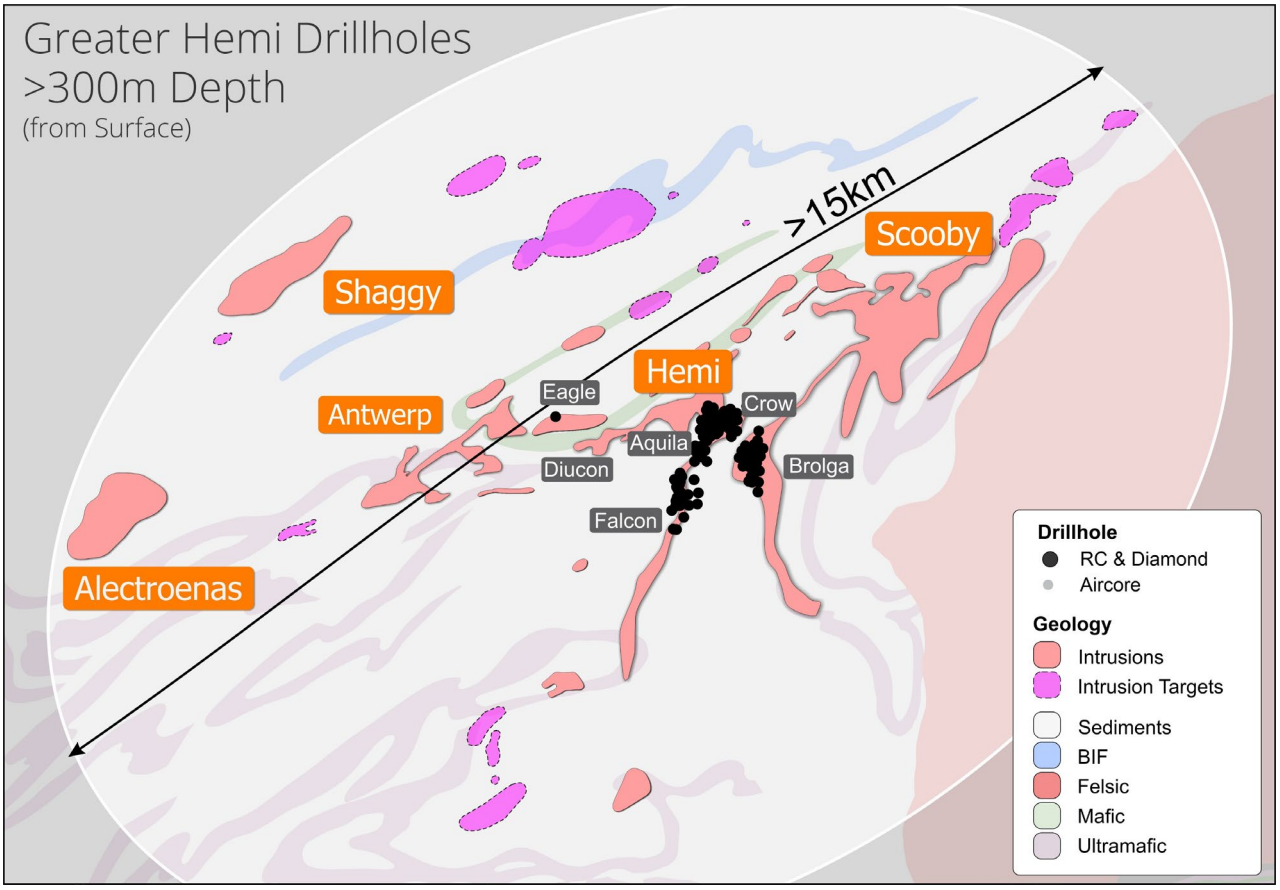


Figure 6: Brolga – showing down plunge potential

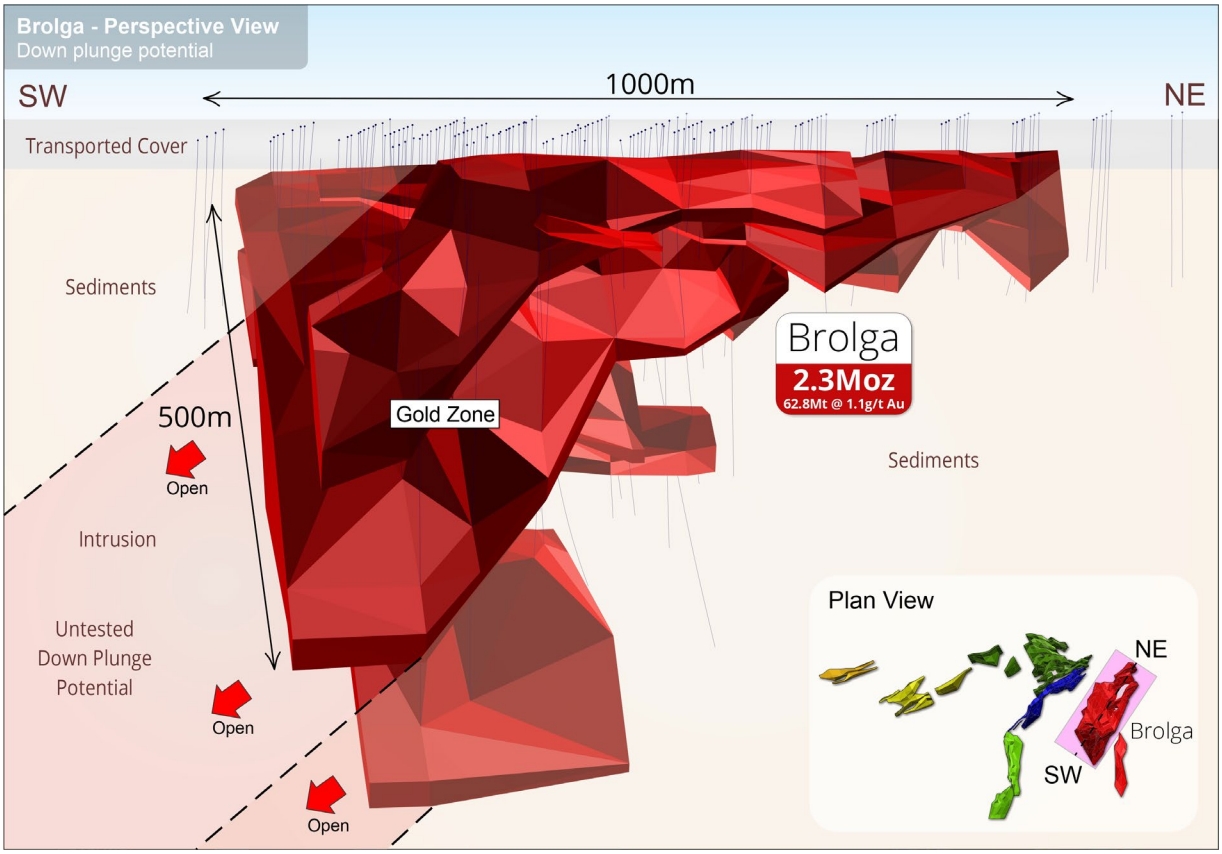
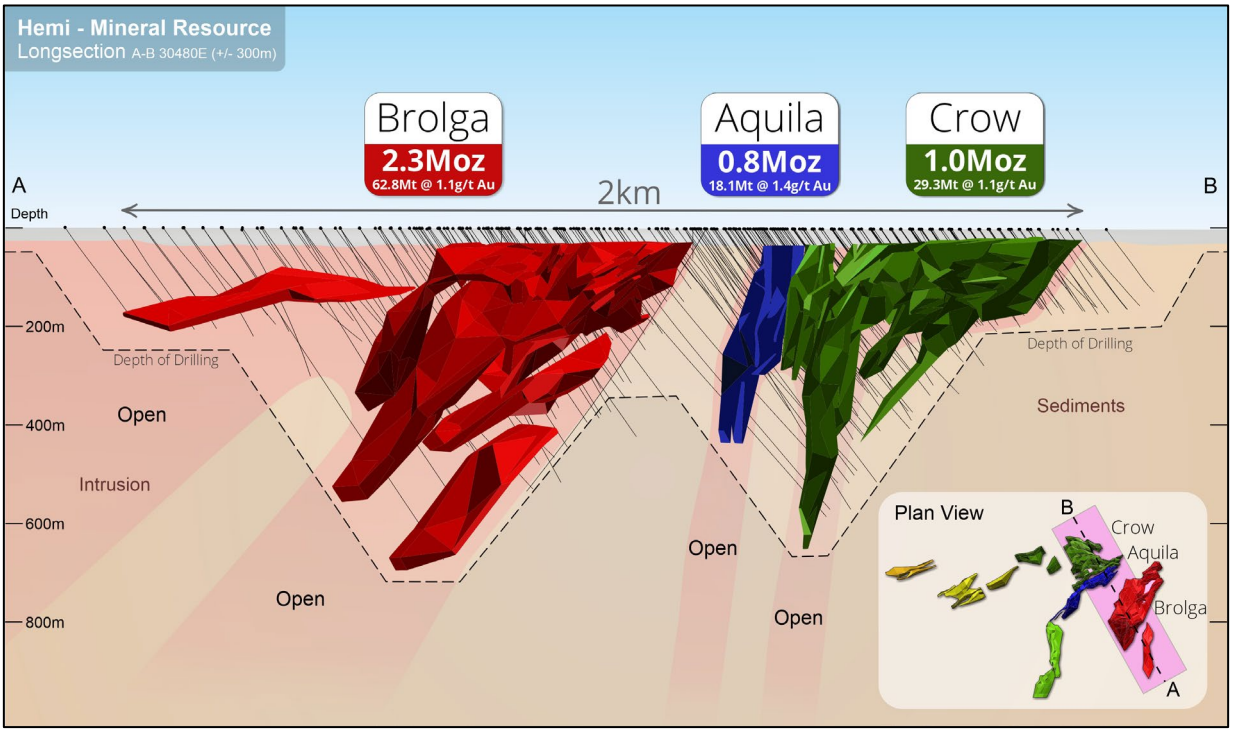


Figure 7: Brolga-Aquila-Crow – Section 30480E showing the scale of mineralisation



Aquila

The Aquila deposit is located approximately 100m to the north of Brolga and represents a northeast to southwest trending zone on the southern margin of the Crow intrusion (Figure 7). Aquila has a strike length of 900m and occurs as subvertical lode up to 50m wide.

The deposit shows stronger sulphide development and more intense alteration towards the western end which correlates to the consistently higher grade gold mineralisation that remains open at depth to at least 500m (Figure 8).

Drilling has been generally completed on an 40m x 40m hole spacing. Drilling over the next 12 months will focus on testing down dip extensions, particularly at the western end of Aquila where it joins the Falcon deposit and where strong high grade plunge potential is evident.

Crow

The Crow deposit is located immediately adjacent and to the north of Aquila (Figure 7). Aquila mineralisation links into the Crow intrusion. Mineralisation at Crow appears to be more complex than other Hemi deposits. This complexity has required infill drilling to 40m x 40m across the deposit.

The strongest mineralisation at Crow occurs within the McLeod lode. The McLeod lode mineralisation strikes east-west and merges with the Aquila lode on the eastern side of the Crow intrusion. The McLeod lode contains high grade gold mineralisation associated with infrequent quartz veining. Further drilling is planned to determine and confirm the orientation of these higher grade veins. The northern portion of the Crow deposit is characterised by a series of shallower dipping stacked lodes of generally lower grade mineralisation.

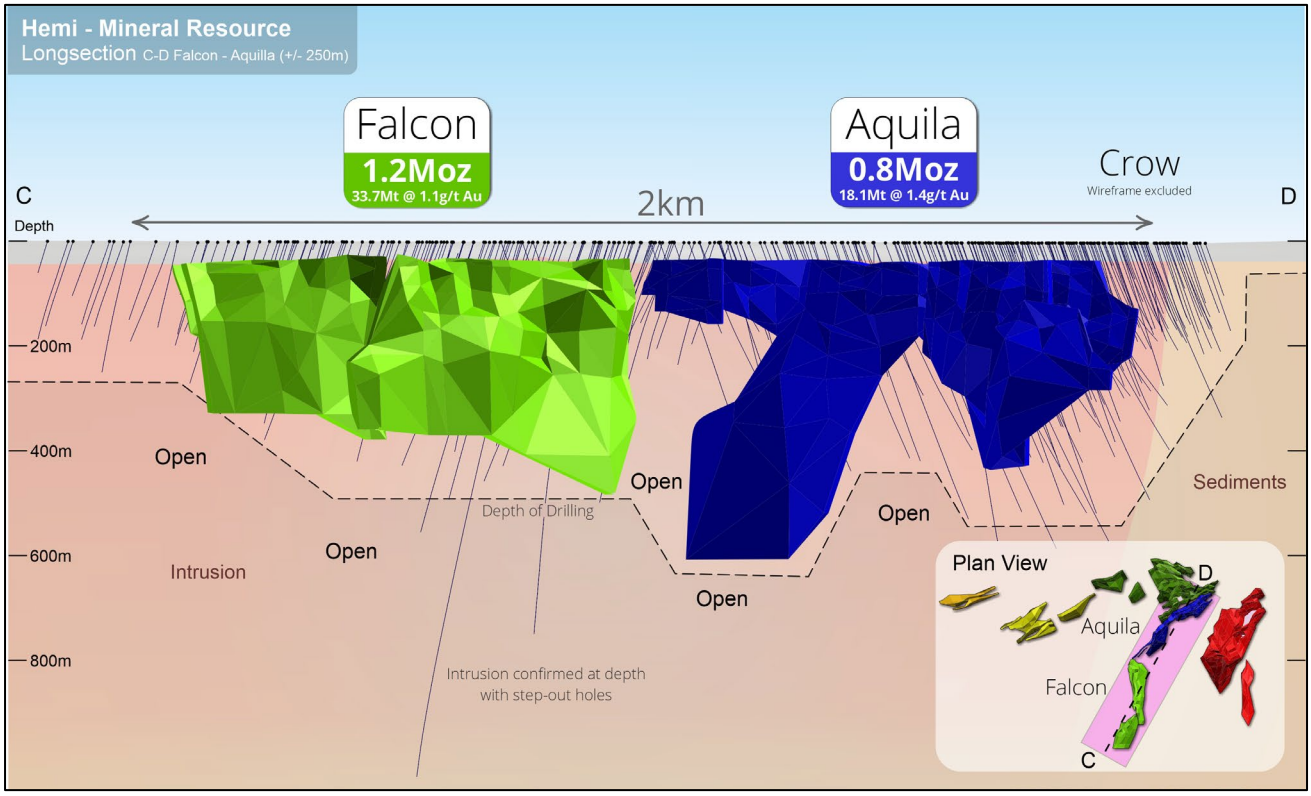
Falcon

The Falcon deposit lies approximately 500m to the west of Brolga and is a steeply dipping, linear intrusion approximately 1,000m long by 50m wide with the northern limits intersecting the western end of Aquila (Figures 3 and 8). The strong continuous gold mineralisation extends up to 500m deep and remains open at depth and along strike.

Resource drilling is generally on a 40m x 40m basis in the shallower portions (300Vm) of the deposit and 80m x 80m at depth. Infill and extensional drilling of the deeper portions of the deposit continues.

The Falcon intrusion extends a further 2km to the south and is currently tested only with shallow wide-spaced aircore drilling. Deeper RC and diamond drilling has commenced to test for extension along this prospective zone.

Figure 8: Aquila – Long projection showing higher grade plunging mineralisation

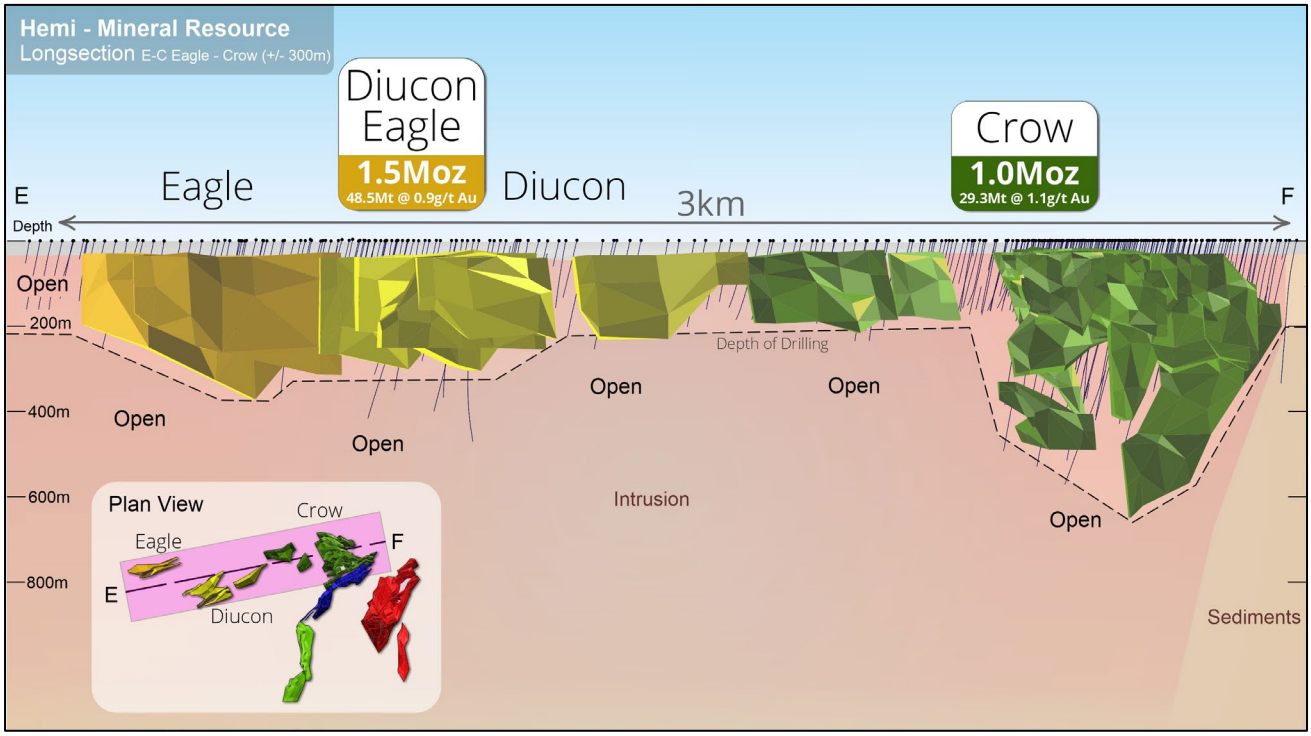


Diucon and Eagle

The Diucon and Eagle deposits were discovered in January 2021 and have only been tested to 300m below surface (Figure 9). The mineralisation is hosted within multiple stacked lodes contained within a broader intrusion. The stacked lodes remain open at depth and deeper drilling is currently underway to extend mineralisation. Broad zones (+20m) of higher grade (+2g/t) mineralisation occur immediately below the transported material and extend at depth providing excellent potential to rapidly increase resources with further drilling. To date the mineralisation has been drilled at an 80m x 80m drill spacing. Further infill drilling is expected to provide added confidence of continuity to allow conversion to Indicated resource.

Potential to extend the Diucon and Eagle resources remains a high priority with step out drilling to the immediate west toward Antwerp and at depth.

Figure 9: Eagle-Diucon-Crow – Long section showing 3km scale and depth potential



Mallina Gold Project Resources

The total Mallina Gold Project (MGP) Mineral Resources (JORC 2012) have increased to **230Mt @ 1.2g/t Au for 9.0Moz**. Since the Hemi discovery there has been almost no regional drilling at other resource centres. Hence, all other existing resources within the Withnell and Wingina Mining centres remain unchanged since the April 2020 resource statement.

Mallina Gold Project - Global Mineral Resource Estimate (JORC 2012), June 2021

Mining Centre	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
Hemi Mining Centre				65.5	1.3	2.8	126.9	1.0	4.0	192.4	1.1	6.8
Withnell Mining Centre	1.6	1.8	0.1	11.7	1.8	0.7	12.2	2.2	0.9	25.6	2.0	1.6
Wingina Mining Centre	3.1	1.7	0.2	2.5	1.5	0.1	6.3	1.2	0.2	11.9	1.4	0.5
TOTAL	**4.7**	**1.7**	**0.3**	**79.8**	**1.4**	**3.6**	**145.3**	**1.1**	**5.1**	**229.8**	**1.2**	**9.0**

(Withnell and Wingina Mining Centre Resource Estimates remain unchanged since the 2 April 2020 update)

The Company has been primarily focused on resource drilling at Hemi during 2020 and into 2021. Drilling activities have expanded to include resource extension and regional discovery drilling throughout the large tenement package.

Currently, the Company has 12 rigs operating across the project with six rigs operating at Hemi, four rigs in the Greater Hemi region and two rigs on regional targets.

The exploration activities are focused on increasing resources across the existing deposits and new target areas including:

- Resource extensions at Hemi;
- Discovery of new intrusion style mineralisation in the Greater Hemi region;
- Resource extensions at Withnell and the other regional shear hosted deposits;
- Resource extensions at Calvert, another intrusion related target; and
- Reconnaissance drilling along the 200km of shear zones and numerous interpreted intrusion targets.

Mallina Project Exploration Upside

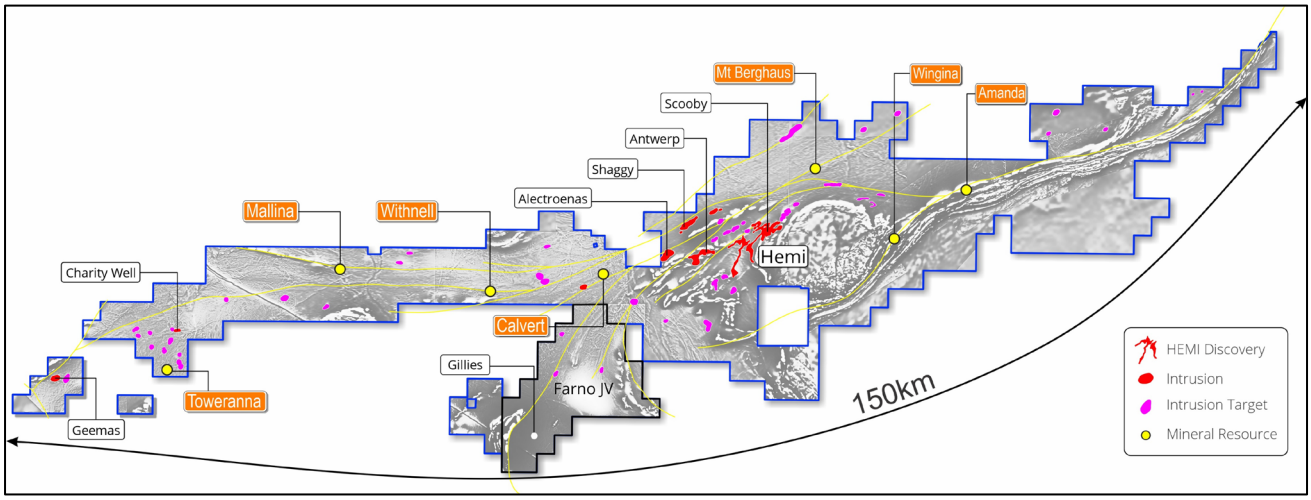
There are at least four similar intrusions already identified in the immediate vicinity of Hemi, namely Scooby, Shaggy, Antwerp and Alectroenas (Figure 10). Further drilling targets within the Greater Hemi structural corridor provide immediate discovery potential.

Drilling to date has yielded encouraging aircore and limited RC drilling results outside of the Hemi resource. Drilling programs continue to test these targets and known intrusions.

Significant untested exploration potential remains across the wider MGP area. The ongoing interpretation of detailed, project-wide aeromagnetic survey and geochemical sampling results has highlighted more than 30 potential intrusive targets requiring evaluation. Reconnaissance drilling has commenced on various regional targets to identify further potential new intrusive and structural targets throughout the project area. The three initial regional areas of focus for intrusion style mineralisation beyond the Greater Hemi area include the Calvert, Charity Well and Geemas areas. Drilling has commenced at Calvert and aircore drilling programs are planned to commence at the other two areas in the second half of 2021, subject to successful heritage clearances.

Exploration activities will also be ongoing on the shear-hosted potential of the project. There are more than 200km of shear zones identified across the Mallina Project, with similar resource potential to the Withnell and Wingina style deposits.

Figure 10: Mallina Gold Project – Large 150km scale landholding.



Project Studies

The Company intends to provide shareholders with production potential at the Mallina Gold Project during the September quarter 2021 following the completion of a scoping study. The aim of this study is to demonstrate the MGP's ability to deliver a Tier 1 production profile.

The large and shallow global resource (9.0Moz) contains a high percentage of Indicated resource within the upper 200m from surface. This sizeable resource base provides a strong platform to evaluate a future open pit mining scenario with processing facilities located at a centralised plant at Hemi.

Detailed testwork, fieldwork and studies include:

- Flora surveys;
- Fauna surveys;
- Heritage surveys and ongoing discussions with traditional owners regarding project development requirements;
- Surface and subsurface hydrology and hydrogeology drilling and testing;
- Geotechnical logging, dedicated drilling and evaluation;
- Energy supply and trade off studies;
- Metallurgical drilling and laboratory testwork including extensive deposit wide multi-element sampling; and
- Further oxidation processing testwork, which has already confirmed high recoveries can be achieved from Brolga, Aquila and the regional deposits.

The Company is also committed on direct and meaningful stakeholder and local community engagement. This focus is gaining momentum with ongoing discussions with the Kariyarra, Ngarluma and Nyamal peoples, local pastoralists and the broader Port Hedland and Karratha communities.

The Company's immediate growth strategy will continue to focus on expanding the footprint of the Hemi deposits, increasing the global project resource and making new discoveries within the large Mallina Gold Project.

The exploration and project studies are to be funded from existing cash reserves, which totaled $87M as at March 31, 2021.

This announcement has been authorised for release by the De Grey Board.

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Competent Person's Statement

Exploration Results

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.

Mineral Resources

The Information in this report that relates to **Mineral Resources** is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services. Mr Payne 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 Resources and Ore Reserves". Mr Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

These materials prepared by De Grey Mining Limited (or the "Company") include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the

future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant securities exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Previously released ASX Material References *that relates to Mallina Gold Project Resources includes:*

- *2020 Total Gold Mineral Resource increases to 2.2Moz, 2 April 2020*
- *2019 Total Gold Mineral Resource - 21 % increase to 1.7Moz, 16 July 2019*
- *2018 Total Gold Mineral Resource increases to 1.4Moz, 3 October 2018*
- *2017 Pilbara Gold Project increases gold resources by >20% to over 1.2Moz*

Appendix 1: Mallina gold Project Global Mineral Resource Estimate Summary

Mallina Gold Project - Global Mineral Resource Estimate, June 2021

Mining Centre	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
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Withnell Mining Centre	1.6	1.8	0.1	11.7	1.8	0.7	12.2	2.2	0.9	25.6	2.0	1.6
Wingina Mining Centre	3.1	1.7	0.2	2.5	1.5	0.1	6.3	1.2	0.2	11.9	1.4	0.5
TOTAL Mallina Gold Project	**4.71**	**1.7**	**0.3**	**79.8**	**1.4**	**3.6**	**145.3**	**1.1**	**5.1**	**229.8**	**1.2**	**9.0**

The regional resource estimates at the Withnell and Wingina Mining Centres have not changed since the April 2020 statement.

Mallina Gold Project – Mineral Resource Estimate changes, June 2021

Mining Centre	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz	Mt	Au g/t	Moz
Mineral Resource Estimate, April 2020												
Withnell Mining Centre	1.6	1.8	0.1	11.7	1.8	0.7	12.2	2.2	0.9	25.6	2.0	1.6
Wingina Mining Centre	3.1	1.7	0.2	2.5	1.5	0.1	6.3	1.2	0.2	11.9	1.4	0.5
Mineral Resource Estimate, June 2021												
Hemi Mining Centre				65.5	1.3	2.8	126.9	1.0	4.0	192.4	1.1	6.8
TOTAL Mallina Gold Project	**4.71**	**1.7**	**0.3**	**79.8**	**1.4**	**3.6**	**145.3**	**1.1**	**5.1**	**229.8**	**1.2**	**9.0**

Mallina Gold Project – Global Mineral Resource Estimate by Type, June 2021

Mining Centre	Type	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
Hemi Mining Centre	Oxide				5.00	1.4	228,500	5.47	0.9	151,800	10.48	1.1	380,300
	Sulphide				60.54	1.3	2,550,900	121.38	1.0	3,873,000	181.92	1.1	6,424,000
	Total				**65.55**	**1.3**	**2,779,400**	**126.85**	**1.0**	**4,024,900**	**192.40**	**1.1**	**6,804,300**
Withnell Mining Centre	Oxide	0.98	1.8	57,500	2.69	1.3	113,400	1.70	1.4	74,000	5.37	1.4	245,000
	Sulphide	0.66	1.7	34,800	9.02	1.9	550,100	10.54	2.4	796,200	20.22	2.1	1,381,100
	Total	**1.63**	**1.8**	**92,300**	**11.72**	**1.8**	**663,500**	**12.24**	**2.2**	**870,200**	**25.58**	**2.0**	**1,626,100**
Wingina Mining Centre	Oxide	2.68	1.8	152,100	1.84	1.5	87,600	2.21	1.1	74,900	6.74	1.5	314,500
	Sulphide	0.40	1.6	20,500	0.68	1.6	34,900	4.04	1.3	168,400	5.12	1.4	223,800
	Total	**3.08**	**1.7**	**172,700**	**2.52**	**1.5**	**122,500**	**6.25**	**1.2**	**243,200**	**11.86**	**1.4**	**538,400**
TOTAL Mallina Gold Project	**Oxide**	**3.66**	**1.8**	**209,600**	**9.54**	**1.4**	**429,500**	**9.4**	**1.0**	**300,700**	**22.6**	**1.3**	**939,800**
	Sulphide	**1.06**	**1.6**	**55,300**	**70.24**	**1.4**	**3,135,900**	**136.0**	**1.1**	**4,837,600**	**207.3**	**1.2**	**8,028,900**
	Total	**4.71**	**1.7**	**265,000**	**79.79**	**1.4**	**3,565,400**	**145.3**	**1.1**	**5,138,300**	**229.8**	**1.2**	**8,968,800**

Mallina Gold Project – Mineral Resource Estimate by Deposit, June 2021

Hemi - Mining Centre

Deposit	Type	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
Brolga	Oxide				1.32	1.4	57,300	2.25	0.8	55,700	3.57	1.0	113,000
	Sulphide				26.77	1.3	1,148,300	32.47	1.0	994,700	59.24	1.1	2,142,900
	Total				**28.09**	**1.3**	**1,205,600**	**34.72**	**0.9**	**1,050,300**	**62.81**	**1.1**	**2,255,900**
Aquila	Oxide				1.00	1.4	45,100	0.23	0.5	4,000	1.23	1.2	49,100
	Sulphide				9.64	1.5	479,600	7.22	1.3	312,100	16.86	1.5	791,700
	Total				**10.64**	**1.5**	**524,700**	**7.45**	**1.3**	**316,100**	**18.09**	**1.4**	**840,700**
Crow	Oxide				0.97	1.0	31,500	1.07	0.9	30,200	2.03	0.9	61,700
	Sulphide				8.85	1.1	320,400	18.46	1.1	649,900	27.31	1.1	970,400
	Total				**9.81**	**1.1**	**352,000**	**19.53**	**1.1**	**680,100**	**29.34**	**1.1**	**1,032,100**
Falcon	Oxide				1.71	1.7	94,500	0.55	1.0	17,600	2.27	1.5	112,100
	Sulphide				15.29	1.2	602,700	16.10	1.0	511,200	31.38	1.1	1,113,900
	Total				**17.00**	**1.3**	**697,200**	**16.65**	**1.0**	**529,700**	**33.65**	**1.1**	**1,226,800**
Diucon/Eagle	Oxide							1.38	1.0	44,400	1.38	1.0	44,400
	Sulphide							47.14	0.9	1,405,100	47.14	0.9	1,405,100
	Total							**48.52**	**0.9**	**1,449,500**	**48.52**	**0.9**	**1,449,500**
Hemi Mining Centre	**Oxide**				**5.00**	**1.4**	**228,500**	**5.47**	**0.9**	**151,800**	**10.48**	**1.1**	**380,300**
	Sulphide				**60.54**	**1.3**	**2,550,900**	**121.38**	**1.0**	**3,873,000**	**181.92**	**1.1**	**6,424,000**
	Total				**65.55**	**1.3**	**2,779,400**	**126.85**	**1.0**	**4,024,900**	**192.40**	**1.1**	**6,804,300**

Withnell – Mining Centre

Deposit	Type	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
Withnell Open Pit	Oxide	0.63	1.4	28,500	0.36	1.2	14,400	0.15	1.1	5,300	1.14	1.3	48,200
	Sulphide	0.63	1.6	33,200	2.68	1.9	163,500	0.53	2.2	38,000	3.85	1.9	234,700
	Total	**1.26**	**1.5**	**61,700**	**3.05**	**1.8**	**177,800**	**0.68**	**2.0**	**43,300**	**4.99**	**1.8**	**282,900**
Withnell Underground	Oxide							0.00	2.5	300	0.00	2.5	300
	Sulphide				0.11	4.3	15,600	2.38	3.9	301,100	2.50	3.9	316,700
	Total				**0.11**	**4.3**	**15,600**	**2.39**	**3.9**	**301,400**	**2.50**	**3.9**	**317,100**
Mallina	Oxide				0.48	1.3	19,900	1.22	1.4	53,000	1.70	1.3	72,900
	Sulphide				1.13	1.2	44,100	3.93	1.5	190,300	5.06	1.4	234,500
	Total				**1.61**	**1.2**	**64,100**	**5.15**	**1.5**	**243,300**	**6.76**	**1.4**	**307,400**
Toweranna Open Pit	Oxide				0.05	3.1	4,700	0.05	2.2	3,500	0.10	2.6	8,200
	Sulphide				4.28	2.1	288,600	2.41	2.1	162,800	6.69	2.1	451,400
	Total				**4.33**	**2.1**	**293,200**	**2.46**	**2.1**	**166,400**	**6.79**	**2.1**	**459,600**
Toweranna Underground	Oxide												
	Sulphide							0.56	3.6	64,500	0.56	3.6	64,500
	Total							**0.56**	**3.6**	**64,500**	**0.56**	**3.6**	**64,500**
Camel	Oxide	0.18	2.8	16,400	0.32	2.6	26,800	0.04	1.1	1,500	0.54	2.6	44,700
	Sulphide	0.01	2.1	600	0.14	1.4	6,500	0.14	1.8	8,600	0.29	1.7	15,700
	Total	**0.19**	**2.8**	**17,000**	**0.46**	**2.2**	**33,300**	**0.19**	**1.7**	**10,100**	**0.84**	**2.2**	**60,400**

Calvert	Oxide				0.43	1.3	17,900	0.05	0.8	1,400	0.48	1.3	19,300
	Sulphide				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**
Roe	Oxide	0.06	2.7	5,500	0.13	1.5	6,000	0.11	1.6	5,700	0.30	1.8	17,200
	Sulphide	0.01	2.5	1,000	0.07	2.3	5,300	0.21	2.2	14,800	0.30	2.2	21,100
	Total	**0.08**	**2.7**	**6,500**	**0.20**	**1.8**	**11,300**	**0.33**	**2.0**	**20,500**	**0.60**	**2.0**	**38,300**
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
	Sulphide				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**
Leach Pad	Oxide				0.86	0.7	19,300				0.86	0.7	19,300
	Sulphide												
	Total				**0.86**	**0.7**	**19,300**				**0.86**	**0.7**	**19,300**
Hester	Oxide				0.04	2.1	3,000	0.03	1.3	1,100	0.07	1.8	4,100
	Sulphide				0.01	2.1	900	0.05	1.4	2,100	0.06	1.6	3,100
	Total				**0.06**	**2.1**	**3,900**	**0.07**	**1.4**	**3,300**	**0.13**	**1.7**	**7,200**
Withnell Mining Centre	**Oxide**	**0.98**	**1.8**	**57,500**	**2.69**	**1.3**	**113,400**	**1.70**	**1.4**	**74,000**	**5.37**	**1.4**	**245,000**
	Sulphide	**0.66**	**1.7**	**34,800**	**9.02**	**1.9**	**550,100**	**10.54**	**2.4**	**796,200**	**20.22**	**2.1**	**1,381,100**
	Total	**1.63**	**1.8**	**92,300**	**11.72**	**1.8**	**663,500**	**12.24**	**2.2**	**870,200**	**25.58**	**2.0**	**1,626,100**

Wingina - Mining Centre

Deposit	Type	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
Wingina	Oxide	2.68	1.8	152,100	0.65	1.3	27,000	0.34	1.3	14,400	3.67	1.6	193,500
	Sulphide	0.40	1.6	20,500	0.34	1.5	16,300	1.08	1.7	57,400	1.82	1.6	94,200
	Total	**3.08**	**1.7**	**172,700**	**0.99**	**1.4**	**43,300**	**1.42**	**1.6**	**71,700**	**5.49**	**1.6**	**287,700**
Mt Berghaus	Oxide				0.68	1.8	38,900	0.99	1.1	35,800	1.67	1.4	74,700
	Sulphide				0.27	1.7	14,400	2.40	1.2	91,800	2.67	1.2	106,300
	Total				**0.95**	**1.7**	**53,300**	**3.39**	**1.2**	**127,600**	**4.34**	**1.3**	**181,000**

Amanda	Oxide				0.51	1.3	21,700	0.89	0.9	24,700	1.40	1.0	46,300
	Sulphide				0.07	1.8	4,200	0.56	1.1	19,200	0.63	1.2	23,300
	Total				**0.58**	**1.4**	**25,800**	**1.44**	**0.9**	**43,900**	**2.03**	**1.1**	**69,700**
Wingina Mining Centre	**Oxide**	**2.68**	**1.8**	**152,100**	**1.84**	**1.5**	**87,600**	**2.21**	**1.1**	**74,900**	**6.74**	**1.5**	**314,500**
	Sulphide	**0.40**	**1.6**	**20,500**	**0.68**	**1.6**	**34,900**	**4.04**	**1.3**	**168,400**	**5.12**	**1.4**	**223,800**
	Total	**3.08**	**1.7**	**172,700**	**2.52**	**1.5**	**122,500**	**6.25**	**1.2**	**243,200**	**11.86**	**1.4**	**538,400**

Appendix 2: Hemi Mineral Resource Estimate Summary

Geology and geological interpretation

Hemi was first discovered in aircore drilling in November 2019 and confirmed by RC drilling in March 2020.

Gold mineralisation at Hemi is hosted in a series of intermediate intrusions associated with sulphide (pyrite and arsenopyrite) stringers and disseminations within brecciated and altered quartz diorites that intrude into the surrounding Archaean aged Mallina Basin sediments. The Archaean bedrock is eroded and truncated by a 25m to 45m thick horizon of recent transported sediments that are barren of gold mineralisation. The Hemi style of mineralisation is new to the Pilbara region and shows a scale of gold mineralisation not previously seen in the Mallina Basin.

Hemi comprises a cluster of mineralised intrusions within a large intrusive complex spanning a structurally prepared corridor of 20x 10km dimensions. This large intrusive complex is only partially drill test below 100 metres depth from surface.

The Hemi intrusive complex comprises a number of separate bodies and is variably mineralised. Five main deposits have been delineated within the complex and have been separately estimated and reported. These include Brolga, Aquila, Crow, Falcon and Diucon-Eagle.

Weathering is variable across the project area, however a deep weathering profile is typically present within the mineralised zones. The base of complete oxidation ("BOCO") typically extends to a depth of between 60m and 100m below surface. The top of fresh rock is typically 30m to 60m below the BOCO. The interval between BOCO and TOFR is termed transitional. Parts of the weathered portion of the mineralised zones are kaolin rich which is typical of the oxide zone, however there is also substantial amounts of remnant or recrystallised sulphides. These zones have been termed the k_py domain and have been defined using their geochemical characteristics.

Drilling

Drilling at the Hemi deposit extends to a vertical depth of approximately 650m at Brolga and Aquila, and to approximately 400m in the other deposits and the mineralisation was modelled from surface to the maximum depth of effective drilling. All drilling has been completed by DEG and the estimate is based on data from 688 high quality RC holes and 169 diamond holes (including RC holes with diamond tail extensions). Drill hole spacing throughout much of the project is 40m by 40m. Areas of recently defined mineralisation, depth extensions of the deposits and some shallow portions of strong mineralisation have been defined with hole spacings of between 80m and 160m.

All drill hole collars were surveyed by contract and company surveyors using DGPS. All RC and diamond holes at Hemi were down hole surveyed using either a Reflex EZ-Gyro or an Axis Champ Gyro. Both utilise north-seeking gyro technology with final surveys generally at 10m down hole intervals.

Sampling and Sub-Sampling Techniques

The RC drill holes have been sampled at 1m intervals via a rig mounted cone splitter. Sample recovery was visually determined to be excellent and samples were almost exclusively kept dry during the drilling operations.

Diamond drill core was typically HQ2 and NQ2 diameter with a small number of PQ holes drilled to provide samples for metallurgical test work. Core recovery was generally excellent.

Core was sampled by half core (NQ2) or quarter core (HQ2 and PQ), generally at 1m intervals but with boundaries determined by logged geological features.

Sample Analysis Method

Sample preparation and assaying was carried out at the ALS facility in Perth. Samples were crushed (core) then the full sample pulverised (RC and core) before splitting to provide a sub-sample for analysis. All samples were assayed for gold using a 50g fire assay procedure. Every fifth sample, as well as numerous whole drill hole intervals, were also analysed by ICPOES/ICPAES to provide results for a 48 element suite.

An extensive QAQC protocol has been incorporated into all drilling programs. This included the use of certified reference material, field duplicates and inter-laboratory umpire checks. The results have confirmed the reliability of the sampling and assay data.

Resource estimation methodology

The Mineral Resource was estimated using ordinary kriging ("OK") grade interpolation of 1m composited data within wireframes prepared using nominal 0.2g/t Au envelopes. High grade cuts ranging between 10g/t and 30g/t gold were determined by statistical analysis and applied to the 1m composite data within certain lodes. Due to the general lack of high grade outliers throughout the Hemi mineralisation, the effect of the high grade cut was minimal other than in portions of the Crow deposit where erratic high grade mineralisation occurs.

A single block model was constructed to include all five deposits at Hemi. The model was rotated to 050° with parent block dimensions of 20m NS by 10m EW by 10m vertical with sub-cells of 5m by 5m by 2.5m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis ("KNA") and also considered drill hole spacing throughout the deposits. The Mineral Resource block model was created and estimated in Surpac using Ordinary Kriging ("OK") grade interpolation in up to three passes.

Interpolation parameters were based on geostatistical analysis of the main lodes and considered the geometry of individual lodes. A first pass search range of 120m was used with a minimum of 8 samples and a maximum of 20 samples. The first pass estimate informed 86% of the blocks. The search range was increased and minimum samples reduced to fill the remaining blocks.

Bulk Density

Bulk densities applied to the model were based on an extensive dataset of density determinations carried out on drill core. Different densities were applied to the various weathering domains and included 1.7t/m3 for oxide, 2.4t/m^3 for transition and 2.76t/m^3 for fresh rock. An assumed density of 2.0t/m^3 was applied to the transported cover.

Mineral Resource Classification

DEG has completed preliminary evaluation work based on first pass processing parameters and benchmarking of other cost parameters against similar scale projects. The results show the potential for development of a very large-scale open pit mining operation and confirms the potential for eventual economic extraction of the defined mineralisation.

The Hemi Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and mineralisation continuity. The Indicated Mineral Resource is based on mostly

40m spaced sections and 40m to 80m hole spacings on section where strong, continuous mineralisation has been intersected. A portion of the Brolga deposit drilled at 80m section spacing but displaying strong mineralisation consistent with the adjacent 40m spaced drilling has also been classified as Indicated Mineral Resource.

Areas of the block model that are informed by holes at more than 80m spacings, or areas of extrapolation have been classified as Inferred Mineral Resource. Some of the smaller lodes and in areas of erratic grade continuity have been defined as Inferred mineralisation even where closer spaced drilling may be present. Extrapolation of the Mineral Resource has generally been limited to 40m along strike and 80m down dip but up to 160m down dip in the strongest mineralisation.

Cut-off Grades

As the project does not yet have well defined operating cost and processing parameters, cut-off grades applicable to the project cannot be calculated. Preliminary metallurgical test work by DEG has demonstrated that a viable processing circuit can be developed for the project using well understood and currently available technology. The work has demonstrated that gold recoveries >95% can be achieved.

The preliminary process parameters and benchmarked production costs have been used to derive a reporting cut-off grade of 0.3g/t Au for the portion of the deposit considered to have potential for open pit mining. This was applied from surface to -300mRL (370m vertical depth).

It is clear that the mineralisation at Hemi extends strongly at depth in a number of areas and potential exists for underground mining in the future. To allow reporting of the deeper potential of the deposit, a cut-off grade reflecting large scale underground mining costs was required. Benchmarking against similar scale operations suggested that 1.5g/t Au was a reasonable cut-off grade. Consequently, a cut-off grade of 1.5g/t Au was applied for reporting of mineralisation below -300mRL (370m vertical depth).

Metallurgy

Preliminary results have been received from test work designed to assess the metallurgical performance of the Brolga and Aquila mineralisation. For Transitional and Fresh mineralisation, overall gold recoveries of 95% have been achieved on samples from Brolga and 94% on samples from Aquila using a flowsheet combining gravity, flotation/oxidation and CIL.

For oxide mineralisation, the test work has demonstrated that gold recovery of 95% can be achieved through conventional cyanide leaching.

Modifying factors

No modifying factors were applied to the reported Mineral Resource estimate. Parameters reflecting mining dilution, ore loss and metallurgical recoveries will be considered during the planned mining evaluation of the project.

Appendix 3: 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
Sampling techniques	• *Nature and quality of sampling (eg 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 representivity 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• All drilling and sampling was undertaken in an industry standard manner • Core samples were collected with a diamond rig drilling mainly 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. HQ and PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis. • Sample weights ranged from 2-4kg • RC holes were sampled on a 1m basis with samples collected from a cone splitter mounted on the drill rig cyclone. The 1m samples typically ranged in weight from 2.5kg to 3.5kg • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. Samples for selected holes were collected on a 1m basis by spear from 1m sample piles. Sample weights ranges from around 1kg to 3kg. Aircore results have not been used in the resource estimate • Commercially prepared certified reference material ("CRM") was inserted at a rate of approximately 1 in 20 samples. • Field duplicates were selected on a routine basis to verify the representivity of the sampling methods. • Sample preparation is completed at an independent laboratory where samples are dried, split, crushed and pulverized prior to analysis as described below. • Sample sizes are considered appropriate for the material sampled. • The samples are considered representative and appropriate for this type of drilling. Diamond core and RC samples are appropriate for use in the Mineral Resource estimate.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Diamond core diameters are - NQ2 (51mm), HQ3 (61mm), PQ (85mm). • Reverse Circulation (RC) holes were drilled with a 5 1/2-inch bit and face sampling hammer. • Aircore holes were drilled with an 83mm diameter blade bit.

Criteria	JORC Code explanation	Commentary
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.*	• 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. • RC and aircore samples were visually assessed for recovery. • Samples are considered representative with generally good recovery. Deeper RC and aircore holes encountered water, with some intervals having less than optimal recovery and possible contamination. • No sample bias is observed.
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.*	• The entire holes have been geologically logged and core was photographed by Company geologists, with systematic sampling undertaken based on rock type and alteration observed. • RC and diamond sample results are appropriate for use in a resource estimation, except where sample recovery is poor. • The aircore results provide a good indication of mineralisation but are not used in resource estimation.
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.*	• All core was logged and photographed. • NQ2 drill core was cut in half, with one half sent to the laboratory for assay and the other half retained. HQ and PQ core was quartered, with one quarter sent for assay. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis. • RC sampling was carried out by a cone splitter on the rig cyclone and drill cuttings were sampled on a 1m basis in bedrock and 4m composite basis in cover. • Aircore samples were collected by spear from 1m sample piles and composited over 4m intervals. Samples for selected holes were collected on a 1m basis by spear from 1m sample piles. • Industry prepared independent standards are inserted approximately 1 in 20 samples. • Each sample was dried, split, crushed and pulverised. • Sample sizes are considered appropriate for the material sampled. • The samples are considered representative and appropriate for this type of drilling • Core and RC samples are appropriate for use in a resource estimate. • Aircore samples are generally of good quality and appropriate for delineation of geochemical trends but were not used in the Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The samples were submitted to a commercial independent laboratory in Perth, Australia. • For diamond core and RC samples Au was analysed by a 50g charge Fire assay fusion technique with an AAS finish. • Aircore samples were analysed for Au using 25g aqua regia extraction with ICPMS finish. • All aircore samples and at least every fifth RC and DD sample were analysed with ALS procedure MS61 which comprises a four acid digest and repots a 48 element analysis by ICPAES and ICPMS. • The techniques are considered quantitative in nature. • A comprehensive QAQC protocol including the use of CRM, field duplicates and umpire assay at a second commercial laboratory has confirmed the reliability of the assay method.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• A number of significant intersections were visually field verified by the Competent Person. • No twin holes were completed. • Sample results have been merged by the company's database consultants. • Results have been uploaded into the company database, checked and verified. • No adjustments have been made to the assay data. • Results are reported on a length weighted basis.
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.*	• Diamond and RC drill hole collar locations are located by DGPS to an accuracy of +/-10cm. • Aircore hole collar locations are located by DGPS to an accuracy of +/-10cm., or by handheld GPS to an accuracy of 3m. • Locations are recorded in GDA94 zone 50 projection • Diagrams and location tables have been provided in numerous releases to the ASX. • Topographic control is by detailed georeferenced airphoto and Differential GPS data. • Down hole surveys were conducted for all RC and DD holes using a north seeking gyro tool with measurements at 10m down hole intervals.
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.*	• Within the limits of the Mineral Resource, the drill hole spacing varies from 40m by 40m spacing to 80m by 80m spacing. Small portions at the extremities of the of the deposit have been defined with hole spacings up to 160m. • Based on the extensive drilling programs carried out, the mineralised domains are

Criteria	JORC Code explanation	Commentary
		demonstrated to have sufficient continuity in both geology and grade to be considered appropriate for the Mineral Resource and Ore Reserve estimation procedures and classification applied under the 2012 JORC Code. • Samples have been composited to 1m lengths in mineralised lodes using best fit techniques prior to estimation.
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.*	• The drilling is approximately perpendicular to the strike of mineralisation. The holes are generally angled at -55º which provides good intersection angles into the mineralisation which ranges from vertical to -45º dip. • The sampling is considered representative of the mineralised zones. • Where drilling is not orthogonal to the dip of mineralised structures, true widths are less than downhole widths.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by company personnel and delivered direct to the laboratory via a transport contractor.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Reviews of drilling and sampling procedures were carried out by the Competent Person. • 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	• *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 license to operate in the area.*	• The entire Hemi Mineral Resource lies within exploration licence E45/3392-I. The tenement is held 100% by Last Crusade Pty Ltd, a wholly owned subsidiary of De Grey Mining Limited. • The Hemi Prospect is approximately 60km SSW of Port Hedland. • The tenements are in good standing as at the time of this report. • There are no known impediments to operating in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No detailed exploration is known to have occurred on the tenement prior to De Grey Mining. Prior to the Hemi discovery, De Grey completed programs of airborne aeromagnetics/radiometrics, surface geochemical sampling and wide spaced aircore and RAB drilling. Limited previous RC drilling was carried out at the Scooby Prospect approximately 2km NE of the Brolga deposit at Hemi.
Geology	• *Deposit type, geological setting and style of*	• The mineralisation style is new to the

Criteria	JORC Code explanation	Commentary
	mineralisation.	Pilbara region and is interpreted to be hydrothermally emplaced gold mineralisation within intermediate intrusions that have intruded into the older Archaean Mallina basin sediments. • Host rocks comprise igneous rocks of quartz diorite composition. • The gold mineralisation is intimately associated with sulphide stringer and disseminations. • The sulphide minerals are dominantly arsenopyrite and pyrite.

Drill hole Information	• *A summary of all information material to the under-standing 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.*
		• All exploration results have previously been communicated in various ASX releases.

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.*	• Exploration results are not being reported. • Not applicable, as a Mineral Resource is being reported. • Metal equivalent values have not been 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').*	• The drill holes are interpreted to be approximately perpendicular to the strike of mineralisation. • Where drilling is not perpendicular to the dip of mineralisation the true widths are less than downhole widths.
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.*	• Relevant diagrams have been included in numerous ASX releases.
Balanced reporting	• *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.*	• All drilling used in the Mineral Resource estimate has been accurately located using DGPS for collar locations and gyroscopic downhole directional surveys.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Exploration results are not being reported.
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.*	• Extensive metallurgical, groundwater, and geotechnical studies have commenced as part of the economic assessment of the project.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration drilling is ongoing at the project. • Further infill drilling will be conducted prior to commencement of mining. • Refer to diagrams in the body of this and previous ASX releases.

Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• *All drilling data in the Mineral Resource estimate has been generated by DEG since 2019. It has been systematically recorded and stored using industry best practice for data management.* • *Field validation of 13 holes was carried out by the Competent Person. This included verification of the hole location as well as review of core or chips to confirm the mineralisation intervals.*
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• *Since 2017 several site visits have been carried out to the Mallina Gold Project by the Competent Person.* • *A specific Hemi site visit was conducted in November 2020. The extensive drilling program was in operation at the time with 8 rigs working at the project. Procedures were determined to be sound and core and chips from 12 drill holes were reviewed to confirm the style and extent of mineralisation.* • *The favourable topography was confirmed and no obvious impediments to future development were identified.*
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling*	• *The confidence in the underlying geological interpretation is considered to be high and is based on extensive RC and core drilling. The entire project area is overlain by 25m to 45m of transported cover so no outcrop is present.* • *Five discrete deposit areas have been defined within the Hemi project. These*

Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation. • *The factors affecting continuity both of grade and geology.*	*include Brolga, Aquila, Crow, Falcon and Diucon-Eagle.* • *Geochemistry and geological logging have been used to assist with identification of lithology, mineralisation and weathering.* • *The deposit consists of broad zones of gold mineralisation within well defined intrusive lithologies. Gold is associated with pyrite and arsenopyrite with sericite and silica alteration of the host rocks.* • *The controlling lithologies are well defined and lithology boundaries commonly coincide with mineralisation boundaries. Some of the mineralised zones have gradational boundaries, with the limit of mineralisation based on a gold cut-off grade.* • *Infill drilling has confirmed geological and grade continuity in most areas of the deposit.*
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• *The Hemi Mineral Resource area extends over a north-south strike length of 2000m, and an east-west extent of 3300m. It has been drilled and interpreted to a maximum vertical interval of 670m from surface at 70mRL to -600mRL.*
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• *Using parameters derived from modelled variograms, Ordinary Kriging ("OK") was used to estimate average block grades in up to three passes using Surpac software.* • *Linear grade estimation was considered suitable for the Hemi Mineral Resource due to the generally well defined, disseminated nature of the mineralisation and the absence of erratic high grade outliers in most of the mineralised zones.* • *Maximum extrapolation of wireframes from drilling was 160m down-dip in the strongest zones where the host lithology was confidently defined.* • *No recovery of by-products is anticipated.* • *In addition to gold, sulphur and arsenic were estimated in the model to provide information for metallurgical evaluation.* • *The Mineral Resource parent block dimensions used were 20m NS by 10m EW by 10m vertical with sub-cells of 5m by 2.5m by 2.5m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis and the drill hole spacing in the well drilled parts of the deposit.* • *For the Mineral Resource area, an orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in zone orientations, however all other parameters were taken from the variography. Up to three passes were used*

Criteria	JORC Code explanation	Commentary
		for each domain. First pass had a range of 120m, with a minimum of 8 samples and filled 86% of the model. For the second pass, the range was extended to 180m, with a minimum of 8 samples which filled a further 10% of the model. For the third pass, the range was extended to 240m, with a minimum of 4 samples. A maximum of 20 samples was used for all passes, with a maximum of 6 samples per hole. • *A degree of correlation was determined between Au and S and Au and As. Strong correlation was determined between S and As. No assumptions about correlation were made in the estimate.* • *Within the Mineral Resource area, the deposit mineralisation was constrained by wireframes constructed using a 0.2g/t Au cut-off grade. The wireframes were applied as hard boundaries in the estimate and in a number of areas coincided with the interpreted intrusion contact.* • *Statistical analysis was carried out on data from 41 individual estimation domains. The moderate to high coefficient of variation and the scattering of high grade values observed on the histogram for some of the domains suggested that high grade cuts were required if linear grade interpolation was to be carried out. As a result, variable high grade cuts between 10g/t and 30g/t Au were applied.* • *Other than the McLeod Lode at the Crow deposit, the high grade cut had negligible impact on the reported grade and contained gold in the deposit.* • *In the McLeod Lode, application of the high grade cut reduced the reported grade and contained gold by 20%.* • *Validation of the model included detailed comparison of composite grades and block grades by strike, cross strike and elevation. Validation plots showed good correlation between the composite grades and the block model grades.*
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• *Tonnages and grades were estimated on a dry in situ basis.*
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• *The Mineral Resource has been reported at a cut-off 0.3g/t Au for mineralisation above 370m vertical depth, and 1.5g/t Au cut-off below 370m.* • *The reporting cut-off parameters were selected based on preliminary economic evaluation of the Hemi deposit.*

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• *The substantial size and shallow nature of the mineralisation at Hemi suggests that the deposit could be mined with open pit mining techniques. Higher grade zones within the deposit also show potential for large scale underground mining if sufficient Mineral Resources can be defined.*
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• *Extensive metallurgical test work has been completed to understand the likely processing characteristics of the Hemi mineralisation.* • *Initial work suggests that high gold recoveries can be achieved through a combination of conventional CIL processing, and flotation of sulphides before pressure oxidation or ultra fine grinding.* • *Anticipated metallurgical recoveries for the are >95%.*
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• *No assumptions have been made regarding environmental factors. DEG will work to mitigate environmental impacts as a result of any future mining or mineral processing.*
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• *Bulk density values applied to the Mineral Resource were based on a substantial number of density determinations carried out on drill core.* • *A bulk density of 1.7t/m3 was applied to oxide material, 2.4t/m3 was applied to transitional material and 2.76t/m3 was applied to primary sulphide material.* • *The transported cover material was assigned an assumed density value of 2.0t/m3.*
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	• *The Mineral Resource estimate is reported in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC).*

Criteria	JORC Code explanation	Commentary
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• *The Hemi Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and geological and grade continuity.* • *The Indicated Mineral Resource is based on mostly 40m spaced sections and 40m hole spacings on section. Where the mineralisation showed clear continuity into areas of 80m by 40m drill hole spacing, these were also classified as Indicated Mineral Resource.* • *The majority of the Inferred Mineral Resource has been defined with a drill hole spacing of 80m by 80m. In peripheral parts of the deposits, or in recently delineated zones of mineralisation, portions of the Mineral Resource are defined with holes spacings up to 160m.* • *Extrapolation of the mineralisation was generally limited to 80m along strike and down dip of drill hole intersections. Extrapolation of up to 160m down dip was included where the strongest mineralisation remained open and untested.* • *The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains.* • *Quantitative validation of the block model using swath plots and statistical comparison shows good correlation of the input data to the estimated grades.* • *The Mineral Resource estimate appropriately reflects the view of the Competent Person.*
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• *Internal audits have been completed by PayneGeo* • *DEG has completed an internal audit of the resource model* • *DEG commissioned Cube Consulting to complete an external review of the resource model. The review verified the technical inputs, methodology, parameters and results of the estimate.* • *Cube and PayneGeo recommend additional resource definition drilling at Hemi including at Brolga and Crow as economic studies progress.* • *Cube recommend alternative estimation methods be evaluated as mining and economic studies progress with a view to better defining local areas of waste in Brolga and Crow*

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• *The deposit geometry and continuity has been adequately interpreted to reflect the classification applied to the Mineral Resource.* • *The data quality is excellent and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.* • *The Mineral Resource statement relates to global estimates of tonnes and grade.*