ASX: DEG

ASX ANNOUNCEMENT

15 June 2023

Mallina Gold Project Resource Statement - 2023

Hemi Mineral Resource grows by 1.0Moz to 9.5Moz

Global Mallina Gold Project Resource grows by 1.1Moz to 11.7Moz

Global Measured & Indicated Resources grow by 1.1Moz to 8.1Moz

Hemi Highlights

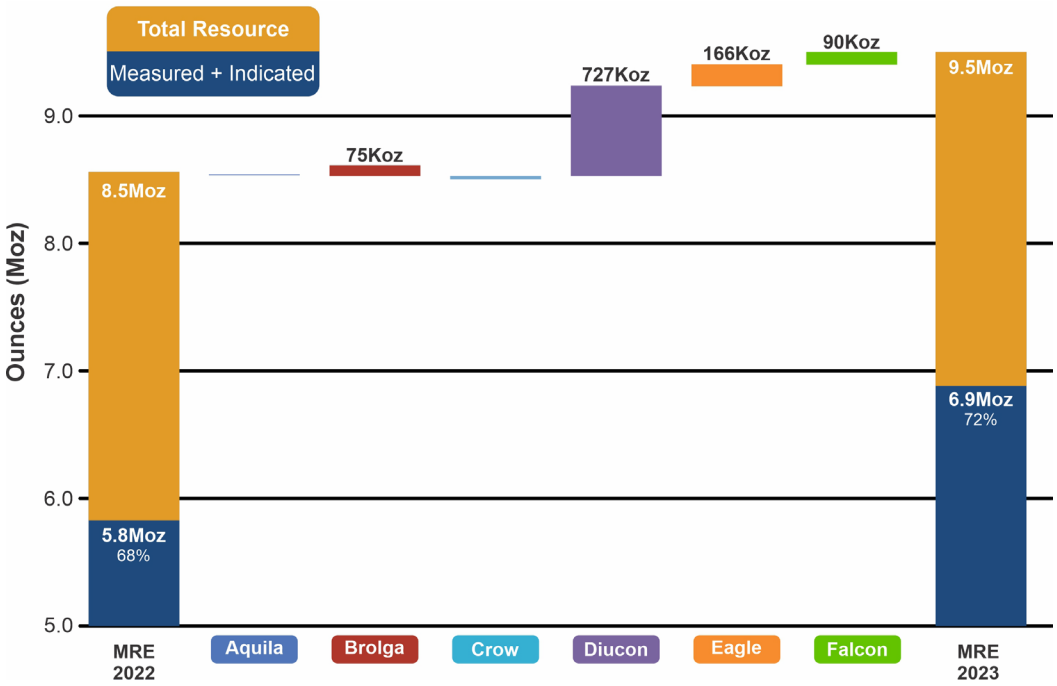
- **Hemi - Gold Mineral Resource grows 12% to 9.5Moz, including 6.9Moz JORC Indicated category**

Hemi Mineral Resource Estimate (JORC 2012)	**236Mt @ 1.3g/t Au for 9.5Moz**
Indicated (72%)	166Mt @ 1.3g/t Au for 6.9Moz
Inferred (28%)	71Mt @ 1.2g/t Au for 2.6Moz

(0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 7 March 2023, rounding errors may occur)

- Indicated category increases from 5.8Moz to 6.9Moz, providing a strong platform for the upcoming Definitive Feasibility Study (DFS) and Ore Reserve update.
- Indicated resources fall within the Open Pit classification to 390m depth.
- Inferred Resource discovery cost of $10/oz and additional conversion cost to Indicated Resource of $6/oz at Hemi.

Figure 1 Change in Hemi Mineral Resource Estimate from May 2022 to June 2023.



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Mallina Gold Project Highlights

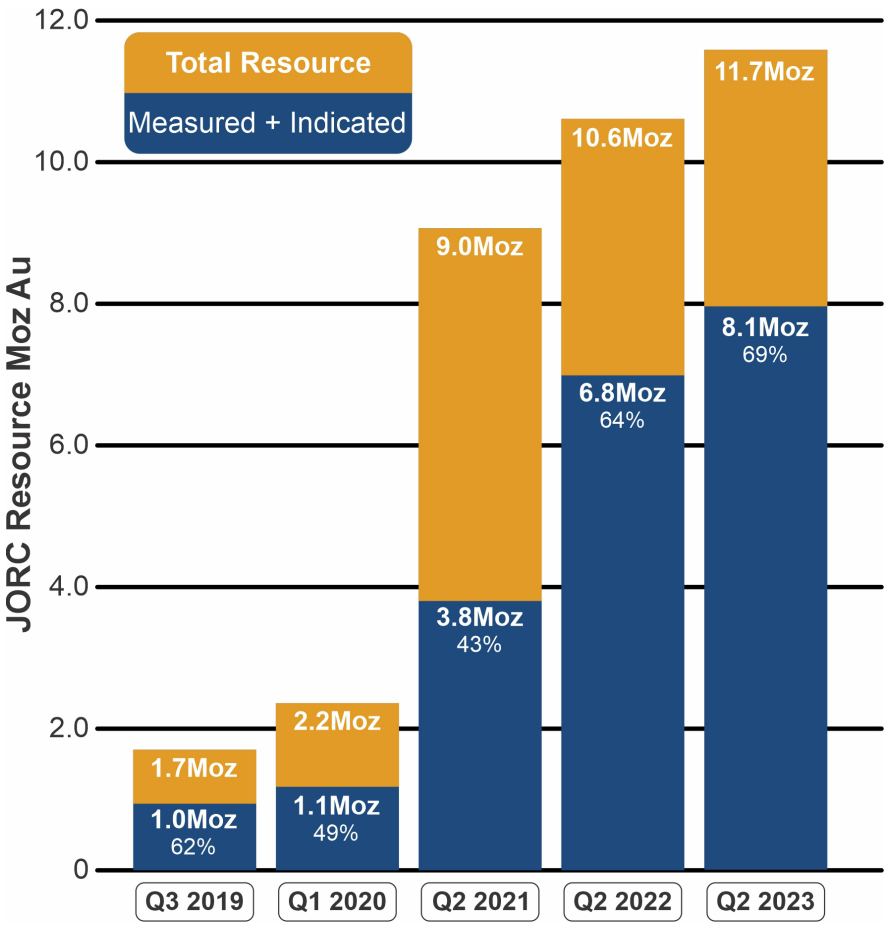
- **MGP - Global Gold Mineral Resource increases to 11.7Moz including 8.1Moz M&I**

MGP Mineral Resource Estimate (JORC 2012)	**278Mt @ 1.3g/t Au for 11.7Moz**
Measured (2%)	5Mt @ 1.7g/t Au for 0.3Moz
Indicated (66%)	184Mt @ 1.3g/t Au for 7.8Moz
Inferred (32%)	89Mt @ 1.3g/t Au for 3.7Moz

(0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 7 March 2023, rounding errors may occur)

- Toweranna resource increased by 14% to 0.6Moz.
- Measured and Indicated Resources increase by 18% to 8.1Moz, with Hemi contributing 6.9Moz.
- All deposits remain open at depth and some along strike with drilling for resource extensions continuing.
- Exploration drilling continues to test for new shallow resources near Hemi and large-scale discoveries within the Greater Hemi corridor and regional target areas.

Figure 2 Five year Mallina Gold Project Mineral Resource Growth



De Grey GM Exploration, Philip Tornatora, commented:

"*Hemi is Australia's largest undeveloped gold deposit and continues to grow. Work during the last 12 months has upgraded the resource to a high confidence level to support delivery of the DFS.*

Drilling has provided a significant lift in Indicated resources, expanded open pit resources (particularly at Diucon and Eagle) and provided geotechnical and metallurgical data to support the DFS.

The Hemi resource below 390m has now reached 1Moz and conceptual studies are planned to determine the potential of an underground mining operation to add to the Project mine life and the current PFS production rate of 540,000ozpa through the potential delivery of higher grade material to the plant. Drilling beneath the open pits at Hemi has demonstrated that the large mineralised system remains open.

Our ongoing exploration is targeting strike and depth extensions to the Hemi deposits, new shallow potential resources adjacent to Hemi, as well as new large-scale discoveries at Regional prospects. Work is also ongoing to expand and upgrade the Regional deposits."

De Grey Managing Director, Glenn Jardine, commented:

"Resource definition drilling completed for the 2023 MRE update at Mallina has succeeded in increasing Measured and Indicated resources from 6.8Moz to 8.1Moz with Hemi Indicated resources increasing from 5.8Moz to 6.9Moz.

"The increase in Indicated resources has been aimed at improving the overall Ore Reserve and percentage of Ore Reserves within the DFS production profile. Increased Ore Reserves will further de-risk the project and maximise its debt carrying capacity. The DFS is advancing to plan and due for completion in the September quarter 2023."

Refer to page 14 and 15 of this announcement for Competent Person disclosures and a disclaimer in relation to forward looking statements contained in this announcement. A summary of estimation techniques and modifying factors in contained in Appendix 2 of this announcement.

All references to the Prefeasibility Study and its outcomes in this announcement relate to ASX announcement *Mallina Gold Project Preliminary Feasibility Study Outcomes* dated 8 September 2022. All material assumptions and technical parameters used in the Preliminary Feasibility Study continue to apply and have not materially changed.

All references to the 2022 Mineral Resource Estimate in this announcement relate to ASX announcement *Mallina Gold Project Resource Statement – 2022* dated 31 May 2022. Please refer to this announcement for full details and supporting information including JORC and Competent Person information.

[1]Resource discovery costs exclude regional exploration, study, corporate and administration costs.

De Grey Mining Limited (ASX: DEG, "De Grey" or the "Company") is pleased to report that the Mallina Gold Project Mineral Resource Estimate (MRE) update has been completed by Cube Consulting Pty Ltd, based on additional drilling and assay results to 7 March 2023 at the Hemi and Toweranna gold deposits. The other Regional gold deposit MREs remain unchanged from the April 2020 Mineral Resource statement.

Overall, the MRE increases include:

- **Hemi increased by 12% contained gold to 9.5Moz**
  - The Diucon resource increased by 44% contained gold to 2.4Moz
  - Hemi JORC Indicated category increases from 5.8Moz contained gold to 6.9Moz
  - The Hemi resource below 390m depth totals 1.0Moz
- **Mallina Gold Project (MGP) increased 11% to 11.7Moz**
  - MGP JORC Measured and Indicated categories increased by 18% to 8.1Moz

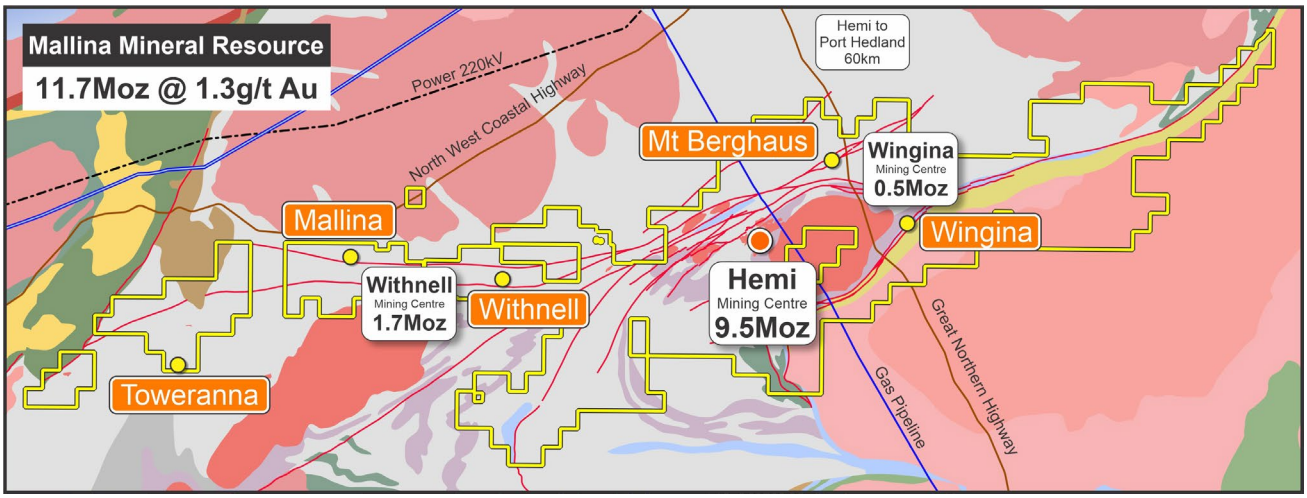
The Hemi MRE is based on 439 diamond drill holes for a total of 133,574m and 1,033 reverse circulation (RC) drill holes for 249,192m including pre-collars completed between February 2020 and the March 2023 cut-off date.

The DFS is well advanced and due in the September Quarter 2023. This DFS will provide an updated assessment of mineable resources, Ore Reserves and economics of the project.

Hemi Mineral Resource Update

The Hemi gold deposit is located centrally within De Grey's 1,500km^2 Mallina Gold Project and immediately southwest of Port Hedland in the northern Pilbara region of Western Australia. The project benefits from its close proximity to Port Hedland's major infrastructure network, including major highways, port facilities, gas pipelines, overhead 220kV electrical powerlines and associated power stations.

Figure 3 Mallina Gold Project showing main gold deposits and the Hemi Discovery.



Hemi was first discovered by aircore drilling conducted in November 2019 and confirmed by RC drilling in February 2020. Extensive RC and diamond drilling continued during 2020 and 2021, leading to the maiden MRE of 6.8Moz for Hemi announced on 23 June 2021.

Additional drilling during 2021 to 2023 has focused on improving the density of drilling within, and resource extensions to, the maiden MRE. This has culminated in this MRE update based on assays to 7 March 2023. All deposits remain open at depth and along strike. Drilling continues to test for extensions to the known deposits at Hemi and new discoveries within the Greater Hemi region.

Gold mineralisation at Hemi is primarily 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 was previously unknown in the Pilbara region and shows a scale of gold mineralisation not previously seen in the Mallina Basin.

A Preliminary Feasibility Study (PFS) was completed in September 2022, based on the May 2022 MRE. This included a Maiden Ore Reserve for Hemi of 5.1Moz @ 1.5g/t Au. The PFS highlighted an open pit mining scenario and on-site processing based on a 10Mt annual throughput. The study showed potential production of:

- An average ~550,000ozpa over the first 5 years
- An average ~540,000ozpa over the first 10 years at an average processed grade of 1.6g/t Au

The PFS provided strong and robust economics which are expected to be improved upon during the DFS currently underway. The DFS is expected to be completed during the September Quarter 2023 and is based on this June 2023 MRE.

The June 2023 MRE for Hemi is summarised below by deposit and then by the depth breakdown for open pit (above 390m depth) and underground (below 390m depth). A plan view of the various Hemi deposits is shown in Figure 4 and the relative JORC Indicated and Inferred portions are shown in Figure 5.

Table 1 Hemi - Mineral Resource Estimate (JORC 2012) by Deposit, June 2023.

Deposit	Indicated			Inferred			Total		
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Aquila	**12.7**	**1.5**	**631**	**7.2**	**1.2**	**283**	**19.9**	**1.4**	**913**
Brolga	**46.0**	**1.3**	**1,982**	**16.2**	**1.0**	**525**	**62.2**	**1.3**	**2,507**
Crow	**24.3**	**1.1**	**874**	**7.6**	**1.2**	**288**	**31.9**	**1.1**	**1,162**
Diucon	**37.2**	**1.3**	**1,590**	**17.1**	**1.4**	**773**	**54.3**	**1.4**	**2,363**
Eagle	**19.6**	**1.2**	**743**	**10.7**	**1.1**	**371**	**30.2**	**1.1**	**1,114**
Falcon	**26.0**	**1.3**	**1,056**	**12.0**	**1.0**	**393**	**37.9**	**1.2**	**1,449**
Total Hemi	**165.7**	**1.3**	**6,876**	**70.7**	**1.2**	**2,632**	**236.5**	**1.3**	**9,508**

Note: 0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 7 March 2023, Differences may occur due to rounding

Table 2 Hemi - Mineral Resource Estimate (JORC 2012) by Depth, June 2023.

Depth	Indicated			Inferred			Total		
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
0 – 390m	**165.2**	**1.3**	**6,856**	**50.5**	**1.0**	**1,661**	**215.8**	**1.2**	**8,517**
Below 390m	**0.5**	**1.2**	**20**	**20.2**	**1.5**	**971**	**20.7**	**1.5**	**991**
Total Hemi	**165.7**	**1.3**	**6,876**	**70.7**	**1.2**	**2,632**	**236.5**	**1.3**	**9,508**

Note: 0.3g/t Au cut-off above 390m depth, 1.0g/t Au cut-off below 390m depth, assays to 7 March 2023. Differences may occur due to rounding.

The Indicated resources of the Hemi MRE occurs within the Open Pit classification to a depth of 390m from surface. The previous 12 month infill drilling program concentrated on increasing the density of drilling within the previously defined PFS pit shells. The aim of this infill drilling was to increase the Indicated resources for inclusion within the DFS, for potential conversion to reserves.

Figure 4 Hemi gold deposits resource areas.

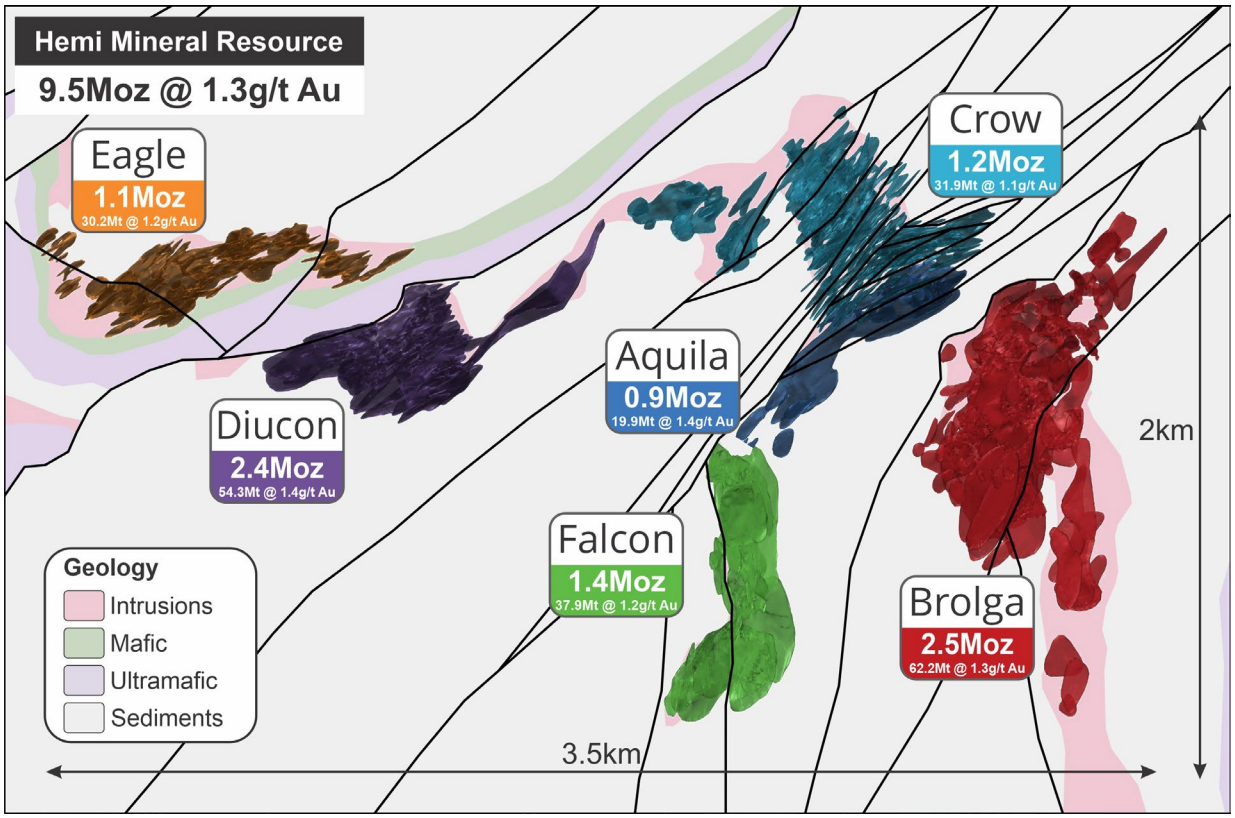
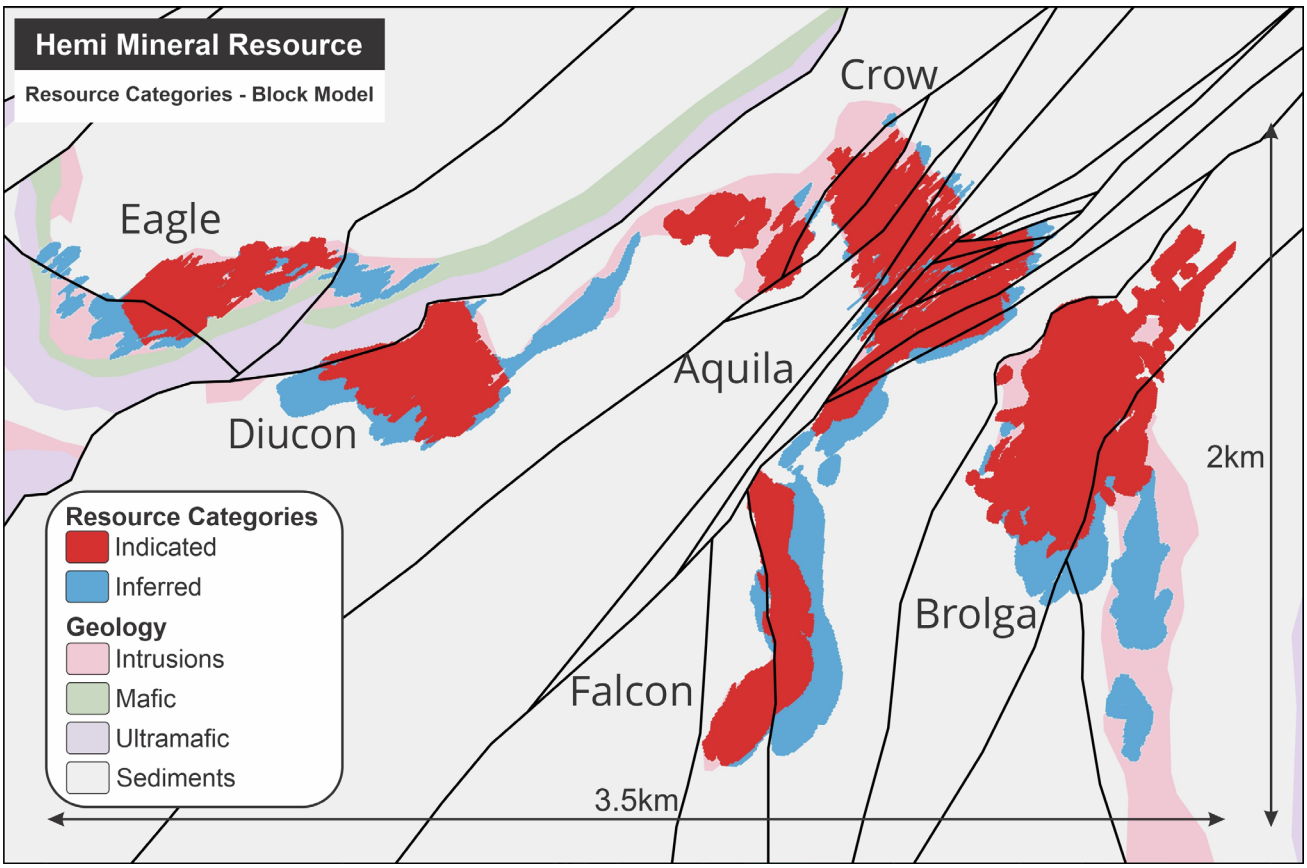


Figure 5 **Hemi gold deposits resource showing JORC Indicated and Inferred areas.**



The robust nature of the Hemi May 2023 MRE is demonstrated in Table 3 which provides a summary of the MRE estimated at higher cut off grades than the reported resource estimate (which is reported at a cut-off grade of 0.3g/t Au).

Table 3 **Hemi Project Mineral Resource at various cut-off grades.**

Cut-off Grade 0 – 390m	Indicated			Inferred			Total		
(Au g/t)	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
0.3	165.7	1.3	6.9	70.7	1.2	2.6	236.5	1.3	9.5
0.4	148.3	1.4	6.7	63.5	1.2	2.6	211.8	1.4	9.2
0.5	131.9	1.5	6.4	57.2	1.3	2.5	189.1	1.5	8.9
0.6	117.3	1.6	6.2	51.8	1.4	2.4	169.1	1.6	8.5
0.7	104.4	1.8	5.9	47.2	1.5	2.3	151.6	1.7	8.2

Note: Above 390m depth, cut-off grades as shown above. Below 390m depth a 1.0g/t cut-off was applied.

The high average gold endowment, shown as ounces per vertical metre (oz/Vm) for each Hemi deposit, provides strong support for the economic potential of open pit mining. The upper 200m portion of the Brolga resource equates to 10,400oz/Vm and is the reason the Brolga starter pit described in the PFS is prioritised in the early stages of the development strategy and sequencing.

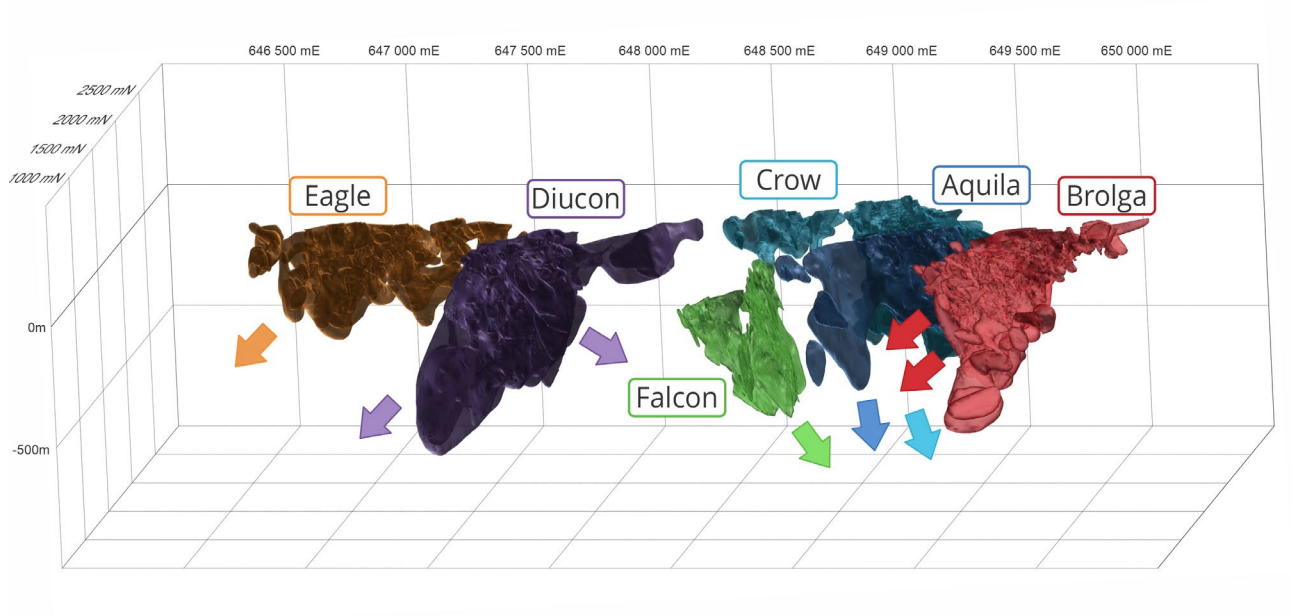
Brolga	**6,700oz/Vm** above 390m depth with **10,400oz/Vm** above 200m depth
Aquila	**2,350oz/Vm** above 390m depth
Crow	**3,000oz/Vm** above 390m depth
Falcon	**3,800oz/Vm** above 390m depth
Diucon	**4,700oz/Vm** above 390m depth
Eagle	**3,000oz/Vm** above 390m depth
TOTAL HEMI	**23,500oz/Vm** above 390m depth

The current combined strike of the six current deposits at Hemi is approximately 5.5km. Where comprehensive drilling has been conducted at the deposits, the combined gold endowment is approximately 23,500 ounces per vertical metre. This gives some indication of the deeper potential at Hemi, where all the deposits remain open at depth. Limited drilling has been conducted below 390m depth as drilling has focused on increasing the confidence of resources likely to be exploited by large scale open pit mining methods. However, a Mineral Resource of 1Moz has been defined below 390m depth at Hemi and there is strong potential to increase the deeper gold endowment, particularly at Diucon and Eagle, where drilling continues to intersect broad zones of mineralisation beyond the limits of the resource model (Figure 6). Similarly, the down plunge potential to the southwest of Brolga and below Aquila/Crow are other high priority areas.

In addition, numerous shallow targets remain to be followed up near the Hemi deposits. Current drilling is concentrating on shallow, open pit targets between and to the west of the Diucon/Eagle deposits and at Antwerp, in addition to Brolga South and Falcon South. Drilling of conceptual targets in the Greater Hemi region near surface and at depth also have the potential to discover new large scale deposits.

Drilling during the next 12 months will aim to extend the known deposits at Hemi at depth and along strike, and test priority targets within the Greater Hemi region based on geochemistry, geology and geophysics.

Figure 6 Hemi showing potential resource extension target areas.



Future Mining Potential

As previously stated, the PFS was completed in September 2022, based on the May 2022 MRE, which demonstrated the May 2022 MRE (8.5Moz) was economic with a potential 13.6 year mine life at an average grade of 1.6g/t Au and an average annual production rate of ~540,000oz over the first 10 years at an average grade of 1.8g/t Au. The updated June 2023 MRE is currently the subject of a detailed DFS which is expected to be finalised during the September Quarter 2023.

The Hemi MRE update process incorporated preliminary pit optimisations to define potential open pit mining depths. The following parameters were used: various gold prices, mining costs averaging AUD $9.33/BCM for ore and AUD $7.88/BCM for waste and processing costs of A$30.01 per tonne for all material types used.

The preliminary pit shells reached a maximum depth of 450m below surface (-390 mRL) for Brolga, 470m below surface (-410 mRL) for Diucon, and the maximum depths for the shells for the other deposits was 400m to 420m below surface (-340 to -360 mRL). These pit optimisations were used to verify the depth level to divide open pit from underground resources.

Cube concluded that a depth of 390m (-320 mRL) below surface is realistic for future possible open pit mining based on current drilling data. Previously a depth of 370m (-300 mRL) below surface was used to differentiate open pit from underground resources. The underground resources have been reported above a cut-off grade of 1.0g/t Au. The cut-off grade has been lowered from the previous cut-off of 1.5g/t Au after considering the possibility of applying bulk underground mining methods. Appropriate mining cost and gold prices have been used to determine the cut-off grade (see JORC Table 1 in Appendix 5 for more detail).

For comparison purposes, Table 4 shows the in-situ MRE within pit shell optimisations at Hemi conducted at various gold prices.

Table 4 Hemi – Mineral Resources at a 0.3g/t Au cut-off grade within open pit optimisation shells generated at various gold prices

Gold price	Indicated			Inferred			Total		
(A$/oz)	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
2,100	145.7	1.3	6,281	4.3	1.3	174	150.0	1.3	6,456
2,300	152.2	1.3	6,494	9.3	1.2	359	161.5	1.3	6,853
2,500	155.7	1.3	6,600	12.8	1.2	480	168.5	1.3	7,080
2,700	159.1	1.3	6,703	17.4	1.2	646	176.4	1.3	7,349
2,900	160.1	1.3	6,730	20.9	1.1	772	181.0	1.3	7,501
3,100	161.4	1.3	6,766	26.1	1.1	944	187.5	1.3	7,711
3,300	162.6	1.3	6,801	33.0	1.1	1,219	195.6	1.3	8,020

Note: Only open pit resources reported from Hemi. Regional resources excluded.

Table 5 provides an overview of the contained resources for the 2023 MRE within the A$2,500/oz open pit optimisation shell showing the range of resources at various cut off grades. The table shows a range from 7.1Moz @ 1.3g/t (0.3g/t cut-off) to 6.1Moz @ 1.8g/t (0.7g/t cut-off). Importantly, all ranges show the Indicated category being greater than 93% in all cases.

This compares with the same information presented from the 2022 MRE provided in Table 6. At a 0.5g/t Au cut-off grade, total resources within pit shells have increased from 6.2Moz to 6.7Moz with Indicated resources increasing from 5.3Moz to 6.2Moz.

The high level of Indicated category resources within pit shells points to the high confidence level in potential production and Ore Reserves to be reported in the DFS. This high confidence level will enable debt providers to maximise the debt carrying capacity of the project and will provide confidence to the overall investment community in Hemi's production profile.

The resources contained within the pit shells shown in tables 4, 5 and 6 do not represent reserves. The resources will be subject to mining studies that will include consideration of dilution, ore loss and other factors.

Table 5 Hemi – Mineral Resources within a $2,500/oz open pit optimisation shell at various cut off grades – 2023 MRE

Cut-off grade (Au g/t)	Indicated			Inferred			Total			% Indicated
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	
0.3	155.7	1.3	6,600	12.8	1.2	480	168.5	1.3	7,080	93.2%
0.4	140.1	1.4	6,424	11.4	1.3	464	151.4	1.4	6,888	93.3%
0.5	125.2	1.5	6,209	10.0	1.4	444	135.2	1.5	6,653	93.3%
0.6	111.8	1.7	5,971	8.8	1.5	423	120.6	1.6	6,394	93.4%
0.7	99.8	1.8	5,721	7.7	1.6	400	107.5	1.8	6,121	93.5%

Note: Only open pit resources reported from Hemi. Regional resources excluded.

Table 6 Hemi – Mineral Resources within a $2,500/oz open pit optimisation shell at various cut off grades – 2022 MRE

Cut-off grade (Au g/t)	Indicated			Inferred			Total			% Indicated
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	
0.3	133.6	1.3	5,651	26.9	1.1	988	160.5	1.3	6,639	85.1%
0.4	120.2	1.4	5,500	23.5	1.3	950	143.7	1.4	6,450	85.3%
0.5	107.4	1.5	5,315	20.4	1.4	905	127.8	1.5	6,220	85.4%
0.6	95.8	1.7	5,110	17.7	1.5	858	113.5	1.6	5,968	85.6%
0.7	85.5	1.8	4,895	15.4	1.6	810	100.9	1.8	5,705	85.8%

Note: Only open pit resources reported from Hemi. Regional resources excluded.

Mallina Gold Project Resources

The overall global Mallina Gold Project (MGP) MRE (JORC 2012) has increased 11% to **278Mt @ 1.3g/t Au for 11.7Moz**. Increases have occurred mainly at Hemi, with a small increase at Toweranna. All other existing Regional resources within the Withnell and Wingina Mining centres remain unchanged since the April 2020 MRE (except Toweranna).

Table 6 Mallina Gold Project - Mineral Resource Estimate (JORC 2012) by Mining Centre, June 2023.

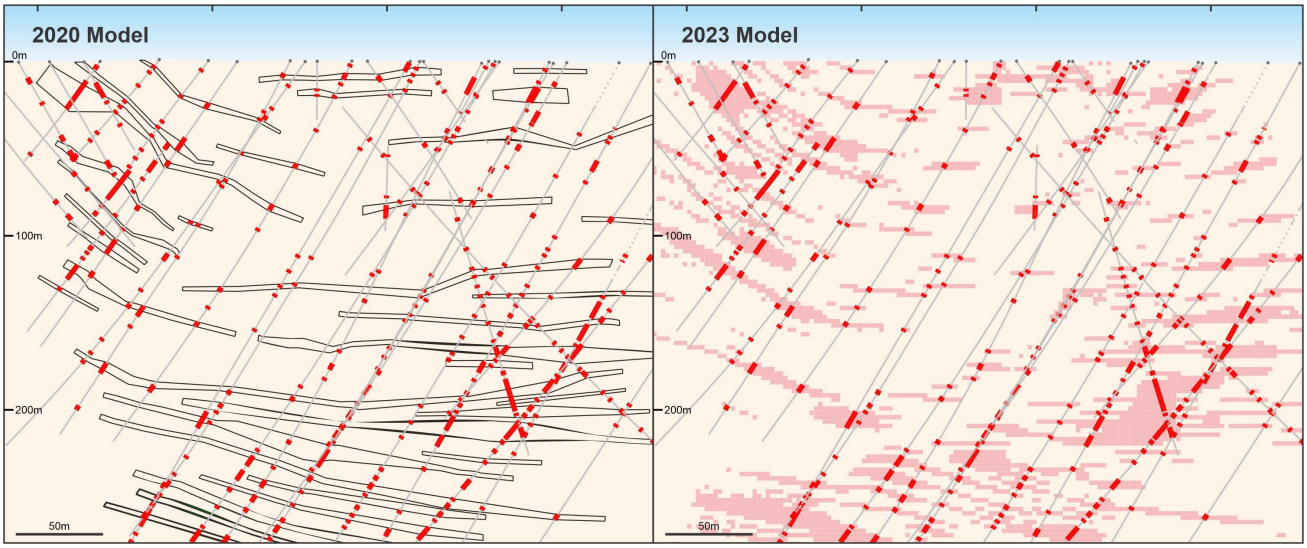
Mining Centre	Total		
	Mt	Au g/t	Koz
Hemi Mining Centre	**236.5**	**1.3**	**9,508**
Withnell Mining Centre	**29.7**	**1.8**	**1,701**
Wingina Mining Centre	**11.9**	**1.4**	**538**
Total	**278.0**	**1.3**	**11,747**

An updated resource model was developed for the Toweranna deposit, which used indicator kriging (IK) to constrain estimation domains, where data is flagged as 1 for mineralisation (minimum interval of 2m and Au >=0.3g/t) and 0 for waste. The IK approach is considered to be a more objective and lower risk approach than the potential bias introduced by manually selecting and linking discrete veins between drillholes as previously done. Additionally, the IK approach allowed for the incorporation of all mineralisation at the defined cut-off, which may not have been included previously (see Figure 9). This has resulted in the updated resource model containing increased tonnes (56%) and ounces (14%) with a reduction in grade (27%) than the previous model.

A total of 24 additional diamond drill holes were drilled at Toweranna since the previous 2020 MRE update. Of these drill holes 10 focussed on upgrading the resource category to Indicated at the base of the proposed pit, 10 supported geotechnical studies and 4 supported metallurgical studies.

The updated Toweranna MRE (JORC 2012) is 11.5Mt @ 1.6g/t for 0.6Moz.

Figure 9 Cross sections through Toweranna showing 2020 mineralisation domain model compared to 2023.



The MGP MRE has grown substantially since 2016 from approximately 0.3Moz in 2016 to 2.2Moz in early 2020 just prior to the discovery of the Hemi deposits. In just over three years since early 2020, Hemi has added a further 9.5Moz. Overall, the MGP resource since 2016 has increased by approximately 40 times to 11.7Moz. Importantly, the Measured and Indicated portion of the MGP MRE represents 69% of the total resource.

The latest resource increase has occurred mainly at Hemi, with an additional 1.0Moz added since the May 2022 MRE. The Toweranna resource update resulted in an additional increase of 75Koz. Figure 9 shows the resource additions at each of the individual deposits within Hemi.

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

- Resource extensions and new zones at Hemi;
- Discovery of new intrusion-style and shear-hosted mineralisation in the Greater Hemi region;
- Resource extensions at Withnell and the other regional shear-hosted deposits;
- Toweranna and Charity Well corridor; and
- Application of geological experience to discover new deposits within the large tenement portfolio (Figure 10).

Figure 9 Hemi – Resource additions since Maiden Resource in June 2021.

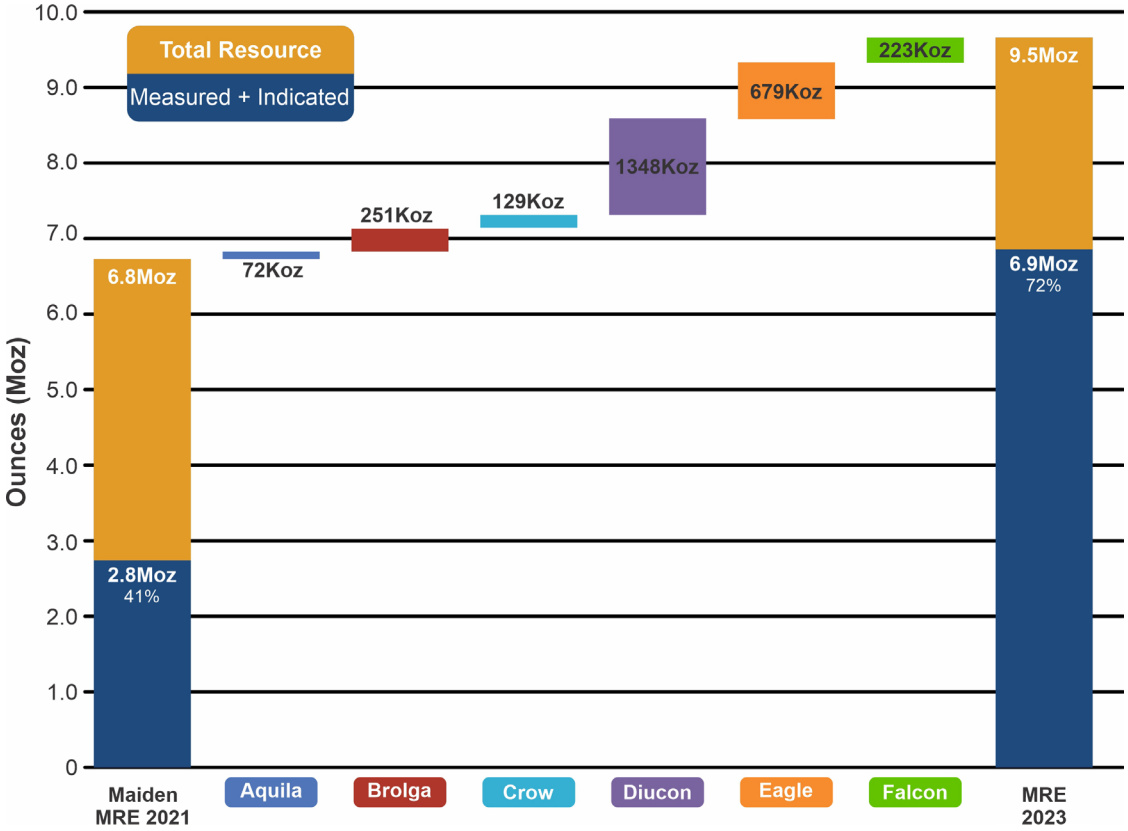
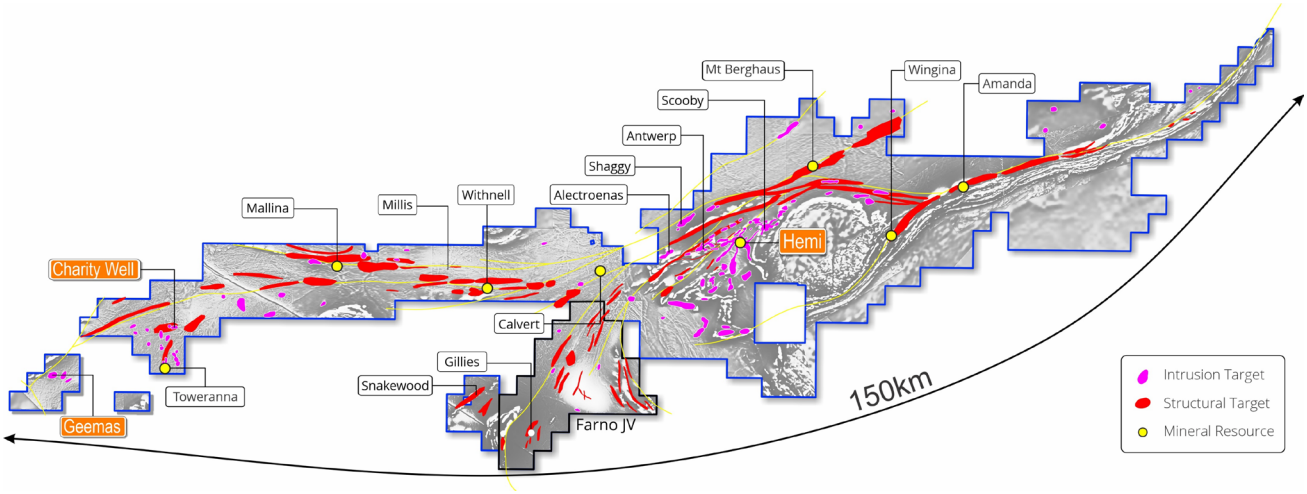


Figure 10 Mallina Gold Project – Large 150km scale landholding.



Ends

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 - Regional

The Information in this report that relates to **Wingina and Withnell Mining Centre Mineral Resources (excluding Toweranna)** 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.

Mineral Resources - Hemi

The Information in this report that relates to **Hemi Mining Centre and Toweranna Mineral Resources** is based on information compiled by Mr. Michael Job, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Job is a full-time employee of Cube Consulting. Mr Job 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 Job 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:*

- *Mallina Gold Project Resource Statement – 2022, 31 May 2023*
- *6.8Moz Hemi Maiden Mineral Resource drives MGP to 9.0Moz, 23 June 2021*
- *Total Gold Mineral Resource increases to 2.2Moz, 2 April 2020*
- *Total Gold Mineral Resource - 21 % increase to 1.7Moz, 16 July 2019*
- *Total Gold Mineral Resource increases to 1.4Moz, 3 October 2018*
- *Pilbara Gold Project 20% increase in Resources to over 1.2Moz, 28 September 2017*

Appendix 1: Mallina Gold Project Global Mineral Resource Estimate Summary

Mallina Gold Project - Global Mineral Resource Estimate, June 2023

Mining Centre	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Hemi Mining Centre				165.7	1.3	6,876	70.7	1.2	2,632	236.5	1.3	9,508
Withnell Mining Centre	1.6	1.8	92	15.8	1.6	799	12.3	2.0	809	29.7	1.8	1,701
Wingina Mining Centre	3.1	1.7	173	2.5	1.5	122	6.3	1.2	243	11.9	1.4	538
Total	4.7	1.7	265	184.1	1.3	7,798	89.2	1.3	3,684	278.0	1.3	11,747

Note: The Regional resource estimates at the Withnell and Wingina Mining Centres have not changed since the April 2020 statement, except Toweranna.

Mallina Gold Project – Global Mineral Resource Estimate by Type, June 2023

Mining Centre	Type	Measured			Indicated			Inferred			Total		
		Mt	Au g/t	Au KOz	Mt	Au g/t	Au KOz	Mt	Au g/t	Au KOz	Mt	Au g/t	Au KOz
Hemi Mining Centre	Oxide				7.8	1.5	385	0.5	0.9	14	8.3	1.4	399
	Sulphide				158.0	1.3	6,491	70.2	1.2	2,619	228.2	1.2	9,109
	Total				165.7	1.3	6,876	70.7	1.2	2,632	236.5	1.3	9,508
Withnell Mining Centre	Oxide	1.0	1.8	58	2.9	1.3	122	1.7	1.3	75	5.6	1.4	255
	Sulphide	0.7	1.7	35	12.9	1.6	677	10.5	2.2	734	24.9	1.9	1,496
	Total	1.6	1.8	92	15.8	1.6	799	12.3	2.0	809	29.7	1.8	1,701
Wingina Mining Centre	Oxide	2.7	1.8	152	1.8	1.5	88	2.2	1.1	75	6.7	1.5	315
	Sulphide	0.4	1.6	21	0.7	1.6	35	4.0	1.3	168	5.1	1.4	224
	Total	3.1	1.7	173	2.5	1.5	122	6.3	1.2	243	11.9	1.4	538
Total	Oxide	3.7	1.8	210	12.6	1.5	595	4.4	1.1	163	20.6	1.5	968
	Sulphide	1.1	1.6	55	171.5	1.3	7,202	84.8	1.3	3,521	258.2	1.3	10,829
	Total	4.7	1.7	265	184.1	1.3	7,798	89.2	1.3	3,684	278.0	1.3	11,747

Mallina Gold Project – Mineral Resource Estimate by Mining Centre and Deposit, June 2023

Hemi Mining Centre

Deposit	Type	Measured			Indicated			Inferred			Total		
		Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Aquila	Oxide				1.1	1.5	51	0.1	0.7	3	1.2	1.4	54
	Sulphide				11.6	1.5	580	7.0	1.2	280	18.7	1.4	860
	Total				12.7	1.5	631	7.2	1.2	283	19.9	1.4	913
Brolga	Oxide				3.3	1.5	159	0.1	0.8	2	3.4	1.5	161
	Sulphide				42.7	1.3	1,823	16.1	1.0	523	58.9	1.2	2,346
	Total				46.0	1.3	1,982	16.2	1.0	525	62.2	1.3	2,507
Crow	Oxide				1.2	1.2	47	0.0	0.7	1	1.3	1.2	47
	Sulphide				23.0	1.1	827	7.6	1.2	287	30.6	1.1	1,114
	Total				24.3	1.1	874	7.6	1.2	288	31.9	1.1	1,162
Diucon	Oxide				0.2	1.9	10	0.2	1.1	7	0.4	1.4	17
	Sulphide				37.1	1.3	1,580	16.8	1.4	765	53.9	1.4	2,345
	Total				37.2	1.3	1,590	17.1	1.4	773	54.3	1.4	2,363
Eagle	Oxide				0.1	1.7	8	0.0	0.7	0	0.2	1.5	8
	Sulphide				19.4	1.2	735	10.7	1.1	371	30.1	1.1	1,106
	Total				19.6	1.2	743	10.7	1.1	371	30.2	1.1	1,114
Falcon	Oxide				1.9	1.8	111	0.0	0.0	0	1.9	1.8	111
	Sulphide				24.1	1.2	946	12.0	1.0	393	36.0	1.2	1,338
	Total				26.0	1.3	1,056	12.0	1.0	393	37.9	1.2	1,449
Hemi Mining Centre	Oxide				7.8	1.5	385	0.5	0.9	14	8.3	1.4	399
	Sulphide				158.0	1.3	6,491	70.2	1.2	2,619	228.2	1.2	9,109
	Total				165.7	1.3	6,876	70.7	1.2	2,632	236.5	1.3	9,508

Withnell Mining Centre

Deposit	Type	Measured			Indicated			Inferred			Total		
		Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Withnell OP	Oxide	0.6	1.4	29	0.4	1.2	14	0.2	1.1	5	1.1	1.3	48
	Sulphide	0.6	1.6	33	2.7	1.9	164	0.5	2.2	38	3.8	1.9	235
	Total	1.3	1.5	62	3	1.8	178	0.7	2	43	5	1.8	283
Withnell UG	Oxide							0	2.5	0	0	2.5	0
	Sulphide				0.1	4.3	16	2.4	3.9	301	2.5	3.9	317
	Total				0.1	4.3	16	2.4	3.9	301	2.5	3.9	317
Mallina	Oxide				0.5	1.3	20	1.2	1.4	53	1.7	1.3	73
	Sulphide				1.1	1.2	44	3.9	1.5	190	5.1	1.4	235
	Total				1.6	1.2	64	5.1	1.5	243	6.8	1.4	307
Toweranna OP	Oxide				0.3	1.5	13	0.1	1.6	4	0.4	1.5	18
	Sulphide				8.0	1.6	404	2.5	1.5	116	11.3	1.6	570
	Total				8.3	1.6	418	2.5	1.5	120	10.8	1.5	538
Toweranna UG	Oxide				0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
	Sulphide				0.1	3.0	11	0.5	2.9	49	0.6	2.9	61
	Total				0.1	3.0	11	0.5	2.9	49	0.6	2.9	61
Camel	Oxide	0.2	2.8	16	0.3	2.6	27	0	1.1	2	0.5	2.6	45
	Sulphide	0	2.1	1	0.1	1.4	7	0.1	1.8	9	0.3	1.7	16
	Total	0.2	2.8	17	0.5	2.2	33	0.2	1.7	10	0.8	2.2	60
Calvert	Oxide				0.4	1.3	18	0.1	0.8	1	0.5	1.3	19
	Sulphide				0.6	1.3	24	0.2	1.2	9	0.8	1.3	33
	Total				1	1.3	42	0.3	1.2	11	1.3	1.3	52
Roe	Oxide	0.1	2.7	6	0.1	1.5	6	0.1	1.6	6	0.3	1.8	17
	Sulphide	0	2.5	1	0.1	2.3	5	0.2	2.2	15	0.3	2.2	21
	Total	0.1	2.7	7	0.2	1.8	11	0.3	2	21	0.6	2	38
Dromedary	Oxide	0.1	2.2	7	0	1.6	1	0	1.6	2	0.2	1.9	11
	Sulphide				0	1.6	2	0.1	1.8	5	0.1	1.7	6
	Total	0.1	2.2	7	0.1	1.6	3	0.1	1.7	7	0.3	1.9	17
Leach Pad	Oxide				0.9	0.7	19				0.9	0.7	19
	Sulphide												
	Total				0.9	0.7	19				0.9	0.7	19
Hester	Oxide				0	2.1	3	0	1.3	1	0.1	1.8	4
	Sulphide				0	2.1	1	0	1.4	2	0.1	1.6	3
	Total				0.1	2.1	4	0.1	1.4	3	0.1	1.7	7
Withnell Mining Centre	Oxide	1	1.8	58	2.9	1.3	122	1.7	1.3	75	5.6	1.4	255
	Sulphide	0.7	1.7	35	12.9	1.6	677	10.5	2.2	734	24.9	1.9	1,496
	Total	1.6	1.8	92	15.8	1.6	799	12.3	2.0	809	29.7	1.8	1,701

Wingina Mining Centre

Deposit	Type	Measured			Indicated			Inferred			Total		
		Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Wingina	Oxide	2.7	1.8	152	0.6	1.3	27	0.3	1.3	14	3.7	1.6	194
	Sulphide	0.4	1.6	21	0.3	1.5	16	1.1	1.7	57	1.8	1.6	94
	Total	3.1	1.7	173	1	1.4	43	1.4	1.6	72	5.5	1.6	288
Mt Berghaus	Oxide				0.7	1.8	39	1	1.1	36	1.7	1.4	75
	Sulphide				0.3	1.7	14	2.4	1.2	92	2.7	1.2	106
	Total				1	1.7	53	3.4	1.2	128	4.3	1.3	181
Amanda	Oxide				0.5	1.3	22	0.9	0.9	25	1.4	1	46
	Sulphide				0.1	1.8	4	0.6	1.1	19	0.6	1.2	23
	Total				0.6	1.4	26	1.4	0.9	44	2	1.1	70
Wingina Mining Centre	Oxide	2.7	1.8	152	1.8	1.5	88	2.2	1.1	75	6.7	1.5	315
	Sulphide	0.4	1.6	21	0.7	1.6	35	4	1.3	168	5.1	1.4	224
	Total	3.1	1.7	173	2.5	1.5	123	6.3	1.2	243	11.9	1.4	538

Appendix 2: Hemi Mineral Resource Estimate Summary

Geology

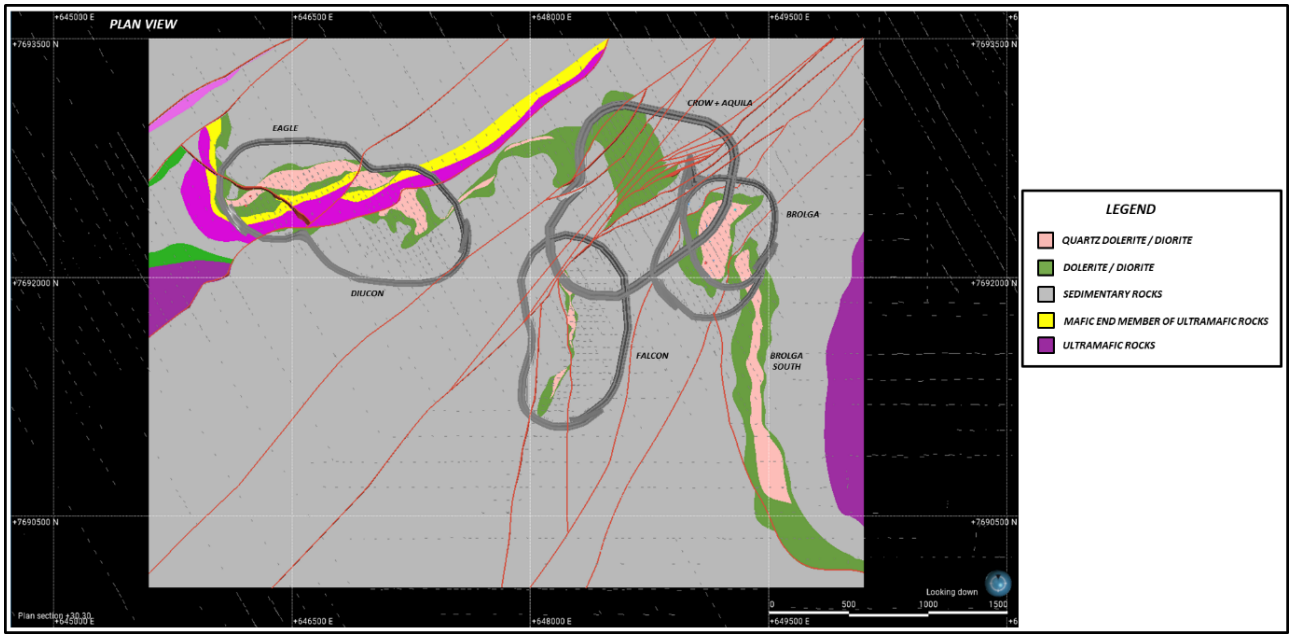
Lithology, Structure, Alteration and Mineralisation

The Hemi discovery comprises a series of gold deposits hosted within predominately diorite to quartz diorite intrusions and sills that have been emplaced within the Mallina Basin. The gold deposits comprise of Aquila, Brolga, Crow, Falcon, Diucon and Eagle, with the latter two straddling the locally important Diucon Thrust and the former four being situated to the south of the Diucon Thrust.

The intrusions in the Hemi area were emplaced into a sequence of sedimentary rocks (Figure 1) that form part of the Mallina Formation and locally comprise greywacke, siltstones, sandstones, shale and black shale. Mafic-ultramafic sills occur within the area, which help to map the interpreted folding and faulting within the region around the Hemi discovery amongst the otherwise poorly outcropping and non-magnetic sediments of the Mallina Formation. The sediments immediately enclosing the intrusions have largely been strongly sheared but in limited instances the contact is hornfelsed, expressed by locally developed hardening and biotitic alteration related to emplacement of the intrusions.

The rock sequence at Hemi has undergone a complex deformation history commencing in extension during basin development, basin inversion that resulted in SW-NE striking folding and brittle-ductile shear zone development (Figure 1). The area was subject to a locally less significant compression event that has resulted NW-SE striking folding and typically local scale faulting that forms a weak interference pattern on the earlier event. The SW-NE striking folding and brittle-ductile shear zone development has resulted in dislocation, truncation and repetition of the lithostratigraphy. Current studies are ongoing but the brittle-ductile shear zones are likely to have initiated in response to the inability of flexural slip and flow mechanism during folding to accommodate continued strain. The shear zones occur as fold hinge parallel shears and as imbricate thrust fault fans/stacks that are important constraints on the lithostratigraphy and mineralisation.

Figure 1 Plan flitch diagram of the geology and structure (red lines) at the Hemi Project.

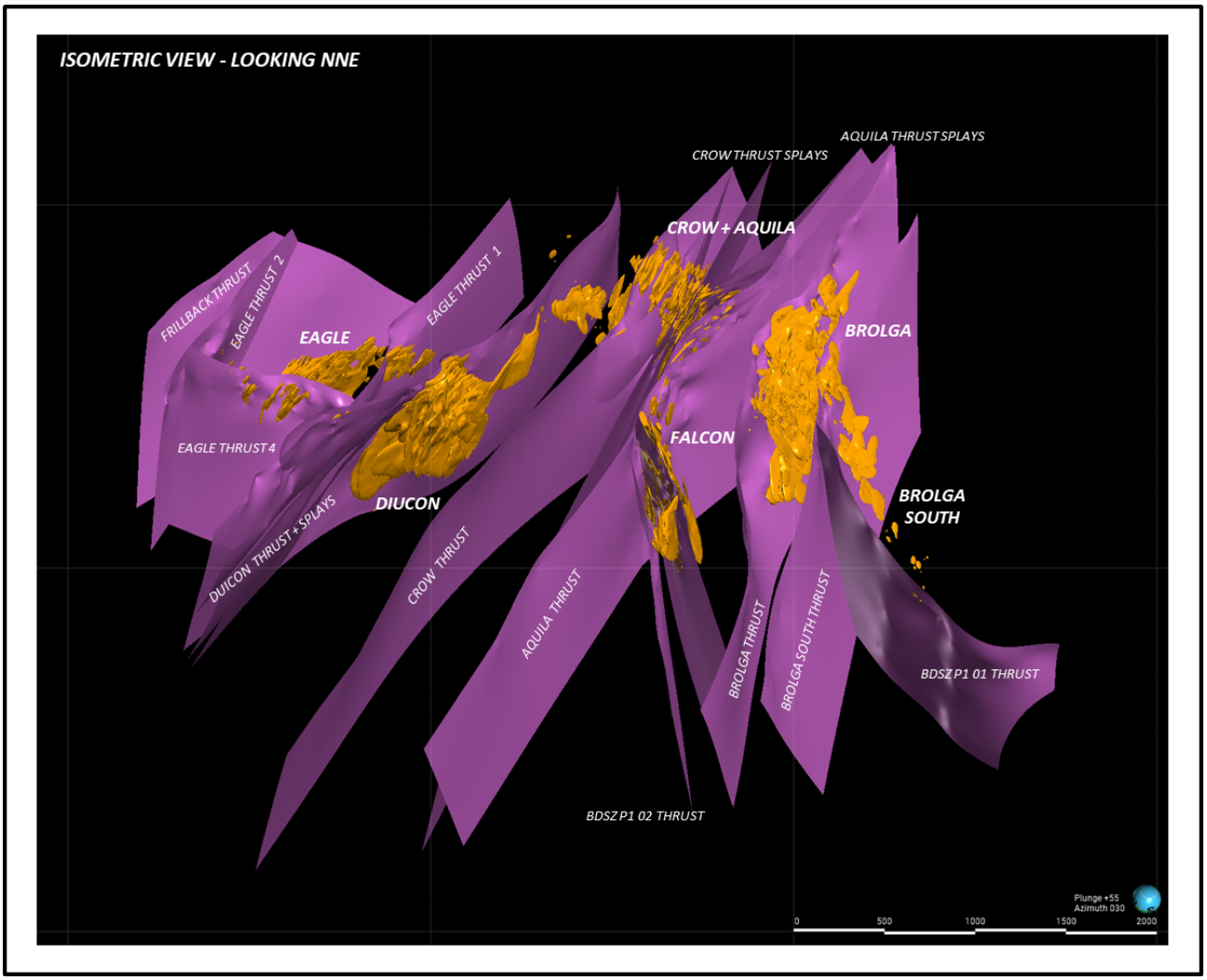


Alteration and Mineralisation

The alteration in the country rock/waste rock units away from the intrusions is typified by regional metamorphic chlorite alteration.

There are two main deposit alteration and mineralisation styles, informally named as the Brolga-type and the Diucon-type. The Brolga-type all occur south of the Diucon Thrust and Diucon and Eagle type straddle the Diucon Thrust (Figure 2). The Aquila, Brolga South, Crow and Falcon deposits are interpreted as Brolga-type and Diucon and Eagle are interpreted as Diucon-type.

Figure 2 Isometric view looking north by northeast of the Hemi deposit gold resource wireframes (gold) and the current brittle-ductile shear zone architecture (purple).



There is volumetrically minor chlorite-albite-sulphide alteration within the sediments that occur proximal to the intrusions. Unmineralised intrusions adjacent to the deposits are characterised by reduced sulphide levels, lower to no albite and increased chlorite and/or carbonate.

At the Brolga-type, strong albite-chlorite-sulphide alteration occurs within the intrusions and this alteration is intimately associated with a stockwork of quartz veins and chlorite-sulphide carbonate-quartz veins and small and localised brittle-ductile shear zones. Rare sericite and later chlorite alteration and veins are also observed.

At the Diucon-type a similar assemblage of alteration minerals is present with the exception of an initial development of sericite and albite alteration and smoky quartz veining. Later brittle-ductile shear zones exploit the alteration and veining, where later chlorite-carbonate-talc alteration and sulphide-gold mineralisation is observed.

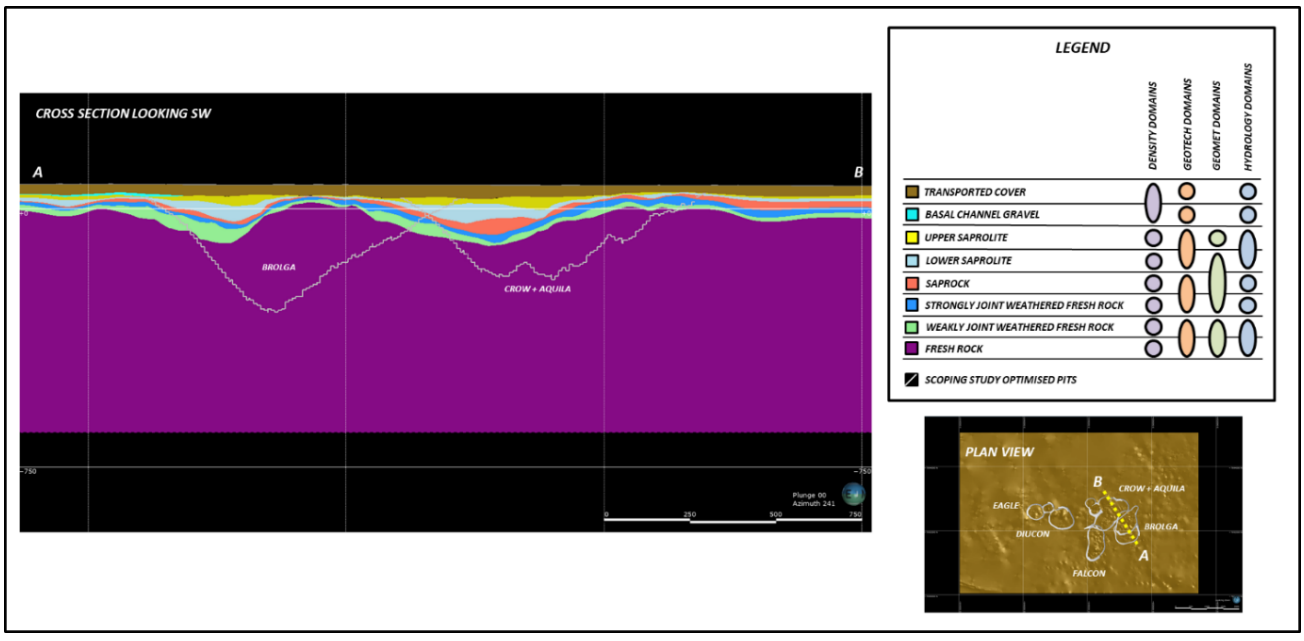
Sulphide abundance in the mineralised intrusions typically ranges from 2.5% to 10%, whilst marginal alteration zones peripheral to the gold mineralised zones comprise sulphide contents that typically range from 0.5% to 1%. The ore mineralogy is fairly consistent in type but not content across the different deposits and consists of dominantly sulphides – arsenopyrite and pyrite. Native gold is typically constrained to the Diucon and Eagle deposits. Away from the gold mineralised zones the arsenopyrite content drops off rapidly to <0.5% and pyrite is the main sulphide mineral. Arsenopyrite is generally absent within the country rock away from mineralisation.

Rock Weathering

At Hemi, the deposits are covered by 20m to 45m thick horizon of barren transported material and the upper portion of the bedrock is weathered to varying degrees of saprolite, saprock, joint weathered fresh rock, and fresh bedrock (Figure 3). The regolith (weathered bedrock) models are derived from multiple geoscientific datasets to improve model robustness and be applicable to the end users of the models (Figure 3). The input datasets consist of:

- Physical diamond drill core and percussion drill chips and spoils
- Density measurements
- Geotechnical parameters such as RQD, GSI and RMR89
- Geochemistry
- Hyperspectral data
- 3D lithostratigraphy and structural geology impacts on the weathering regime
- Potential field datasets (airborne aeromagnetics and ground gravity)

Figure 3 Cross-section to display the different regolith models at the Hemi Project.



Geological Model End Users

Geological models are constructed from multiple geoscientific data sources to assist robust geological modelling decision making. The geological model process at Hemi was collaborative and considers the input and / or requirements of multi-disciplines (e.g. structural geology consultants, geotechnical consultants) to ensure the models not only reflect the base controlling geology and regolith but also can be easily adopted as domains for the resource, geotechnical, geometallurgical and hydrological models (Figure 3). This has enabled the project to garner a good understanding and control of the density domains that underpin the resource, the global geotechnical parameters and domains, the mine to mill and geometallurgical models and the likely hydrogeological domains. This will work will continue as additional drilling is completed and as the company progresses towards operations at Hemi.

Drilling

The Hemi deposit was discovered by De Grey in 2019 and therefore there is no historical drilling by other companies.

The Hemi drilling database includes 5,276 drill holes of varying drill types including air core (AC), reverse circulation (RC) and diamond (DD). Aircore holes were drilled with an 83mm diameter blade bit, RC holes were drilled with a 5.5-inch bit and face sampling hammer, and diamond core diameters are NQ2 (51mm), HQ3 (61mm), and PQ (85mm).

All DD and RC holes used for the Mineral Resource Estimate were drilled between 2020 and 2023, with details of this drilling in the immediate area of Hemi deposit shown in Table 1

Table 1 Listing of holes at Hemi.

Hole Type	Year	No. Holes	Metres	Hole ID Series
DD	2020	101	26,311	HEDD, HERC_D
	2021	196	50,846	HEDD, HERC_D, HMRC_D
	2022	125	51,726	HEDD, HERC_D, HMRC_D
	2023	17	4,691	HEDD, HMRC_D
RC	2020	326	80,857	HERC, HMB
	2021	534	127,391	HERC, HMRC
	2022	127	33,020	HMRC
	2023	46	7,924	HMRC
Total	2020 - 2023	1,472	382,766	

Sampling and Sub-Sampling Techniques

For RC drilling, samples were obtained using a rig mounted cone splitter. Samples were typically collected at 1m intervals targeting a sample weight between 2.5kg and 3.0kg. Through the transported cover sequence, the holes were either unsampled, or sampled using 4m composite samples.

For diamond drilling, sampling boundaries are geologically defined and commonly one metre in length unless a significant geological feature warrants a change from this standard unit. Core was cut to preserve

the alignment line and the same side of the core was sent for assay using half core from NQ and HQ holes and quarter core from PQ holes and selected metallurgical HQ holes.

Geological logging is completed for all holes by the Company geological team. The major rock unit (colour, grain size, texture), weathering, alteration (style and intensity), mineralisation (type), interpreted origin of mineralisation, estimation of % sulphides/oxides, and veining (type, style, origin, intensity) are logged following De Grey Mining standard procedure. Diamond core is photographed for future reference.

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.

In addition to the gold assay, every 5th sample from the Hemi drilling have been analysed using a four-acid digest and an ICP AES/MS analysis, providing key pathfinders, major elements and trace element data. The ALS ME-MS61 procedure was used which analyses a 48-element suite. For these samples that were in mineralised zones, they were also analysed via bottle roll, a cyanide extraction technique, to provide an indication of the proportion of the gold that would be recoverable via conventional processing using cyanide extraction. Except for some of the early drilling in 2020, the intervening four samples were also analysed using a four-acid digestion and an ICP-AES finish which provided key pathfinders and major element data.

A comprehensive 'Best Practice' QAQC monitoring system. Certified Reference Materials, Blanks and Field Duplicates are inserted within batches of samples to ensure ongoing quality control. Standards, Blanks, and Field Duplicates are inserted at a minimum of 2% frequency rate.

Resource Estimation Methodology

The Mineral Resource was estimated using Localised Uniform Conditioning ("LUC") grade interpolation of 2m composited data within wireframes prepared using nominal outer margin cut-off of 0.2g/t Au and a minimum 4m interval selection and guided by trends defined by the structural model. High grade caps ranging between 10g/t and 18g/t gold were determined by statistical analysis and applied to the composite data per lode. For eastern deposits (Aquila, Brolga, and Falcon), very few samples were capped, whereas for the western deposits (Crow, Diucon, and Eagle), grade capping was more significant (see Table 3).

A single block model was constructed to include all six deposits at Hemi. The model was rotated to 050º with panel block dimensions of 20mE by 20mN by 5mRL with a selective mining unit (SMU) block size of 5mE by 5mN by 5mRL. The panel block size dimension was selected at half the nominal drill hole spacing throughout the deposits. The Mineral Resource block model was created and estimated in Datamine software.

Variography was performed on capped data transformed to normal scores, and the variogram models were back-transformed to original units. Variography was performed separately for each deposit area. The major direction of continuity is sub-parallel to the strike for each estimation domain, generally with a plunge towards the southwest with ranges of 95 to 180 m. The semi-major direction is along strike, generally plunging to the northeast with ranges of 70 to 100 m. The variogram models had low to moderate nugget effects (25 to 30% of the total sill).

Panel estimation (via Ordinary Kriging (OK) – a necessary precursor step for UC) used a minimum of 8 and maximum of 20 composites, with a search ellipse radius similar to the variogram ranges (160m x 80-120m x 30-40m).

Up to two search passes were used for each estimation domain, with the second pass twice the size of the first pass. The number of samples required was the same for both searches. The second pass was only required for <2% of blocks for all deposit areas.

A locally varying ellipsoid orientation was used to account for the subtle changes in estimation domain orientation along strike and down dip. The local dips and dip directions were calculated from the orientation of specially constructed 'trend surfaces' for each deposit area.

The UC process applies a Change of Support correction (discrete Gaussian model) based on the composite sample distribution and variogram model, conditioned to the Panel grade estimate, to predict the likely grade tonnage distribution at the SMU selectivity.

For the grades above the capped threshold, localised OK estimates were run using uncapped composites on SMU sized blocks to allow the very high grade samples with short ranges to have an appropriate influence on the final estimate. This was completed for Crow, Diucon and Eagle where SMU blocks within 5 m of the composite grades that were above the capping threshold were selected, and the uncapped estimates for these blocks were merged over the LUC estimates.

Estimates of Au grades were validated against the composited drill hole data by extensive visual checking in cross-section, plan and on screen in 3D, by global (per shoot) comparisons of input data and model, and by semi-local statistical methods (swath plots). All methods showed satisfactory results.

Bulk Density

Bulk densities applied to the model were based on an extensive dataset of density determinations carried out on drill core. More than 29,000 bulk density determinations have been made at Hemi, using the water immersion method on drill core. The values assigned to the block model are summarised in Table 2.

Table 2 Density values assigned to the block model.

Material Type	TYPE_N Code	Lithology	LITH Code	Density Assigned (t/m3)
Transported Cover	6	Transported Cover	6	1.7
Upper Saprolite	5	Sediment / Ultramafic / Intrusion	1, 2, 3, 4, 5, and 6	1.7
Lower Saprolite	4	Sediment / Ultramafic	1, 2, and 3	1.9
		Intrusion	4, 5, and 6	1.7
Saprock	3	Sediment / Ultramafic	1, 2, and 3	2.1
		Intrusion	4, 5, and 6	2.15
Fresh with strong weathering on joints	2	Sediment / Ultramafic	1, 2, and 3	2.4
		Intrusion	4, 5, and 6	2.6
Fresh with weak weathering on joints	1	Sediment	1	2.7
		Ultramafic	2 and 3	2.85
		Intrusion	4, 5, and 6	2.7
Fresh (primary sulphide)	0	Sediment	1	2.75
		Ultramafic	2 and 3	2.9
		Intrusion	4, 5, and 6	2.8

Mineral Resource Classification

The Mineral Resource has been classified and reported in accordance with the 2012 JORC Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code).

Classification of Mineral Resources uses two main criteria as follows:

1. Confidence in the Au estimate
2. Reasonable prospects for eventual economic extraction.

Assessment of confidence in the estimate of gold included guidelines as outlined in JORC (2012):

- Drill data quality and quantity
- Geological domaining (for mineralised domains)
- The spatial continuity of Au mineralisation
- Geostatistical measures of Au estimate quality.

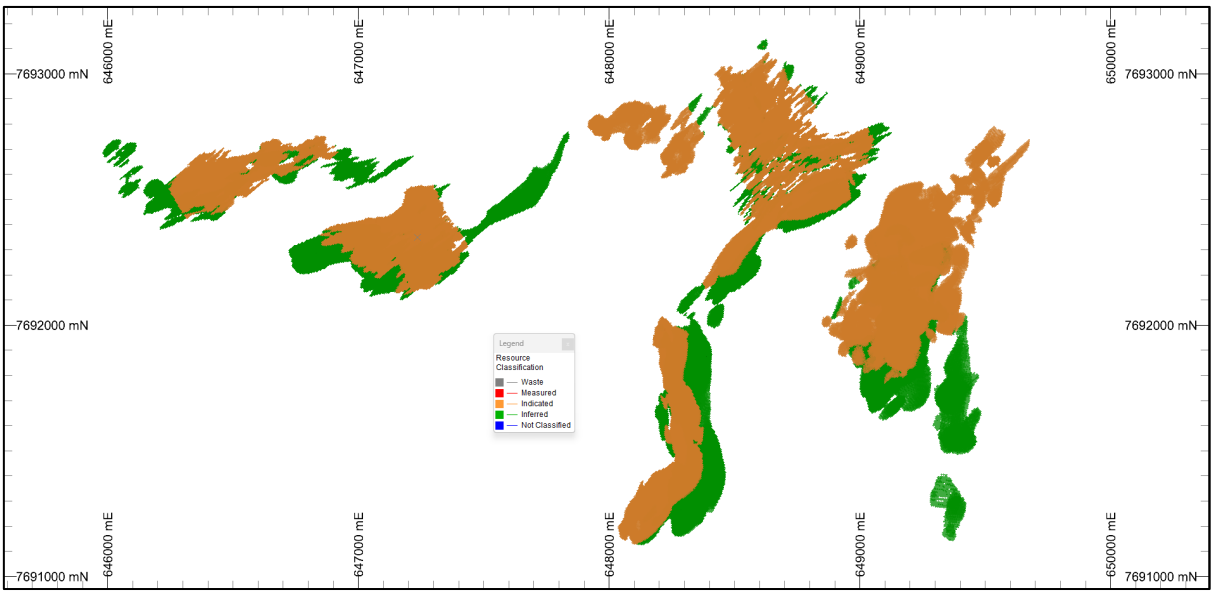
In summary, the more quantitative criteria relating to these guidelines include data density and kriging metrics are as follows:

- The Indicated Mineral Resource is the material within the mineralised domains having a drill spacing of 40mN x 40mE and where the kriging slope of regression for the panel estimates is greater than about 0.7. In a very few instances where the mineralisation showed clear continuity into areas of 80m by 40m drill hole spacing, the resource was classified as Indicated.
- The Inferred Mineral Resource is material within the mineralised domains, with a drill hole spacing of 80m by 80m and with slopes of regression for the panel estimates less than 0.7.

Extrapolation of the mineralisation was generally limited to 60m along strike and down dip of drill hole intersections. Extrapolation of up to 100m down dip was used where the strongest mineralisation remained open and untested.

The resource classification is shown in plan view (Figure 4).

Figure 4 MRE classification plan view.



To assist in defining reasonable prospects for eventual economic extraction (RPEEE) for Hemi, pit optimisation work has been undertaken by Cube on the block model, and the resulting shells have been used to guide the constraints for the declared resource.

The optimisations were run at a gold price of AUD $3,000 per ounce, with mining costs varying with depth, but averaging AUD $9.33/BCM for ore and AUD $7.88/BCM for waste (down to the -405 mRL)

A fixed residual of 0.1 ppm Au after processing was assumed, rather than an overall processing recovery. Processing costs (including G&A) of AUD $30.01 per tonne for all material type used.

Wall angles used are based on detailed geotechnical analysis of the wall rocks at Hemi and vary based on the rock type and oxidation type.

Spot gold price in mid-April 2023 was AUD $2980 per ounce, so an assumed optimistic gold price of $3,000 per ounce is reasonable. The optimised pit shell at Brolga reached a maximum depth of 450 m below surface (-390 mRL), for Diucon it reached a maximum depth of 470 m below surface (-410 mRL), and the maximum depths for the shells for the other deposits was 400 m to 420 m below surface (-340 to -360 mRL).

Therefore -320 mRL (390 m below surface) was selected as the level dividing open cut from underground resources. This is a depth increase of 20 m to the open cut level used for the April 2022 MRE.

The underground resources have been reported above a cut-off grade of 1.0 ppm Au. The cut-off grade has been lowered from the previous cut-ff of 1.5 ppm Au considering the possibility of applying bulk underground mining methods. Appropriate mining cost and gold prices have been used to determine the cut-off grade.

Cut-off Grades

Gold grade caps for the estimate were chosen for each estimation domain, based primarily on examination of the gold distribution for each, (i.e. noting the point at which the upper tail of the distribution loses support), and also taking into account the variability of the domain.

The grade caps and relevant statistics are listed in Table 3

Table 3 Gold grade caps (ppm Au) chosen based on all 2m composites per domain.

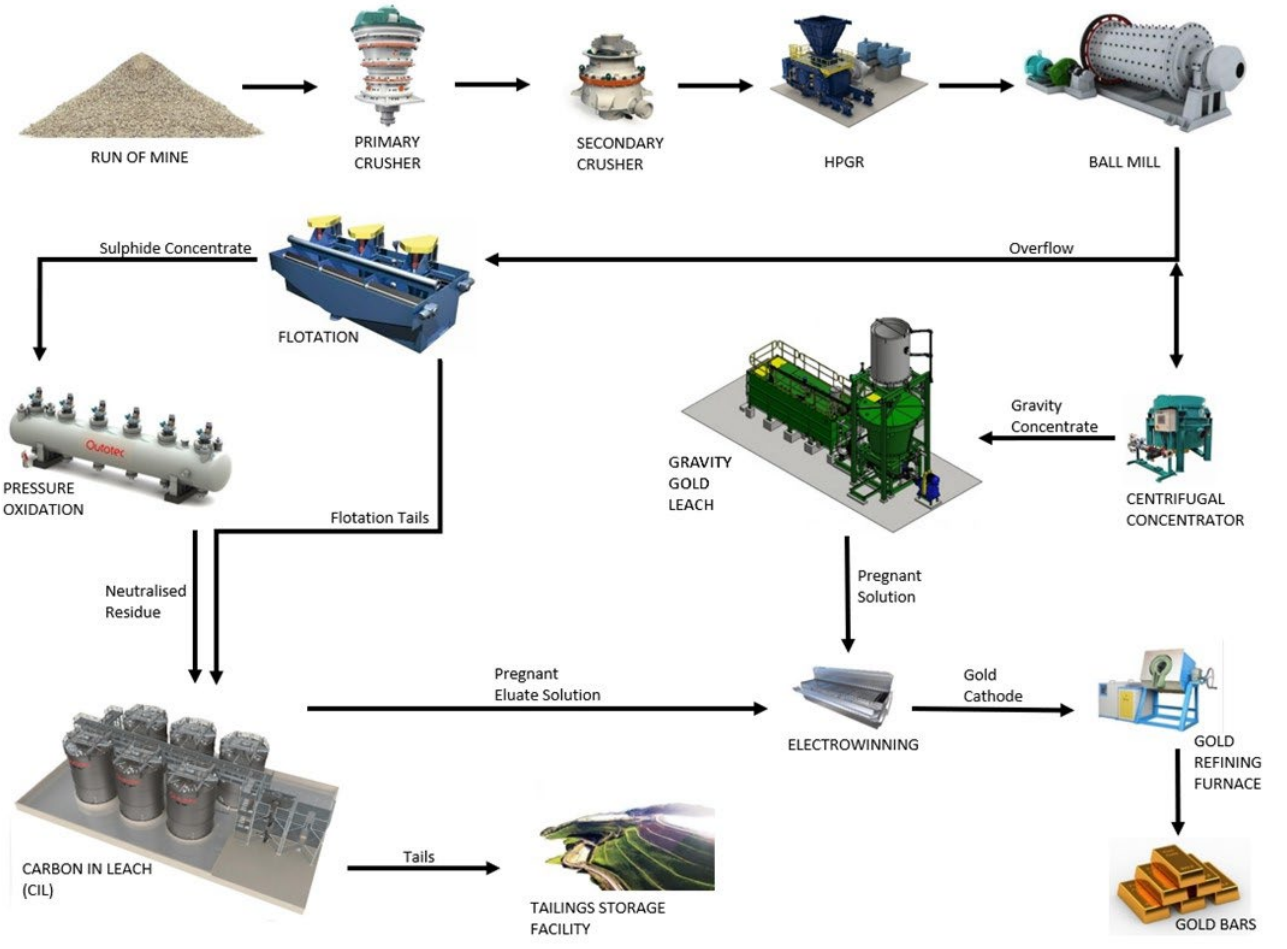
Domain	Top Cap	No. Capped	Uncapped Mean	Capped Mean	% Reduction Mean	Uncapped CoV	Capped CoV	% Reduction CoV
Aquila	-	-	1.26	-	-	1.47	-	-
Brolga	18	14	1.13	1.11	1.6%	1.82	1.41	22.6%
Crow	10	58	1.06	0.88	17%	4.23	1.64	61.2%
Diucon	10	107	1.28	1.07	16.1%	2.80	1.61	42.5%
Eagle	10	52	1.18	0.93	20.8%	3.67	1.60	56.4%
Falcon	15	7	1.19	1.15	3.3%	1.85	1.27	31.4%

Metallurgy

Extensive metallurgical test work has been undertaken at Hemi, with similar mineralogy and metallurgical characteristics noted across all deposits tested thus far. The gold mineralisation is semi-refractory, and a flowsheet (see Figure 5). combining the conventional processing technologies of crushing, milling, sulphide flotation, concentrate pressure oxidation, and cyanide leaching has been tested thoroughly, and has proven successful in achieving high recoveries.

Summary information regarding the metallurgical results and proposed processing plant have been reported on ASX in the Preliminary Feasibility Study Summary announcement (September 2022). For fresh mineralisation, overall gold recoveries of typically 94% have been achieved on samples from Brolga, Falcon, Aquila, Crow, Diucon and Eagle. Oxide mineralisation is non-refractory with recovery averaging 96% via conventional cyanide leaching.

Figure 5 Metallurgical flowsheet.



Comparison to Previous Mineral Resource Estimate

The MRE update for Hemi was completed in June 2023, and contained 8,517 k ounces in open cut resources and 991 k ounces in underground resources, for a total of 9.5 M ounces. Comparisons between the June 2023 and May 2022 MREs are provided in Table 4 and Table 5.

Table 4 Hemi - Mineral Resource statement comparison for open-cut resource above -320 mRL for June 2023 and above -300 mRL for May 2022 (> 0.3 ppm Au).

Category	June 2023			May 2022			Variance		
	Mt	Au ppm	Au koz	Mt	Au ppm	Au koz	Mt	Au ppm	Au koz
Measured									
Indicated	165	1.29	6,856	139	1.30	5,801	19%	-1%	18%
Inferred	51	1.02	1,661	69	1.02	2,252	-27%	1%	-26%
TOTAL	**216**	**1.23**	**8,517**	**208**	**1.20**	**8,053**	**4%**	**2%**	**6%**

Table 5 Hemi - Mineral Resource statement comparison for underground resource below -320 mRL for June 2023 (OK estimate) (>1.0 ppm Au) and -300 mRL for May 2022 (LUC estimate) (>1.5 ppm Au).

Category	June 2023			May 2022			Variance		
	Mt	Au ppm	Au koz	Mt	Au ppm	Au koz	Mt	Au ppm	Au koz
Measured									
Indicated									
Inferred	20.7	1.49	991	5.2	2.49	417	297%	-40%	138%
TOTAL	**20.7**	**1.49**	**991**	**5.2**	**2.49**	**417**	**297%**	**-40%**	**138%**

Note that the insignificant amount of Indicated resources below -320 mRL for the June 2023 model have been included in Inferred in Table 5.

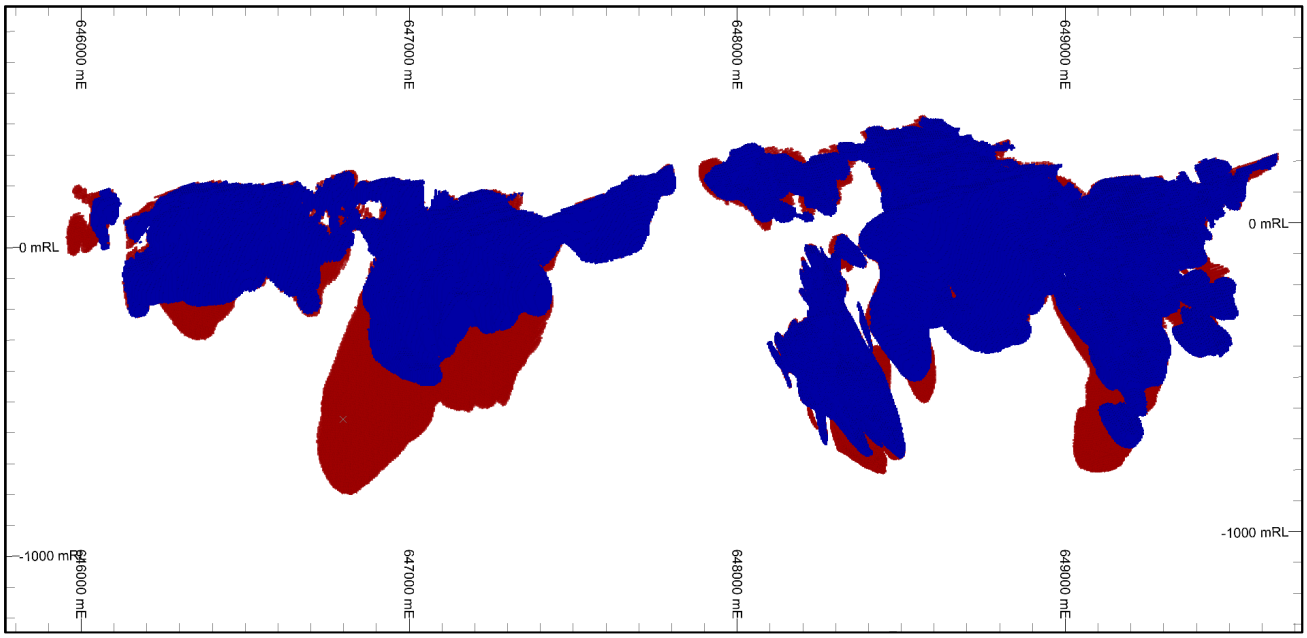
The most obvious difference is the very significant increase in tonnage and ounces in the Indicated classification for open cut resources. This is an expected result, as much of the drilling in 2022 and early 2023 was 40 m x 40 m infill, designed specifically to increase confidence in the resource. However, there was also some extensional drilling at Diucon that increased the overall footprint of the resource.

The amount of Inferred has reduced, as it has been converted to Indicated. Overall, for the open cut resources, there has been an increase of 4% in tonnes and 6% in contained ounces.

For the underground part of the resource, the tonnes and ounces have increased significantly, with a reduction in grade, this is primarily a result of the depth extension drilling completed at Diucon and a change in the reporting cut-off from 1.5 ppm to 1.0 ppm for underground resources. Overall, for the underground resources, there has been an increase of 297% in tonnes and 138% in contained ounces with grade decreasing 40%.

The increase in overall tonnages can be seen in the oblique view in Figure 6 – the April 2022 MRE is in blue, June 2023 in red. The extensional drilling has increased most around Diucon and Eagle (western most deposit areas).

Figure 6 Comparison of mineralised domains for May 2022 MRE (blue) and June 2023 MRE (red).



The classification for the May 2022 MRE is shown in Figure 7 – the classification for the May 2022 MRE for comparison is in Figure 8. The amount of Indicated is now much greater at all deposit areas.

Figure 7 Mineral Resource classification for May 2022 MRE.

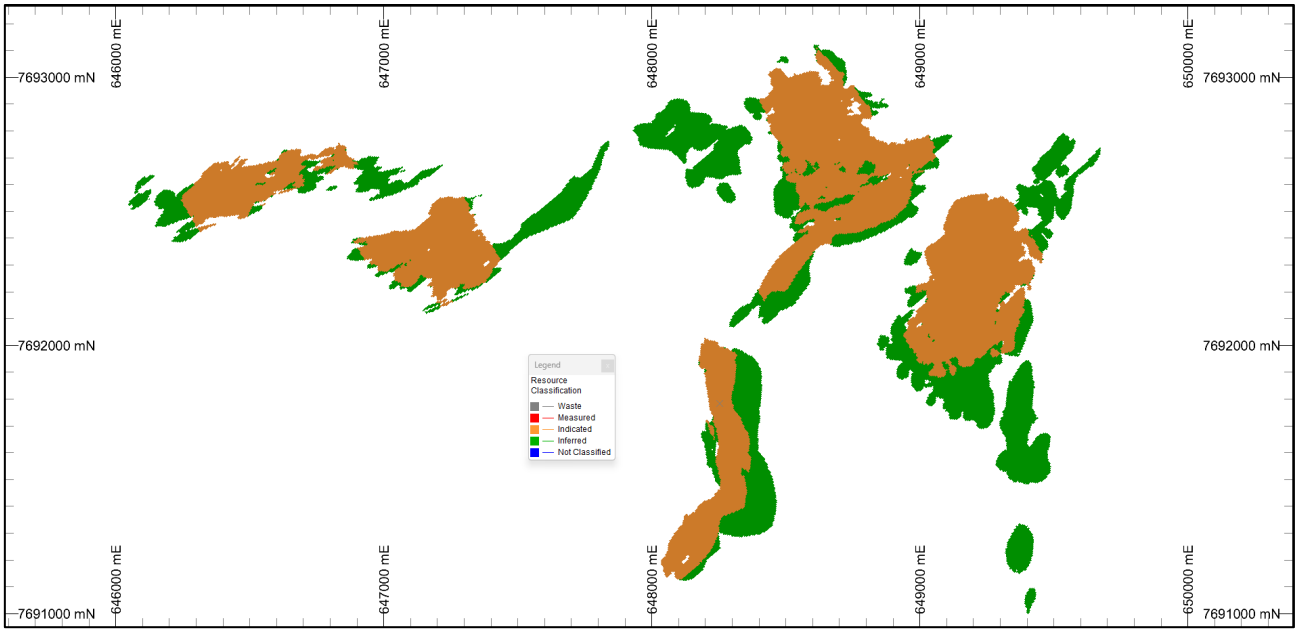
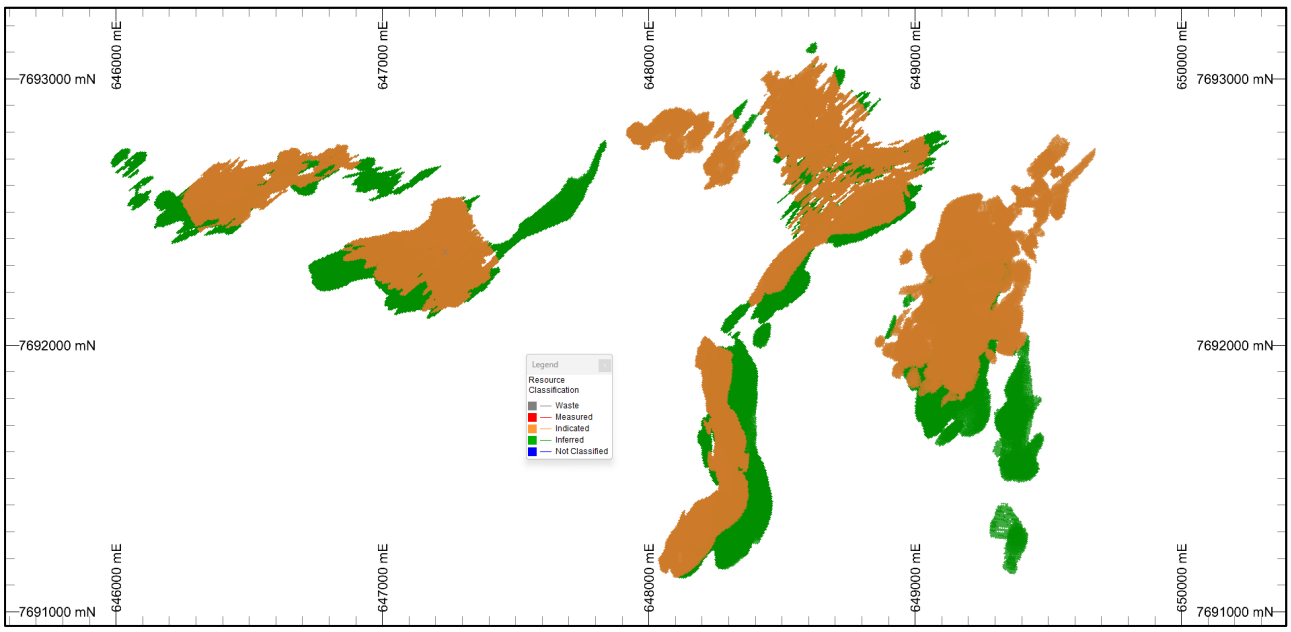


Figure 8 **Mineral Resource classification for June 2023 MRE.**



Appendix 3: Hemi 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 (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• 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 half sent to the laboratory for assay and the other half retained. HQ and PQ core was quartered, with one quarter sent for assay. Mineralised intervals were sampled 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. 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. • Commercially prepared certified reference material ("CRM") and coarse blank was inserted at a minimum rate of 2% • 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 pulverised 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 (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond core diameters are - NQ2 (51mm), HQ2 (61mm), PQ (85mm). • Reverse Circulation (RC) holes were drilled with a 5 1/2-inch bit and face sampling hammer.

Criteria	JORC Code explanation	Commentary
		• Aircore holes were drilled with an 83mm diameter blade bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• 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 was 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 resource estimation. • 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.*	• 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. • Each sample was dried, split, crushed and pulverised to 85% passing 75µm. • 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 Mineral 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The 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 reports a 48-element analysis by ICPAES and ICPMS. • The techniques are considered quantitative in nature. • A comprehensive QAQC protocol including the use of CRMs, field duplicates and umpire assays 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. • Three twin holes were completed. The diamond twins verify grade tenor and mineralisation thickness of RC holes. • Sample results have been merged into the database by the company's database consultants. • Results have been uploaded into the company database, checked and verified. • No adjustments were 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 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 ASX. • Topographic control is by detailed 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.

Criteria	JORC Code explanation	Commentary
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. • The extensive drilling programs have demonstrated that the mineralised domains 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 2m 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 -60o 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 down hole 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.*	• QAQC data has been both internally and externally reviewed.

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

Criteria	JORC Code explanation	Commentary
		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 mineralisation.*	• The Hemi discovery comprises a series of gold deposits hosted within predominately diorite to quartz diorite intrusions and sills that have been emplaced within the Mallina Basin. Six main deposits have been delineated within the complex and have been separately estimated and reported. These include Brolga, Aquila, Crow, Diucon, Eagle and Falcon. • Gold mineralisation is associated with localised to massive zones of fractured to brecciated albite, chlorite and carbonate (calcite) altered intrusion with disseminated sulphides and stringers containing pyrite and arsenopyrite with minor occurrences of pyrrhotite, overprinted in places by quartz-sulphide veins that occasionally host visible gold. Sulphide abundance in the mineralised intrusions typically ranges from 2.5% to 10% and there are strong correlations between gold, arsenic, and sulphur.
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
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.*	• Not applicable as a Mineral Resource is being reported. •

Criteria	JORC Code explanation	Commentary
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 down hole 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.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All drilling used in the Mineral Resource estimate has been accurately located using DGPS for collar locations and gyroscopic downhole directional surveys. • 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. • The database is hosted and managed by Expedio, using their customised SQL data storage system. • Data was geologically logged electronically using the Expedio Ocris Mobile Logger; collar and downhole surveys were also received electronically as were the laboratory analysis results.

Criteria	JORC Code explanation	Commentary

		• The SQL server database is configured for optimal validation through constraints, library tables, triggers and stored procedures. Data that fails these rules on import is rejected or quarantined until it is corrected. Some of the automatic triggers on assay import are listed below.
		  ○ CRM results > +/- 3 standard deviations
		  ○ CRM weight > 200g
		  ○ Blank results > 10 x detection limit
		  ○ Blank weight < 400g
		  ○ Grind size < 85% passing 75µm
		• Data extracted from the database were validated visually in Datamine and Seequent Leapfrog software. Also, when loading the data, any errors such as missing values and sample/logging overlaps are highlighted.
		• In summary the database is of high quality, consisting only of very recent drilling with no significant errors due to data corruption or transcription.

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.*	• The Competent Person visited site on 15 and 16 December 2021, and personally inspected active diamond core drilling and geological logging at the core logging facility. Core recovery and logging was of a very high standard.

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 Mineral Resource estimation.*
	• *The factors affecting continuity both of grade and geology.*
		• 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 25 m to 45 m of transported cover so no outcrop is present.
		• Six discrete deposit areas have been defined within the Hemi project. These are: Aquila, Brolga, Crow, Diucon, Eagle and Falcon.
		• 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 albite, sericite and silica alteration of the host rocks.
		• The controlling lithologies are well defined and lithology boundaries commonly coincide with mineralisation boundaries.
		• The overall dip and dip direction of the intrusives varies between each deposit area:
		  ○ Aquila 80° towards the southeast
		  ○ Brolga 50° to 70° towards the southeast
		  ○ Crow 50° to 80° towards the southeast

Criteria	JORC Code explanation	Commentary
		○ Diucon 70° to 80° towards the southeast ○ Eagle 70° to 80° towards the southeast ○ Falcon 50° to 70° towards the east. • Infill drilling has confirmed geological and grade continuity in most areas of the deposit. • The estimation domains were constrained by wireframes constructed in Leapfrog software using an approximate 0.2 ppm Au cut-off grade, with the domain orientation consistent with the geological interpretation.
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 2,000 m, and an east-west extent of 3,600 m. It has been drilled and interpreted to a maximum vertical interval of 885 m from surface at 65 mRL to -820 mRL.
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 (e.g. 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.*	• Estimation of the mineral resource was by the non-linear geostatistical method Localised Uniform Conditioning (LUC) using Datamine software. The LUC estimation process was as follows: • Drill hole data was selected within mineralised domains for each deposit area and composited to 2 m downhole intervals in Datamine software. • The composited data was imported into Supervisor software for statistical and geostatistical analysis. • Top-caps were applied based on examination of histograms and Au grade distribution analysis. The caps per deposit area ranged from 10 to 18 ppm Au. • Contact analysis of samples within the estimation domains and those outside ('background' domain) showed that hard domain boundaries were suitable. • Variography was performed on capped data transformed to normal scores, and the variogram models were back-transformed to original units. Variography was performed separately for each deposit area. • The variogram models had low to moderate nugget effects (25 to 30% of the total sill), with maximum ranges of ~140 m along strike and ~95 m down dip for all deposit areas. • Estimation (via Ordinary Kriging (OK) – a necessary precursor step for UC) was into a block model that was rotated +50° from the MGA94 grid. The panel block size of 20 mE x 20 mN x 5 mRL is half the average

Criteria	JORC Code explanation	Commentary
		drill spacing in the main well-drilled part of the deposit. • A minimum of 8 and maximum of 20 (2 m composite) samples per panel estimate was used, with a search ellipse radius similar to the variogram ranges (160 m x 80 m x 40 m). • Up to two search passes were used for each estimation domain, with the second pass twice the size of the first pass. The number of samples required was the same for both searches. The second pass was only required for 1% of blocks for most deposit areas, except for Brolga where the second pass was required for 5% of the blocks. • A locally varying ellipsoid orientation was used to account for the subtle changes in estimation domain orientation along strike and down dip The variogram models did not use locally varying orientations in order to be consistent with the Change of Support correction. • The UC process applies a Change of Support correction (discrete Gaussian model) based on the composite sample distribution and variogram model, conditioned to the Panel grade estimate, to predict the likely grade tonnage distribution at the SMU selectivity. • Localisation of the grades was into Selective Mining Units (SMU) block of 5 mE x 5 mN x 5 mRL (16 SMUs per panel). The SMU size is appropriate given the likely mining method (open-cut) and equipment selection. • To account for the higher grades that had been capped, a localised OK estimate using uncapped grades was made into SMU sized blocks in the immediate area (5 m) of these higher grades. These grades superseded the LUC grades. • Estimates of Au grades were validated against the composited drill hole data by extensive visual checking in cross-section, plan and on screen in 3D, by global (per shoot) comparisons of input data and model, and by semi-local statistical methods (swath plots). All methods showed satisfactory results. • No recovery of by-products is anticipated. • In addition to gold, arsenic, sulphur, calcium and iron in total sulphide were estimated in the model to provide information for metallurgical evaluation. • S, As, Ca and Fe in total sulphide were estimated by ordinary kriging into the panel-sized blocks. • Moderate correlation was determined

Criteria	JORC Code explanation	Commentary
		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.
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 using the LUC estimate at a cut-off 0.3 ppm Au for mineralisation above 390 m vertical depth (-320 mRL), and the OK estimate at 1.0 ppm Au cut-off below 390 m from surface. • The reporting cut-off parameters were selected based on economic evaluation of the Hemi deposit to DFS level.
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 majority of the Hemi deposit would be mined by open pit extraction. Recent pit optimisation work was undertaken using an AUD $3,000 gold price, with mining costs averaging $9.33 per BCM for ore and $7.88 per BCM for waste and processing costs of $30.01 per tonne for all material types. • The $3,000 pit shells reached a maximum depth of 455 m at Brolga (to the -390 mRL), for Diucon it reached a maximum depth of 475 m (-410 mRL) and an average depth for the other deposit areas of 405 to 425 m (-340 to – 360 mRL). • Therefore the -320 mRL was selected as the level to divide open cut from underground resources. • Higher grade zones below the -320 mRL within the deposit show potential for large scale underground mining. The cut-off grade for the underground resource (1.0 ppm Au) was derived from a simple economic model, assuming the same Au price and processing costs as for the open cut, with an assumed stoping cost of $50 per tonne.
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 undertaken at Hemi, with similar mineralogy and metallurgical characteristics noted across all deposits tested thus far. The gold mineralisation is semi-refractory, and a flowsheet combining the conventional processing technologies of crushing, milling, sulphide flotation, concentrate pressure oxidation, and cyanide leaching has been tested thoroughly, and has proven successful in achieving high recoveries. • For transitional and fresh mineralisation, overall gold recoveries of typically 94% have been achieved on samples from

Criteria	JORC Code explanation	Commentary
		Aquila, Brolga, Crow, Diucon, Eagle, and Falcon. • Oxide mineralisation is non-refractory with recovery averaging 96% via conventional cyanide leaching.
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.*	• There are no known environmental issues, with a number of operational and closed open cut mines (copper, lithium, iron ore) within 50 km of Hemi, in similar physical geographical settings. • 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 on drill core. • The bulk density values were assigned based on oxidation/weathering as follows: ○ Sediment Upper Saprolite 1.7 t/m3 ○ Intrusion Upper Saprolite 1.7 t/m3 ○ Sediment Lower Saprolite 1.9 t/m3 ○ Intrusion Lower Saprolite 1.7 t/m3 ○ Sediment Saprock 2.1 t/m3 ○ Intrusion Saprock 2.15 t/m3 ○ Sediment Fresh with weathering along joints 2.4 to 2.7 t/m3 ○ Intrusion Fresh with weathering along joints 2.6 to 2.7 t/m3 ○ Sediment Fresh (primary sulphide) 2.75 t/m3. ○ Intrusion Fresh (primary sulphide) 2.8 t/m3. • The transported cover material was assigned an assumed density value of 1.7 t/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 (i.e. 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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• 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). • The Hemi Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and geological and grade continuity and kriging metrics of the panel estimates. • The Indicated Mineral Resource has a drill spacing of 40 m x 40 m and where the kriging slope of regression is greater than about 0.7. In a very few instances where

Criteria	JORC Code explanation	Commentary
		mineralisation showed clear continuity into areas of 80 m by 40 m drill hole spacing, the resource was classified as Indicated. • Wireframes were constructed to delineate the Indicated Mineral Resource i.e. the classification was not defined on a block-by-block basis. • The Inferred Mineral Resource has been defined with a drill hole spacing of 80 m by 80 m and with slopes of regression for the panel estimates less than 0.7. • Extrapolation of the mineralisation was generally limited to 60 m along strike and down dip of drill hole intersections. Extrapolation of up to 100 m down dip was used where the strongest mineralisation remained open and untested. • The input data is on a regular drilling grid and has not been concentrated on higher - grade zones. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. • The classification of 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.*	• Cube Consulting have completed an internal peer review of the estimate. An independent external peer review of the estimate has been completed which found the estimate to be prepared using accepted industry practice with no material issues identified.
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. An independent commercial laboratory has been used for all analyses. • The Mineral Resource statement relates to global estimates of tonnes and grade.

Appendix 4: Toweranna 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 (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Since 2017 all drilling at the project has been carried out by De Grey Mining Ltd ("DEG"). • 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 half sent to the laboratory for assay and the other half retained. HQ and PQ core was quartered, with one quarter sent for assay. Mineralised intervals were sampled 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. 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. • Commercially prepared certified reference material ("CRM") and course blank was inserted at a minimum rate of 2% • 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 pulverised 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. Aircore samples are only used to assist in geological interpretation.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond core diameters are - NQ2 (51mm), HQ2 (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.
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 was 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 resource estimation. • The aircore results provide a good indication of mineralisation but are not used in resource estimation. • Historical drill logs have been preserved in digital copies. Detailed drill logs have been produced by qualified geologists to an appropriate level for use in a Mineral 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.*	• 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. • Each sample was dried, split, crushed and pulverised to 85% passing 75µm. • Sample sizes are considered appropriate for the material sampled.

Criteria	JORC Code explanation	Commentary
		• The samples are considered representative and appropriate for this type of drilling. • Aircore samples are generally of good quality and appropriate for delineation of geochemical trends but were not used in the Mineral Resource estimate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The 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 reports a 48-element analysis by ICPAES and ICPMS. • The techniques are considered quantitative in nature. • A comprehensive QAQC protocol including the use of CRMs, field duplicates and umpire assays 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. • Sample results have been merged into the database by the company's database consultants. • Results have been uploaded into the company database, checked and verified. • No adjustments were made to the assay data. • Results are reported on a length weighted basis. • Infill drilling completed by De Grey has confirmed the results of the historical drilling.
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.*	• Historical drill hole collars were surveyed in AMG coordinates using RTK GPS. • Down hole surveys were recorded at 50m intervals using a single shot Eastman camera for the historical drilling. • Holes were originally located using AMG datum and have since been transformed to GDA94 grid. • Very minor historical mining volumes are approximately digitised from DMP annual

Criteria	JORC Code explanation	Commentary
		reports. • DEG Diamond and RC drill hole collar locations are located by DGPS to an accuracy of +/-10cm. • Aircore hole collar locations are located by DGPS 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 ASX. • Topographic control is by detailed 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, drilling is on a 20m by 20m grid spacing along the western and southern contacts with the granite. The remainder of the deposit is defined by drilling on a 30m to 40m spacing, with holes angled at various directions. • The drilling programs have demonstrated that the mineralised domains 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 -60° which provides good intersection angles into the mineralisation which ranges from -45° dip to sub-horizontal. • 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 down hole 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.*	• QAQC data has been both internally and externally reviewed.

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 drilling occurs on E47/2720 which is located approximately 80km south of Port Hedland. The tenement is held by Indee Gold Pty Ltd, which is a 100% wholly owned subsidiary of DEG. 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.*	• Work has been completed by numerous owners at Toweranna since 1969. This has included surface mapping, soil and rock sampling, cutting of channels, diamond, RAB and RC drilling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• At Toweranna a diorite porphyry plug has intruded into the sedimentary sequence along the structurally weak axial plane of the Croydon anticline. The porphyry is a quartz and feldspar diorite porphyry and is some 200-250m diameter and extends to greater than 450m depth. • Gold occurs in numerous quartz veins and veinlets that occur within the diorite intrusive and extends some distance into the enclosing sediments. The veins vary in size reaching in some cases 6m in true width thickness. The veins are interpreted to dip from sub-horizontal to 45°
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
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*	• Not applicable as a Mineral Resource is being reported.

Criteria	JORC Code explanation	Commentary
	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.*	
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 down hole 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.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All drilling used in the Mineral Resource estimate has been accurately located using DGPS for collar locations and gyroscopic downhole directional surveys. • 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.*	• Historical drilling data as well as recent data collected by DEG since 2017 have been used to inform the Mineral Resource estimate. • Data collected since 2017 has been

Criteria	JORC Code explanation	Commentary

		systematically recorded and stored using industry best practice for data management.
		• The database is hosted and managed by Expedio, using their customised SQL data storage system.
		• Data was geologically logged electronically using the Expedio Ocris Mobile Logger; collar and downhole surveys were also received electronically as were the laboratory analysis results.
		• The SQL server database is configured for optimal validation through constraints, library tables, triggers and stored procedures. Data that fails these rules on import is rejected or quarantined until it is corrected. Some of the automatic triggers on assay import are listed below.
		  ○ CRM results > +/- 3 standard deviations
		  ○ CRM weight > 200g
		  ○ Blank results > 10 x detection limit
		  ○ Blank weight < 400g
		  ○ Grind size < 85% passing 75µm
		• Data extracted from the database were validated visually in Datamine and Seequent Leapfrog software. Also, when loading the data, any errors such as missing values and sample/logging overlaps are highlighted.
		• Historical data was validated where possible by recent DEG drilling.
		• In summary the database is of high quality, with no significant errors due to data corruption or transcription.

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.*	• The Competent Person visited site on the 19th of May 2023, and personally inspected historical workings from surface and outcropping veins. Additionally diamond core and geological logging at the core logging facility were inspected. Core recovery and logging was of a very high standard.
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 Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the underlying geological interpretation is considered to be high and is based on extensive RC and core drilling. • Geochemistry and geological logging have been used to assist with identification of lithology, structure, mineralisation and weathering. • The deposit mineralisation occurs as a quartz vein stockwork system within, and marginal to, a diorite intrusion. The diorite is a dominant geological feature, and

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		quartz veins a controlling feature for mineralisation. • The estimation domains were constrained primarily using indicator kriging (IK), where data is flagged as 1 for mineralisation (minimum interval of 2m and Au >=0.3g/t) and 0 for waste. A probability value of 0.37 was used to define the boundary between mineralisation and waste based on review of the probability model against the drilling. • The IK estimate uses locally varying ellipsoid orientation based on trend surfaces determined from historic workings and structural controls observed in diamond core. • The IK approach is considered to be a more objective and lower risk approach than the potential bias introduced by manually selecting and linking discrete veins between drillholes as done previously. • 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 Toweranna Mineral Resource area extends over a north-south strike length of 650 m, and an east-west extent of 450 m. It has been drilled and interpreted to a maximum vertical interval of 630 m from surface at 80 mRL to -550 mRL.
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 (e.g. 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*	• Estimation of the mineral resource was by the linear geostatistical method Ordinary Kriging (OK) within the estimation domains defined by IK, using Datamine software. • Drill hole data was selected within mineralised domains and composited to 1 m downhole intervals in Datamine software. • The composited data was imported into Supervisor software for statistical and geostatistical analysis. • Top-caps were applied based on examination of histograms and Au grade distribution analysis. The caps per domain ranged from 20 to 25 ppm Au and applied at a distance of >=10m from block centroids. • Contact analysis of samples within the estimation domains and those outside ('background' domain) showed that hard domain boundaries were suitable. • Variography was performed on capped data transformed to normal scores, and

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	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.*	the variogram models were back-transformed to original units. Variography was performed separately for each domain. • The variogram models had low to moderate nugget effects (15 to 35% of the total sill), with maximum ranges of ~40-70 m along strike and ~30-35 m down dip for all domains. • The parent block size of 20 mE x 20 mN x 5 mRL is half the average drill spacing in the main well-drilled part of the deposit. • A minimum of 8 and maximum of 20 samples was used, with a search ellipse radius similar to the variogram ranges (100 m x 100 m x 20 m). • Up to two search passes were used for each estimation domain, with the second pass twice the size of the first pass. The number of samples required was halved for the second search. The second pass was only required for 1% of blocks located on the edges or at depth. • A locally varying ellipsoid orientation was used to account for the subtle changes in estimation domain orientation along strike and down dip. • Estimates of Au grades were validated against the composited drill hole data by extensive visual checking in cross-section, plan and on screen in 3D, by global comparisons of input data and model, and by semi-local statistical methods (swath plots). All methods showed satisfactory results. • No recovery of by-products is anticipated.
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 using the OK estimate at a cut-off 0.5 g/t Au for mineralisation above 240 m vertical depth (-160 mRL), and 2.0 g/t Au cut-off below 240 m and above 350 m (-160 mRL to -270 mRL). • The reporting cut-off parameters were selected based on economic evaluation of the Toweranna deposit to PFS level.
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*	• The majority of the Toweranna deposit would be mined by open pit extraction. Recent pit optimisation work was undertaken using an AUD $3,000 gold price, with mining costs averaging $10.46 per BCM for ore and $10.38 per BCM for waste and processing costs of $40.99 per tonne for all material types.

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	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 $3,000 pit shells reached a maximum depth of 240 m from surface (-160 mRL) • Therefore the -160 mRL was selected as the level to divide open cut from underground resources.
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.*	• Metallurgical testing was conducted on the Toweranna deposit during 2019 and 2023. Test work to assess conventional carbon-in-leach (CIL) gold recovery from both oxidised and fresh ore was carried out at grind sizes ranging from 150µm to 75µm. Both ore types are free-milling, with leach extractions typically exceeding 90% at a grind size of 75µm and 24hr leach duration. These results indicate Toweranna mineralisation is free milling and fully amenable to convention CIL processing without the requirement for oxidative treatment. Flotation testwork completed on fresh ore shows that Toweranna is amenable to concentration by flotation, with gold and sulphide recovery to concentrate averaging 96% and 98% respectively at a grind size of 75um, with an average mass pull to concentrate of 3.5%.
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.*	• There are no known environmental issues, with a number of operational and closed open cut mines (copper, lithium, iron ore) within 100 km of Toweranna, in similar physical geographical settings. • 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 density determinations on drill core, using the water displacement technique.
		• The bulk density values were assigned based on oxidation/weathering as follows:
		  ○ Saprolite 1.9 t/m3
		  ○ Upper Saprock 2.25 t/m3
		  ○ Lower Saprock 2.4 t/m3
		  ○ Fresh with weathering along joints 2.5 to 2.69 t/m3
		  ○ Fresh (primary sulphide) 2.75 t/m3.
		• The transported cover and silcrete material were assigned an assumed density value of 1.9 t/m3 and 2.0 t/m3 respectively

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Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. 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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• 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). • The Toweranna Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and geological and grade continuity of estimates. • The Indicated Mineral Resource has a drill spacing of 40 m x 40 m or less where geological continuity is high. • Wireframes were constructed to delineate the Indicated Mineral Resource i.e. the classification was not defined on a block-by-block basis. • The Inferred Mineral Resource has been defined where drill hole spacing is greater than 40 m x 40 m to a depth of 350 m from surface, or where geological continuity is considered poor. Below 350 m from surface the model is unclassified. • Extrapolation of the mineralisation was generally limited to 40 m along strike and down dip of drill hole intersections. • The input data is on a regular drilling grid and has not been concentrated on higher -grade zones. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. • The classification of 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.*	• Cube Consulting have completed an internal peer review of the estimate.
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*	• 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. An independent commercial laboratory has been used for all analyses. • The Mineral Resource statement relates to global estimates of tonnes and grade.

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	with production data, where available.	