

## **Quarterly Activities Report**

For the period ending 30 June 2021

#### **Highlights:**

## 6.8Moz Hemi Maiden Mineral Resource drives Mallina Gold Project resources to 9.0Moz

- Hemi Total Maiden Mineral Resource Estimate (JORC 2012) of 192Mt @ 1.1g/t Au for 6.8Moz at a 0.3g/t Au cut-off grade
  - High 25,300 ounces per vertical metre at Hemi
- Mallina Gold Project Mineral Resource Estimate (JORC 2012) increased to 230Mt
  @ 1.2g/t Au for 9.0Moz
  - Measured & Indicated resource total 43% or 85Mt @ 1.4g/t Au for 3.8Moz
- Robust estimate with total Mallina Gold Project Mineral Resource Estimate of 192Mt @ 1.4g/t Au for 8.6Moz at higher 0.5g/t Au cut-off grade
- All deposits remain open at depth, down plunge and along strike with significant drill programs continuing at Hemi
- Active rigs on site increased from 10 to 12 during the quarter with drilling ongoing
- A combined 118,416m of aircore, RC and diamond drilling during the quarter
- Hemi Mineral Resource underpins the release of a Scoping Study to demonstrate Tier 1 production potential in the September Quarter 2021

#### Metallurgy

- Continued positive results returned from ongoing detailed metallurgical testwork
- Overall metallurgical recovery of 94.0% achieved on bulk composite of primary mineralisation at Aquila

#### Near term growth strategy:

- Continuing to define and extend the known mineralised zones at Hemi
- Determine the scale of emerging mineralised intrusives around Hemi including Diucon, Eagle and Scooby
- Testing known intrusives and identify new targets in the wider project area
- Expand the existing shear/sediment hosted regional resource base and explore untested areas along the 200km of prospective shear zones

#### Community & Environment

- Environmental Baseline Studies expanded from Hemi to Greater Hemi region
- Continuing engagement with community groups, traditional owners, pastoralists and across multiple sectors including government, education and industry associations

#### Corporate

- Well-funded with cash reserves end of the quarter ~\$71.0 million after expenditure of ~\$16.2 million in the quarter
- Continued capability expansion of management and exploration team to ready the Company for the next phase of growth

30 JULY 2021

ASX: DEG

#### BOARD & MANAGEMENT

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Managing Director Glenn Jardine

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De Grey Mining Limited (ASX: DEG) ("De Grey" or the "Company") is pleased to provide its activities report for the June quarter 2021. The Company's full focus remained on the Mallina Gold Project ("Project") and growing the Hemi discovery in the centre of the Project area, located in the Pilbara region of Western Australia. Hemi is made up of a series of mineralised intrusions that currently host the Aquila, Brolga, Crow, Diucon, Eagle and Falcon deposits.

#### **Mallina Gold Project**

**Hemi is a Tier 1 gold discovery with world class infrastructure at its doorstep.** Hemi is positioned in the central region of the Company's 1,500km<sup>2</sup> Mallina Gold Project (MGP). Hemi is favourably located within 10km of two major sealed highways, approximately 5km from a gas pipeline and less than 20km from a major electricity transmission line.

#### During the quarter a Maiden Mineral Resource Estimate for Hemi of 6.8Moz was announced.

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

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

#### Global Mineral Resources for the MGP, following the inclusion of Hemi, increased to 9.0Moz.

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

## Measured and Indicated Mineral Resources across the MGP comprise 3.8Moz @ 1.4g/t Au including 2.8Moz @ 1.3g/t Au at Hemi.

Hemi was first discovered in aircore drilling in November 2019 and confirmed by RC drilling in March 2020. Hemi currently comprises a cluster of six individual gold deposits: Brolga, Aquila, Crow, Falcon and the more recent discoveries of Diucon and Eagle (Figure 1). The Maiden Mineral Resource Estimate is based on 688 RC holes (134,166m) and 169 diamond holes (69,061m including RC pre-collars) for a total of 203,228m. Overall, drilling at Hemi including aircore drilling exceeds over 400,000m with substantial aircore, RC and diamond drilling programs continuing.

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



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

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

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

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

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

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

#### Hemi Mineral Resource 6.8Moz (192Mt @1.1g/t Au) 3.5km < Crow 1.0Moz Diucon Eagle Eagle 1.5Moz Aquila Diucon 0.8Moz 2km Falcon 1.2Moz Geology Brolga Intrusions 3Moz Ultramafic Sediments

#### Figure 1: Hemi gold deposits

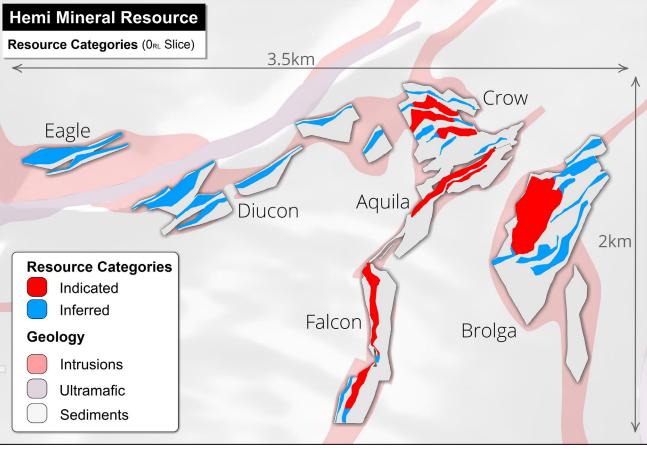


Opportunities to increase resources across the entire Mallina gold project area are plentiful. All deposits remain open at depth and along strike with significant drill programs continuing at each Hemi deposit targeting further extensions and infill drilling to improve JORC 2012 resource categories.

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

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

#### Figure 2: Hemi gold deposits showing Indicated and Inferred Mineral Resource categories.





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

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

#### Hemi Project Mineral Resource at Various Cut-off grades

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

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

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

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

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

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

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



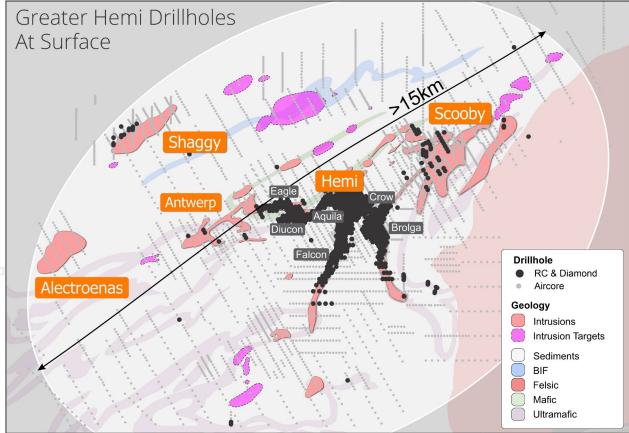
This quick advance in drilling has reduced the timeframe to define the scale of the deposit with wide-spaced (160m x 80m spaced) definition drilling. Subsequent infill drilling has therefore been very focused from an early stage.

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

#### <u>Brolga</u>

The Brolga deposit is the largest resource to date with dimensions of mineralisation spanning over 1,000m x 300m and to at least 500m depth. The deposit remains open down plunge (Figure 5) to the southwest and down dip to the south into Brolga South (Figure 5).

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



#### Figure 3: Greater Hemi Region showing all drilling at surface to date



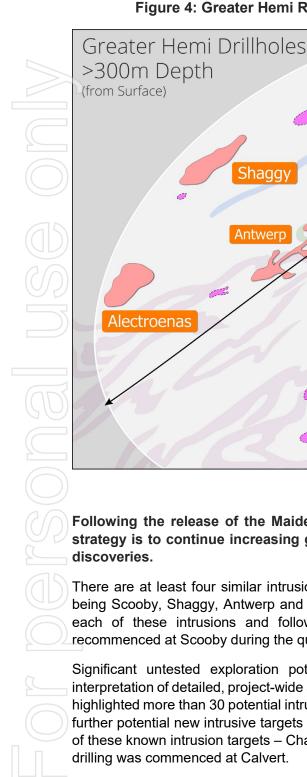


Figure 4: Greater Hemi Region showing all drilling below 300 metres depth.

>300m Depth Shaggy Hem Antwerp Brolaz Falco Drillhole RC & Diamond Aircore Alectroenas Geology Intrusions **Intrusion Targets** Sediments BIF Felsic Mafic Ultramafic

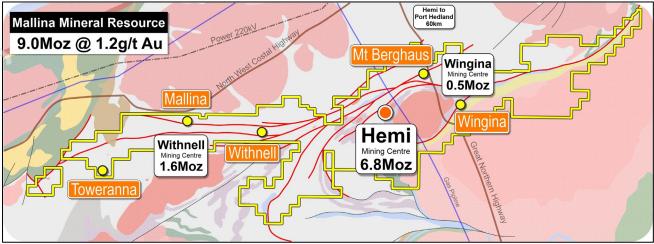
Following the release of the Maiden Hemi Mineral Resource the Company's immediate growth strategy is to continue increasing gold resources, via extending deposits and making large new discoveries.

There are at least four similar intrusion complexes already identified in the immediate vicinity of Hemi, being Scooby, Shaggy, Antwerp and Alectroenas. Wide-spaced aircore drilling has been conducted at each of these intrusions and following the Maiden Mineral Resource announcement RC drilling recommenced at Scooby during the quarter.

Significant untested exploration potential remains across the wider project area. The ongoing interpretation of detailed, project-wide aeromagnetic survey and geochemical sampling results has already highlighted more than 30 potential intrusive targets requiring assessment and work is continuing to identify further potential new intrusive targets throughout the project area. Outside the Greater Hemi area, three of these known intrusion targets – Charity Well, Calvert and Geemas – during the quarter aircore and RC drilling was commenced at Calvert.

Exploration activities will also be ongoing on the shear-hosted potential of the project. There are more than 200km of shear zones existing across the Mallina Project and the majority of the current Mineral Resource outside Hemi (37.4 million tonnes grading 1.8g/t Au for 2.2 million ounces) is found in these shear-hosted deposits.





#### Figure 5: Mallina Gold Project showing main gold deposits and the Hemi Discovery.

Drilling rates continued to be very productive during the quarter with 57,340m of aircore drilling, 48,481m of RC and 12,595m of diamond drilling completed.



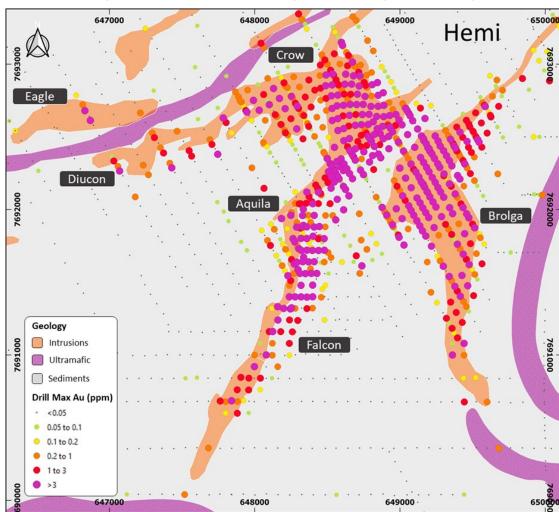
#### Hemi Exploration

During the quarter the exploration activities, outside of those supporting the Hemi Maiden Mineral Resource Estimate which had a cut-off date of 17 May 2021, focussed on increasing resources across the existing deposits and new target areas including resource extensions at Hemi and discovery of new intrusion style mineralisation in the Greater Hemi region.

Updates on the material results at the main deposits follows.

#### Aquila

Aquila is a gold-sulphide zone located to the immediate north of the Brolga zone and adjacent to the Crow zone to the north and Falcon zone to the south (Figure 6).



#### Figure 6: Plan of Hemi showing anomalous gold in drilling

The Aquila intrusion has been outlined over a length of +1,200m with well defined mineralisation over 800m strike and has been confirmed to depths of ~500m. Recent results have confirmed extensions to the plunging higher grade shoots at the eastern and western ends of the intrusion. Mineralisation remains open along strike and at depth.

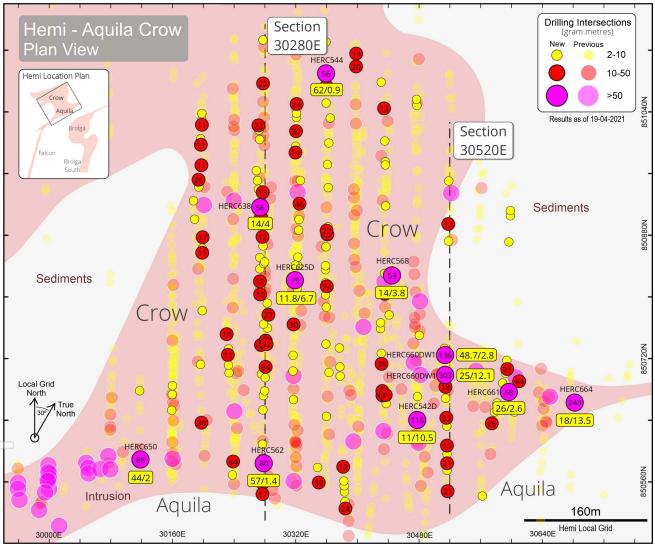


Infill drilling is being conducted at a nominal 40m x 40m spacing to define the overall mineralised system and to provide confidence in the continuity of higher grade lodes. Extensional drilling is being conducted to test depth and strike extensions to higher grade mineralisation.

During the quarter significant new intercepts include:

- 11m @ 10.5g/t Au from 51m including 1m @ 105.5g/t Au in HERC542D
- 44m @ 2.0g/t Au from 48m including 4m @ 6.4g/t Au in HERC650
- 57m @ 1.4g/t Au from 117m in HERC562

#### Figure 7: Hemi - drilling location plan showing the new Aquila and Crow drilling results





#### Brolga/Brolga South

The Brolga deposit is the largest gold resource identified at Hemi to date. The mineralised intrusion now spans 800m along strike and up to 300m wide. Gold mineralisation at Brolga remains open down dip to the south east and down plunge to the west and within the large Brolga South extension. Infill and extensional drilling continued during the period.

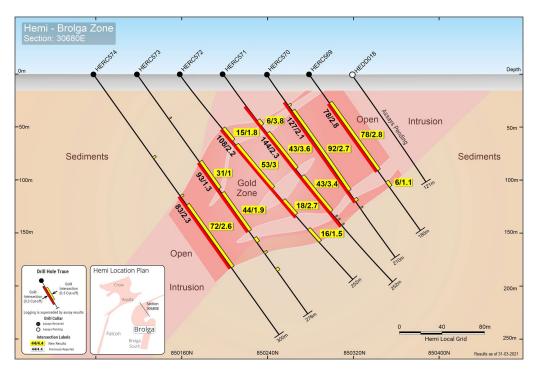
The infill program (40m x 40m) was designed to provide sufficient drill density to enable a significant portion of the resource to meet JORC 2012 Indicated classification. Intercepts received to date have been successful in demonstrating continuity of the previous wide spaced drilling (80m x 80m). Results continue to show broad zones of consistent gold mineralisation and strong correlations between adjacent holes.

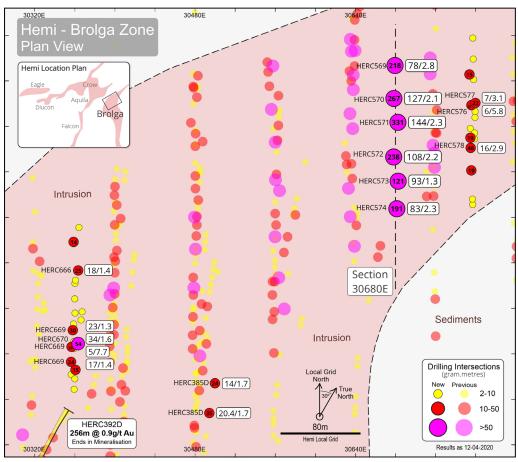
Extensional drilling was conducted to the west and south of the main Brolga zone during the quarter. Drilling has demonstrated that the Brolga mineralised system is open at depth, down plunge to the west and to the south. Extensional drilling is continuing at Brolga South.

During the quarter wide zones of consistent gold mineralisation were intersected in near surface 40m x 40m resource definition (infill) drilling at Brolga on section 30680E. Results, in order, comprised:

- 78m @ 2.8g/t Au from 33m in HERC569
- 127m @ 2.1g/t Au from 34m in HERC570
- 144m @ 2.3g/t Au from 37m in HERC571
- 108m @ 2.2g/t Au from 65m in HERC572
- 93m @ 1.3g/t Au from 101m in HERC573
- 83m @ 2.3g/t Au from 140m in HERC574







#### Figure 9: Brolga - drilling location plan.

#### Crow

The Crow zone is a large intrusion located immediately north of the Aquila zone. The style of mineralisation is similar to the Aquila and Brolga zones with more discrete sub vertical dipping lodes of sulphide rich alteration and brecciated intrusion. Mineralisation remains open at depth, to the north and to the west towards the newly discovered Diucon and Eagle zones.

The most dominant lode within the Crow intrusion has been named the McLeod lode and is located approximately 200m north and oblique to Aquila intersecting each other at the eastern end. The McLeod lode is currently defined over 600m in strike, 300m depth and up to 60m true thickness and remains open. The McLeod lode contains some of the highest grade intercepts in the overall Hemi deposit.

The RC drilling program at Crow has targeted resource definition at a 40m x 40m spacing. This drilling is to confirm continuity of mineralisation between the existing 80m x 80m drilling. Results to date have been positive, with continuity confirmed and additional stacked lodes intersected or extended.

The infill and extensional drilling programs have continued in parallel. A series of high-grade intercepts over broad widths were returned during the quarter, including:

HERC660DW1 in the McLeod lode at Crow returned:

- 25.0m @ 12.1g/t Au from 164m including 6.0m @ 44.9g/t Au from 178m; and
- 48.7m @ 2.8g/t Au from 195m including 6m @ 9.3g/t Au from 201m and 7.3m @ 5.4g/t Au from 231m.

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This new result is 120m along strike to the east from the previously reported **64m @ 13.4g/t Au** from 141m in HERC238 including **19m @ 42.0g/t Au** from 170m.

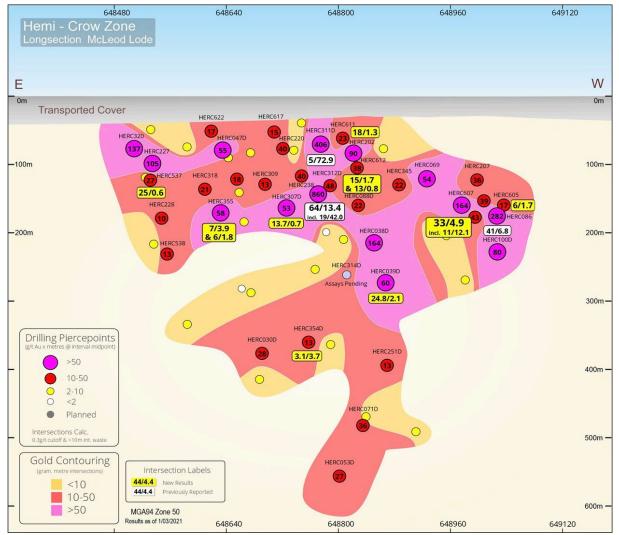
Additional significant new resource definition drilling results at Crow included:

- 18m @ 13.5g/t Au from 179m including 6m @ 38.9g/t Au from 180m in HERC664 (McCleod Lode)
- 11.8m @ 6.7g/t Au from 294.3m including 4.7m @ 13.7g/t Au from 300.8m in HERC625D
- 14m @ 3.8g/t Au from 175m including 1m @ 41.0g/t Au from 187m in HERC568
- 11.8m @ 3.3g/t Au from 312m including 2.1m @ 14.6g/t Au from 318m in HERC314D
- 26m @ 2.6g/t Au from 56m including 5m @ 8.7g/t Au from 73m and 13m @ 2.4g/t Au from 112m in HERC661

Significant near surface extensional drilling results in the north of Crow include:

- 62m @ 0.9g/t Au from 25m including 4m @ 3.1g/t Au from 26m in HERC544

#### Figure 10: Crow – McLeod Lode Longitudinal Projection showing grade thickness (gram.metres Au) of drill intervals





#### Falcon

The Falcon intrusion is located approximately 600m west of Brolga and immediately south of Aquila. Strong mineralisation has been defined over a strike length of approximately 1km. The intrusion has been defined in shallow aircore drilling over a further 2km to the south. The bedrock is covered by approximately 30m to 40m of transported material similar to the other deposits at Hemi.

The mineralisation at Falcon dips steeply to the east and is intimately associated with highly brecciated and extensively sulphide altered portions of the north-south orientated subvertical intrusion. The style and intensity of alteration and brecciation is similar to the nearby Aquila deposit.

Drilling has continued during the quarter targeting depth extensions along the known 1km strike of the resource area. Further drilling results are expected in the next period.

#### **Diucon and Eagle**

The discoveries of the Diucon and Eagle zones were first announced during the March quarter 2021. Diucon and Eagle are located immediately to the west of Crow and present a potential geological link between the Crow intrusion to Antwerp (Figure 11). The gold mineralisation shows similar alteration and sulphide development as seen at the adjacent deposits of Aquila, Brolga, Crow and Falcon.

Diucon is defined over approximately 900m of strike and remains open down plunge to the west and at depth beneath sediments. The Eagle mineralisation is currently defined over 600m strike and remains open in most directions as drilling is at an early stage.

During the quarter, significant new intercepts included:

#### Diucon

- 35m @ 2.0g/t Au from 83m in HERC458
- 20m @ 4.9g/t Au from 201m in HERC460
- 14m @ 21.2g/t Au from 50m and 13m @ 1.0g/t Au from 132m and 46m @ 1.7g/t Au from 203m (ending in mineralisation) in HERC477
- 4m @ 3.5g/t Au from 116m and 11m @ 0.8g/t Au from 169m and 2m @ 12.6g/t Au from 187m and 19.0m @ 4.4g/t Au from 194m and 17m @ 5.7g/t Au from 282m (ending in mineralisation) in HERC476
- 26m @ 1.6g/t Au from 69m and 18m @ 2.2g/t Au from 126m in HERC475

#### Eagle

- 36m @ 6.9g/t Au from 40m in HERC470
- 61m @ 2.6g/t Au from 116m including 6m @ 13.4g/t Au from 142m in HERC480
- 52m @ 1.1g/t Au from 40m in HERC462



647360E

17/5.7

19/4.4 46/1.7 14/21.2

34/1.8

17/3.5

Diucon

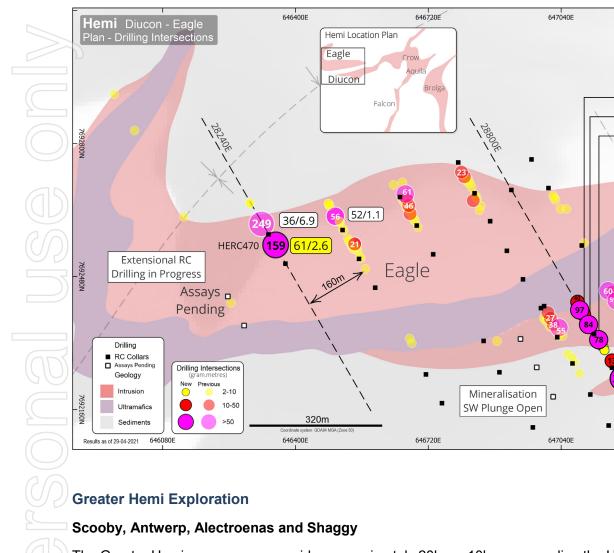
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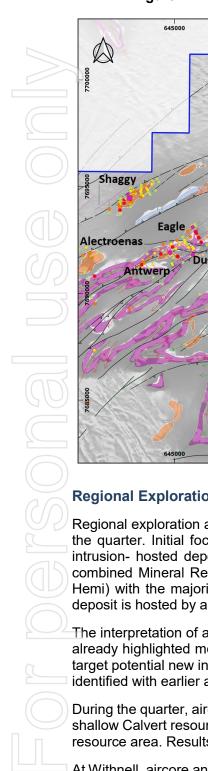
#### Figure 11: Hemi showing recent RC results at Diucon and Eagle and previous RC results at Antwerp

The Greater Hemi area covers a corridor approximately 20km x 10km surrounding the Hemi deposits and includes four other known intrusion targets: Scooby, Antwerp, Alectroenas and Shaggy and numerous targets based on the geophysical interpretation(Figure 12).

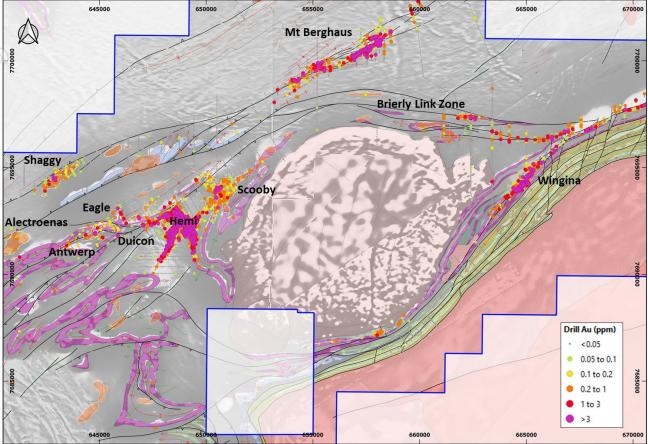
The Company continues to undertake reconnaissance exploration within the Greater Hemi corridor using systematic aircore drilling, geophysical and geochemical techniques to identify new mineralised intrusions based on recent experience derived from Hemi geochemical vectors and mineralising parameters.

Late in the guarter, RC drilling recommenced at Scooby to complete the previous first pass RC drilling program which was interrupted by the discovery and resource drilling at Diucon and Eagle. New geological and geochemical targets defined by the aircore drilling are planned to be tested with deeper RC drilling during the current quarter.





#### Figure 12: Greater Hemi region showing Hemi and the surrounding target areas



#### **Regional Exploration**

Regional exploration activities outside of the greater Hemi corridor continued throughout the MGP during the quarter. Initial focus of the regional exploration team is to identifying new, large scale, high value intrusion- hosted deposits similar to Hemi and new structural shear zone targets. The MGP hosts a combined Mineral Resource of 37.4 million tonnes grading 1.8g/t Au for 2.2 million ounces (excluding Hemi) with the majority of resources hosted along shear zones in sediments and only the Toweranna deposit is hosted by an intrusion.

The interpretation of a detailed, project-wide aeromagnetic survey and geochemical sampling results has already highlighted more than 30 potential intrusive targets requiring assessment and work continues to target potential new intrusions throughout the project area (Figure 13). Three known intrusions have been identified with earlier aircore drilling at Charity Well, Calvert and Geemas.

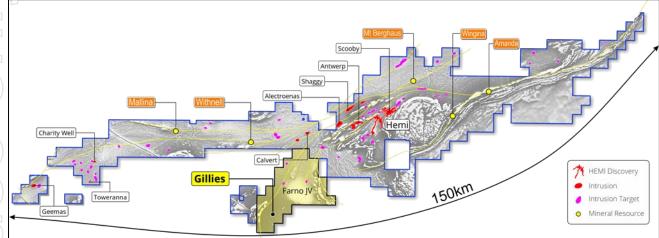
During the guarter, aircore and RC drilling has been undertaken at Calvert, aiming to increase the existing shallow Calvert resource and to test the previous defined and gold anomalous intrusion to the north of the resource area. Results of this drilling are expected during August.

At Withnell, aircore and RC drilling programs have commenced aiming to test a series of targets within the mining leases along the Withnell Trend. Results of this drilling program are expected to be progressive during the current quarter.

Heritage surveys have commenced at Gemmas and Charity Well areas after delays associated with Covid 19 constraints. Upon completion of the heritage surveys planned aircore drilling programs will commence during August.



In the eastern portion of the MGP, a follow-up RC program has been recently completed at the Buckle prospect aiming to extend previously intersected gold mineralisation at the Buckle prospect. Results remain pending.



#### Figure 13: Intrusion targets within the Mallina Project, including regional magnetic survey

#### Farno Joint Venture (De Grey Mining Ltd 75%, Novo Resources Inc 25%)

De Grey has completed earning a 75% equity interest in the Farno JV. De Grey is the JV manager with 25% equity partner TSX-listed Novo Resources Inc (TSX:NVO).

At the Gilles prospect (Figure 13), a program of 11 follow-up RC holes has recently been completed aiming to extend previously defined mineralisation (15m @ 1.8g/t Au from 90m in GLRC016 within a broader 52m @ 0.7g/t Au from 53m) along a potential 600m strike length. Results of this program are expected during August/September.

#### **Other Project Activities**

#### **Metallurgical Testwork**

The Company is undertaking a comprehensive metallurgical testwork program across each of the mineralised zones at Hemi starting with (Brolga, Aquila, Crow and Falcon) to be followed by Diucon and Eagle when diamond core becomes available and the regional deposits of Mallina and Withnell. Testing has also been undertaken on the other main regional deposits of Toweranna and Wingina which are free milling and will be able to be treated through a conventional CIL circuit.

During the quarter testwork at Aquila was conducted on 12 individual composites representing oxide, transition and primary mineralisation and one bulk composite comprising primary mineralisation.

The samples were sourced from the top 200vm of the Aquila zone early in the drilling program.

Overall metallurgical recovery of 94.0% was achieved on a bulk composite of primary mineralisation at Aquila. The head grade of the composite was 1.67g/t Au and the overall tail grade achieved was 0.10g/t Au. The flowsheet for the primary mineralisation bulk composite comprised sulphide flotation followed by oxidation of the flotation concentrate through pressure oxidation and then cyanide leaching of the pressure oxidation residue. Flotation tailings were treated by cyanide leaching.



Individual composites of transition and primary mineralisation at Aquila achieved overall recoveries of between 89.8% and 97.2% via the same process used for the primary mineralisation bulk composite.

A composite of oxide mineralisation at Aquila achieved a recovery of 94.9% after 24 hours through cyanide leaching. The head grade of the oxide composite was 1.08g/t Au and the tail grade was 0.06g/t Au.

Separate gravity testwork was conducted on the oxide mineralisation composite from Aquila and achieved a gravity recovery of 18.5%.

A full suite of metallurgical testwork has commenced on composite samples from Crow and Falcon. The same program will be conducted for the Diucon and Eagle zones when core for testwork becomes available from diamond drilling at those zones.

Optimisation of the testwork conditions based on experience to date with be applied to Crow, Falcon, Diucon and Eagle. Mineralisation previously tested at Brolga and Aquila will also continue to be tested using optimised testwork conditions with the aim of improving results achieved to date.

#### **Environmental Studies**

During the quarter, a desktop Flora assessment and follow-up field surveys were completed. Fauna field studies are currently in the planning stage and will be completed in the next quarter. Additional ecological studies are in progress.

#### Safety and COVID-19 Protocols

During the quarter the focus on safety increased, including the employment of additional risk management and on site safety personnel. Hazard identification and reporting has increased significantly with a strong focus on hazard reduction during this strong exploration growth phase. The June quarter is planned to focus on increased training of personnel across many aspects of the business.

The Company has continued operating with COVID-19 protocols in place. This includes full testing of all site personnel for COVID-19 prior to departure to site. No cases of COVID-19 have been reported at site.

On 29 June 2021, the Western Australian government announced a four-day lockdown until 12:01am on 3 July 2021. The Company put in place enhanced management regimes for its personnel and contractors to allow operations to continue uninterrupted during this period.

#### **Community Relations**

During the quarter, community engagement activity continued to be a focus for the Company.

Stakeholder engagement activity included meetings held regularly with community groups, traditional owners, pastoralists and across multiple sectors including local government, state government, education, and industry associations.

As the Company continued to expand its activities, community relations focused on maintaining engagement with existing networks whilst also forging many new important connections throughout the Pilbara region.



#### Corporate

#### **Cash Position and Quarterly Cash flows**

The Company ended the quarter in a strong cash position with cash reserves of ~A\$71.0 million.

During the March quarter 2021:

- Net cash used in exploration activities totalled \$13.2 million;
- Company received funds in relation to the exercise of 2.8 million options exercisable at \$0.30 and 66,000 option exercisable at \$0.35 and share allotment occurred during the quarter; and
- Payments to related parties of the Company and their associates for Executive and Non-Executive Director fees, including (where applicable) superannuation, totalled ~\$309,000.

#### Share Equity and Shareholders

As at 30 June, the Company had 12,241 shareholders and 1,292,217,061 shares on issue. The top 20 shareholders held 68.0% of the issued shares. The company also has 2,790,000 Options, 1,590,846 Performance Rights and 3,069,780 zero priced unlisted options (ZEPOS) on issues. A total of 547,422 ZEPOS were issued to senior management during the quarter and represent the LTI component of their respective employment agreements.

Further details with respect to Consolidated quarterly cash flows are available in the Appendix 5B.

#### For further information, please contact:

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#### **Competent Person's Statement**

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

The information in the Resource Statement is based on, and fairly represents information and supporting documentation prepared 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.



### Appendix 1: Mallina Gold Project Global Mineral Resource Estimate

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

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

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



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

#### Hemi - Mining Centre

<b>D</b>	<b>T</b>		Measure	d		Indicate	ed		Inferre	d		Total	
Deposit Type	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	
Brolga	Oxide				1.32	1.4	57,300	2.25	0.8	55,700	3.57	1.0	113,000
	Sulphide				26.77	1.3	1,148,300	32.47	1.0	994,700	59.24	1.1	2,142,90
	Total				28.09	1.3	1,205,600	34.72	0.9	1,050,300	62.81	1.1	2,255,90
Aquila	Oxide				1.00	1.4	45,100	0.23	0.5	4,000	1.23	1.2	49,100
	Sulphide				9.64	1.5	479,600	7.22	1.3	312,100	16.86	1.5	791,700
	Total				10.64	1.5	524,700	7.45	1.3	316,100	18.09	1.4	840,700
Crow	Oxide				0.97	1.0	31,500	1.07	0.9	30,200	2.03	0.9	61,700
	Sulphide				8.85	1.1	320,400	18.46	1.1	649,900	27.31	1.1	970,400
	Total				9.81	1.1	352,000	19.53	1.1	680,100	29.34	1.1	1,032,10
Falcon	Oxide				1.71	1.7	94,500	0.55	1.0	17,600	2.27	1.5	112,100
	Sulphide				15.29	1.2	602,700	16.10	1.0	511,200	31.38	1.1	1,113,90
	Total				17.00	1.3	697,200	16.65	1.0	529,700	33.65	1.1	1,226,80
Diucon/Eagle	Oxide							1.38	1.0	44,400	1.38	1.0	44,400
	Sulphide							47.14	0.9	1,405,100	47.14	0.9	1,405,10
	Total							48.52	0.9	1,449,500	48.52	0.9	1,449,50
Hemi Mining	Oxide				5.00	1.4	228,500	5.47	0.9	151,800	10.48	1.1	380,300
Centre	Sulphide				60.54	1.3	2,550,900	121.38	1.0	3,873,000	181.92	1.1	6,424,00
	Total				65.55	1.3	2,779,400	126.85	1.0	4,024,900	192.40	1.1	6,804,30



#### Indicated Measured Inferred Total Deposit Туре Mt Mt Au g/t Au Oz Mt Au g/t Au Oz Mt Au g/t Au Oz Au g/t Au Oz Withnell Open 28,500 48,200 Oxide 0.63 1.4 0.36 1.2 14.400 0.15 5.300 1.3 1.1 1.14 Pit 1.9 Sulphide 0.63 1.6 33,200 2.68 163,500 0.53 2.2 38,000 3.85 1.9 234,700 Total 1.26 1.5 61,700 3.05 1.8 177,800 0.68 2.0 43,300 4.99 1.8 282,900 0.00 2.5 300 0.00 2.5 300 Withnell Oxide Underground 4.3 2.38 3.9 2.50 3.9 316,700 Sulphide 0.11 15,600 301,100 0.11 4.3 15,600 301,400 2.50 317,100 Total 2.39 3.9 3.9 Oxide 1.3 19,900 1.4 1.70 1.3 72,900 Mallina 0.48 1.22 53,000 1.13 1.2 44,100 3.93 1.5 190,300 5.06 234,500 Sulphide 1.4 5.15 1.5 Total 1.61 1.2 64,100 243,300 6.76 1.4 307,400 Oxide 0.05 3.1 4,700 0.05 2.2 3,500 0.10 2.6 8,200 Toweranna **Open Pit** Sulphide 4.28 2.1 288,600 2.41 2.1 162,800 6.69 2.1 451,400 4.33 2.1 2.46 6.79 2.1 Total 293,200 2.1 166,400 459,600 Oxide Toweranna Underground Sulphide 0.56 64,500 0.56 64,500 3.6 3.6 0.56 3.6 Total 64,500 0.56 3.6 64,500 Oxide 2.8 16,400 0.32 2.6 26,800 0.04 1,500 0.54 2.6 44,700 Camel 0.18 1.1 2.1 600 0.14 1.4 0.14 1.8 0.29 1.7 15,700 0.01 6.500 8.600 Sulphide Total 0.19 2.8 17,000 0.46 2.2 33,300 0.19 1.7 10,100 0.84 2.2 60,400 0.43 1.3 17,900 0.05 0.8 0.48 1.3 19,300 1,400 Calvert Oxide 0.56 1.3 0.23 1.2 0.79 1.3 33,100 Sulphide 23,800 9,300 Total 0.99 1.3 41,700 0.28 1.2 1.27 1.3 52,400 10,700 0.06 5,500 1.5 6,000 1.6 5,700 0.30 17,200 Roe Oxide 2.7 0.13 0.11 1.8 Sulphide 0.01 2.5 1,000 0.07 2.3 5,300 0.21 2.2 0.30 2.2 21,100 14,800 2.7 0.20 1.8 11,300 0.33 2.0 20,500 0.60 2.0 38,300 Total 0.08 6,500

#### Withnell – Mining Centre

De Grey Mining Limited ASX Announcement



Dromedary	Oxide	0.10	2.2	7,200	0.03	1.6	1,400	0.04	1.6	2,200	0.17	1.9	10,800
	Sulphide				0.03	1.6	1,700	0.08	1.8	4,700	0.12	1.7	6,400
	Total	0.10	2.2	7,200	0.06	1.6	3,200	0.12	1.7	6,900	0.29	1.9	17,200
Leach Pad	Oxide				0.86	0.7	19,300				0.86	0.7	19,300
	Sulphide												
	Total				0.86	0.7	19,300				0.86	0.7	19,300
Hester	Oxide				0.04	2.1	3,000	0.03	1.3	1,100	0.07	1.8	4,100
	Sulphide				0.01	2.1	900	0.05	1.4	2,100	0.06	1.6	3,100
	Total				0.06	2.1	3,900	0.07	1.4	3,300	0.13	1.7	7,200
Withnell Mining	Oxide	0.98	1.8	57,500	2.69	1.3	113,400	1.70	1.4	74,000	5.37	1.4	245,000
Centre	Sulphide	0.66	1.7	34,800	9.02	1.9	550,100	10.54	2.4	796,200	20.22	2.1	1,381,100
15	Total	1.63	1.8	92,300	11.72	1.8	663,500	12.24	2.2	870,200	25.58	2.0	1,626,100

#### Wingina - Mining Centre

Deposit	Measured Type				Indicated			Inferred			Total		
Deposit	туре	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz	Mt	Au g/t	Au Oz
Wingina	Oxide	2.68	1.8	152,100	0.65	1.3	27,000	0.34	1.3	14,400	3.67	1.6	193,500
	Sulphide	0.40	1.6	20,500	0.34	1.5	16,300	1.08	1.7	57,400	1.82	1.6	94,200
	Total	3.08	1.7	172,700	0.99	1.4	43,300	1.42	1.6	71,700	5.49	1.6	287,70
Mt Berghaus	Oxide				0.68	1.8	38,900	0.99	1.1	35,800	1.67	1.4	74,700
	Sulphide				0.27	1.7	14,400	2.40	1.2	91,800	2.67	1.2	106,30
_	Total				0.95	1.7	53,300	3.39	1.2	127,600	4.34	1.3	181,00
Amanda	Oxide				0.51	1.3	21,700	0.89	0.9	24,700	1.40	1.0	46,300
	Sulphide				0.07	1.8	4,200	0.56	1.1	19,200	0.63	1.2	23,300
	Total				0.58	1.4	25,800	1.44	0.9	43,900	2.03	1.1	69,700
Wingina Mining	Oxide	2.68	1.8	152,100	1.84	1.5	87,600	2.21	1.1	74,900	6.74	1.5	314,50
Centre	Sulphide	0.40	1.6	20,500	0.68	1.6	34,900	4.04	1.3	168,400	5.12	1.4	223,80
	Total	3.08	1.7	172,700	2.52	1.5	122,500	6.25	1.2	243,200	11.86	1.4	538,40



## **Appendix 2: Tenement Holdings and Movements**

# Schedule of Mining Tenements and Beneficial Interests Held as at the end of the June 2021 Quarter NUO BSN

Project/Location	Country	Tenement	Percentage held/earning
Mallina Gold Project, Pilbara	Australia	E45/2533	100%
Mallina Gold Project, Pilbara	Australia	E45/2364	100%
Mallina Gold Project, Pilbara	Australia	E45/2983	100%
Mallina Gold Project, Pilbara	Australia	E45/2995	100%
Mallina Gold Project, Pilbara	Australia	E45/3390	100%
Mallina Gold Project, Pilbara	Australia	E45/3391	100%
Mallina Gold Project, Pilbara	Australia	E45/3392	100%
Mallina Gold Project, Pilbara	Australia	E45/4751	100%
Mallina Gold Project, Pilbara	Australia	E45/5140	100%
Mallina Gold Project, Pilbara	Australia	E47/2502	75%ª
Mallina Gold Project, Pilbara	Australia	E47/2720	100%
Mallina Gold Project, Pilbara	Australia	E47/3504	100%
Mallina Gold Project, Pilbara	Australia	E47/3552	100%
Mallina Gold Project, Pilbara	Australia	E47/3553	100%
Mallina Gold Project, Pilbara	Australia	E47/3554	100%
Mallina Gold Project, Pilbara	Australia	E47/3750	100%
Mallina Gold Project, Pilbara	Australia	E47/891	100%
Mallina Gold Project, Pilbara	Australia	M47/473	100%
Mallina Gold Project, Pilbara	Australia	M47/474	100%
Mallina Gold Project, Pilbara	Australia	M47/475	100%
Mallina Gold Project, Pilbara	Australia	M47/476	100%
Mallina Gold Project, Pilbara	Australia	M47/477	100%
Mallina Gold Project, Pilbara	Australia	M47/480	100%
Mallina Gold Project, Pilbara	Australia	L47/164	100%
Mallina Gold Project, Pilbara	Australia	L47/165	100%
Mallina Gold Project, Pilbara	Australia	L47/578	100%
Mallina Gold Project, Pilbara	Australia	E47/891	100%
Mallina Gold Project, Pilbara	Australia	P45/3029	100%
Mallina Gold Project, Pilbara	Australia	P47/1866	100%
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<sup>a</sup> The Company has earned a 75% interest in E45-2502, and a 25% interest held by Farno McMahon Pty Ltd, a 100% subsidiary of Novo Resources Inc.

#### **Schedule of Mining Tenements and Beneficial Interests** Acquired during the June 2021 Quarter

Project/Location	Country	Tenement	Acquisition or Grant Date
Mallina Gold Project, Pilbara	Australia	E45/5140	9 April 2021
Schedule of Mining Tenem Disposed of during the Ju	ne 2021 Quarter	al Interests	
Project/Location	Country	Tenement	Withdrawal Date
Nil			