

# Market Release

12 October 2021



## Havieron PFS Stage 1 delivers solid returns and base for future growth

- Havieron PFS Stage 1 estimated IRR of 16% with a 4 year payback period<sup>1,2,3,4</sup>
- Estimated average gold production of 160kozpa @ AISC of US\$743/oz over initial 9 year mine life from a ~2Mtpa operation<sup>1,2,3</sup>
- Capital efficient, low intensity development utilising existing Telfer processing infrastructure
- PFS based on Ore Reserves of 14Mt and does not consider 37Mt of Inferred Mineral Resource
- The Study identified that including additional Mineral Resources could allow for a ~3Mtpa operation
- The Feasibility Study underway will also assess production rates of 3Mtpa and beyond
- Significant exploration upside, with recent drilling showing the deposit open laterally and at depth
- Completion of PFS triggers Newcrest's entitlement to an additional 10% interest in Havieron
- Feasibility Study expected to be completed in the December 2022 Quarter<sup>5</sup>

Newcrest Mining Limited (ASX, TSX, PNGX: NCM) is pleased to announce that the Havieron Pre-Feasibility Study Stage 1 (the Study) has been completed and the Newcrest Board has approved the progression of the Study to the Feasibility Stage.

The Havieron Project (the Project) is located 45km east of Newcrest's existing Telfer operation and is a high grade, low capital intensity project with significant expansion potential. Newcrest has adopted a staged approach to the evaluation and development of Havieron aiming to deliver early production and cash flows from the project while work continues to define potential resource additions and assess growth targets. The benefit of existing processing capacity at Telfer and ongoing definitional drilling highlights the clear potential for a larger scale operation that will be further assessed during the Feasibility Stage.

**Newcrest Managing Director and Chief Executive Officer, Sandeep Biswas**, said "It is an incredible achievement that, within two years of starting the Havieron drilling program, we have been able to deliver this significant project milestone and demonstrate financial returns that comfortably exceed our hurdle rate, even in this first stage. The Pre-Feasibility Study underpins an initial Ore Reserve estimate for the upper section of the South East Crescent Zone which increases our confidence in achieving first production in FY24 and triggers our entitlement to a cumulative 70% Joint Venture interest."

"We believe that this is just the first stage of a bright and profitable future for Havieron. Our extensive drilling program continues to assess the extent of the South East Crescent Zone and further test the Northern and Eastern Breccia for mineralisation which may be suitable for bulk mining methods. We have recently delivered several new and

1 The Pre-Feasibility Study is subject to an accuracy range of  $\pm 25\%$ . The findings in the Study and the implementation of the Havieron Project are subject to all the necessary approvals, permits, internal and regulatory requirements and further works. The estimates are indicative only and are subject to market and operating conditions. They should not be construed as guidance.

2 The production targets underpinning the Study estimates are LOM average annual gold and copper production of 160koz Au and 6.9kt Cu. The production targets are based on the utilisation of 100% of the total Havieron Ore Reserves, being 1.6Moz Au and 73Kt Cu Probable Ore Reserves, as set out on Page 12, which have been prepared by a Competent Person in accordance with Appendix 5A of the ASX Listing Rules.

3 As Havieron's functional currency is AUD, the Study has been assessed in AUD. AUD values have been converted to USD using an exchange rate of 0.75.

4 Payback is the earliest date that net accumulated free cash flow is equal to zero. This is calculated from first commercial production which is defined as the expected commencement date of saleable gold production.

5 Subject to market and operating conditions, all necessary approvals, regulatory requirements and no unforeseen delays (including any delays due to COVID-19).

exciting high grade intercepts which extend the high grade mineralisation beneath the initial Mineral Resource estimate and highlights the potential for further resource growth”.

“Notably, the Study assumes that Havieron is the sole ore feed for the Telfer plant and does not assume any potential upside from the extension of Telfer’s mine life beyond FY24. We continue to assess the potential for further open pit and underground opportunities at Telfer to extend its life and supplement production from Havieron in FY24 and beyond” said Mr Biswas.

### Summary of Study Findings (in 100% terms)<sup>1,2,3</sup>

- Initial Ore Reserve estimate:
  - 14Mt @ 3.7 g/t Au and 0.54% Cu for 1.6Moz Au and 73kt Cu<sup>6</sup>
- Low-cost production in a Tier 1 jurisdiction, with further upside
  - Life of Mine (LOM) average annual gold production of 160koz and copper production of 6.9kt
  - PFS based on Ore Reserves of 14Mt and does not consider 37Mt of Inferred Mineral Resource
  - LOM average All-In Sustaining Cost (AISC) of A\$990/oz (US\$743/oz)
- Attractive investment opportunity
  - Estimated total capital expenditure of A\$529 million (US\$397 million)<sup>7,8</sup>
  - Internal Rate of Return (IRR) of 16% (real, after tax)
  - Payback of 4 years from first commercial production<sup>4</sup>
  - Net Present Value (NPV) of A\$304 million (US\$228 million)<sup>9</sup>
- Uses Newcrest’s existing milling and support infrastructure at Telfer to process and treat Havieron ore
  - Demonstrates the value that this strategic infrastructure can provide to the Project
  - The Study assumes that Havieron is the sole ore feed for the Telfer plant and does not assume any potential upside from the extension of Telfer’s mine life beyond FY24
  - Newcrest is assessing the potential for further open pit and underground opportunities at Telfer to extend its life and supplement production from Havieron in FY24 and beyond
- Growth optionality
  - Potential to expand the Project and increase the mining rate to 3Mtpa or more through the inclusion of areas of the Inferred Mineral Resource that are currently subject to an infill drilling program
  - Potential to lower mining costs by considering alternative, higher production rate, mining methods
  - Ongoing growth drilling continues to show potential for resource additions outside of the existing Inferred Mineral Resource boundaries

The Havieron Project is located on the traditional lands of the Martu people who hold exclusive possession native title rights to 130,000km<sup>2</sup> of country in the Western Desert. The Indigenous Land Use Agreement with Western Desert Land Aboriginal Corporation, centred on the Telfer mine, extends to the Havieron project.

The Project is operated by Newcrest under a Joint Venture Agreement with Greatland Gold plc (Greatland Gold). Completion of this Pre-Feasibility Study triggers Newcrest’s entitlement to an additional 10% interest in the Joint Venture for a cumulative 70% Joint Venture interest. Newcrest has an option to acquire an additional 5% Joint Venture interest for fair market value, exercisable during the 12 months from 12 December 2021.

The Havieron Feasibility Study is expected to be completed in the December 2022 Quarter<sup>5</sup>.

<sup>6</sup> Represents 100% of the Ore Reserve for Havieron. Newcrest’s joint venture interest in the Ore Reserve is currently 40%. Newcrest has now met the Stage 3 farm-in requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Upon delivery of the PFS, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).

<sup>7</sup> Inclusive of previously approved Early Works funding totalling A\$146 million (US\$112 million). See Newcrest release titled “Havieron Project receives regulatory and funding approval” dated 13 January 2021 which is available to view at [www.asx.com.au](http://www.asx.com.au) under the code of “NCM” and on Newcrest’s SEDAR profile.

<sup>8</sup> Upon finalisation of the Study, Greatland Gold is obliged to fund 30% of all project expenditure going forward and Newcrest is obliged to fund 70%. This funding split will adjust to 25% Greatland Gold and 75% Newcrest if Newcrest exercises its option to acquire the additional 5% interest in the 12 months from 12 December 2021.

<sup>9</sup> Using a discount factor of 4.5% (real).

## Table of Key Study Findings (100% terms)<sup>1,2,3,10</sup>

Area	Measure	Unit	Study Outcomes
Production	Ore milled / milling rate (max)	Mtpa	2.1
	LOM	Years	9
	Ore mined (LOM)	Mt	14
	Average gold grade (LOM)	g/t	3.72
	Average copper grade (LOM)	%	0.54
	Gold produced (LOM)	koz	1,432
	Copper produced (LOM)	kt	62
	Average annual gold production (LOM)	koz	160
	Average annual copper production (LOM)	kt	6.9
Capital	Project capital <sup>7,8</sup>	A\$m (real)	529
Operating	Total operating cost (LOM) <sup>11</sup>	A\$/t (real)	112
	AISC (LOM)	A\$/oz sold	990
Economic assumptions	Gold price	US\$/oz	1,500
	Copper price	US\$/lb	3.30
	AUD:USD exchange rate		0.75
Financials	NPV <sup>9</sup>	A\$m (real)	304
	IRR	% (real)	16
	Payback period <sup>4</sup>	Years	4
	Free cash flow generation (LOM) (post tax)	A\$m (real)	531

## Key milestones<sup>5</sup>

Milestone Activity	Estimated Date
Gate Feasibility Study to Execution	Q2 FY23
First Ore	1H FY24
First Production of Gold/Copper	2H FY24

<sup>10</sup> Newcrest has now met the Stage 3 farm-in requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Upon delivery of the PFS, Newcrest is entitled to earn an additional 10% joint venture interest resulting in an overall joint venture interest of 70% (Greatland Gold 30%).

<sup>11</sup> Total operating costs includes mining costs, processing costs, infrastructure costs and general and administrative costs.

## Potential Exploration Upside

The Study considers only the Indicated Mineral Resource, which is a small portion of the existing resource inventory and excludes Inferred Mineral Resources. The Havieron Project has significant additional growth potential, including:

- Mineralisation open at depth and along strike:
  - Extension of the SE Crescent Zone below the current Mineral Resource, where increasing grade and thickness of mineralisation has been observed in recent drilling
- Expansion of multiple higher-grade targets within the main Havieron NW corridor, including the Northern Breccia and NW Pod
- Potential for additional NW trending corridors including the Eastern Breccia; and
- Potential to discover additional mineralisation centres (at Havieron North, Zipa and Meco).

In addition to the active testing of the above higher-grade targets, drilling continues in the northern and eastern breccia corridors to assess the bulk mining potential.

## Havieron Feasibility Study<sup>5</sup>

The Havieron Feasibility Study is expected to be completed in the December 2022 Quarter and the study scope is expected to include:

- Completion of a further infill drilling program by end of CY21 to increase the Indicated Mineral Resource base for potential Ore Reserve expansion
- Completion of the growth drill program immediately below the Crescent Zone for potential Mineral Resource expansion
- Further investigation and optimisation of the Sub-Level Open Stopping (SLOS) design and sequence to include additional Inferred Mineral Resources that are currently being drilled with the aim of increasing resource confidence that Indicated Mineral Resources can support production rates of 3Mtpa or higher
- Initial assessment of future development options with further resource growth in the Northern and Eastern Breccia including evaluation of alternative, lower cost, mining methods.

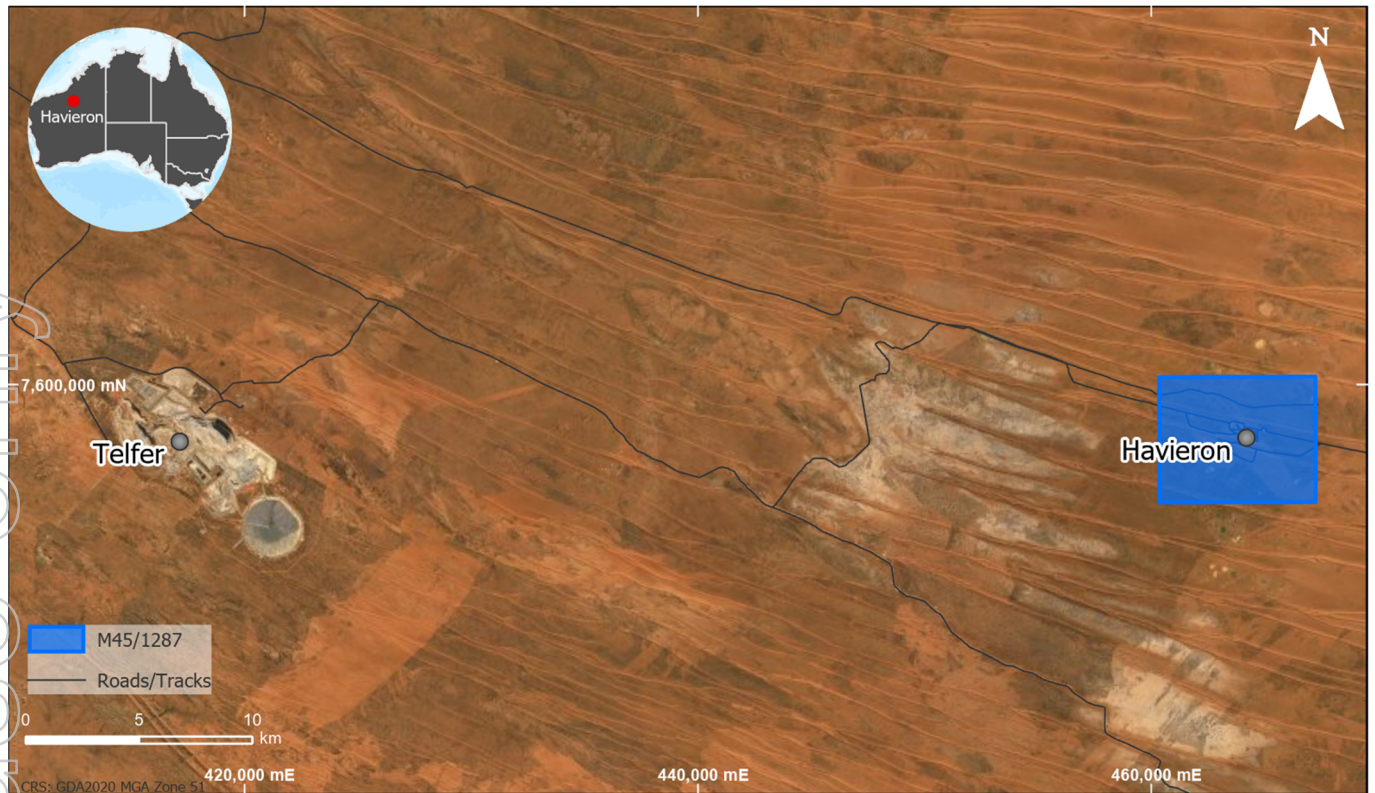
## Project Details

The Havieron Project is centred on a deep magnetic anomaly 45km east of Telfer in the Paterson Province on the traditional lands of the Martu people. The target is overlain by approximately 420m of post mineralisation Permian cover. Newcrest commenced drilling during mid-2019 and has progressively increased its drilling activities with up to eight drill rigs now in operation.

The Martu people and the Western Desert Land Aboriginal Corporation (WDLAC) are key project stakeholders. The Martu hold exclusive possession native title rights and interests over more than 130,000 km<sup>2</sup> of land, including to all points around the Telfer mine and Havieron Project. The Indigenous Land Use Agreement (ILUA) with WDLAC, centred on the Telfer mine, extends to the Havieron project.

The Project has received the necessary regulatory approvals for the construction of a box cut, exploration decline and associated surface infrastructure, with these works formally commencing in January 2021. The Study has assessed the next stage of the Project which comprises the underground and surface development to establish the initial mining area at Havieron and ore processing modifications at Telfer.





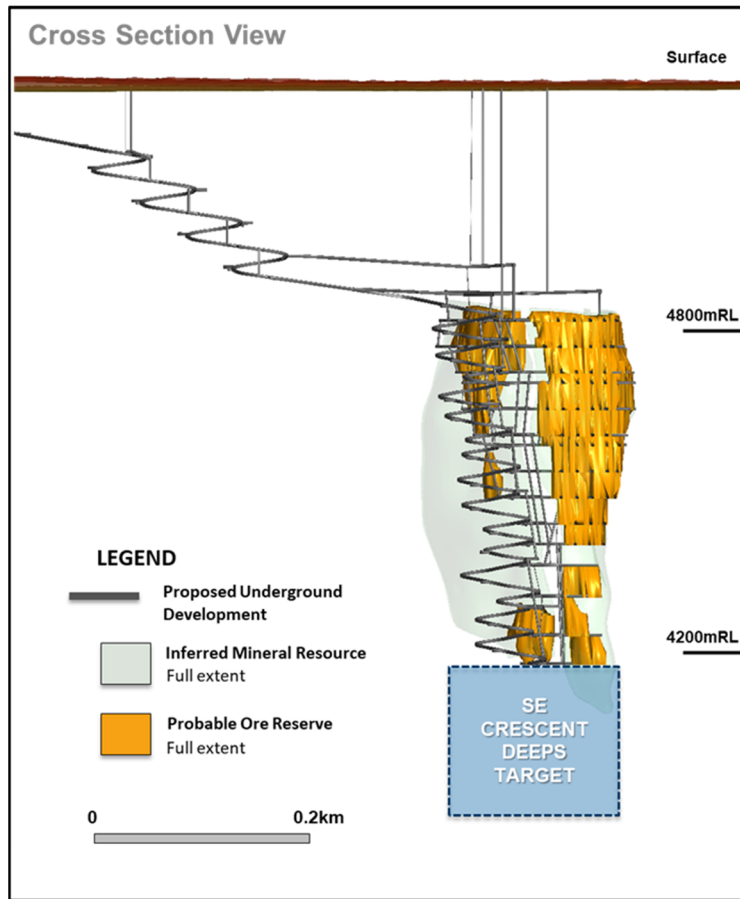
**Figure 1.** Location of the Havieron Project, approximately 45km east of Telfer, Western Australia.

Mineralisation of gold and copper in the current Resource Model are within the South East (SE) Crescent and the Breccia zones. High grade gold mineralisation is associated with a massive sulphide zone termed the Crescent Zone which occurs on the margin of the Breccia zones. The Crescent Zone is characterised by a series of massive to semi-massive sulphide replacement units that have a subvertical dip and are best developed on the SE of the system forming as arcuate, crescent like geometry. The Breccias are still being defined through exploration drilling and early-stage evaluations will be completed to test the potential to develop additional mining fronts and utilise bulk mining methods.

The SE Crescent Zone is 5-40m wide, extending 550m in length in unfolded section from the basement contact and defined over 900m vertically, tapering to ~300m in length and open at that depth. The SE Crescent Zone has been the focus of drilling and has been infilled to a nominal drill spacing of 50–100m laterally (with at least part being infilled to a 50m x 50m spacing to satisfy the requirements for an Indicated Mineral Resource), and 100m vertically.

The Study assessed mining production methods including SLOS with mining rates of 2Mtpa to 3Mtpa and caving options up to 6Mtpa. Surface infrastructure studies were focused on the transportation of ore back to the Telfer processing plant with a range of options considered in early-stage evaluations including conveyor, rail, pipeline and truck haulage, with the latter adopted for the Ore Reserve case. Processing studies evaluated a modified Telfer process plant to accommodate the Havieron ore.

The initial Ore Reserve case is based on a ~2Mtpa production rate from SLOS mining method limited to the Indicated Mineral Resources within the SE Crescent Zone. The Study demonstrates the potential to expand the Project and increase the mining rate to 3Mtpa or more based on the conversion of the current Inferred Mineral Resources and additional potential Mineral Resource growth from immediately below the Crescent Zone (Figure 2) as seen in recent drill results (refer to Section titled “Potential Exploration Growth” on Page 14 for a summary of drill results).



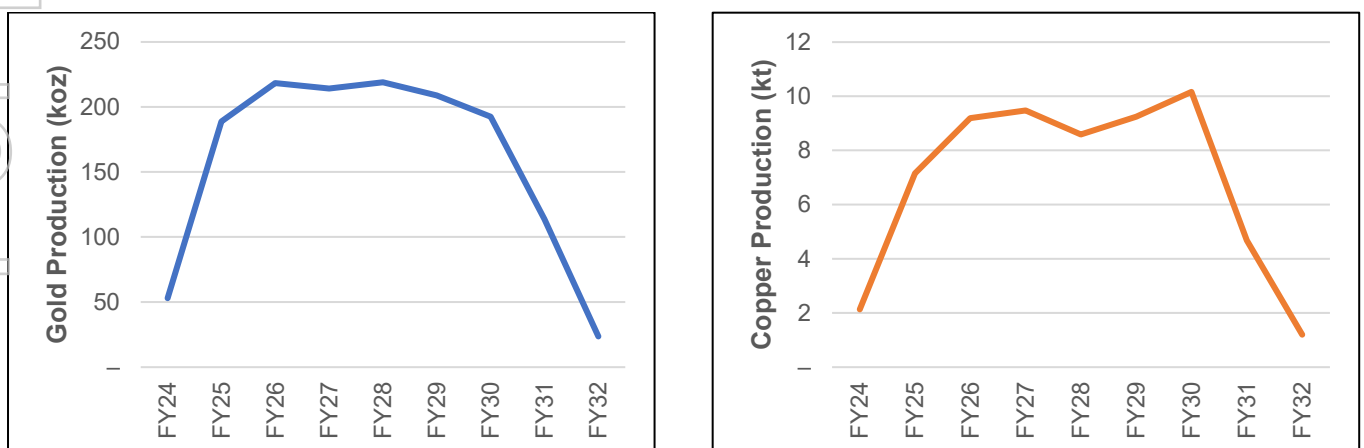
**Figure 2.** Section view looking north of Crescent Zone mineralisation and the proposed underground development required to support the Ore Reserve and future growth options.

### Indicative Production Profile (100% terms)<sup>1,2</sup>

The Ore Reserve Case for the Study is based on the currently defined Indicated Mineral Resource estimate which incorporates a ~2Mtpa underground SLOS operation with an expected mine life of 9 years. Ore will be transported in trucks along a new 55km long haul road to the modified processing plant at the Telfer mine and tailings deposited at Telfer's existing tailings storage facility (TSF).

Multiple stope priority runs were conducted to determine the optimal sequence which maximises the number of years at peak production while reducing and compressing the production tail as much as practical. The production rate of ~2Mtpa for the Havieron SLOS was determined by maximising the steady state production of the sequence.

The indicative gold and copper production profiles are shown in the figures below:



**Figure 3.** Production Profile for Havieron 2Mtpa SLOS Reserve Case.

## Indicative Havieron Mine Production Profile<sup>1,2</sup>

Year	Total Material Movement (mt)	Plant Feed (mt)	Average Gold Grade (g/t)	Average Copper Grade (%)
FY24	~0.5	~0.5	3.5	0.48
FY25	~1.6	~1.6	4.1	0.52
FY26	~2.0	~2.0	3.9	0.55
FY27	~2.0	~2.0	3.8	0.56
FY28	~2.0	~2.0	3.9	0.52
FY29	~2.0	~2.0	3.7	0.54
FY30	~2.1	~2.1	3.3	0.58
FY31	~1.1	~1.1	3.7	0.51
FY32	~0.3	~0.3	2.8	0.49

## Estimated Development Capital Profile (100% terms)<sup>1,3,7,8</sup>

The capital profile for the Project contemplates a ~2Mtpa SLOS operation. Having now completed the Study, Greatland is obliged to fund 30% of all project expenditure going forward and Newcrest is obliged to fund 70%. This funding split will adjust to 25% Greatland and 75% Newcrest if Newcrest exercises its option to acquire the additional 5% interest.

	FY22	FY23	FY24	Total
Capital Expenditure (A\$m)	124	296	109	529
Capital Expenditure (US\$m)	93	222	82	397

## Metal Price and Exchange Rate Sensitivity Analysis<sup>1,2,3</sup>

The actual IRR of the Project will vary according to the gold and copper prices realised. Base case assumptions include a gold price of US\$1,500/oz, copper price of US\$3.30/lb, and an AUD:USD exchange rate of 0.75.

The table below outlines how the estimated Base Case Project IRR of 16% varies using different price assumptions:

Scenario	Assumption	IRR
Gold price (US\$ per ounce)	1,200	5%
Gold price (US\$ per ounce)	1,800	24%
Copper price (US\$ per pound)	2.60	14%
Copper price (US\$ per pound)	4.00	17%

## Mine Development and Sequence

SLOS is a large-scale open stoping method that is conducted over multiple levels at once. Once the stope has been mined out it is backfilled with paste to maintain the overall stability of the opening and enable mining of adjacent stopes. This method is typically applied to strong orebodies that require minimal support and are surrounded by strong country rock, such as the Havieron deposit. Stopes are mined in a checkerboard fashion with all primary stopes first, followed by the intermediate secondary stopes. The mining sequence is top down overall, divided into a number of different lifts separated by horizontal sill levels which are recovered after the upper and lower level have been mined and filled.

A sub-level spacing of 50m with sill drill levels located 20m below each mining front was selected. Some sub-level spacings are increased to 60m to accommodate the inclusion of ore and minimising additional level development. The design consists of nine semi-independent mining sequences, based on both horizontal and vertical mining fronts. The horizontal fronts are determined by the orebody orientations as outlined in Figure 4.

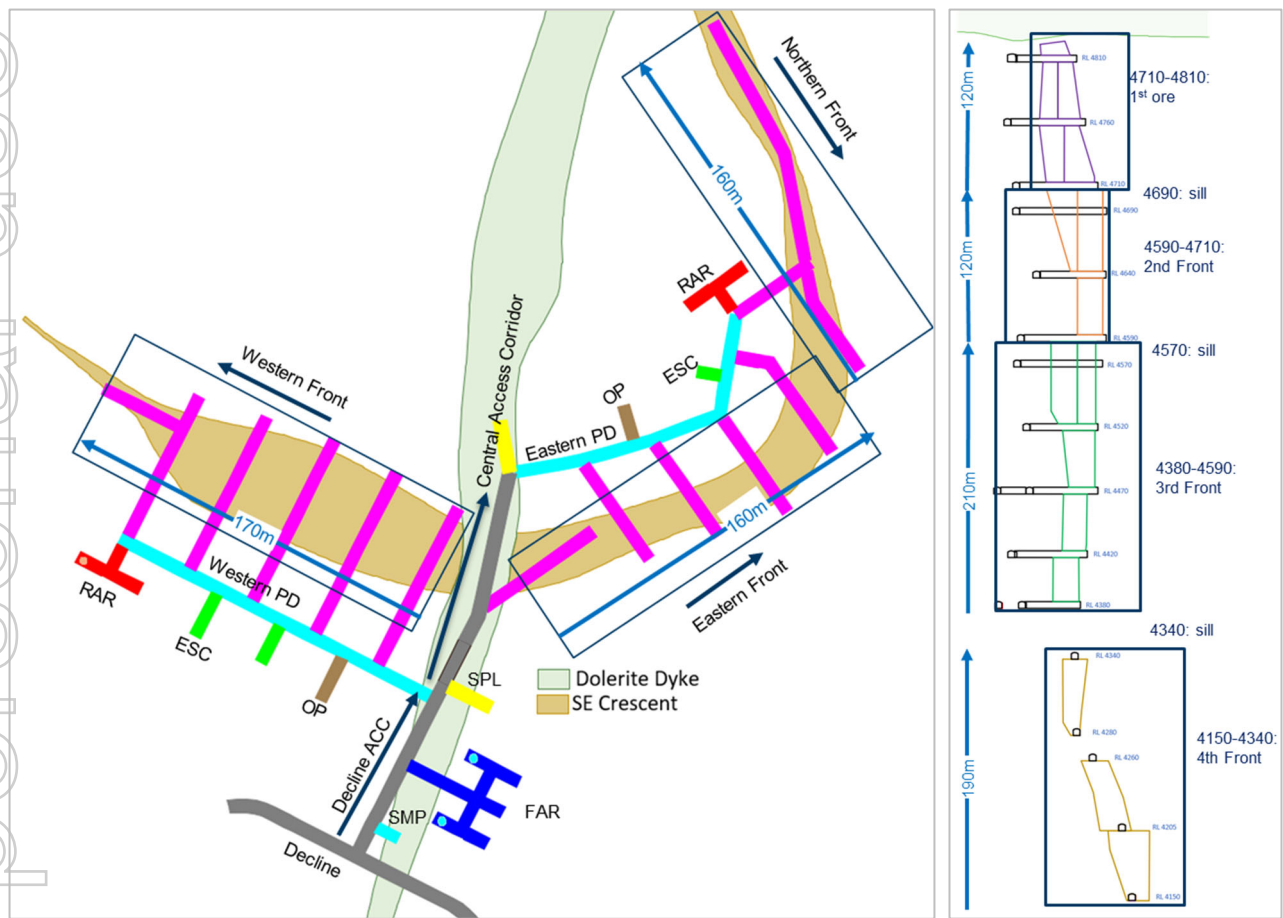


Figure 4. Havieron Reserve Case SLOS horizontal and vertical mining fronts

## Infrastructure

The Study contemplates the transport of ore from the mine to Telfer via road trains on an all-weather unsealed road. The road has been designed to withstand a 1-in-a-100-year flood event and maintain access to Havieron.

Power will be supplied to Havieron from Telfer's existing gas power station via a 66 kilovolt (kV) overhead line running parallel to the nominated haul road corridor. Further opportunities to replace this with non-fossil fuel power generation as part of Newcrest's emission reduction program will be evaluated as part of the Feasibility Study.

Telfer currently operates two processing trains with a total capacity of ~22Mtpa. The Havieron ore is expected to be processed through a modified Telfer Processing Plant which will operate a single train at 6Mtpa rate on a campaign basis. The Plant modifications are expected to include magnetic separation within the flotation circuit to reduce the amount of pyrrhotite in the final Cu Concentrate and a Carbon in Pulp (CIP) circuit on the flotation tail and cyanide detoxification circuit. The expected cost of the plant modifications is included in the \$529 million project capital estimate<sup>1,3,7,8</sup>. A single train operation also provides optionality if higher mining rates are achieved from Havieron or through the extension of Telfer's current mine life (i.e. Telfer ore can be run through the other train with the existing flowsheet). Tailings from ore processed will be deposited at the existing Telfer TSF.

## Joint Venture Agreement

The Project is operated by Newcrest under a Joint Venture Agreement with Greatland. Pursuant to the farm-in and joint venture arrangements, the completion of the Study triggers Newcrest's entitlement to an additional interest in the joint venture for a cumulative 70% joint venture interest and the option to acquire an additional 5% joint venture interest at fair market value. The option period commences on 12 December 2021 and will run for 12 months.

The Joint Venture Agreement includes tolling principles reflecting the intention of the parties that, subject to the outcome of the Feasibility Study and a positive decision to mine, the Havieron mineralised material will be processed at Telfer pursuant to a Tolling Agreement. The tolling principles include an agreed processing fee formula, which includes charges for capital costs incurred in upgrading the Telfer facilities, as required, to treat Havieron ore in the tolling process. The Telfer infrastructure is not included in the scope of the Joint Venture assets, so the Tolling Agreement is the route by which Greatland will bear the capital, operating and haulage costs involved with processing Havieron ore.



## Mineral Resource Estimate<sup>12</sup>

The updated Mineral Resource is estimated to contain an Indicated Mineral Resource of 1.9 million ounces of gold and 0.10 million tonnes of copper and an Inferred Mineral Resource of 1.7 million ounces of gold and 0.07 million tonnes of copper. This Mineral Resource estimate is based on drilling completed by February 2021.

Since the initial Mineral Resource estimate an additional 45 drill holes were completed between November 2020 and February 2021, primarily as infill drilling to increase the resource confidence of the Crescent Zone, that transferred 1.9 million ounces of gold and 0.10 million tonnes of copper from Inferred Mineral Resources to Indicated Mineral Resources.

### Mineral Resource estimate tabulation for the Havieron Deposit:

#### Indicated Gold Mineral Resource (100%):

Domain	Classification	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)
Crescent Zone	Indicated	15	3.9	1.9
Breccia Zone	Indicated	-	-	-
<b>Gold Mineral Resource</b>	<b>Indicated</b>	<b>15</b>	<b>3.9</b>	<b>1.9</b>

#### Inferred Gold Mineral Resource (100%):

Domain	Classification	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)
Crescent Zone	Inferred	3.6	4.0	0.46
Breccia Zone	Inferred	34	1.1	1.2
<b>Gold Mineral Resource</b>	<b>Inferred</b>	<b>37</b>	<b>1.4</b>	<b>1.7</b>

#### Indicated Copper Mineral Resource (100%):

Domain	Classification	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)
Crescent Zone	Indicated	15	0.64	0.099
Breccia Zone	Indicated	-	-	-
<b>Copper Mineral Resource</b>	<b>Indicated</b>	<b>15</b>	<b>0.64</b>	<b>0.099</b>

#### Inferred Copper Mineral Resource (100%):

Domain	Classification	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)
Crescent Zone	Inferred	3.6	0.45	0.016
Breccia Zone	Inferred	34	0.15	0.051
<b>Copper Mineral Resource</b>	<b>Inferred</b>	<b>37</b>	<b>0.18</b>	<b>0.067</b>

The Havieron Mineral Resource estimate is reported as an Indicated Mineral Resource and Inferred Mineral Resource in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code). Refer to details in Appendix 1 for information relating to data collection and resource estimation. There are no material differences between the definitions of Indicated or Inferred Mineral Resources under the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves and the equivalent definitions in the JORC Code. Mineral Resources are reported inclusive of Ore Reserves. Mineral Resources that are not Ore Reserves do not have demonstrated economic viability.

<sup>12</sup> Data is reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. Data represents 100% of the Mineral Resource for Havieron. Newcrest's joint venture interest in the Mineral Resource is 40%. Newcrest has now met the Stage 3 farm-in requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Upon delivery of the PFS, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).



Drilling has outlined an ovoid shaped zone of variable brecciation, alteration and sulphide mineralisation with dimensions of approximately 650m x 350m x 1000m trending in a north west orientation below 420m of Permian cover.

Gold and copper mineralisation at Havieron consists of breccia, vein and massive sulphide replacement gold and copper mineralisation typical of intrusion-related styles of mineralisation. Mineralisation is hosted by metasedimentary rocks (meta-sandstones, meta-siltstones and meta-carbonate) and intrusive rocks of an undetermined age. The main mineral assemblage contains well developed pyrrhotite-chalcocopyrite and pyrite sulphide mineral assemblages as breccia and vein infill, and massive sulphide lenses.

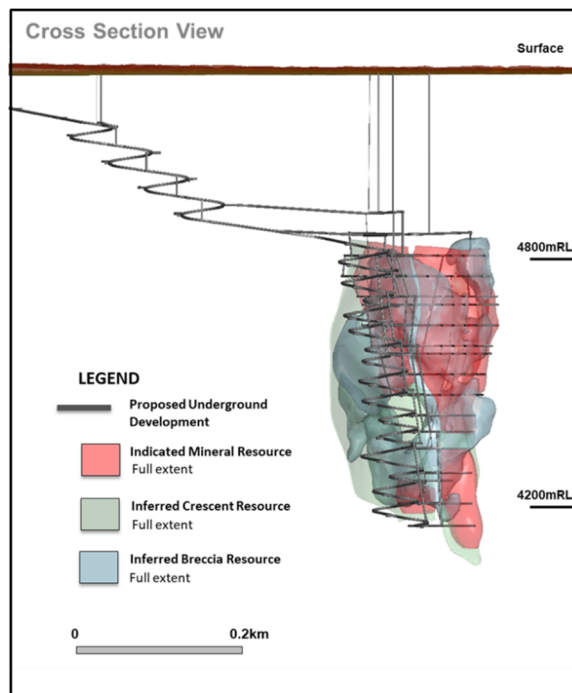
The Indicated Mineral Resource estimate is restricted to the South East Crescent Zone only, with the Inferred Mineral Resource estimate comprised of some part of the South East Crescent Zone, the Breccia Zones, and a portion of the Northern Breccia Zones to an RL of 4060m (~750m below the unconformity) where drill data provides sufficient support to define an appropriate level of geological control and statistical confidence.

Ordinary Kriging of 5m composites of gold and copper was undertaken into 10m x 10m x 10m blocks for Crescent and 20m x 20m x 20m blocks for Breccia and re-blocked into 5m x 5m x 5m blocks. The resource model was domained utilising the geological unit of the Crescent Zone, the Calcite Cemented Breccia, Actinolite Cemented Breccia and Crackle Breccia. Hard boundaries were used between the Crescent Zone and the Breccia zones with semi soft boundaries used between the Breccia zones. Kriging Neighbourhood Analysis was used to define the search neighbourhood for gold and copper. Gold and copper were estimated independently of each other. Composite copper and gold grades were capped prior to estimation. The resource estimation is based entirely on interpolation.

The resource model was validated via visual, statistical, and geostatistical methods.

Reasonable prospects for eventual economic extraction have been assessed through ongoing mining and processing studies which suggest that selective underground mining would be appropriate for exploitation of the Crescent Zone.

The Indicated and Inferred Mineral Resource estimate has been constrained using appropriate drill hole data spacing parameters and geological control. The Indicated Mineral Resource estimate is reported based on the A\$100/t Net Smelter Return (NSR) value cut-off and the average weighted distance of 45 metres within the SE Crescent Zone which assumes selective underground mining. The Inferred Mineral Resource estimate is reported within an A\$50/t NSR value shell with no internal selectivity, which assumes bulk mining and therefore includes internal waste. The NSR uses metals prices of US\$1,400/oz Au and US\$3.40/lb Cu, domain-specific metallurgical recoveries of 84-94% for Au and 82-92% for Cu, a AUD:USD exchange rate of 0.75, as well as treatment and refining costs, payables and royalties, similar to those at Telfer.



**Figure 5.** 3D view looking north of Crescent Zone mineralisation showing resource classification and proposed underground development.

## Ore Reserve Estimate<sup>13</sup>

The Havieron Ore Reserve estimate is outlined below and reported as a Probable Ore Reserve in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code). Refer to details in Appendix 1 for information relating to Ore Reserve estimation. There are no material differences between the definitions of Probable Ore Reserves under the JORC Code and the equivalent definitions under the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.

A summary of the material assumptions is outlined below and included in the Appendix (JORC Table 1 - Section 4).

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Proved Ore Reserve	-	-	-	-	-
Probable Ore Reserve	14	3.7	1.6	0.54	0.073
<b>Total Ore Reserve</b>	<b>14</b>	<b>3.7</b>	<b>1.6</b>	<b>0.54</b>	<b>0.073</b>

A Pre-Feasibility level study has been completed which provides supporting basis for this Ore Reserve estimate. The Havieron Pre-Feasibility Study (on which this Ore Reserve statement is based) defined a SLOS mining method with paste fill and truck ore haulage at a 2Mtpa mining rate. Metallurgical test-work has been executed on the Havieron deposit during the Pre-Feasibility Study and in preceding studies. The test-work undertaken is of an adequate level to ensure an appropriate representation of metallurgical characterisation and the derivation of corresponding metallurgical recovery factors.

Havieron is a greenfield site and currently does not have infrastructure to support mining operations. Major infrastructure requirements are included in the Pre-Feasibility Study capital cost estimates, which are based on multiple market prices across all technical disciplines. Provision has been made for capital expenditure requirements for new equipment, infrastructure and replacement of infrastructure and equipment during the life of the mine is based on the study. A contingency has also been factored into the capital cost estimate consistent with the level of accuracy of the study.

The operating cost estimate has been built up from a combination of existing Telfer site costs scaled for the Havieron material throughput rate, first principles cost modelling and quotations where practicable.

The Probable Ore Reserve is based on Indicated Mineral Resources and diluting material. No Measured Mineral Resources are stated for this deposit. This classification is based on geological confidence as a function of continuity and complexity of geological features; data spacing and distribution and estimation quality parameters including distance to informing samples for block grade estimation.

Underground mining at Havieron is planned to be undertaken using a SLOS mining method at a 2Mtpa mining rate. The Pre-Feasibility Study has been prepared on the basis of:

- decline, accesses to the levels, ore passes, ventilation raises and other underground excavations
- SLOS stopes with paste fill
- paste fill plant and underground distribution system
- ventilation shafts, fans, regulators and refrigeration equipment
- dewatering, electrical and other service equipment
- truck haulage of ore to surface via the access decline

<sup>13</sup> Data is reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals. Data represents 100% of the Ore Reserve for Havieron. Newcrest's joint venture interest in the Ore Reserve is 40%. Newcrest has now met the Stage 3 farm-in requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Upon delivery of the PFS, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%).

The following Modifying Factors have been applied to all mining shapes to accurately represent the expected mined tonnes and grades:

- Dilution factors for overbreak in primary, secondary and tertiary stopes (average 9%) consisting of waste (average 6%) and stope paste (average 3%);
- Dilution included at zero grade; and
- Mining recovery factor of 97.5%

Of the total Ore Reserve approximately 0.6Mt of ore is Inferred Mineral Resource as dilution. This material contains 2% of the gold metal and 1.6% of the copper metal in the Ore Reserve and does not have a material impact upon the estimate. As this is dilution material associated with the SLOS mining method, it has been incorporated into the Ore Reserve estimate.

Havieron ore will be processed on a campaign basis through the Telfer Train 2 Treatment Plant circuit at a throughput of approximately 2Mtpa. Metal recovery will be through conventional flotation to produce a copper/gold concentrate and doré through a newly installed flotation tails leach circuit. The technology associated with the ore processing is conventional and the flowsheet is similar to that utilised by other operations.

Metallurgical recovery assumptions are based on detailed analysis and laboratory flotation and leach test work completed on 38 variability samples during the Havieron Concept (2020) and Pre-Feasibility (2021) studies with good spatial coverage of the SE Crescent Zone. Of the 38 samples, 8 samples are located in the breccia zones and 30 samples are located in the SE Crescent Zone, of which 21 samples are located within the SE Crescent Zone Indicated Mineral Resources. Based on these samples metallurgical recoveries for gold are anticipated to average approximately 88% and recoveries of copper are expected to average approximately 84% throughout the life of the project.

Bismuth is the key deleterious element for the gold/copper concentrate product with smelter penalties incurred on the basis of bismuth content. The impact of bismuth in concentrate will be managed by mine sequencing and concentrate blending.

The Havieron Ore Reserve employs a value based cut-off determined from the Net Smelter Return (NSR) value equal to the site operating cost included within the Pre-Feasibility Study. The NSR calculation takes into account revenue factors, metallurgical recovery assumptions, transport costs, refining charges, and royalty charges.

The site operating costs include mining cost, processing cost, relevant site general & administration costs and relevant sustaining capital costs. These costs equate to a break even cut off value of approximately A\$130/t milled, and a marginal cut off value of approximately A\$115/t milled.

Estimation of the Havieron Ore Reserve involved standard steps of mine optimisation, mine design, production scheduling and financial modelling. Factors and assumptions have been based on benchmarked performance from similar SLOS operations. The Ore Reserve has been evaluated through a financial model. All operating and capital costs as well as Ore Reserve revenue factors stated in this document were included in the financial model. A discount factor of 4.5% real was applied. This process demonstrated that the Havieron Ore Reserve has a positive NPV. Sensitivities were conducted on the key input parameters including commodity prices, capital and operating costs, ore grade, mined tonnes and mining rate, exchange rate and metallurgical recoveries confirming the estimate to be robust.

A staged approach for approvals is being undertaken with Phase 1 currently approved which has allowed the development of the boxcut, decline and service corridor. These approvals also allow for a waste rock dump, evaporation ponds and supporting infrastructure such as offices and workshops.

Phase 2 approvals will consist of a SLOS underground mine, permanent infrastructure corridor, associated infrastructure and changes to Telfer approvals to accept Havieron tailings in existing tailings storage facilities. The approval strategy for Phase 2 consists of both Commonwealth and State level approvals with engagement well advanced with all regulatory bodies. The timelines outlined in the Pre-Feasibility Study are considered achievable.

A Mining Lease has been granted over the orebody, and miscellaneous leases granted along the existing service corridor. For Phase 2 approvals an application will be made for an additional miscellaneous lease to secure access for an infrastructure corridor to connect Telfer and Havieron (haul road, powerlines, water pipes). This is not considered a risk to the timelines or project.

## Potential Exploration Growth

The Havieron mineral system as outlined by drill testing to date, is an 650m x 350m ovate shaped NW trending alteration zone in which mineralisation is hosted by variable brecciation, and sulphide accumulations centred on a complex of nested diorite intrusions. Higher grade zones are associated with increases in sulphide accumulations including pyrrhotite, chalcopyrite and pyrite with quartz. The SE Crescent Zone is a geological domain characterised by massive sulphide accumulations. Mineralisation has been observed to over 1,000m in vertical extent below the 420m of post mineralisation cover sequence.

The Study only considers the Indicated Mineral Resource which is a relatively small proportion of the existing resource inventory. The Havieron project has significant additional growth potential including:

- Conversion of existing Inferred Mineral Resources
- Mineralisation open at depth and along strike
  - Extension of the SE Crescent Zone below the current Mineral Resource, where increasing grade and thickness of mineralisation has been observed in recent drilling
- Expansion of multiple higher-grade targets within the main Havieron NW corridor, including the Northern Breccia and NW Pod
- Potential for additional NW trending corridors including the Eastern Breccia; and
- Potential to discover additional mineralisation centres (at Havieron North, Zipa and Mecó)

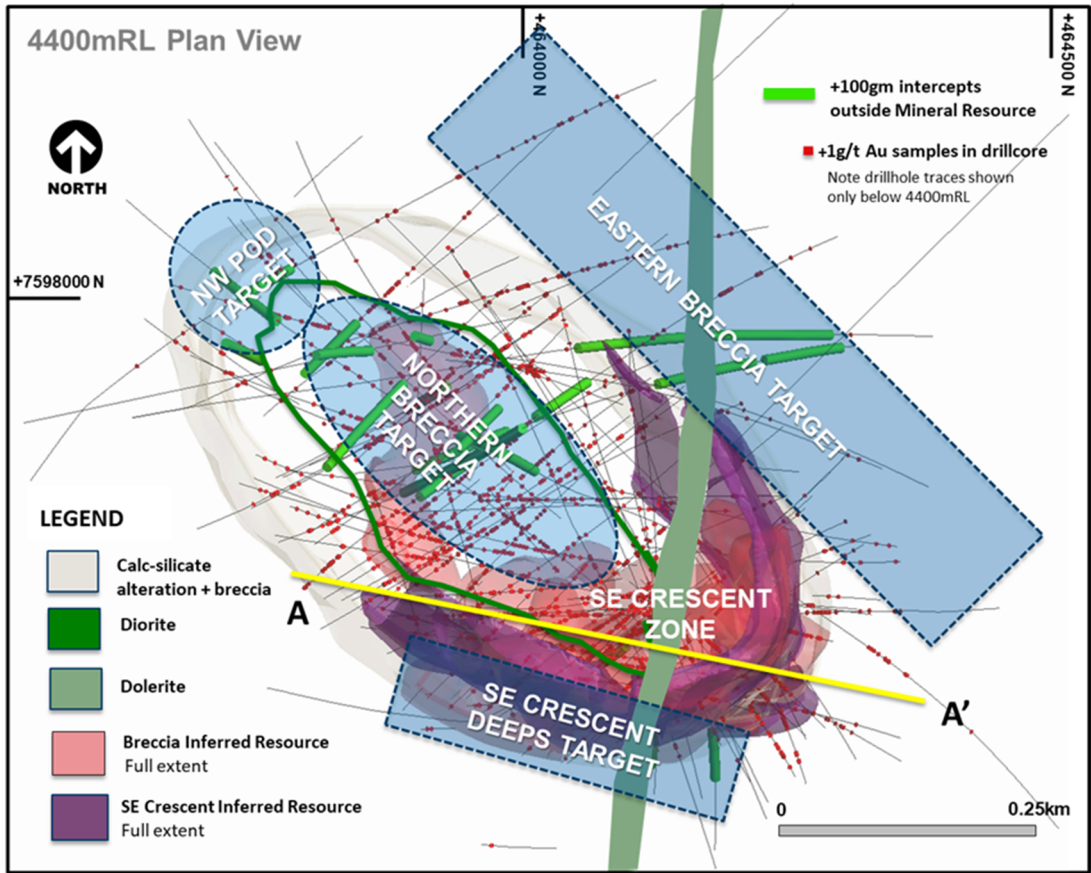
In addition to the active testing of the above higher-grade targets, drilling continues in the northern and eastern breccia corridors to assess the bulk extraction potential.

At the **SE Crescent**, drilling has extended the high-grade mineralisation ~250m below the base of the current Mineral Resource with two recent drillholes (HAD133 and HAD133W1) returning intervals >900 gram metres (Au ppm x length). These new intercepts show an increase in both grade and thickness with increasing depth. Drilling continues to assess the depth extents of SE Crescent which now has a vertical extent of over 900m.

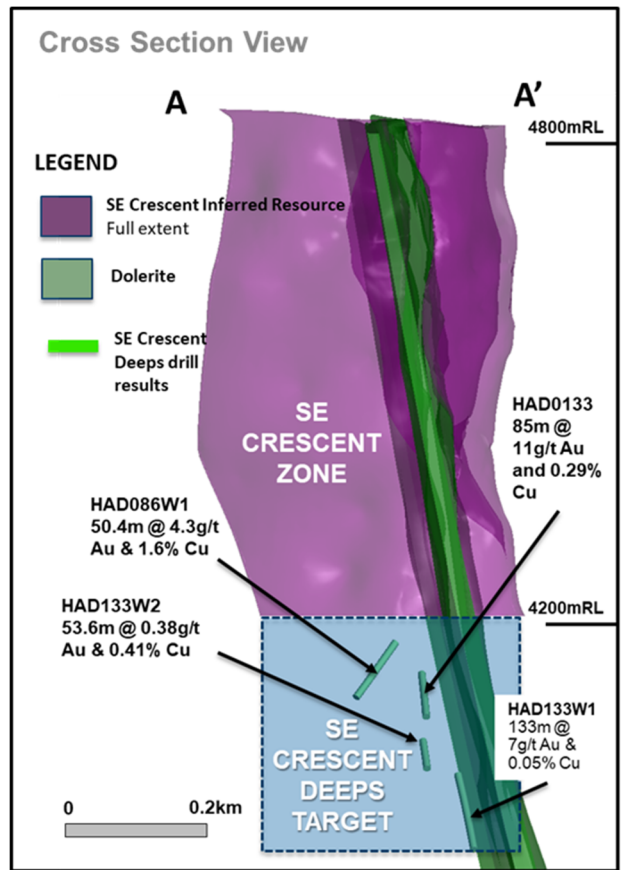
Results external to the Mineral Resource include<sup>14</sup>:

- **HAD133**
  - 85m @ 11g/t Au & 0.29% Cu from 1,345m
  - including 13m @ 32g/t Au & 0.46% Cu from 1,363m
  - including 14.5m @ 32g/t Au & 0.33% Cu from 1,396.5m
- **HAD133W1**
  - 133m @ 7.0g/t Au & 0.05% Cu from 1,446m
  - including 55.9m @ 9.7g/t Au & 0.04% Cu from 1,449.5m
  - including 20m @ 11g/t Au & 0.04% Cu from 1,519m
- **HAD086W1**
  - 99.7 m @ 2.5g/t Au & 0.85% Cu from 1,308m
  - 50.4 m @ 4.3g/t Au & 1.6% Cu from 1,313.6m

<sup>14</sup> The Havieron drill results included in this document have been extracted from Newcrest's releases titled "Exploration Update" dated 9 September 2021 and "Quarterly Exploration Report" dated 22 July 2021, 28 January 2021 and 29 October 2020. These releases include the exploration results for all material drill holes (including those referred to in this document).



**Figure 6.** 3D Plan view schematic showing the spatial association of the South East Crescent, Northern Breccia, NW Pod and Eastern Breccia targets in relation to the Inferred Resource extents. Also highlighted are previously reported intercepts >100 gram metres (Au ppm x length) that have been intersected outside of the Inferred Mineral Resource estimate.

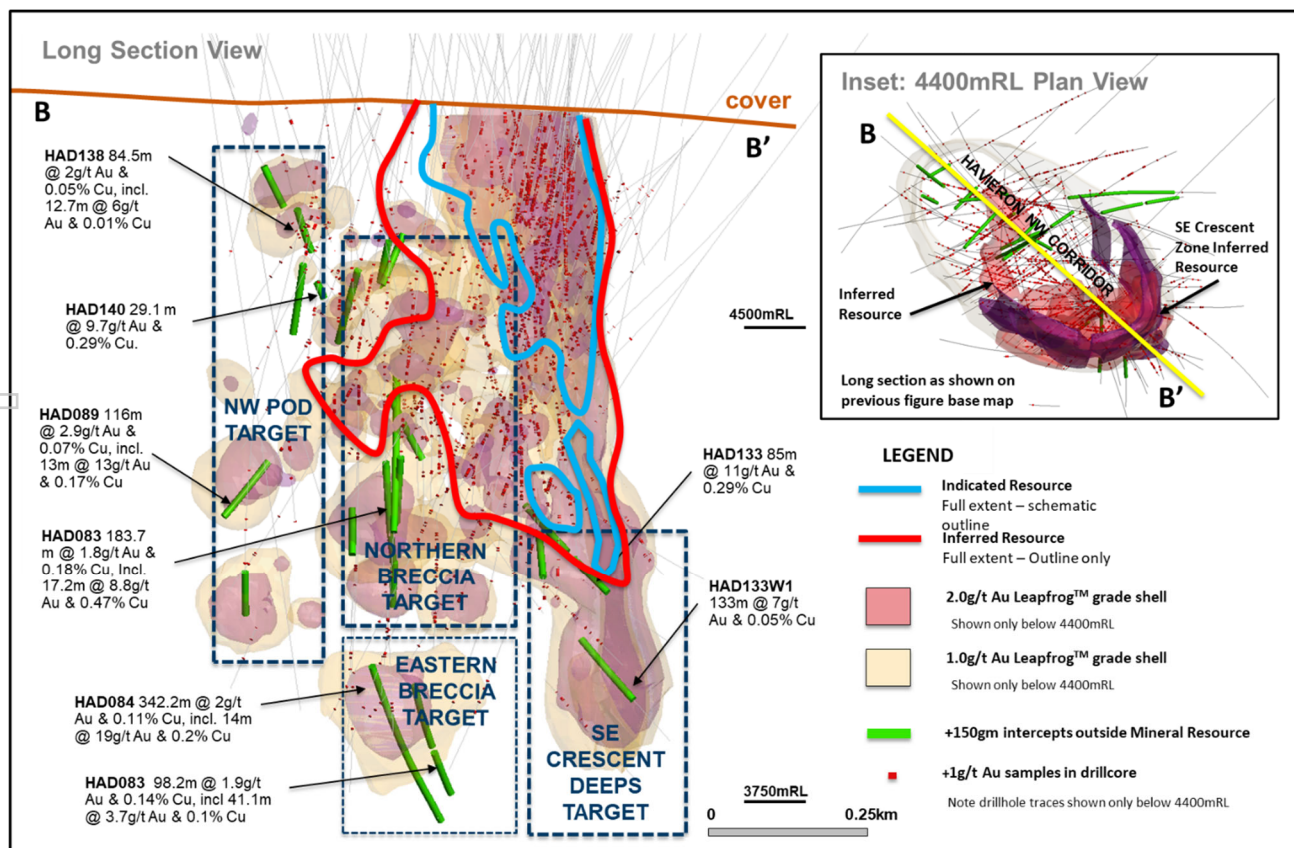


**Figure 7.** 3D section view schematic across section line A on Figure 6, highlighting selected South East Crescent growth intercepts below the current Inferred Mineral Resource estimate.



At the **Northern Breccia**, drilling has extended the mineralised breccia footprint around the Mineral Resource extents. Drilling has confirmed and increased the continuity of internal higher grade Crescent-like mineralisation in a north-west mineralised corridor which now extends up to 300m in length, and 100m wide, between 4300 – 4100mRL, and remains open at depth. Results of greater than 150 gram metres (Au ppm x length) outside of the current Mineral Resource include<sup>14</sup>:

- **HAD047**
  - 309m @ 0.99g/t Au & 0.07% Cu from 915m
  - including 44m @ 3.3g/t Au & 0.15% Cu from 1,157m
- **HAD101**
  - 147.2m @ 1.1g/t Au & 0.18% Cu from 1,083.8m
  - including 51.8m @ 1.6g/t Au & 0.25% Cu from 1,129.2m
  - 92.5m @ 1.9g/t Au & 0.06% Cu from 1,296m
  - including 15.6m @ 4.8g/t Au & 0.02% Cu from 1,350m
  - including 14m @ 6.2g/t Au & 0.10% Cu from 1,373m
- **HAD103**
  - 90.6m @ 2.3g/t Au & 0.18% Cu from 776.4m
  - including 2.4m @ 67g/t Au & 0.33% Cu from 822.7m
- **HAD083W4**
  - 156.6m @ 1.1g/t Au & 0.22% Cu from 805.8m
- **HAD140**
  - 29.1m @ 9.7g/t Au & 0.29% Cu from 813.2m
- **HAD083**
  - 183.7m @ 1.8g/t Au & 0.18% Cu from 1,098m
  - including 17.2m @ 8.8g/t Au & 0.47% Cu from 1,165.2m



**Figure 8.** 3D long section view showing the extents of the 1.0 and 2.0 g/t Au Leapfrog™ grade shells in relation to the Indicated and Inferred Mineral Resource outlines. Also showing previously reported intercepts >100 gram metres (Au ppm x length) that have been intersected outside of the Inferred Mineral Resource.



Higher grade mineralisation external to the Mineral Resource has also been identified on the NW margin of the breccia, previously referred to as the North West Crescent, with additional intercepts showing a vertically extensive high grade pod (**NW Pod Target**) which remains open at depth and to the north west. Drilling is ongoing to confirm the extents and continuity of this zone. Results from this zone outside the current Mineral Resource include<sup>14</sup>:

- **HAD085**
  - 74.2m @ 2g/t Au & 0.09% Cu from 568.8m
  - including 19.1m @ 7g/t Au & 0.23% Cu from 594m
- **HAD089**
  - 116m @ 2.9g/t Au & 0.07% Cu from 1,136m
  - including 13m @ 13g/t Au & 0.17% Cu from 1,136m
- **HAD138**
  - 84.5m @ 2g/t Au & 0.05% Cu from 683m
  - including 12.7m @ 6.0g/t Au & 0.01% Cu from 685.3m
- **HAD141**
  - 87m @ 1.8g/t Au & 0.05% Cu from 1,328m
  - including 17.8m @ 5.7g/t Au & 0.14% Cu from 1,378.5m

At the **Eastern Breccia** drilling has targeted extensions of previously reported drill holes HAD083 and HAD084, identifying a separate north west trending corridor with an alteration footprint of over 600m. Crescent like higher grade zones are observed internal to this Eastern Breccia. Results outside of the current Mineral Resource include:

- **HAD083**
  - 134m @ 1.4g/t Au & 0.04% Cu from 1,529m
  - 98.2m @ 1.9g/t Au & 0.14% Cu from 1,677m
  - including 41.1m @ 3.7g/t Au & 0.1% Cu from 1,723.9m
- **HAD084**
  - 342.2m @ 2g/t Au & 0.11% Cu from 1,536.8m
  - including 14m @ 19g/t Au & 0.20% Cu from 1,572m
  - including 11.1m @ 6.6g/t Au & 0.11% Cu from 1,629.9m
  - including 19.5m @ 4.2g/t Au & 0.04% Cu from 1,726.3m

## Appendix 1

### JORC Code, 2012 Edition – Table 1

#### Section 1: Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	Core samples are obtained from core drilling in Proterozoic basement lithologies. PQ-HQ and NQ diameter core was drilled on a 6m run. Core was cut using an automated core-cutter and half core sampled at 1m intervals with breaks for major geological changes. Sampling intervals range from 0.2 – 1.0m. Cover sequences were not sampled.
<b>Drilling techniques</b>	<p>Permian Paterson Formation cover sequence was drilled using mud rotary drilling. Depths of cover typically observed to approximately 420m vertically below surface. Steel casing was emplaced to secure the pre-collar.</p> <p>Core drilling was advanced from the base of the cover sequence with PQ3, HQ3 and NQ2 diameter coring configuration.</p> <p>Core from inclined drill holes are oriented on 3m and 6m runs using an electronic core orientation tool (Reflex ACTIII). At the end of each run, the bottom of hole position is marked by the driller, which is later transferred to the whole drill core run length with a bottom of hole reference line.</p>
<b>Drill sample recovery</b>	<p>Core recovery is systematically recorded from the commencement of coring to end of hole, by reconciling against driller's depth blocks in each core tray with data recorded in the database. Drillers depth blocks provided the depth, interval of core recovered, and interval of core drilled.</p> <p>Core recoveries were typically 100%, with isolated zones of lower recovery.</p> <p>Cover sequence drilling by the mud-rotary drilling did not yield recoverable samples.</p>
<b>Logging</b>	<p>Geological logging recorded qualitative descriptions of lithology, alteration, mineralisation, veining, and structure (for all core drilled – 100,799m from 170 drillholes, all intersecting mineralisation), including orientation of key geological features.</p> <p>Geotechnical measurements were recorded including Rock Quality Designation (RQD) fracture frequency, solid core recovery and qualitative rock strength measurements.</p> <p>Magnetic susceptibility measurements were recorded every metre. The bulk density of selected drill core intervals was determined at site on whole core samples.</p> <p>All geological and geotechnical logging was conducted at Havieron site.</p> <p>Digital data logging was captured on diamond drill core intervals only, and all data validated and stored in an acquire database.</p> <p>All drill cores were photographed, prior to cutting and/or sampling the core.</p> <p>The logging was of sufficient quality to support the Mineral Resource estimate.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>Sampling, sample preparation and quality control protocols are considered appropriate for the material being sampled.</p> <p>Core was cut and sampled at the Telfer and Havieron core processing facility. Half core samples were collected in pre-numbered calico bags and grouped into bulk bags for dispatch to the laboratory. Sample weights typically varied from 0.5 to 4kg. Sample sizes are considered appropriate for the style of mineralisation. Drill core samples were freighted by air and road to the laboratory.</p> <p>Sample preparation was conducted at the independent ISO17025 accredited Intertek Laboratory, Perth (Intertek). Samples were dried at 105°C, and crushed to 95% passing 4.75mm, and the split to obtain up to 3kg sub-sample, which was pulverised (using LM5) to produce a pulped product with the minimum standard of 95% passing 106µm. Routine grind size analysis is conducted.</p> <p>Duplicate samples were collected from crush and pulp samples at a rate of 1:20. Duplicate results show an acceptable level of variability for the material sampled and style of mineralisation.</p> <p>Periodic size checks (1:20) for crush and pulp samples and sample weights are provided by the laboratory and recorded in the acquire database.</p>
<b>Quality of assay data and laboratory tests</b>	<p>Assaying of drill core samples was conducted at Intertek. All samples were assayed for 48 elements using a 4-acid digestion followed by ICP-AES/ICP-MS determination (method 4A/MS907), which is considered to provide a total assay for copper. Gold analyses were determined by 50g fire assay with AAS finish (method FA50N/AA), which is considered to provide a total assay for gold.</p> <p>Sampling and assaying quality control procedures consisted of inclusion of certified reference material (CRMs), coarse residue and pulp duplicates with each batch (at least 1:20).</p> <p>Assays of quality control samples were compared with reference samples in acquire database and verified as acceptable prior to use of data from analysed batches.</p> <p>Laboratory quality control data, including laboratory standards, blanks, duplicates, repeats and grind size results are captured in the acquire database and assessed for accuracy and precision for recent data.</p>

Criteria	Commentary
	<p>Extended quality control programs including pulp samples submitted to an umpire laboratory and combined with more extensive re-submission programs have been completed.</p> <p>Analysis of the available quality control sample assay results indicates that an acceptable level of accuracy and precision has been achieved and the database contains no analytical data that has been numerically manipulated.</p> <p>The assaying techniques and quality control protocols used are considered appropriate for the data to be used for estimation of Mineral Resources.</p>
<b>Verification of sampling and assaying</b>	<p>Sampling intervals defined by the geologist are electronically assigned sample identification numbers prior to core cutting. Corresponding sample numbers matching pre-labelled calico bags are assigned to each interval.</p> <p>All sampling and assay information were stored in a secure acQuire database with restricted access.</p> <p>Electronically generated sample submission forms providing the sample identification number accompany each submission to the laboratory. Assay results from the laboratory with corresponding sample identification are loaded directly into the acQuire database.</p> <p>Assessment of reported significant assay intervals was verified by re-logging of diamond drill core intervals and assessment of high-resolution core photography. The verification of significant intersections has been completed by company personnel and the Competent Person.</p> <p>No adjustments are made to assay data, and no twinned holes have been completed.</p> <p>There are no currently known drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data.</p>
<b>Location of data points</b>	<p>Drill collar locations were surveyed using a differential GPS with GNSS with a stated accuracy of +/- 0.5m for all drill holes used.</p> <p>Drill rig alignment was attained using an electronic azimuth aligner. Downhole survey was collected at 6-12m intervals in the cover sequence, and every 6 to 30m in diamond drill core segments of the drill hole using single shot (Axis Mining Champ Gyro). The single shot surveys have been validated using continuous survey to surface (Axis Mining Champ) along with a selection of drill holes re-surveyed by an external survey contractor using a DeviGyro tool - confirming sufficient accuracy for downhole spatial recording.</p> <p>A LIDAR survey was completed over the project area in November 2019 which was used to prepare a DEM / topographic model for the project with a spatial accuracy of +/- 0.1m vertical and +/- 0.3m horizontal. The topography is generally low relief to flat, elevation within the dune corridors in ranges between 250-265m Australian Height Datum (AHD) steepening to the southeast. All collar coordinates are provided in the Geocentric Datum of Australian (GDA20 Zone 51). All relative depth information is reported in AHD +5000m.</p>
<b>Data spacing and distribution</b>	<p>The drill hole spacing ranges from 40–100m within the SE Crescent Zone to 50-200m in lateral extent within the breccia zones over an area of ~2km<sup>2</sup>. The data spacing is sufficient to establish the degree of geological and grade continuity for an Indicated Mineral Resource and Inferred Mineral Resource within SE Crescent Zone and Inferred Mineral Resource within the Breccia zones.</p> <p>Significant assay intercepts remain open. Further drilling is required to determine the extent of currently defined mineralisation. No sample compositing is applied to samples.</p> <p>Drilling intersects mineralisation at various angles.</p>
<b>Orientation of data in relation to geological structure</b>	<p>Drill holes exploring the extents of the Havieron mineral system intersect moderately dipping carbonate and siliclastic sedimentary facies, mineralised breccia and sub-vertical intrusive lithologies. Geological modelling has been interpreted from historic and Newcrest drill holes.</p> <p>Variable brecciation, alteration and sulphide mineralisation are observed with a footprint with dimensions of 650m x 350m trending in a north west orientation and 1000m in vertical extent below cover.</p> <p>The subvertical southeast high grade arcuate crescent sulphide zone has an average thickness of 20m and has been defined over a strike length of up to 550m, and over 700m in vertical extent below cover.</p> <p>Drilling direction is oriented to intersect the steeply dipping high-grade sulphide mineralisation zones at an intersection angle of greater than 40 degrees. The drilled length of reported intersections is typically greater than true width of mineralisation.</p>
<b>Sample security</b>	<p>The security of samples is controlled by tracking samples from drill rig to database.</p> <p>Drill core was delivered from the drill rig to the Havieron core yard every shift. On completion of geological and geotechnical logging, core processing was completed by Newcrest personnel at the Havieron facility.</p> <p>High resolution core photography and cutting of drill core was undertaken at the Havieron or Telfer core processing facilities.</p> <p>Samples were freighted in sealed bags by air and road to the Laboratory, and in the custody of Newcrest representatives. Sample numbers are generated directly from the database. All samples are collected in pre-numbered calico bags.</p>

Criteria	Commentary
	<p>Verification of sample numbers and identification is conducted by the laboratory on receipt of samples, and sample receipt advice issued to Newcrest.</p> <p>Details of all sample movement are recorded in a database table. Dates, Hole ID sample ranges, and the analytical suite requested are recorded with the dispatch of samples to analytical services. Any discrepancies logged at the receipt of samples into the analytical services are validated.</p>
<b>Audits or reviews</b>	<p>Internal reviews of core handling, sample preparation and assays laboratories were conducted on a regular basis by both project personnel and owner representatives.</p> <p>In the Competent Person's opinion, the sample preparation, security and analytical procedures are consistent with current industry standards and are entirely appropriate and acceptable for the styles of mineralisation identified and will be appropriate for use in Mineral Resource estimates. There are no identified drilling, sampling or recovery factors that materially impact the adequacy and reliability of the results of the drilling programme in place at the Havieron Project.</p>

## Section 2: Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>The Havieron Project is entirely contained within mining tenement M45/1287, which is jointly owned by Greatland Pty Ltd and Newcrest Operations Limited. Newcrest has entered into a Joint Venture Agreement (effective 30 November 2020) and Farm-In Agreement (effective 12 March 2019) with Greatland Pty Ltd and Greatland Gold plc. Newcrest is the Manager of the Havieron Project. Newcrest has now met the Stage 3 farm-in requirement and has earned an additional 20% joint venture interest, resulting in a joint venture interest of 60%. Upon delivery of the PFS, Newcrest is entitled to earn an additional 10% joint venture interest, resulting in an overall joint venture interest of 70% (Greatland Gold 30%). Newcrest also has an option to acquire a further 5% at fair market value.</p> <p>Newcrest and the WDLAC are parties to an ILUA which relates to the use of native title land for Newcrest's current operations at Telfer and its activities within a 60-km radius around Telfer and includes its exploration activities at Havieron. The parties have agreed that the ILUA will apply to any future development activities by the Joint Venture Participants (Newcrest and Greatland Gold) at Havieron.</p> <p>The mining tenement M45/1287 wholly replaces the 12 sub-blocks of exploration tenement E45/4701 (former exploration tenement on which the Havieron Project is based) and was granted on 10 September 2020. All obligations with respect to legislative requirements including minimum expenditure are maintained in good standing for prior exploration tenement E45/4701.</p>
<b>Exploration done by other parties</b>	<p>Newcrest completed six core holes in the vicinity of the Havieron Project from 1991 to 2003. Greatland Gold completed drill targeting and drilling of nine Reverse Circulation (RC) drill holes with core tails for a total of approximately 6,800m in 2018. Results of drilling programs conducted by Greatland Gold have previously been reported on the Greatland Gold website.</p> <p>Drilling has defined an intrusion-related mineral system with evidence of breccia and massive sulphide-hosted higher-grade gold-copper mineralisation.</p>
<b>Geology</b>	<p>The Havieron Project is located within the north-western exposure of the Palaeo-Proterozoic to Neoproterozoic Paterson Orogen (formerly Paterson Province), 45 km east of Telfer. The Yeneena Supergroup hosts the Havieron prospect and consists of a 9km thick sequence of marine sedimentary rocks and is entirely overlain by approximately 420m of Phanerozoic sediments of the Paterson Formation and Quaternary aeolian sediments.</p> <p>Gold and copper mineralisation at Havieron consist of breccia, vein and massive sulphide replacement gold and copper mineralisation typical of intrusion-related and skarn styles of mineralisation. Mineralisation is hosted by metasedimentary rocks (meta-sandstones, meta-siltstones and meta-carbonate) and intrusive rocks of an undetermined age. The main mineral assemblage contains well developed pyrrhotite-chalcocopyrite and pyrite sulphide mineral assemblages as breccia and vein infill, and massive sulphide lenses. The main mineralisation event is associated with amphibole-carbonate-biotite-sericite-chlorite wall rock alteration. Drilling has partially defined the extents of mineralisation which are observed over 650m by 350m within an arcuate shaped mineralised zone, and to depths of up to 1400m below surface.</p>
<b>Drill hole Information</b>	Refer to previous exploration releases for drillhole information of the previously reported intercepts highlighted in this report.
<b>Data aggregation methods</b>	Significant assay intercepts are reported as (A) length-weighted averages exceeding 1.0g/t Au greater than or equal to 10m, with a maximum of 5m consecutive internal dilution; and (B) length-weighted averages exceeding 0.2g/t Au for greater than or equal to 20m, with a maximum of 10m consecutive internal dilution.
<b>Relationship between mineralisation widths and intercept lengths</b>	Significant assay intervals reported represent apparent widths. Drilling is not always perpendicular to the dip of mineralisation and true widths are less than downhole widths. Estimates of true widths will only be possible when all results are received, and final geological interpretations have been completed.

Criteria	Commentary
Diagrams	As provided above.
Balanced reporting	<p>This report includes highlights of drilling from previously released drillhole intercepts. There have been eighteen Exploration Results releases for this project made by Newcrest. Previous release dates are 25 July 2019, 10 September 2019, 24 October 2019, 2 December 2019, 30 January 2020, 11 March 2020, 30 April 2020, 11 June 2020, 23 July 2020, 10 September 2020, 29 October 2020, 10 December 2020, 28 January 2021, 11 March 2021, 29 April 2021, 10 June 2021, 22 July 2021 and 9 September 2021.</p> <p>Earlier reporting of exploration programs conducted by Newcrest and Greatland Gold have previously been reported. Exploration drilling programs are ongoing and further material results will be reported in subsequent Newcrest releases</p>
Other substantive exploration data	Nil.
Further work	<p>Infill drilling is underway on the Inferred Mineral Resource portion of the SE Crescent Zone, looking to upgrade a significant portion of the Inferred Mineral Resource to Indicated Mineral Resource.</p> <p>Growth drilling is planned to extend the limits of the mineralised system down depth and looking to establish additional resources outside those stated in this announcement.</p>

### Section 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Data are stored in a SQL acQuire database. Assay and geological data are electronically loaded into acQuire and the database is replicated in Newcrest's centralised database system in Melbourne. In-built validation tools are used in the acQuire™ database and data loggers are used to minimise keystroke errors, flag potential errors and validate against internal library codes. Regular reviews of data quality are conducted by site and corporate teams prior to resource estimation. Final surveyed collars are checked against the original collar GPS pickup and the Lidar topographic surface. Downhole surveys are checked visually and statistically for outliers. Assay data is checked for negative, extreme, missing and overlapping samples. Below detection assay values are set to half the lower detection limit for estimation. Geological domains are reviewed against core photography, geochemistry and Corescan data and checked for overlaps and missing intervals. Data that is found to be in error is investigated and corrected where possible. If the data cannot be corrected it is removed from the data set used for resource modelling and estimation.
Site visits	The Competent Person for the Indicated Mineral Resource and Inferred Mineral Resource estimate is an employee of Newcrest and is based in Telfer. The Competent Person has remained closely linked with the project at all stages and has completed numerous site inspections on a regular basis with the last visit completed in 2021. The Competent Person has reviewed the drilling, sampling, sample security, drill logging, and data management and is satisfied with the quality of the measures undertaken.
Geological interpretation	<p>The geology model is based on grouped primary logging domain codes interpreted from drill cores. 3D solids were modelled in Leapfrog Geo 6.1 using vein, intrusive and erosional implicant models.</p> <p>The geology model for the Havieron deposit comprises a cover sequence and a basement sequence of variably mineralised and altered metasediments. The cover sequence consists of 7 sub horizontal units ascribed to the Permian whilst the basement sequence consists of the Crescent Zone that typically comprises of the massive sulphides including locally banded pyrrhotite or chalcopyrite., Calcite Cemented Breccia, Actinolite Cemented Breccia, Crackle Breccia and the post mineralisation Dolerite dyke.</p> <p>Mineralisation in Havieron is hosted in the Crescent and to a lesser extent within the cemented breccia's (Calcite Cemented and Actinolite Cemented Breccia). These units are therefore used as estimation domains. The confidence in the geological volumes that were used to define the estimation domains is reflected in the Mineral Resource classification.</p>
Dimension	Variable brecciation, alteration and sulphide mineralisation are observed with a footprint with dimensions of 650m x 350m trending in a north west orientation and 1000m in vertical extent below ~420m of cover. The SE Crescent Zone Mineral Resource extents are ~550m in unfolded plan section, between 5-40m true width and ~750m in vertical extent, mineralisation remains open at depth. The Breccia Mineral Resource extents occurs as a 50-100m sleeve around the SE Crescent Mineral Resource and also a ~250x50x300 NW trending zone in the north western half on the breccia complex "Northern Breccia" which remains open at depth and to the northwest.
Estimation and modelling techniques	<p>Geostatistical testing of the gold and copper grade distributions showed that the Breccia Zones are moderately diffusive in nature, and the Crescent Zone is relatively weakly diffusive in nature. Even though the Crescent Zone is weakly diffusive in nature, the estimation method of OK is considered appropriate due to the consideration of the geological setting, geological observation from the logging data and the geometry of the domain.</p> <p>All drillhole samples were composited to 5 metre intervals downhole and honouring the domain boundary. OK estimation of gold, copper, sulphur, iron, cobalt, bismuth, arsenic, lead, zinc and nickel, was undertaken into 10 m x 10 m x 10 m</p>



Criteria	Commentary
	<p>blocks for the Crescent Zone and 20 m x 20 m x 20 m blocks for the Breccia with discretisation of 4 x 4 x 4. A single pass run was conducted for gold, copper, sulphur, iron and cobalt estimate and two passes were conducted for bismuth, arsenic, lead, zinc and nickel estimates. The minimum and maximum number of informing composites were 10 and between 20 to 24 respectively, depending on the domain and variable being estimated. Due to the highly skewed nature of the grade distribution, a grade capping strategy has been applied for variables including Au, Cu, Co, Bi, As, Pb, Zn and Ni. Caps are typically around the value at a 99<sup>th</sup> percentile of distributions. The model grades were estimated in Isatis software. Gold and copper were the only revenue generating elements, no recovery of by-products has been assumed. Variables were estimated independently. The block size was chosen on the basis of estimation quality and likely scale of mining.</p> <p>The block model used for interpolators was populated with local rotations for the Crescent Zone and the Calcite Breccia Zone based on the orientation of the mineralisation including the high grade (structurally control) zone with a hard boundary applied between domains. The entire resource is based on interpolation of grades.</p> <p>The model has been validated via visual, statistical and geostatistical method, including statistical comparison, metal at risk analysis, swath plots, Global Change of Support (Discrete Gaussian Modelling) comparison and visual comparison of the drillholes and the blocks by sections and plan views. The model assumes the likelihood of a selective mining method for the Crescent Zone.</p>
<b>Moisture</b>	All tonnages are calculated and reported on a dry tonnes basis.
<b>Cut-off parameters</b>	<p>A value algorithm is used to calculate the NSR for each block using revenue and cost assumptions as of July 2020.</p> <p>The NSR calculation takes account revenue factors, metallurgical recovery assumptions (outlined below), transport costs and refining charges and royalty charges with the gold price of US\$1,400 per ounce, copper price of US\$3.40 per pound and a 0.75 AUD:USD exchange rate.</p> <p>The Indicated Mineral Resource was defined based on a threshold of A\$100/t within the SE Crescent Zone. A smoothed shell was generated based on a threshold of A\$50/t and includes internal below value cut-off blocks and excludes isolated above cut-off blocks applied for the definition of the Inferred Mineral Resources. Both Indicated Mineral Resources and Inferred Mineral Resources are representing the limit of reasonable prospects of eventual economic extraction. The A\$100/t cut-off for Indicated Mineral Resources and A\$50/t cut-off for Inferred Mineral Resources are based on Newcrest's experience at its nearby Telfer operation, its current understanding of the Havieron deposit and other benchmarked operations.</p>
<b>Mining factors or assumptions</b>	<p>The Indicated Mineral Resource estimate is reported based on the A\$100/t NSR value cut-off and the average weighted distance of 45metres within the SE Crescent Zone, based on mining selective mining.</p> <p>The Inferred Mineral Resource estimate is reported within a notional constraining shell based on an A\$50/t NSR value cut-off, based on bulk mining and therefore all internal materials are reported within the constraining shell.</p> <p>The current proposal is to potentially commence mining the high-grade Crescent Zone by underground SLOS.</p>
<b>Metallurgical factors or assumptions</b>	<p>Havieron underground ore will be processed on a campaign basis through the Telfer Train 2 Treatment Plant circuit at a throughput of approximately 2Mtpa. Metal recovery will be through conventional flotation to produce a copper/gold concentrate and doré through a newly installed flotation tails leach circuit. The technology associated with the ore processing is conventional and the flowsheet is similar to that utilised by other operations.</p> <p>Metallurgical recovery assumptions are based on detailed analysis and laboratory flotation and leach test work completed on 38 variability samples during the Havieron Concept (2020) and Pre-Feasibility (2021) studies with good spatial coverage of the SE Crescent Zone. Of the 38 samples, 8 samples are located in the Breccia zones and 30 samples are located in the SE Crescent Zone, of which 21 samples are located within the SE Crescent Zone Indicated Mineral Resources. Based on these samples metallurgical recoveries for gold are anticipated to average approximately 88% and recoveries of copper are expected to average approximately 84% throughout the life of the project.</p> <p>Bismuth is the key deleterious element for the gold/copper concentrate product with smelter penalties incurred on the basis of bismuth content. The impact of bismuth in concentrate will be managed by mine sequencing and concentrate blending.</p> <p>Bulk sample or pilot scale test work has not been undertaken.</p>
<b>Environmental factors or assumptions</b>	As Havieron is a brownfields project the potential environmental impact assessments are not well advanced; however, the assumption is that there will be no significant impediments to conventional waste management of rock and tailings as utilised at Newcrest's Telfer Operations based on the similarities between the Havieron and Telfer deposits.
<b>Bulk Density</b>	<p>All bulk density measurements have been carried out in accordance with site standard procedure and used a standard water immersion method.</p> <p>Intervals for bulk density determination are selected according to lithology/ alteration/mineralisation type to best represent certain intervals as defined by the geologist.</p> <p>The measurements are performed on site by geologists or geological assistants as part of the logging process. Measurements are based on 10 cm to 20 cm lengths generally taken at 10 metre to 50 metre intervals down hole.</p> <p>Bulk density from several thousand measurements was estimated into the block model by an inverse distance method on a domain-wise basis.</p>



Criteria	Commentary
<b>Classification</b>	<p>The Mineral Resource estimate has been classified as an Indicated Mineral Resource and an Inferred Mineral Resource.</p> <p>The resource classification is based on drillhole spacing and geological and grade continuity including the assessment of average weighted distance of informing samples. The Indicated Mineral Resource estimate is classified within the SE Crescent Zone only with a nominal drill spacing less than 45m x 45m, the Inferred Mineral Resource estimate is classified within a nominal drill spacing less than 100m x 100m and the contiguous footprint of the reasonable prospect of eventual economic extraction. The Indicated Mineral Resource and Inferred Mineral Resource classifications appropriately reflects the view of the Competent Person.</p>
<b>Audits or reviews</b>	<p>Derisk Geomining Consultants conducted an independent review of the previous Havieron Underground Mineral Resource estimate (November 2020) and concluded that the estimate has been prepared using accepted industry practice, has been completed in accordance with the JORC Code guidelines, is suitable for preparing a public report documenting the Mineral Resource estimate. Some responses and actions were noted from this review and have been included in this updated estimate.</p>
<b>Discussion of relative accuracy/ confidence</b>	<p>The uncertainty of the geological domain at the upper part of SE Crescent is considered between moderate to low. The grade uncertainty of the Indicated classification of the SE Crescent Zone is supported by the <math>\pm 15\%</math> variability at 90% confidence interval of the mining rate 2-3Mtpa derived from the conditional simulation. The breccia is considered Inferred Mineral Resources and reflects the wide spaced drilling where the geological evidence is sufficient to imply but not verify geological and grade continuity, thus it is deemed not necessary to assess the relative uncertainty in tonnage, grade and metal over a production volume for Inferred Mineral Resources. There is no production data for Havieron.</p>

#### Section 4: Estimation and Reporting of Ore Reserves

Criteria	Commentary
<b>Mineral Resource Estimate for conversion to Ore Reserves</b>	<p>Havieron is a gold and copper deposit located within the boundaries of the East Pilbara Shire in the Paterson Province, Western Australia (WA), and is located approximately 45 kilometres (km) east of Newcrest's fly-in fly-out Telfer Mine. The Havieron deposit lies unconformably below approximately (~) 420 metres (m) of post-mineral, flat-lying Permian fluvio-glacial sediments of the basal sequence rocks in the Palaeozoic Canning Basin.</p> <p>Mineralisation of gold and copper in the current resource estimate are within the South East (SE) Crescent and the Breccia zones. High grade gold mineralisation is associated with a massive sulphide zone termed the Crescent Zone which occurs on the margin of the Breccia. The Crescent Zone is characterised by a series of massive to semi-massive sulphide replacement units that have a subvertical dip and is best developed on the SE of the system forming as arcuate, crescent like geometry.</p> <p>The SE Crescent Zone is 5-40 m wide, extending 550 m in length in unfolded section from the basement contact and defined up to 900 m vertically, tapering to ~300 m in length and open at that depth. The SE Crescent Zone has been the focus of drilling and has been infilled to a nominal drill spacing of 50 – 100 m laterally, and 100 m vertically.</p> <p>OK estimation has been used for gold, copper, sulphur, iron, cobalt, bismuth, arsenic, lead, zinc and nickel. A panel size of 10 mE x 10 mN x 10 mRL for the SE Crescent and 20 mE x 20 mN x 20 mRL for the Breccias are used for estimation with a parent block size of 5 mE x 5 mN x 5 mRL designated for the final model.</p> <p>The Mineral Resource estimate for the SE Crescent has been classified as Indicated Mineral Resource and Inferred Mineral Resource based on data quality and quantity factors as well as geological domaining, estimation confidence and reasonable prospect of the eventual economic extraction (RPEEE).</p> <p>The reported Havieron Mineral Resources are inclusive of Ore Reserves.</p>
<b>Site Visits</b>	<p>The Competent Person for the Ore Reserve estimate is an employee of Newcrest Mining Limited and completed a site visit in January 2020.</p>
<b>Study Status</b>	<p>A Pre-Feasibility Study was completed in 2021 to generate the supporting basis for the Havieron Ore Reserve Estimate. The Pre-Feasibility Study shows that the mine plan is technically achievable and economically viable taking into consideration all material Modifying Factors.</p>
<b>Cut-off Parameters</b>	<p>The Havieron Ore Reserve employs a value based cut-off determined from the Net Smelter Return (NSR) value equal to the site operating cost included within the Pre-Feasibility Study.</p> <p>The NSR calculation takes into account revenue factors, metallurgical recovery assumptions, transport costs, refining charges, and royalty charges.</p> <p>The site operating costs include mining cost, processing cost, relevant site general and administration costs and relevant sustaining capital costs. This cost equates to a break even cut off value of approximately AUD130/t milled, and a marginal cut off value of approximately AUD115/t milled.</p>

Criteria	Commentary																				
<b>Mining factors or assumptions</b>	<p>Estimation of the Havieron Ore Reserve involved standard steps of mine optimisation, mine design, production scheduling and financial modelling. The basis of the analysis is considered at Pre-Feasibility Study level.</p> <p>The Pre-Feasibility Study supports the appropriateness of the selected mining method (Sub-Level Open Stopping) at a 2Mtpa mining rate as the basis of the Ore Reserve estimate.</p> <table border="1"> <thead> <tr> <th colspan="2">Mine Design Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td colspan="2">Back Fill Type</td> <td>Paste Fill</td> </tr> <tr> <td colspan="2">Materials Handling System</td> <td>Decline Trucking</td> </tr> <tr> <td rowspan="5">Stope Dimensions</td> <td>Width</td> <td>5 to 30 m</td> </tr> <tr> <td>Length</td> <td>15 to 20 m</td> </tr> <tr> <td>Height</td> <td>15 to 70 m</td> </tr> <tr> <td>Sublevel Height</td> <td>20 to 60m</td> </tr> <tr> <td>Sill Height</td> <td>70 m</td> </tr> </tbody> </table> <p>The following Modifying Factors have been applied to all mining shapes to accurately represent the expected mined tonnes and grades:</p> <ul style="list-style-type: none"> <li>• Dilution factors for overbreak in primary, secondary and tertiary stopes (average 9%) consisting of waste (average 6%) and stope paste (average 3%);</li> <li>• Dilution included at zero grade; and</li> <li>• Mining recovery factor of 97.5%</li> </ul> <p>The resource model is comprised of Indicated Mineral Resources and Inferred Mineral Resources. Mine plans are based on the definition of mining shapes solely delineated on the basis of the Indicated Mineral Resources.</p> <p>Ore Reserves estimates and statements are required to include estimates of dilution. The dilution included in the total Ore Reserve is approximately 2.7Mt which is comprised of Inferred Mineral Resources and unclassified material and paste fill dilution. Only metal from the Inferred Mineral Resource material is considered in the dilution estimate. This is a relatively small proportion (2% of the gold metal and 1.6% of the copper metal) of the tabled Ore Reserve and does not have a material impact upon the estimate. Even without consideration of the metal contained in the dilution incorporated in the Ore Reserve, the economic analysis indicates an economic Probable Ore Reserve.</p> <p>The Havieron Project is a greenfield mining project and will require the following mining infrastructure to support the mine:</p> <ul style="list-style-type: none"> <li>• decline, accesses to the levels, ore passes, ventilation raises and other underground excavations;</li> <li>• paste fill plant and underground distribution system;</li> <li>• ventilation fans, regulators and refrigeration equipment; and</li> <li>• dewatering, electrical and other service equipment</li> </ul>	Mine Design Parameter		Value	Back Fill Type		Paste Fill	Materials Handling System		Decline Trucking	Stope Dimensions	Width	5 to 30 m	Length	15 to 20 m	Height	15 to 70 m	Sublevel Height	20 to 60m	Sill Height	70 m
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<b>Metallurgical factors or assumptions</b>	<p>Havieron underground ore will be processed on a campaign basis through the Telfer Train 2 Treatment Plant circuit at a throughput of approximately 2Mtpa. Metal recovery will be through conventional flotation to produce a copper/gold concentrate and doré through a newly installed flotation tails leach circuit. The technology associated with the ore processing is conventional and the flowsheet is similar to that utilised by other operations.</p> <p>Metallurgical recovery assumptions are based on detailed analysis and laboratory flotation and leach test work completed on 38 variability samples during the Havieron Concept (2020) and Pre-Feasibility (2021) studies with good spatial coverage of the SE Crescent Zone. Of the 38 samples, 8 samples are located in the breccia zones and 30 samples are located in the SE Crescent Zone, of which 21 samples are located within the SE Crescent Zone Indicated Mineral Resources. Based on these samples, metallurgical recoveries for gold are anticipated to average approximately 88% and recoveries of copper are expected to average approximately 84% throughout the life of the project.</p> <p>Bismuth is the key deleterious element for the gold/copper concentrate product with smelter penalties incurred on the basis of bismuth content. The impact of bismuth in concentrate will be managed by mine sequencing and concentrate blending.</p> <p>Bulk sample or pilot scale test work has not been undertaken.</p>																				
<b>Environmental</b>	<p>Detailed environmental studies have been undertaken in the project area and include flora and vegetation, fauna, subterranean fauna, waste rock characterisation, soil and landform study, surface hydrology assessment, a basic hydrogeological assessment and a greenhouse gas emissions study.</p> <p>The Project has been designed to recognise biodiversity values and, through consultation with Martu and their native title corporation (WDLAC), minimise the impacts to sites and landscapes of cultural significance. The footprint for the Project has been minimised through the use of existing tracks and areas of disturbance, as well as utilising the existing Telfer Gold Mine infrastructure to process the ore and dispose of the tailings material.</p> <p>Waste rock characterisation has been undertaken and shows that it contains material which has potentially acid forming (PAF) and metalliferous drainage, in addition to dispersive or saline material. The portion of PAF material is less than 1%</p>																				

Criteria	Commentary
	<p>of total waste volumes. Waste dumps have been designed for the life of mine that have incorporated cells to safely encapsulate the PAF material. The waste dump is to be located near the boxcut to minimise haulage distance and considering the local surface terrain and environmental and cultural aspects.</p> <p>A staged approach for approvals is being undertaken, with Stage 1 currently approved, which has allowed the development of the boxcut, decline and service corridor. These approvals also allow for a waste rock dump, evaporation ponds and supporting infrastructure such as offices and workshops.</p> <p>Stage 2 approvals will consist of a SLOS underground mine, permanent infrastructure corridor, associated infrastructure and changes to Telfer approvals to accept Havieron tailings in existing tailings storage facilities.</p>
<b>Infrastructure</b>	<p>The Havieron Sub-Level Open Stopping mine is a greenfield project and will require the following infrastructure to support mining operations:</p> <ul style="list-style-type: none"> <li>• Ventilation fans and refrigeration equipment;</li> <li>• Paste plant;</li> <li>• Surface Mining Infrastructure Area (MIA) including camp, offices, workshops, evaporation ponds, electrical substations, explosive magazines, batch plant, waste dumps, ore stockpile, and other facilities;</li> <li>• Haulage road to transport the ore from Havieron to the Telfer Processing Plant; and</li> <li>• Modifications to the existing Telfer Processing plant to treat the ore coming from Havieron.</li> </ul> <p>The capital and operating costs for the above have been estimated in the Pre-Feasibility Study.</p>
<b>Costs</b>	<p>Capital and operating costs have been determined as part of the Pre-Feasibility Study.</p> <p>Capital cost estimates are based on multiple market prices across all technical disciplines and include processing upgrade and mine development costs along with associated surface and underground infrastructure, project establishment and sustaining capital costs. These provisions have been allowed for during the life of the mine based on most recent Pre-Feasibility plan estimates. Contingency has also been factored into the project capital cost estimate consistent with the level of accuracy of the study.</p> <p>The operating cost estimate includes the mining cost, surface transport cost, processing cost and relevant site general and administration costs. Ore Reserve cost estimates have been reviewed as part of the study execution and are considered to be to a Pre-Feasibility Study level.</p> <p>Long term metal prices and exchange rate assumptions adopted in the Pre-Feasibility Study 2021 are US\$1,300/oz for gold, US\$3.00/lb for copper, at a USD:AUD exchange rate of 0.75. These assumptions are consistent with Newcrest metal price guidelines for 2021 Ore Reserve reporting.</p> <p>Transport and refining charges have been developed from first principles consistent with the application of the current Telfer operation. These included charges for deleterious elements, e.g. bismuth where applicable.</p> <p>Costs include a revenue based payment from mining the Havieron Project area under the ILUA with WDLAC.</p> <p>State royalties are 2.5% for gold, 5% for copper after allowable deductions.</p>
<b>Revenue factors</b>	<p>Long term metal prices and exchange rate assumptions adopted in the Pre-Feasibility Study Ore Reserve estimation process are US\$1,300/oz for gold, US\$3.00/lb for copper, at a USD:AUD exchange rate of 0.75. These assumptions are consistent with Newcrest metal price guidelines for the 2021 Ore Reserve reporting.</p> <p>The NSR calculation takes into account Ore Reserve revenue factors, metallurgical recovery assumptions, transport costs and refining charges and royalty charges.</p>
<b>Market assessment</b>	<p>Newcrest is a price taker and gold is sold on the open market and subject to price fluctuations. Supply and demand for gold from Telfer and Havieron is not a constraint in the estimation of the Ore Reserve.</p> <p>Telfer has sold copper concentrate for its operational life into the world concentrate markets and this is assumed to continue under conditions similar to Newcrest's current market agreements over the life of the operational plan.</p> <p>Concentrate volume forecasts were derived from the Pre-Feasibility Study production schedule.</p>
<b>Economic</b>	<p>The Ore Reserve has been evaluated through a financial model. All operating and capital costs as well as revenue factors stated in this document were included in the financial model. A discount factor of 4.5% real was applied. This process demonstrated the Havieron Ore Reserve to have a positive NPV.</p> <p>Sensitivities were conducted on the key input parameters including commodity prices, capital and operating costs, ore grade, mined tonnes, mining rate, exchange rate and metallurgical recoveries confirming the estimate to be robust. The NPV range has not been provided as it is commercially sensitive.</p>
<b>Social</b>	<p>The landowners, the Martu people and the WDLAC are key project stakeholders. The Martu hold exclusive possession native title rights and interests over more than 130,000km<sup>2</sup> of land, including to all points around the Telfer mine and Havieron Project. The ILUA with WDLAC, centred on the Telfer mine, extends to the Havieron Project.</p>
<b>Other</b>	<p>The only identified material naturally occurring risk at Havieron is flooding from large rain events typically associated with the cyclone season. The existing boxcut has been located and all other surface connections to the surface have been designed above a modelled 1 in 1,000 year Average Recurrence Interval (ARI) event where possible, or will be elevated such that large volumes of water cannot enter the mine workings.</p>

Criteria	Commentary
	<p>A number of State and Commonwealth statutory requirements are relevant to the Havieron Project and all aspects of the Project will comply with the relevant Government Acts and Regulations applicable in the jurisdiction of Western Australia.</p> <p>A staged approach for approvals is being undertaken with Stage 1 currently approved which has allowed the development of the boxcut, decline and service corridor. These approvals also allow for a waste rock dump, evaporation ponds and supporting infrastructure such as offices and workshops. Minor additional approvals are in the process of being obtained and include a Groundwater Licence amendment and Part V approval to allow the operation of the evaporation ponds, waste water treatment plant and to allow construction of a landfill for non-mineralised waste.</p> <p>The Part V licence and registrations have approved Works Approvals and detailed consultation regarding the Groundwater Licence and associated Water Management Plan has occurred.</p> <p>Stage 2 approvals will consist of a SLOS underground mine, permanent infrastructure corridor, associated infrastructure and changes to Telfer approvals (processing of Havieron ore, Tailings Storage Facility 8 [TSF8] raise to accept Havieron tailings), groundwater use at Havieron.</p> <p>The approval strategy for Stage 2 consists of both Commonwealth and State level approvals with engagement well advanced with all regulatory bodies. The timelines outlined in the Pre-Feasibility Study are considered achievable.</p> <p>A Mining Lease has been granted over the orebody, and miscellaneous leases granted along the existing service corridor. For Stage 2 approvals, an additional miscellaneous lease will be applied for to secure access for an infrastructure corridor to connect Telfer and Havieron (haul road, powerlines, water pipes). This is not considered a risk to the timelines or project.</p>
<b>Classification</b>	<p>The Ore Reserve classification is based on Indicated Mineral Resources only. No Measured Mineral Resources are stated for this deposit. This classification is based on geological confidence as a function of continuity and complexity of geological features; data spacing and distribution and estimation quality parameters including distance to informing samples for block grade estimation.</p> <p>Inferred Mineral Resource material has been included within the Probable Ore Reserve as mined dilution due to the nature of stoping mining. This is a relatively small proportion (0.03 Moz gold or 2% &amp; 1.2 kt copper or 1.6%) of the tabled Ore Reserve. Even without consideration of Inferred Mineral Resource material in the mining inventory, the proportion of Indicated Mineral Resource material would still conclusively deliver a Probable Ore Reserve.</p> <p>It is the Competent Person's view that the classifications used for the Ore Reserves are appropriate.</p>
<b>Audits or reviews</b>	<p>Golder Associates Pty Ltd (Golder) was commissioned to conduct an independent review of the Ore Reserve estimation processes and results.</p> <p>Golder concluded that the Ore Reserve had been prepared using accepted industry practice and is considered suitable and reported in accordance with the JORC Code, 2012 Edition.</p>
<b>Discussion of relative accuracy/ confidence</b>	<p>The accuracy of the estimates within this Ore Reserve is mostly determined by the order of accuracy associated with the Mineral Resource estimate, the geotechnical input and the cost factors used.</p> <p>The Competent Person views the Havieron Ore Reserve a reasonable assessment of the global estimate. Some risk and opportunity is associated with the Ore Reserve process due to the greenfield nature of the project. Remaining areas of uncertainty at this stage are associated with:</p> <ul style="list-style-type: none"> <li>• Cost base assumptions rely on current technology and macroeconomic factors. Changes to these assumptions will have an impact on the Ore Reserve estimate.</li> <li>• The Modifying Factors (key inputs) for Ore Reserve estimation rely upon the geology and geotechnical data inherent to the orebody. This data, such as geological structures and rock mass properties, is to the appropriate definition and has been applied within the Pre-Feasibility Study, however further orebody data is required to confirm the geological and geotechnical information and is planned as part of the Forward Works Programme.</li> </ul>

## Forward Looking Statements

This document includes forward looking statements and forward looking information within the meaning of securities laws of applicable jurisdictions. Forward looking statements can generally be identified by the use of words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “believe”, “continue”, “objectives”, “targets”, “outlook” and “guidance”, or other similar words and may include, without limitation, statements regarding estimated reserves and resources, certain plans, strategies, aspirations and objectives of management, anticipated production, study or construction dates, expected costs, cash flow or production outputs and anticipated productive lives of projects and mines. Newcrest continues to distinguish between outlook and guidance. Guidance statements relate to the current financial year. Outlook statements relate to years subsequent to the current financial year.

These forward looking statements involve known and unknown risks, uncertainties and other factors that may cause Newcrest’s actual results, performance and achievements or industry results to differ materially from any future results, performance or achievements, or industry results, expressed or implied by these forward-looking statements. 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 licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which Newcrest operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. For further information as to the risks which may impact on Newcrest’s results and performance, please see the risk factors included in the Operating and Financial Review included in the Appendix 4E and Financial Report for the year ended 30 June 2021 which is available to view at [www.asx.com.au](http://www.asx.com.au) under the code “NCM” and on Newcrest’s SEDAR profile.

Forward looking statements are based on Newcrest’s good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect Newcrest’s business and operations in the future. Newcrest does not give any assurance that the assumptions will prove to be correct. There may be other factors that could cause actual results or events not to be as anticipated, and many events are beyond the reasonable control of Newcrest. Readers are cautioned not to place undue reliance on forward looking statements, particularly in the current economic climate with the significant volatility, uncertainty and disruption caused by the COVID-19 pandemic. Forward looking statements in this document speak only at the date of issue. Except as required by applicable laws or regulations, Newcrest does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in assumptions on which any such statement is based.

## Non-IFRS Information

Newcrest’s results are reported under International Financial Reporting Standards (IFRS). This document includes certain non-IFRS financial information within the meaning of ASIC Regulatory Guide 230: ‘Disclosing non-IFRS financial information’ published by ASIC and within the meaning of Canadian Securities Administrators Staff Notice 52-306 – Non-GAAP Financial Measures. Such information includes: ‘Free Cash Flow’ (calculated as cash flow from operating activities less cash flow related to investing activities and ‘AISC’ (All-In Sustaining Cost) as per the updated World Gold Council Guidance Note on Non-GAAP Metrics released November 2018. AISC will vary from period to period as a result of various factors including production performance, timing of sales and the level of sustaining capital and the relative contribution of each asset. These measures are used internally by Newcrest management to assess the performance of the business and make decisions on the allocation of resources and are included in this document to provide greater understanding of the underlying performance of Newcrest’s operations. The non-IFRS information has not been subject to audit or review by Newcrest’s external auditor and should be used in addition to IFRS information. Such non-IFRS financial information/non-GAAP financial measures do not have a standardised meaning prescribed by IFRS and may be calculated differently by other companies. Although Newcrest believes these non-IFRS/non-GAAP financial measures provide useful information to investors in measuring the financial performance and condition of its business, investors are cautioned not to place undue reliance on any non-IFRS financial information/non-GAAP financial measures included in this document. When reviewing business performance, this non-IFRS information should be used in addition to, and not as a replacement of, measures prepared in accordance with IFRS, available on Newcrest’s website, the ASX platform and SEDAR.

## Ore Reserves and Mineral Resources Reporting Requirements

As an Australian Company with securities listed on the Australian Securities Exchange (ASX), Newcrest is subject to Australian disclosure requirements and standards, including the requirements of the Corporations Act 2001 and the ASX. Investors should note that it is a requirement of the ASX listing rules that the reporting of ore reserves and mineral resources in Australia is in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) and that Newcrest’s ore reserve and mineral resource estimates comply with the JORC Code.

Newcrest is also subject to certain Canadian disclosure requirements and standards, as a result of its secondary listing on the Toronto Stock Exchange (TSX), including the requirements of National Instrument 43-101 (NI 43-101). Investors should note that it is a requirement of Canadian securities law that the reporting of Mineral Reserves and Mineral Resources in Canada and the disclosure of scientific and technical information concerning a mineral project on a property material to Newcrest comply with NI 43-101.



Newcrest's material properties are currently Cadia, Lihir, Red Chris and Wafi-Golpu. Copies of the NI 43-101 Reports for Cadia, Lihir and Wafi-Golpu, which were released on 14 October 2020, are available at [www.newcrest.com](http://www.newcrest.com) and on Newcrest's SEDAR profile. The Red Chris NI 43-101 report is expected to be submitted within 45 days of the date of this market release.

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

The information in this document that relates to Havieron Ore Reserves is based on and fairly represents information compiled by Pasqualino Manca. Pasqualino Manca is the Group Manager Mining Studies and a full-time employee of Newcrest Mining Limited. He is a shareholder in Newcrest Mining Limited and is entitled to participate in Newcrest's executive equity long term incentive plan, details of which are included in Newcrest's 2021 Remuneration Report. He is a Fellow of the Australasian Institute of Mining and Metallurgy. Pasqualino Manca has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code and as a Qualified Person under NI 43-101. Pasqualino Manca approves the disclosure of scientific and technical information contained in this document and consents to the inclusion of material of the matters based on his information in the form and context in which it appears.

The information in this document that relates to Havieron Mineral Resources is based on and fairly represents information compiled by Ashok Doorgapershad. Ashok Doorgapershad is the Chief Geologist and a full-time employee of Newcrest Mining Limited. He is a shareholder in Newcrest Mining Limited and is entitled to participate in Newcrest's executive equity long term incentive plan, details of which are included in Newcrest's 2021 Remuneration Report. He is a Fellow of the Australian Institute of Mining and Metallurgy. Ashok Doorgapershad has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code and as a Qualified Person under NI 43-101. Ashok Doorgapershad approves the disclosure of scientific and technical information contained in this document and consents to the inclusion of material of the matters based on his information in the form and context in which it appears.

The information in this document that relates to Exploration Results at Havieron has been extracted from Newcrest's releases titled "Exploration Update" dated 9 September 2021 and "Quarterly Exploration Report" dated 22 July 2021, 28 January 2021 and 29 October 2020 (the original releases). The original exploration releases are available to view at [www.asx.com.au](http://www.asx.com.au) under the code "NCM" and on Newcrest's SEDAR profile. Newcrest confirms that it is not aware of any new information or data that materially affects the information included in the original releases and that all material assumptions and technical parameters underpinning the estimates in the original releases continue to apply and have not materially changed. Newcrest confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original releases.

### **Authorised by a Newcrest Board Committee**

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