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## **ASX Announcement**

## 16 July 2021

# COWAL UNDERGROUND BOARD APPROVAL, RED LAKE GROWTH UPDATE AND GROUP THREE-YEAR OUTLOOK

Evolution Mining Limited (ASX:EVN) ("Evolution") is pleased to advise that Board has approved, subject to receipt of final regulatory approval, the development of the Cowal underground mine and a clear and defined pathway to grow gold production at Red Lake to 350,000 ounces per annum. Details on each approval are provided below.

Commenting on the approvals, Evolution's Executive Chairman, Jake Klein said:

"Cowal is undoubtedly a world class asset and a key asset in the Evolution portfolio. Today, the Board has approved the development of an underground mine that contributes to our goal of Cowal producing 350,000 ounces of low-cost gold a year and extend its mine life out beyond 17 years, while at the same time injecting significant economic benefit for all stakeholders. The Board has also approved a plan that accelerates the restoration of Red Lake to a premier Canadian gold mine producing low-cost gold in excess of 350,000 ounces per year. This will also deliver significant benefit for all stakeholders of the Red Lake asset.

Both operations demonstrate the outstanding organic growth opportunities within Evolution's portfolio that will grow production by 35% to over 900,000 ounces of low-cost gold over the next three years."

## **Cowal Underground Feasibility Study and Board Approval**

The addition of a new mining front at Cowal provides a higher-grade ore source that will be blended with the current E42 open pit and stockpiled ore. The Feasibility Study demonstrated a robust investment case, with an Internal Rate of Return of 15% and a mine life of approximately 17 years. Peak mine production is achieved over a seven-year period after a three-year ramp up (Figure 1).

Capital required to reach commercial production of A\$380 million will be invested during the 2022 and 2023 financial years with A\$240 million for surface infrastructure, paste plant, process plant modifications and accommodation village, and A\$140 million of initial mine development costs. This capital is included in the Group Three-Year Outlook below.

During the public exhibition process strong community support was received for the project. The regulatory approval process is progressing well with draft consent conditions received. Primary approvals are expected in the current quarter.

Development of the Galway decline is ongoing, with completion targeted for the December 2021 quarter. Activities will then transition to the development of the mine. First production ore is targeted for the March 2023 quarter which coincides with the commissioning of the paste plant.

Key milestones for the project during the ramp up period are shown in Table 1. A summary of the key metrics from the Feasibility Study to support the investment are shown in Table 2.

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Figure 1: Feasibility Study Ore Tonnes Mined

FY22					FY23			FY24			
Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
Board and Regulatory Approval											
Undergroun definition	d resource drilling										
Ongoing de of Galway	velopment / decline	Commen under develo	cement of ground opment			First prod	luction ore			Ore Mining +1.0	g rate up to Mtpa
Paste plant procurement		Commen paste const	cement of plant ruction			Paste commis	e plant ssioning				
Procuren	nent and co	nstruction c	of village								

Table 1: Cowal Underground Key Milestones

Feasibility Study Key Metrics	Units	Value
Approved pre-production capital	A\$M	380
Pre-tax IRR <sup>1,2</sup>	%	~15
Payback period	Years	~8
Mine life <sup>3</sup>	Years	~17
Life of mine ounces mined	Moz	1.7
Life of mine grade	g/t Au	2.5
Mining method		Sub level open stoping with backfill
Life of mine average mining cost <sup>4</sup>	A\$/ ore t	65 – 85
Life of mine average incremental processing cost <sup>5</sup>	A\$/ ore t	3 – 6
Ore Reserves <sup>6</sup>	Moz	1.05
Reserve grade <sup>6</sup>	g/t Au	2.5

#### Table 2: Cowal Underground Feasibility Study Metrics

- 1. Calculated using a gold price assumption of A\$2,200 per ounce
- 2. IRR of 21% at current spot gold price of A\$2,400 per ounce
- 3. Includes three year ramp up period
- 4. Operating cost (excl major project capital). Includes mine development costs. Average cost per tonne is higher than the upper range in early years due to mine development profile
- 5. Additional processing costs to treat underground ore
- 6. Cowal Underground Ore Reserve is at 31 December 2020. See the Material Information Summary of this release and JORC Code Table 1 in Appendix 1 for details on the Ore Reserve



## **Red Lake Growth Update**

Evolution's Board has approved a clear and defined program to grow gold production at Red Lake to 350,000 ounces per annum by FY26. The Stage One transformation to produce 200,000 ounces per annum at an AISC of less than US\$1,000 per ounce remains on track with the operation successfully achieving production and cost guidance in the 2021 financial year. Red Lake's growth plans to deliver value from of its 11Moz Mineral Resource have now been accelerated with the completion of the Battle North acquisition in May 2021. Investment in the operation in the coming years is appropriate to extend Red Lake's mine life to beyond 15 years and enable a production to ramp up targeting 350,000 ounces per annum by FY26.

Mining activities are focused on achieving a consistent underground development rate of 1,200m per month in the lower areas of the mine to enable the operation to produce ~850ktpa of ore from the existing operations. The development of the Campbell Young Dickenson (CYD) decline is progressing well and is planned to enable ~750kt of ore to be mined from Upper Campbell in FY24 which will ramp up to over 1Mtpa by FY26. Development work at McFinley will take place in FY22 to support a bulk sample.

Campbell mill expansion studies have commenced which are aimed at increasing total milling capacity at the Red Lake Operations to over 1.5Mtpa within the next three years. Beyond FY24, an expansion of the Bateman mill to ~900ktpa is expected to increase the combined long-term milling capacity of the operation to over 2.0Mtpa. Investment in upgrading and consolidating Tailings Storage Facilities (TSF) will commence in FY22 to support the mill upgrades.

A breakdown of key areas of investment over the next three years at Red Lake is provided in the Group Three Year Outlook below.

A timeline of the ke	v milestones at Red	Lake over the next th	ree vears is provided i	n Table 3 below.
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	FY22		/22	FY	<b>′</b> 23	FY24		
		December 2021 Half Year	June 2022 Half Year	December 2022 Half Year	June 2023 Half Year	December 2023 Half Year	June 2024 Half Year	
Geology	Mineral Resource and Ore Reserves	McFinley bulk sample	Updated McFinley Mineral Resources and Ore Reserves (JORC Code)					
	Existing	Development rat mo	es at 1,200m per	Ongoing mine	e development	Ongoing mine	development	
	operations	FY22 ore mined: ~850kt		FY23 ore m	ined: ~850kt	FY24 ore mi	ned: ~750kt	
Mining	Upper Campbell	Commence CYD decline development		First ore from Upper Campbell		Production ramp up		
		FY22 ore n	nined: ~50kt	FY23 ore m	ined: ~325kt	FY24 ore mined: ~750kt		
	Mattinlau	Development to support bulk sample		Investment in underground infrastructure				
	NICFINIEY	Development to s	upport buik sample	Ir	ivestment in under	ground initiastructur	е	
	Campbell	Debottlenecking constraints	Expansion Front	Ir End Engineering ign	Mill expansion	Ramp up of the	e roughput rates	
	Campbell	Debottlenecking constraints	Expansion Front Des hput: ~625kt	In End Engineering ign FY23 throug	Mill expansion	Ramp up of the	e roughput rates hput: ~800kt	
Processing	Campbell mill Red Lake	Development to st Debottlenecking constraints FY22 throug Throughput ramp mi	Expansion Front Expansion Front Des phput: ~625kt up in line with ore ned	End Engineering sign FY23 throug Consistent opera (excluding major	Mill expansion Mill expansion hput: ~650kt ational throughput shut of ~30 days)	Ramp up of thi FY24 throug Consistent opera	e roughput rates hput: ~800kt tional throughput	
Processing	Campbell mill Red Lake mill	Development to si Debottlenecking constraints FY22 throug Throughput ramp mi FY22 throug	Expansion Front Expansion Front Des hput: ~625kt up in line with ore ned hput: ~250kt	End Engineering ign FY23 throug Consistent opera (excluding major FY23 throug	Mill expansion Mill expansion hput: ~650kt ational throughput shut of ~30 days) hput: ~350kt	Ramp up of the FY24 throug Consistent opera FY24 throug	e roughput rates hput: ~800kt tional throughput hput: ~375kt	
Processing	Campbell mill Red Lake mill Bateman	Debottlenecking constraints FY22 throug Throughput ramp mit FY22 throug Dry commissioning	Expansion Front Expansion Front Des hput: ~625kt up in line with ore ned hput: ~250kt Mill expansion	End Engineering sign FY23 throug Consistent opera (excluding major FY23 throug Commission expanded mill	Mill expansion hput: ~650kt tional throughput shut of ~30 days) hput: ~350kt Ram	Ramp up of thi FY24 throug Consistent opera FY24 throug p up of throughput	e roughput rates hput: ~800kt tional throughput hput: ~375kt rates	
Processing	Campbell mill Red Lake mill Bateman mill	Development to si Debottlenecking constraints FY22 throug Throughput ramp mi FY22 throug Dry commissioning FY22 throug	Expansion Front Des phput: ~625kt up in line with ore ned phput: ~250kt Mill expansion ghput: ~25kt	End Engineering ign FY23 throug Consistent opera (excluding major FY23 throug Commission expanded mill FY23 throug	Mill expansion hput: ~650kt tional throughput shut of ~30 days) hput: ~350kt Ram	Ramp up of the FY24 throug Consistent opera FY24 throug p up of throughput FY24 throug	e roughput rates hput: ~800kt tional throughput hput: ~375kt rates hput: ~325kt	

Table 3: Timeline of key activities at Red Lake between FY22 – FY24



## **Group Three-Year Outlook**

Following the Board approval of the Cowal underground project and the integration of the Bateman Project into the Red Lake Operation, Evolution is pleased to provide an updated Three-year Outlook for Group production, costs and capital.

Production is planned to increase by at least 30% to over 900,000 ounces during the three-year period to FY24. Growth will be largely driven by the ramp up of the Cowal underground mine and an increasing production profile at Red Lake.

Costs are expected to remain relatively stable over the three-year period as the growth strategy continues to focus on producing high margin ounces.

Investment in sustaining capital is forecast to be between A\$120 – A\$150 million in FY22; A\$115 – A\$155 million in FY23; and A\$120 – A\$160 in FY24. Replacement of equipment and infrastructure at Cowal (A\$35 – A\$45M per year) and Red Lake (A\$40 – A\$45M in FY22; A\$45 – A\$55M in FY23 & FY24) due to extended life of mine plans account for the majority of sustaining capital.

Investment in growth projects at Cowal and Red Lake will materially increase production and transform the quality of Evolution's asset portfolio.

A breakdown of major capital items for key growth projects at Cowal, Red Lake and Mungari is provided in Table 4 below.

Cowal	FY22	FY23	FY24
Underground	A\$145 – 160M¹	A\$235 – 245M	A\$35 – 40M <sup>2</sup>
Integrated Waste Landform	A\$75 – 80M	A\$45 – 50M	A\$25 – 30M
Open Pits Feasibility Study	A\$15 – 20M		
Red Lake			
Existing Mining Operations	A\$50 – 55M	A\$50 – 55M	A\$55 – 60M
Upper Campbell	A\$35 – 40M	A\$70 – 75M	A\$55 – 60M
McFinley	A\$25 – 30M	A\$35 – 40M	A\$10 – 15M
Campbell Mill Expansion	A\$10 – 15M	A\$20 – 25M	
Bateman Mill Expansion <sup>3</sup>	A\$10 – 15M	A\$40 – 45M	
Mungari			
Mine development	A\$20 – 30M	A\$20 -30M	
Plant expansion			A\$80 – 90M

Table 4: Breakdown of Major Capital

1. Includes A\$15-20M for completion of Galway Decline

2. Mine capital development post-commissioning

3. Includes water treatment project of A\$15 - 20M





The Group Three-Year Outlook for production, costs and capital is provided in the following charts.

Figure 2: Group Three-Year Outlook for Production, Costs and Capital

A breakdown of FY22 guidance at an individual asset level will be provided with the FY21 Financial Results in August.

Group Three-year Outlook comprises 77% Probable Ore Reserves, 7% Indicated Mineral Resources, 12% Inferred Mineral Resources and 4% Exploration Targets.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The potential quantity and grade of the Exploration Targets are conceptual in nature and there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of Mineral Resources or that Production Target itself will be realised. Information on the Exploration Targets is provided on pages 6 to 7 of this release.

The material assumptions, excluding Cowal Underground, on which the Three-year Outlook is based are presented in ASX releases entitled "Annual Mineral Resources and Ore Reserves Statement" and "Annual Mineral Resources and Ore Reserves Statement" released to the ASX on 17 February 2021 and 12 February 2020 respectively and are available to view at www.evolutionmining.com.au.

The material assumptions for Cowal Underground are provided in the Cowal Underground Material Information Summary on pages 9 to 15 of this release and within the JORC Code 2012 Assessment and Reporting Criteria in Appendix 1.

The material assumptions upon which the Group Three-year Outlook forecast financial information is based are: Gold A\$2,200/oz; Silver A\$27.50/oz; Copper A\$11,000/t; and Diesel A\$80/bbl.

The All-In Sustaining Cost Outlook is based on a Gold price of A\$2,200/oz (Royalties) and a Copper price of A\$11,000 per tonne (by-product credits).

The Ore Reserves and Mineral Resources underpinning the Group Three-year Outlook have been prepared by Competent Persons in accordance with the requirements in Appendix 5A (JORC Code).



## **Exploration Targets**

## Red Lake Operations Exploration Target

The Red Lake Operations Exploration Target is approximately 60,000 – 70,000 tonnes grading 5.0 – 5.5g/t for 9,600 to 15,400 gold ounces and represents approximately 0.5% of Group Three-year Outlook. This Exploration Target comprises peripheral mineralisation to existing Indicated and Inferred Mineral Resources. The potential quantity and grade of the Red Lake Operations Exploration Target is conceptual in nature as there has been insufficient exploration to determine a Mineral Resource. There is no certainty that further exploration work will result in the determination of Mineral Resources or that the Production Target itself will be realised.

The Exploration Target material is from several of the main future production areas (Upper Campbell and Lower Red Lake) and is mineralisation that is defined by insufficient diamond drilling to be classified as either Indicated and or Inferred Mineral Resources.

The three-year mine plan includes further diamond drilling to specifically test the Exploration Target (and other targets) with the aim of converting the target to Mineral Resources. Red Lake Operations has a long history of incremental Mineral Resource conversion and replacement and is supported by drilling, mapping and sufficient geological continuity on the main mineralised structures that comprise the Exploration Target.

## Crush Creek Exploration Target

The Crush Creek Exploration Target included in the Mt Carlton Life of Mine plan includes approximately 270,000 to 350,000 tonnes grading 3.0 – 5.0g/t for 26,000 to 56,000 gold ounces and represents approximately 2.9% of group Three-year Outlook production. It is based on results from historic and early-phase exploration drilling results from multiple prospects that occur within 750m of the Delta and BV7 Mineral Resources. The Crush Creek Exploration Targets were generated through geological interpretation of the strike extent of mineralisation and estimated true widths derived from drill-hole grade intersections. The potential quantity and grade of the Crush Creek Exploration Target is conceptual in nature as there has been insufficient exploration to determine a Mineral Resource. There is no certainty that further exploration work will result in the determination of Mineral Resources or that the Production Target itself will be realised.

Resource definition drill programs will be completed over the Crush Creek Exploration Target during FY22. Drilling to date at the Crush Creek exploration prospects shows identical mineralisation occurrences to Delta and BV7, with grade continuity along strike and down dip within several northwest striking, north-easterly dipping, structures that remain open to the north along strike and down dip. Current drill spacing at the Crush Creek exploration prospects ranges from 40m x 40m to 100m x 100m, with mineralisation identified over a strike extent of between approximately 150m to 200m.

Information on previous drilling programs at Crush Creek is provided in ASX releases entitled "March 2021 Quarterly Report", "December 2020 Quarterly Report", "Evolution Acquires 100% of Crush Creek" and "September 2020 Quarterly Report" released to the ASX on 22 April 2021, 28 January 2021, 10 December 2020 and 27 October 2020 respectively and are available to view at <u>www.evolutionmining.com.au</u>.

## Telstra Hill Exploration Target

The Telstra Hill Exploration Target at Mt Carlton of approximately 260,000 to 340,000 tonnes grading 1.4 - 1.9g/t for 14,000 to 18,000 gold ounces and represents approximately 0.6% of the Group Three-year production Outlook. It is based on results from 98 historic exploration drill holes. Current drill spacing at Telstra Hill ranges from 20m x 20m to 50m x 50m. The Telstra Hill Exploration Target was generated through geological interpretation and resource modelling utilising all available drilling and completing estimation by Ordinary Kriging. The potential quantity and grade of the Telstra Hill Exploration Target is conceptual in nature as there has been insufficient exploration to determine a Mineral Resource. There is no certainty that further exploration work will result in the determination of Mineral Resources or that the Production Target itself will be realised.

Mineralisation at the Telstra Hill Exploration Target is interpreted to occur as narrow (0.5-1.5m true width) intervals in E-W trending and very steeply north dipping breccia faults. At least five such faults, with a regular spacing of ~25m, occur in the prospect area. Narrow intervals of gold mineralisation also occur on a structure dipping steeply towards SE and featuring vuggy chalcedonic silica. Mineralisation preferentially occurs in the upper half of the coherent quartz-feldspar porphyritic rhyodacite unit. The Telstra Hill Exploration Target is approximately 200m in terms of strike.

Drilling of the Telstra Hill target is planned to commence in 1HFY22 and a maiden Mineral Resource is planned for release as part of the 31 December 2020 Mineral Resource and Ore Reserve update.



## Bateman Mineral Reserves and Ore Reserves relating to Group Three-year Outlook

Production from Red Lake which forms part of the Group Three-year Outlook includes gold production from the McFinley orebody during FY22 (5,000oz) and FY23 (10,000oz).

The ore sources included are a small component of the Mineral Reserve Estimate for the Bateman Project that was acquired by Evolution and reported in the ASX release entitled "Battle North Gold Corporation to be Acquired by Evolution Mining Limited" on 15 March 2021. This report referenced the NI43-101 Bateman Gold Project Feasibility Study Technical Report on which Evolution has relied. This Feasibility Study Technical Report (27 January 2021) is available to view under Battle North Gold's profile at <u>www.sedar.com</u>.

Battle North Gold's Mineral Resources and Mineral Reserves estimate for the Bateman Project have been prepared using the Canadian NI 43-101 Standards and are not in accordance with the JORC Code 2012.

Evolution is in the process of updating the Mineral Resources and Ore Reserves for the Bateman Project in accordance with the JORC Code 2012. These Mineral Resources and Ore Reserves will be included in Evolution's annual Mineral Resources and Ore Reserves Statement in February 2022.

#### **Cowal Underground Production Target**

The Cowal underground has a production target of 1.6Moz to 1.8Moz between FY22 and FY38 relating to the Feasibility Study metrics presented on Table 1. This target comprises 62% Probable Ore Reserves, 7% Indicated Mineral Resources, 31% Inferred Mineral Resources. Between this period, the following production targets are provided:

- 0.1Moz to 0.12Moz between FY22 and FY24: comprised of 71% Probable Ore Reserves, 12% Indicated Mineral Resources, 17% Inferred Mineral Resources.
- 0.95Moz to 1.08Moz between FY25 and FY31 comprised of: 65% Probable Ore Reserves, 7% Indicated Mineral Resources, 28% Inferred Mineral Resources.
- 0.54Moz to 0.6Moz between FY32 and FY38 comprised of: 55% Probable Ore Reserves, 8% Indicated Mineral Resources, 37% Inferred Mineral Resources.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The material assumptions relating to the Cowal underground production target is provided in the Cowal Underground Material Information Summary on pages 9 to 15 of this release and within the JORC Code 2012 Assessment and Reporting Criteria in Appendix 1. The modifying factors used in the estimation of the Underground Ore Reserve were also applied to the Indicated and Inferred Mineral Resources in the generation of the production target. The Ore Reserves and Mineral Resources underpinning the Cowal underground production target have been prepared by Competent Persons in accordance with the requirements in Appendix 5A (JORC Code).



## **Cowal GRE46 Mineral Resources and Ore Reserves**

#### Cowal GRE46 Underground Mineral Resource Statement December 2020

G	old			Measured			Indicated	k		Inferred		Tot	tal Resou	irce	
Project	Туре	Cut- Off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	CP <sup>1</sup>									
Cowal	UG	1.5	-	-	-	22.78	2.55	1,868	14.75	2.43	1,151	37.53	2.50	3,019	1

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding Mineral Resources are reported inclusive of Ore Reserves. UG denotes underground.

<sup>1</sup>Cowal GRE46 UG Mineral Resources Competent Person (CP) Notes refer to 1. James Biggam

### Cowal GRE46 Underground Ore Reserve Statement June 2021

Gold				Proved			Probable		Т	otal Reserv	e	
Project	Туре	Cut- Off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	CP <sup>1</sup>
Cowal	UG	1.8	-	-	-	12.55	2.59	1045	12.55	2.59	1045	2

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding.

<sup>1</sup> Cowal GRE46 UG Ore Reserve Competent Person (CP) Notes refer to 2. Joshua Northfield <sup>2</sup> Ore Reserves are reported inclusive of marginally economic material from development activities



## **Cowal Underground Material Information Summary**

Material Information Summaries are provided for the GRE46 Underground Mineral Resource and Ore Reserve at Cowal pursuant to ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria in accordance with JORC Code 2012 requirements. The Assessment and Reporting Criteria in accordance with JORC Code 2012 is presented in Appendix 2.

## 1.1 GRE46 Underground Mineral Resource

#### 1.1.1 Material Assumptions for Mineral Resources

The GRE46 underground Mineral Resource estimate is defined by an underground mining shape optimiser using an A\$2,000/oz gold price assumption. The GRE46 underground mine has assumed conventional mining techniques and parameters typical of current Evolution underground operations.

#### 1.1.2 Geology and Geological Interpretation

Gold mineralisation at Cowal is concentrated in a north-south orientated corridor hosted in second and third order structures marginal to and parallel to the Gilmore Suture. The gold deposits are hosted by a shallowing-upwards sequence of semi-conformable sedimentary, volcaniclastic, and volcanic rocks of trachydacitic and trachyandesitic composition that have been intruded by a diorite sill, andesite dome, and various dykes. The sequence strikes northeast–southwest and dips moderately 30° to 40° to the northwest.

The mineralisation at CGO comprises six deposits: E41E, E41W, E42, Galway Regal, E46 and GRE46. GRE46 will be discussed exclusively in this section.

The GRE46 zone trends north-south, dips vertical to -70° west, and extends approximately 2km along strike, 200m across strike and at least 1km down dip. The mineralisation is hosted in structural zones 1-15m wide, 25 to 250m long, and extends 50 to 200m down dip. These structural zones consist of narrow (<10cm) high-grade quartz carbonate, pyrite and base metal veins which vary significantly in grade and thickness. Broad zones of alteration around lithological contacts and rare zones of grade enrichment occur in dilatant structures within the deposit known as Quartz Sulphide Breccias. The host lithology varies from poorly mineralised massive intrusive diorite and fine volcaniclastic sediments through to the preferentially mineralised trachydacitic lava in the north, lenses of coarse to fine conglomeritic volcaniclastic sediments and the andesitic Dalwhinnie lava unit to the east. Lithological contacts with strong competency contrasts have also provided favourable sites for broad areas of mineralisation. The trachydacite is brittle and is both a good geochemical and rheological host for Au mineralisation.

Vein orientation at the GRE46 deposit displays a distinct change in orientation on a nominal northing of 37,000mN. Veins in the south of the deposit are generally orientated at 50° towards 120°. Veins in the north of the deposit rotate clockwise and steepen to a general dip direction of 70° towards 180°(Figure 1). All coordinates and directions are expressed in mine grid eastings, northings and elevation.



Figure 1 Orientation of mineralised veins in sediment units of GRE46, and location of 37,000mN domain boundary

GRE46 is immediately adjacent to the eastern edge of the E42 Open Cut. The deposit is abuts the Glenfiddich Fault which provides a sharp boundary separating GRE46 from E42. Bedding orientations change sharply across this structural contact and the sediments hosting GRE46 mineralisation have a younging direction to the west (Figure 2).





Figure 2 E46-GRE46 Oblique Cross section

## 1.1.3 Sampling and Sub-sampling

Diamond drillcore is cut with a diamond saw. Core is cut to preserve the bottom of hole orientation mark and the top half of core is always sent for analysis to ensure no bias is introduced. Throughout 2019 and 2020, portions of the GRE drilling campaign have been whole core sampled to speed up assay turnaround time. These intervals have been predominantly from UG collared holes where proximal half core has been retained.

There are 348 reverse circulation and aircore samples that have been used in the GRE46 UG Resource, exclusively in the upper RL's of the deposit. RC and AC samples have been split using either a riffle splitter from a bulk sample collected at the rig or a rotary cone splitter attached to the cyclone. For most holes, chip samples were collected dry, but several areas have been affected by groundwater.

In 2003 Analytical Solutions Ltd conducted a Review of Sample Preparation, Assay and Quality Control Procedures for Cowal Gold Project. This study, combined with respective operating company policy and standards (North Ltd, Homestake, Barrick and Evolution) formed the framework for the sampling, assaying and QAQC protocols used at Cowal to ensure appropriate and representative sampling.

Field duplicates are taken at regular intervals on reverse circulation and air core holes. Prior to 1993 (hole 266), the North quality control checks used standards, blanks, pulp repeats and interlab checks and were supervised and documented by R.Jones, a North geochemist (Rowley M., 2001). This data is considered reasonably good. For a period of time, procedures lapsed and precision deteriorated.

A report by van der Hayden (1996) of North compared original assay results for 571 AC/RC percussion spear samples taken in 1995/96 with repeat sample assay results from the original uncrushed sample. The North scatter plots of this data for grade ranges 0 to 1g/t, 0 to 10g/t and 0 to 50g/t show a relatively poor precision. The mean of the original and repeat data set is however, very close. No sample bias is evident.

In 2005, Francis Pitard (Pitard, 2005) was commissioned to review sampling protocol at the Cowal Gold Mine and complete a bulk sampling exercise. The review found excessive variance was present between bulk sample test work results and conventional 50-gram fire assay results. Whilst the report focused on the E42 pit, the conclusions are applicable to the greater Cowal Gold Mine. Pitard concluded that most Au results in the Database are underestimated with the relative difference between fire assay and bulk samples showing a clear underestimation of at least 7.6%. Furthermore, Pitard concluded the likelihood of obtaining a representative sample from drill core was remote given the particle size of the Au and the clustering of veins, resulting in systematic underestimation of Au content in most blocks and overestimation in a few. Pitard recommends large samples of at least 20kg at the GC stage, cross stream sampling of the gravity circuit and cross stream sampling of the Final Tail.

Results per interval are reviewed for half core samples and if unexpected or anomalous assays are returned an additional quarter core may be submitted for assay.

#### 1.1.4 Sample Analysis Methods

Early in the North program, samples were crushed to 95% minus 6mm and a sub-sample then pulverised to 95% minus 75µm. Mid-way in the North program, specifications were modified to crushing to 95% minus 10mm to 15mm followed by pulverising to 85% minus 75µm. Analysis of all the North samples was done at Australian Laboratory Services and Australian Assay Labs, Orange, NSW. Both independent facilities used fire assay of a 50g sample with an atomic absorption (AA) finish.

More recent sample preparation was conducted by SGS West Wyalong (Figure 3) and consisted of:

Drying in the oven at 105°C; crushing in a jaw crusher; fine crushing in a Boyd crusher to 2-3mm; rotary splitting a 3kg assay sub-sample if the sample is too large for the LM5 mill; pulverising in the LM5 mill to nominal; 90% passing 75 $\mu$ m; and a 30g fire assay charge was taken with an atomic absorption (AA) finish. The detection limit was 0.01 g/t Au.





Figure 3 CGO Sample Preparation and Assay Flow Chart

#### 1.1.5 Drilling Techniques

The bulk of the resource definition holes are drilled with an HQ3 collar through the oxide and completed through the primary zone to target using NQ2. Due to the depth of holes into the GRE46 deposit post 2018 (800m av.), directional diamond holes were commonly utilised.

Reverse Circulation and Air Core drilling was also used to delineate oxide areas of the resource utilizing 4.5-5.5 inch bits. RC drilling was completed to base of oxide with some holes hosting diamond tails. Air Core drilling was conducted to refusal.

Core has been oriented using a variety of techniques in line with standard industry practice of the time.

#### 1.1.6 Estimation Methodology

The Galway Regal open cut (GR\_OC) model has been modelled separately from the Galway Regal underground model (GRE46UG) which has been developed for underground resource optimisation.

A review of the June 2020 GRE46UG model was undertaken to re-define domains with similar features and continuity of mineralisation. Domaining was based on geological interpretation from drillhole logging, structural interpretation and analytical assay results for Au from drillhole data.

Top cutting of assay data was completed based on statistical analysis per domain to limit the impact of extreme values on block estimates and minimise the extent of grade smearing that can occur on a local basis around these samples.



A review was completed to establish the optimum search parameters for the kriging process. Search distances and kriging weights were examined for the effect on kriging variance, slope of regression and negative kriging weights.

Individual domains were reviewed in terms of grade distribution using frequency histograms.

Im composites were formed for use in grade estimation for the GRE46UG model. The decision to use 1m composites for underground was based on the narrow nature of the veins. Datamine software was used to composite data.

Estimation involved the use of Categorical Indicator Kriging (CIK) and Ordinary Kriging (OK) techniques to estimate grade into the domained model. CIK helps to define mineralised material above or below a defined threshold. A probability threshold of 0.4 was used in the April 2020 estimate. This threshold was independently verified by Optiro Pty Ltd. Once defined OK techniques are used to estimate grade into the resource. A discretisation of  $5 \times 5 \times 5$  in the plane x, y, z was used with a minimum sample number of 6 and maximum of 32 for the estimate. Search ellipsoids are based on the modelled semi-variogram ranges for each domain.

Parent block size for the GRE46UG model was selected at 10m x 10m x 10m. Ordinary kriging was completed on all domains and block grades were compared with composite of cut data to ensure kriging grades were represented in block grades. Swath plots were used to compare the modelled gold distributions in relation to composites as well as visual validation on 25m to 40m sections.

No assumption of mining selectivity has been incorporated in the estimate.

Only Au was estimated in the Mineral Resource, Ag which is a by-product of the processing has an assumed ratio of 1:1 with Au. Ag has not been accounted for in the estimation of Mineral Resources or Ore Reserves.

Validation of the Mineral Resource comprised comparing block grades against the data used to inform the estimate on a domain by domain basis, visual comparison of the informing data against the estimate and the use of swath plots showing grade trends by easting northing and elevation of the input data against the estimate.

The GRE46 model has not been reconciled against production.

## 1.1.7 Resource Classification

Resource classification for GRE46UG was delineated based on a nominal 40m x 40m drill spacing, the proximity to preferred orientated drilling and geological knowledge and confidence in the estimate.

The model was filtered at 0.3g/t, and areas satisfying the resource classification criteria were captured within digitised polygons in 20m plan sections. The block model was then assigned an Indicated classification (RESCAT=2) within the interpreted resource classification polygons. Estimated areas of lower confidence which fall outside of these polygons are assigned an Inferred classification (RESCAT=3). All blocks that have been estimated are flagged with either a 2 or a 3. Areas outside the variogram search distance, which have not been estimated were coded 4.

The Mineral Resource has been categorised using the guidelines set out in the JORC Code (2012). The Mineral Resource comprises a mixture of Indicated and Inferred Mineral Resource. No material has been assigned a Measured Mineral Resource category due to the notable grade variability and complex geological controls on mineralisation present on a local basis. Estimation errors on a local basis are considered significant and will only be minimised with additional infill drilling and a phase of tight spaced grade control drilling. The Mineral Resource is considered an appropriate global estimate.

The Mineral Resource estimate and Mineral Resource categories appropriately reflect the views of the Competent Person and have been reported in accordance with the JORC Code (2012).

#### 1.1.8 Cut-off Grade

GRE46UG Mineral resources used a 1.5g/t Au cut-off grade which reflects the estimated mining costs and a gold price of AUD2000/oz Au.

#### 1.1.9 Audits or reviews

The Mineral Resource has been reviewed externally by Optiro in November 2020 and by AMC in May 2021. No Fatal flaws were identified. The Mineral Resource estimate was considered appropriate from a global reporting perspective.

As part of the external review process, Optiro produced a check estimate of the GRE46 Mineral Resource. Comparison of the Optiro model and the Evolution model shows a difference of 16% in tonnage and 3% in grade, with the Optiro check estimate being lower in both cases. Investigations into the differences in the reported Mineral resource indicate that the estimate is sensitive to the top caps applied on the input sample data within the estimation process. Optiro does not consider the top-cut values applied by CGO to be an error but recommends a review of applied top cuts be undertaken for future Mineral Resource estimates.

AMC Consultants Pty Ltd (AMC) completed a site visit and review of the GRE46 Mineral Resource estimate in May 2021. A detailed examination of the inputs and outputs from the MROR were assessed against the overarching principles recommended by the JORC Code, 2012 Edition1 (JORC Code). The review includes assessment of compliance and whether or not industry best practice is applied. AMC does not consider there are any high-risk factors for the Mineral Resources at CGO. AMC recommend however that further refinement of the domaining and estimation practices occur once additional infill drilling is completed to improve estimation at a local scale.

The Feasibility study has been reviewed by an Internal Peer Review (IPR) team which included Evolution's Transformation and Effectiveness (T&E) team. T&E are an oversight group within Evolution independent of the study team. The T&E team have identified the inherent risk present in accurately estimating grades on a local scale due to the inherent grade variability and complex geology present. The T&E team have recommended that a phase of infill 20m by 20m spaced drilling and associated grade control drilling be completed to accurately define and demarcate the limits to economic mineralisation to support mine planning and production activities.



## 1.2 GRE46 Underground Ore Reserve

#### 1.2.1 Material Assumptions for conversion to Ore Reserves

The Ore Reserve estimate is based on the current Mineral Resource estimate as described in Section 3. The Mineral Resource estimate is reported inclusive of the Ore Reserve estimate. The Ore Reserve has been declared at the point where ore is delivered to the ROM pad at the processing facility.

#### 1.2.2 Cut-off parameters

At the commencement of the study, a Hill of Value (HoV) analysis was conducted using the outputs from the Pre-Feasibility Study (PFS) as the inputs into the HoV analysis. The analysis considered both capital and operating costs for the project. This analysis estimated the maximum Net Present Value (NPV) and cash flow generated by the project by analysing various tonnage and grade scenarios inclusive of all Mineral Resources. A range of cut off grades and production rates were assessed from 1.5-2.5g/t Au and 1.6-2.1Mtpa based on scenarios evaluated during the study.

The HoV analysis was undertaken using a gold price of A\$2,000/oz and concluded a stope generation cut-off grade for the project between 1.8-2.1g/t delivered the highest NPV and free cashflow. In the results of this analysis, there was negligible difference in the range of results between 1.8-2.1g/t. Given the project goal of maintaining optionality, minimising capital start-up, minimising start-up risk and stepped acceleration to a higher production rate, the 1.8g/t stope set was chosen.

The Ore Reserve stopes were individually assessed to ensure they were economic based upon their location and the specific costs associated with the extraction of each respective stope. The analysis used a base case gold price of A\$1,450/oz and varied the gold price in increments of 10% above and below the base case. The analysis concluded that 98% of the stope set was economic at a gold price of A\$1,450/oz. Stopes were removed where a gold price of greater than A\$2,000/oz was required.

#### 1.2.3 Mining factors or assumptions

Mining method assessments indicated that sub-level open stoping (SLOS) with pastefill was the most appropriate mining method for the GRE46 underground deposit. This allowed maximum extraction of the economic portion of the deposit, while ensuring no surface subsidence due to the deposit being under Lake Cowal. Access to the orebody will be via a decline positioned on the hangingwall. The stope extraction sequence based on the study is predominantly longitudinal with some transverse stope extraction. Grade control infill drilling will be required prior to production related activity. Infill drilling commenced in June 2021 targeting a spacing of 20x20m and with second pass drilling to 10x10m as required. A key assumption as part of the study was all stope voids are to be backfilled with pastefill.

Mineable stope shapes were created using the Shape Optimiser (SO) software from Deswik, according to stope design parameters established in the study and are included in Table 1.

Optimal stope dimensions were determined through a geotechnical assessment. A sublevel development interval of 30m was selected and typical stope dimensions are shown in Table 1. The orebodies vary in consistency along strike and across strike with both single and double sublevel intervals used to optimize production rate.

Zone	Strike Length (m)	Stope Width (m)	Stope Height (m)
Regal North	15	25	30-60
Regal South and Dalwhinnie	15	40	30-60
Endeavour and Galway	15	25	30-60

#### Table 1 - Stope Parameters

Stope dilution was estimated by undertaking an Equivalent Linear Overbreak Sloughing (ELOS) analysis as part of the study. This included hangingwall (HW) and footwall (FW) dilution estimates which were escalated at depth and an overriding fault dilution when mining near the Glenfiddich fault. The ELOS increases at depth in line with Table 2 and the associated material grade was estimated from the Mineral Resource model.

Depth	ELOS FW (m)	ELOS HW (m)
0-400	0.2	0.5
400-600	0.3	0.6
600-800	0.5	0.8
800+	1.0	1.3

#### Table 2 - Total ELOS

Where a stope is adjacent to the Glenfiddich Fault, a defined ELOS is used as shown in Table 3.

Fault Related ELOS HW				
<b>Distance from Fault</b>	ELOS (m)			
0-10	2.1			
10-30	1.35			
30-40	0			

Table 3 - Fault Related ELOS

Additional stope dilution has been applied in the schedule to account for pastefill. For a single exposure, 2.5% dilution has been added, and for multiple exposures, 5% dilution has been added with the associated material assumed to contain no metal. Ore and waste development have a dilution factor of 10% applied with the associated material assumed to contain no metal. Mining recoveries were set at 100% for development activities, and 95% for stoping activities.

Each stope included in the Ore Reserve was required to have a minimum of 75% Indicated material. The Inferred material included in the Ore Reserve is approximately 2.9% of estimated contained metal. Inferred material included in the Ore Reserve is the result of extraction method to access the Ore Reserve and stope dilution.



This material is deemed to be an integral part of the Ore Reserve mine plan and not separable and as such is included in the financial analysis.

All material mined underground will be trucked to surface to the Run of Mine (ROM) pad or waste dump.

The GRE46 Underground Ore Reserve is dependent on the continuation of the open pit and low-grade stockpile processing plan. At the time of reporting, the Ore Reserve from the Cowal open pit operations and stockpiles will continue to be processed beyond the GRE46 Underground Ore Reserve. All modifying factors will be reconciled once production commences.

#### 1.2.4 Metallurgical factors or assumptions

Metallurgical test work is ongoing as the mineral resource is extended. Geometallurgical testwork completed as part of the study indicates an average weighted life of mine Au recovery of 87%.

Processing of ores will be through the current plant which has been in operation since 2006. Laboratory testwork of underground ores indicates they will respond similarly to the current hard rock sulphide ores being processed from the existing open pit adjacent to the GRE46 underground.

The current processing facility utilises commonly used crushing and grinding circuitry followed by a combination of gravity, flotation and cyanide leaching methods for the recovery and extraction of gold. These processes are widely used throughout the mining industry in similar applications. No new or novel processes are proposed.

Metallurgical test-work has been performed on 44 individual ore samples from the underground mining region. These samples have been selected to provide both spatial coverage and ensure all lithology types are represented. Five lithology types have been identified within the underground mine region: lava, conglomerate, fine sediments, Dalwhinnie and diorite. Each lithology type has been assigned its own recovery factor based on the metallurgical testwork results. The ore variability testwork program involved testing each individual sample under standardised conditions for flotation response, gravity recoverable gold, cyanide leaching of flotation tails and flotation concentrates, comminution parameter assessments, abrasiveness, geochemistry, preg-robbing index and the sensitivity of Au recovery to flotation feed P80. In addition to this limited cyanide detox testwork has been undertaken to ensure the current cyanide destruction process utilised on site is suitable for future ores.

All data generated by the laboratory testwork program has been assessed for the presence of deleterious elements. No deleterious elements have been found that will impact the expected performance of the ores and are considered to be in-line with the current ores being processed.

No pilot scale tests have been conducted and the 20kt bulk sample processed in 2020 was found not to be representative. The underground ores will be blended at an average 15% of the total process feed. As such bulk testing is not considered necessary.

Recovery is applied in the Ore Reserve estimate by lithological unit in the mine plan based on the mill feed schedule.

The following process plant modifications have been included in the study:

- a second primary jaw crusher dedicated to the treatment of underground ore. This crusher will remove tramp metal from the underground ore feed
- an additional FTL elution circuit and carbon regeneration kiln
- a deslimed tailings circuit located at the process plant's tailings area to supply tailings to the surface pastefill plant for operational backfill activities. The pastefill plant design parameters are based on a specification of 150m<sup>3</sup>/h.

#### 1.2.5 Infrastructure

As Cowal is an established mine site, all major infrastructure is already in place (i.e. processing plant, power, water, magazine etc.); modifications and/or expansions to these facilities are accounted for in the study. Provision for construction and operation of a pastefill plant, surface workshops and auxiliary mining offices have also been included. All infrastructure required underground such as service bays, explosives magazine and services such as primary ventilation and dewatering to support mining has been considered in the study. A labour and accommodation assessment was conducted as part of the study. A key outcome of the accommodation assessment was the requirement to construct an accommodation village in West Wyalong. A road will need to be upgraded on site to facilitate the delivery of bulk commodities to the pastefill plant precinct.

#### 1.2.6 Costs

Costs have been estimated based on Early Contractor Involvement (ECI) for all underground mining activities and first principles build-up of capital infrastructure. Cost estimates for overhead expenses including G&A and processing were derived from current operational forecasts for CGO and where applicable modified to account for changes relating to the study. Contract mining has been assumed for life of mine under a fixed and variable commercial arrangement. Estimated rates were sourced from two mining contractors as part of the ECI process.

A government royalty of 4% is applicable to metalliferous mines in NSW, payable on the ex-mine value (value less allowable deductions) of the processed gold. After allowable deductions a rate of 3% was applied.

The financial model is in Australian dollars.

#### 1.2.7 Revenue

All financial assumptions are in Australian dollars. Transportation and treatment charges have been derived from the existing site operating model. These costs are not anticipated to change with respect to the study and Ore Reserve estimate.

The gold price of A\$2,200/oz has been used to generate revenue for the Ore Reserve estimate. Evolution uses an internal gold price assumption of A\$2,200 for Life of Mine (LOM) planning which is set with reference to both historical prices and consensus broker forecasts.

This gold price is assumed to be constant for the mine plan associated with the Ore Reserve estimate.



## 1.2.8 Economic

GRE46 Underground is an economically robust project, generating a strong NPV. A sensitivity analysis was carried out over a range that aligns with the uncertainty with the level of study and the project was found to be sensitive to gold price, grade, operating costs, project capital costs, sustaining capital and recovery in descending order of relevance. For all sensitivity scenarios modelled the project remained viable.

A discount rate of 7.2% was applied in the financial models informing the project and Ore Reserve estimate.

The strategic value of the underground project to CGO has also been considered with the view that the full potential of the underground is yet to be fully realised. Going forward the Mineral Resource and Ore Reserve will be updated with additional data and the project metrics will be further reviewed, refined, and reported.

The Ore Reserve has demonstrated that extraction can be reasonably justified.

#### 1.2.9 Classification

The classification of the GRE46 Underground Ore Reserve reflects the view of the Competent Person and is in accordance with the JORC 2012 Code.

Probable Ore Reserves have been derived from economically viable, Indicated Mineral Resources only, no Proved Ore Reserves have been declared.

#### 1.2.10 Audits or reviews

The Feasibility Study has been reviewed internally by Evolution Transformation and Effectiveness (T&E) team. T&E are an oversight group within Evolution independent of the study team. Additionally, an Independent Project Review (IPR) on the Mineral Resource and Ore Reserve was undertaken by AMC Consultants Pty Ltd (AMC). These reviews included numerous observations and recommendations covering both technical and reporting elements. In general, these reviews have highlighted the geological risk in the deposit, and a program of infill drilling is required prior to commencing production activities. Recommendations from AMC associated with the reporting of Ore Reserves were subsequently considered and or included in this Ore Reserve estimate. In particular further refinement of modifying factors, cost and revenue factors, the mine plan and improved documentation were recommended.

#### 1.2.11 Discussion of relative accuracy / confidence

The accuracy of the Ore Reserve estimate is mostly determined by the order of accuracy associated with the Mineral Resource model, the ground conditions expected and the metallurgical inputs.

Risk analysis was undertaken on the Mineral Resource in the form of a conditional simulation study to understand the potential grade variability from the estimated stope grades used for the Ore Reserve estimate. This analysis was then used to provide direction in prioritising the mine plan to minimise geological risk and grade uncertainty.

Modifying factors such as dilution, recovery, costs, and other mine planning parameters are based on study inputs that may vary upon the commencement of underground development and production. The modifying factors were estimated using standard industry practice and benchmarked against similar operations. Any deviation from these estimates may have an impact on the Ore Reserve estimate.

The Mineral Resource is deemed a global estimate. There is a possibility that the stoping layout may change with increased orebody knowledge which may in turn affect the modifying factors and cost estimate and have an impact on the Ore Reserve estimate.

In the opinion of the Competent Person, the modifying factors and long-term cost assumptions used in the Ore Reserve estimate are reasonable.

It is the opinion of the Competent Person that the Ore Reserve estimate is supported by appropriate design, scheduling, and cost estimate. As such there is a reasonable expectation of achieving the reported Ore Reserves commensurate with the Probable classification.

No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate. The Ore Reserve estimate is best described as global.



## **Competent Persons Statement**

The information in this statement that relates to the Mineral Resources, Exploration Targets and Ore Reserves listed in the table below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears in the same row, who is employed on a full-time basis by Evolution Mining Limited and is a Member or Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and consents to the inclusion in this report of the matters based on their information in the form and context in which it appears. Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012.

Evolution employees acting as a Competent Person may hold equity in Evolution Mining Limited and may be entitled to participate in Evolution's executive equity long-term incentive plan, details of which are included in Evolution's annual Remuneration Report. Annual replacement of depleted Ore Reserves is one of the performance measures of Evolution's long-term incentive plans.

Activity	Competent Person	Membership	Status
Cowal GRE46 Underground Mineral Resource	James Biggam	AusIMM	Member
Cowal GRE46 Underground Ore Reserve	Joshua Northfield	AusIMM	Member
Red Lake Exploration Target	Dean Fredericksen	AusIMM	Member
Mt Carlton: Crush Creek and Telstra Hill Exploration Targets	Ben Coutts	AusIMM	Member

#### Forward looking statements

This report prepared by Evolution Mining Limited (or "the Company") include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control. Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

This announcement has been authorised for release to the ASX by the Executive Chairman.

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#### **About Evolution Mining**

Evolution Mining is a leading, globally relevant gold miner. Evolution operates five wholly-owned mines – Cowal in New South Wales, Mt Rawdon and Mt Carlton in Queensland, Mungari in Western Australia, and Red Lake in Ontario, Canada. In addition, Evolution holds an economic interest in the Ernest Henry copper-gold mine in Queensland

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The following information is provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 - Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results), Section 3 (Estimation and Reporting of Mineral Resources) and Section 4 (Estimation and Reporting of Ore Reserves).

#### **Cowal GRE46 Underground Mineral Resource and Ore Reserve**

JORC Code 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul> <li>Most of the drilling used to generate the Mineral Resource at GRE46 is diamond core for the primary portion of the deposit.</li> <li>Drill holes were drilled on a nominal even spaced grid pattern to avoid clustering and collar and down hole surveys were utilised to accurately record final locations. Industry standard sampling, assaying and QA/QC practices were applied to all forms of drilling.</li> <li>Prior to 2018, Drill core was halved with a diamond saw in 1m intervals, irrespective of geological contacts. Since 2018, sampling to lithological contacts has been implemented and occasional full core intervals have been submitted for assay. Throughout 2019, portions of the GREUG drill campaign have been whole core sampled to speed up assay turnaround time.</li> <li>Recent sample preparation was conducted by SGS West Wyalong and consisted of: Drying in the oven at 105°C; crushing in a jaw crusher; fine crushing in a Boyd crusher to 2-3mm; rotary splitting a 3kg assay sub-sample if the sample is too large for the LM5 mill; pulverizing in the LM5 mill to nominal; 90% passing 75µm; and a 30g fire assay charge was taken with an atomic absorption (AA) finish. The detection limit was 0.01 g/t Au.</li> </ul>
Drilling techniques	The bulk of the resource definition holes are drilled with an HQ3 collar through the oxide and completed through the primary zone to target using NQ size coring tools. Due to the depth of holes into the GRE46 deposit post 2018 (800m av.), directional diamond holes were commonly utilised. Underground diamond drilling has been conducted utilising 3 LM90 diamond rigs. Holes are drilled to target mineralisation utilising NQ2 core. Holes vary in depth from 350 to 650m depth. There are 348 reverse circulation (RC) and aircore (AC) samples that have been used in the GRE46 UG Resource, predominantly in the upper RLs of the estimate. Reverse Circulation and Air Core drilling was also used to delineate oxide areas of the resource utilizing 4.5-5.5 inch bits. RC drilling was completed to base of oxide with some holes hosting diamond tails. Air Core drilling was conducted to refusal. Core has been oriented using a variety of techniques in line with standard industry practice of the time.
Drill sample recovery	Provisions are made in the drilling contract to ensure that hole deviation is minimised and core/chip sample recovery is maximised. This is monitored by a geologist on a hole by hole basis. Core recovery is recorded in the database. There are no significant core loss or sample recovery issues. Core is reoriented and marked up at 1m intervals. Measurements of recovered core are made and reconciled to the driller's depth blocks, and if necessary, to the driller's rod counts. There is no apparent relationship between core-loss and grade.
Logging	The logged structures include faults, shears, breccias, major veins, lithological contacts, and intrusive contacts. Structures are also recorded as point data to accommodate orientation measurements. Structural measurements are obtained using alpha and beta measurements then converted using the downhole survey measurements to obtain the dip and dip direction. Freiberg compasses and Kenometer Core Orientation tools are used for structural measurements. Geologists log vein data including vein frequency, vein percentage of interval, vein type, composition, sulphide percentage per metre, visible gold, sulphide type, and comments relative to each metre logged. Routine Geotechnical logging is done by field technicians and geologists. Logging is on a per metre basis and includes percentage core recovery, percentage RQD, fracture count, and an estimate of hardness. The geotechnical data is entered into the database. Specialist Geotechnical Engineers have logged core from GRE46UG deposit for geotechnical studies. All drill core, once logged, is digitally photographed on a core tray-by-tray basis. The digital image captures all metre marks, the orientation line (BOH) and geologist's lithology, alteration, mineralogy, and other pertinent demarcations. The geologists highlight geologically significant features such that they can be clearly referenced in the digital images.
Sub-sampling techniques and sample preparation	Diamond Core is cut with a diamond saw or chisel. Core is cut to preserve the bottom of hole orientation mark and the top half of core is always sent for analysis to ensure no bias is introduced. Throughout 2019, portions of the GRE46 drilling campaign have been whole core sampled to speed up assay turnaround time. These intervals have been predominantly from UG collared holes were proximal half core has been retained.



#### JORC CODE 2012 ASSESSMENT AND REPORTING CRITERIA DDENIDIY 4

Criteria	Commentary
	RC/AC Samples have been split using either a riffle splitter from a bulk sample collected at the rig or a rotary cone splitter attached to the cyclone. For most holes, chip samples were collected dry, but several areas have been affected by groundwater. In 2010 Analytical Solutions Ltd conducted an audit of Sample Preparation, Assay and Quality Control Procedures for Cowal Gold Project was conducted. This study, combined with respective operating company policy and standards formed the framework for the sampling, assaying and QAQC protocols used at Cowal to ensure appropriate and representative sampling.
	Field duplicates are taken at regular intervals on reverse circulation and air core holes. Prior to 1993 (hole 266), the North quality control checks used standards, blanks, pulp repeats and interlab checks and were supervised and documented by R.Jones, a North geochemist (Rowley M., 2001). This data is considered reasonably good. For a period of time, procedures lapsed and precision deteriorated.
	A report by van der Hayden (1996) of North compared original assay results for 571 AC/RC percussion spear samples taken in 1995/96 with repeat sample assay results from the original uncrushed sample. The North scatter plots of this data for grade ranges 0 to 1g/t, 0 to 10g/t and 0 to 50g/t show a relatively poor precision. The mean of the original and repeat data set is wever, very close. No sample bias is evident.
	In 2005, Francis Pitard (Pitard, 2005) was commissioned to review sampling protocol at the Cowal Gold Mine and complete a bulk sampling exercise. The review found excessive variance was present between bulk sample test work results and conventional 50-gram fire assay results. Whilst the report focused on the E42 pit, the conclusions are applicable to the greater Cowal Gold mine. Pitard concluded that most Au results in the Database are underestimated with the relative difference between fire assay and bulk samples showing a clear underestimation of at least 7.6%. Furthermore, Pitard concluded the likelihood of obtaining a representative sample from drill core was remote given the particle size of the Au and the clustering of veins, resulting in systematic underestimation of Au content in most blocks and overestimation in a few. Pitard recommends large samples of at least 20kg at the GC stage, cross stream sampling of the gravity circuit and cross stream sampling of the Final Tail.
	Results per interval are reviewed for half core samples and if unexpected or anomalous assays are returned an additional quarter core may be submitted for assay.
Quality of assay data and laboratory tests	SGS West Wyalong acts as the Primary Laboratory and ALS Orange conducts independent Umpire checks and primary assaying during periods of high sample volume. Both labs operate to international standards and procedures and take part in the Geostatistical Round Robin inter-laboratory test survey. The Cowal QA/QC program comprises blanks, Certified Reference Material (CRM), inter-laboratory duplicate checks, and grind checks. Both laboratories analyse for Au utilizing Fire Assay with an AAS detection.
	<ul> <li>Typical protocols for QAQC checks are summarised below, however depending on sample submission batch sizes overall rates may vary slightly:</li> <li>1:30 fine crush residue has an assay duplicate.</li> <li>1:20 pulp residue has an assay duplicate.</li> <li>1:20 wet screen grind checks</li> <li>1:38 site blanks are inserted into the dispatch ensuring at least 1 blank per fire</li> <li>1:20 CRMs submitted in the dispatch</li> <li>The frequency of repeat assays is set at 1 in 30 samples.</li> </ul>

All sample numbers, including standards and duplicates, are pre-assigned by a QA/QC Administrator and given to the sampler on a sample sheet. The QA/QC Administrator monitors the assay results for non-compliance and requests action when necessary. Batches with CRM's that are outside the ±2SD acceptance criteria are reviewed and reassayed if definitive bias is determined or if re-assay will make a material difference.

Material used for blanks is uncertified, sourced locally, comprising fine river gravel which has been determined to be below detection limit. Results are reviewed by the QA/QC Administrator upon receipt for non-compliances. Any assay value greater than 0.1g/t Au will result in a notice to the laboratory. Blank assays above 0.2g/t Au result in re-assay of the entire batch. The duplicate assays (Au2) are taken by the laboratory during the subsampling at the crushing and pulverisation stages. The results were analysed using scatter plots and relative percentage difference (RPD) plots.

Verification of sampling and assaying

GRE46 has not been reconciled to production data.

Cowal uses DataShed software system to maintain the database. Digital assay results are loaded directly into the database. The software performs verification checks including checking for missing sample numbers, matching sample numbers, changes in sampling codes, inconsistent "from-to" entries, and missing fields. Results are not entered into the database until the QA/QC Administrator approves of the results. A QA/QC report is completed for each drill hole and filed with the log, assay sheet, and other appropriate data.

Recent drill hole collars are surveyed using high definition DGPS. All drill holes were Location of surveyed using a downhole survey camera. For all hole types, the first survey reading was data points approximately 18 m from surface, then at 30 m intervals and, finally, at the end of each hole.

> On completion of each angled drill hole, a down hole gyroscopic (Gyro) survey is conducted. The Gyro tool was referenced to the accurate surface surveyed position of



Criteria	Commentary
	<ul> <li>each hole collar and readings were taken at intervals to the base of each hole ("in run") and at intervals back to surface ("out run"). The results of these two surveys were then compared and a final survey produced if there was "closure" between surveys. The Gyro results were entered into the drill hole database without conversion or smoothing.</li> <li>An aerial survey was flown during 2003 by AAM Hatch. This digital data has been combined with surveyed drill hole collar positions and other features (tracks, lake shoreline) to create a digital terrain model (DTM). The survey was last updated in late 2014.</li> <li>In 2004, Cowal implemented a new mine grid system with the assistance of AAM Hatch. The current mine grid system covers all areas within the ML and ELs at Cowal with six</li> </ul>
	digits.
Data spacing and distribution	In well informed areas that comprise the Indicated resource, drill spacing largely varies between 20m*20m to 40m*40m. For Inferred areas, drill spacing varies from 40m*40m to 150m*150m. This drill spacing is generally sufficient to generate reliable Mineral Resource estimates utilising definitions and classifications consistent with the JORC Code 2012. All drilling is sampled between 0.3m and 1.3m intervals irrespective of drill type. Samples are then composited to 1 m for estimation.
Orientation of data in relation to geological structure	Predominant drill direction at GRE46 is W to E or E to W. This was considered the best orientation to intersect the main controls on mineralisation in a normal manner up to late 2018 (Figure 4).A small number of south-north holes had been strategically drilled to confirm the existence of oblique mineralised structures to assist with geological interpretation and modelling.
	GRE46 Pre 2018Drilling

GRE46 Pre 2018Drilling

Figure 4 GRE46UG dataset collar azimuths to Dec2017

Vein analysis of GRE46 indicates east west orientated drilling to be a poor angle to intercept the main vein sets. Drilling from 2018 onwards has been optimised to provide more appropriate angles of intercept for the bulk of mineralisation in GRE46(Figure 5). 300-330° has been the dominant azimuth direction from mid-2019 onwards. Dips are generally -50 to -20 through target areas.



Figure 5 GRE46 UG dataset collared azimuths Jan 2018 to Oct 2020

59% of the December 2020 GRE46UG drill dataset contains holes on either 090 or 270 azimuths (Figure 6). 27% of holes are considered to be drilled at the optimal angle of intercept for mineralisation and modelling.



Figure 6 GRE46 UG total dataset collared azimuths October 2020



Criteria	Commentary
Sample security	Drill contractors are issued with drill instructions by an Evolution geologist. The sheet provides drill hole names, details, sample requirements, and depths for each drill hole. Drill hole sample bags are pre-numbered. The drill holes are sampled by Evolution personnel who prepare sample submission sheets. The submission sheet is then emailed to the laboratory with a unique submission number assigned. This then allows individual drill holes to be tracked. An SGS West Wyalong (SGS) representative collects the samples from site twice daily. Samples dispatched to other laboratories utilise a local freight company. Upon arrival, the laboratory sorts each crate and compares the received samples with the supplied submission sheet. The laboratory assigns a unique batch number and dispatches a reconciliation sheet for each submission via email. The reconciliation sheet is checked, and any issues addressed. The new batch name and dispatch information is entered into the tracking sheet. The laboratory utilising the LIMS system. Upon completion, the laboratory emails Standard Industry Format (SIF) files with the results for each batch to Evolution personnel. The assay batch files are checked against the tracking spreadsheet and processed. The drill plan is marked off showing completed drill holes. Any sample or QA/QC issues with the results are tracked and resolved with the laboratory.
Audits or reviews	QA/QC Audits of the Primary SGS West Wyalong Laboratory are carried out on an approximately quarterly basis. Audits of ALS Orange Laboratory are conducted on a sixmonth period. Any issues are noted and agreed remedial actions assigned and dated for completion.

## Section 2 Reporting of Exploration Results

Criteria	Commen	itary							
Mineral tenement and land tenure status	CGO is approxim the Bland irrigation of the mit Land and Evolution acquired on local I Land with stock res part of th been relo Agricultu previous Mineral T The Cow ML cover The Cow Wales M	locate hately 3 d Cree farmin ning le <b>d tenu</b> has a to act andow hin Min serve ( e ML go cated ral acti owner enure al Min ring 10 al ML ining A	ed on the 38km north ek Valley, v og in the Je ase. <b>re</b> total prope as a physic ners and th ing Lease 1 TSR), a ga grant. The T to the south vities on Ev s and neigh e tenement 73 km2, as 1535 encon act 1992.	western side of La of West Wyalong and which is a region that malong/Wyldes Plain erty holding of approx cal buffer to reduce the general public. 535 (ML) is a mixture me reserve, and thre SR has been relocate of the ML to maintat volution landholdings abours under licence incorporates seven of summarised in Table	ake Cowa d 350km v at supports s Irrigation imately 1 ae effects e of freeho e unforme are currer agreemen contiguous e 1-1. All le	I in cen vest of Sy mainly Districts I,300ha a of mining Id owned ed Crown the ML a ccess to I ntly under ts. eases are a as allow	tral New dney. It is dry land a located t t Cowal, w and proce by Evolut roads we nd the gai ake Cow taken by a on licence 100% he ved under	South situate agricult o the n which h essing ion. A t ere adj me res al. a numb es (EL) Id by E the Ne	Wales, ed within cure with portheast nas been activities ravelling usted as erve has per of the and two volution. ew South
Tenement Act Status Holder/				Holder/Applicant	Application	Grant	Expiry	Units	На
	EL 1590	1973	Renewal Pending	Evolution Mining (Cowal) Pty Limited	27-May-80	13-Mar-81	13-Mar-19	24	
	EL 5524	1992	Current	Evolution Mining (Cowal) Pty Limited	23-Apr-98	16-Sep-98	16-Sep-24	42	
	EL 6593	1992	Current	Evolution Mining (Cowal) Pty Limited	11-Apr-06	06-Jul-06	06-Jul-25	4	
	EL 7750	1992	Current	Evolution Mining (Cowal) Pty Limited	01-Dec-09	27-May-11	27-May-22	220	
	EL 8524	1992	Current	Evolution Mining (Cowal) Pty Limited	30-May-16	02-Mar-17	02-Mar-23	100	
	EL 8781	1992	Current	Evolution Mining (Cowal) Pty Limited	06-Mar-18	25-Jul-18	25-Jul-21	82	
	EL 8970	1992	Current	Evolution Mining (Cowal) Pty Limited	25-Nov-19	09-Apr-20	09-Apr-26	8	
	ML 1535	1992	Current	Evolution Mining (Cowal) Pty Limited	22-Aug-95	13-Jun-03	12-Jun-24		2636
	ML 1791	1992	Current	Evolution Mining (Cowal) Pty Limited	16-Aug-18	20-Jun-19	20-Jun-40		250.4
	Table 4 - Cowal Gold Operations Land Tenure								



Criteria

## APPENDIX 1 – JORC CODE 2012 ASSESSMENT AND REPORTING CRITERIA

Commentary

	The ML is granted by the Minister for Mineral Resources of the State of New South Wales (the Minister.) Obligations to retain the ML are detailed in the Conditions of Authority for the Mining Lease and outline all requirements for operating within the lease: Royalties A New South Wales government royalty is applicable to Cowal, payable on the value of the processed gold. The royalty is calculated as follows: Royalty = 4% of (Total Revenue – Processing Costs – (33% of site Administration costs) – Depreciation) For financial evaluations, the 4% gross royalty has been equated to approximately 3% of the gold produced. <b>Cultural Heritage</b> Aboriginal heritage sites which occur within ML 1535 and have been registered with Heritage New South Wales. These sites range from open scatters to base camps to a sacred tree. Summaries of the survey results and the registered Aboriginal sites identified in each management zone are outlined in the IACHMP. All relevant permits and consents have been obtained under Section 87 and Section 90, respectively, pursuant to the National Parks and Wildlife (NPW) Act for the management of Aboriginal Heritage New South Wales. These sites wall community, in accordance with heperints and consents. All collection works have been monitored and no non-compliances have been reported. Collection works have been monitored and no non-compliances have been reported. Collection works have been undertaken at CGO by archaeologists with observation/participation of members of the Aboriginal community, in accordance with the permits and consents. All collectod Aboriginal Lectures, Permits, and the Mining Operation (CGO). All activities at Consent and various Environmental Licencee, Permits, and the Mining Place within ML 1535. No items considered to be of important European heritage which cannot be disturbed have been found near the Project.
Exploration done by other parties	Before 1980 limited exploration and shallow gold mining activities were mainly constrained to the west of Lake Cowal in areas of better outcrop. No investigation of the lake was made due to virtually no outcrop and up to 80m of recent lacustrine sediments and the cyclical flooding. Following upon the success in the Goonumbla area, (now the Northparkes group of mines), the exploration company, Geopeko, identified the Cowal area as having some potential for porphyry copper development and subsequently conducted reconnaissance RAB drilling. By 1988 the company had broadly delineated the geology of the Cowal Igneous Complex (CIC) and a number of low grade porphyry copper deposits in the south of the CIC and had outlined an anomalous 0.1 ppm Au "gold corridor", (approximately 2km by 7.5km), along the western margin of the lake which now includes the E41, E42, Galway/Regal and E46 deposits. Exploration continued into the early 1990s and a feasibility study of the E42 deposit, was completed in 1995. Provisional mining consent was obtained in 1999. In 2000, Rio Tinto acquired North Ltd who subsequently sold to Homestake Mining in May 2001, by December 2001 Homestake had merged into Barrick Gold Corporation. Native title agreements were completed in 2003, culminating in the granting of ML1535 to Barrick Gold of Australia Limited. During this time extensive mineral resource/ore reserve definition drilling was undertaken. Construction began in 2004, with the first gold produced in 2006. The mine and exploration ground were purchased by Evolution Mining Ltd in 2015 and further drilling has continued to expand upon the CGO resource.
Geology	<b>Regional Geology</b> The Macquarie Arc comprises one minor and three major belts of mafic to intermediate volcanic and volcaniclastic rocks, limestones and intrusions that, with two hiatuses in

The Macquarie Arc comprises one minor and three major belts of mafic to intermediate volcanic and volcaniclastic rocks, limestones and intrusions that, with two hiatuses in magmatism, span the Ordovician and extend into the Early Silurian. The three major belts in central New South Wales are separated by Silurian-Devonian rift basins and are therefore, inferred to have been rifted apart during crustal extension. Paleogeographic setting and magmatic evolution of the Macquarie Arc provided perfect conditions for mainly porphyry-

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Criteria

## APPENDIX 1 – JORC CODE 2012 ASSESSMENT AND REPORTING CRITERIA

#### Commentary

related, rich Au-Cu deposits, in the Ordovician, and especially in the Early Silurian after amalgamation of the arc with its flanking terranes (Glen et al, 2012).

Remnants of the arc complex extend from Junee to Nyngan and include the lithologies comprising the North Parkes Volcanic Complex (NPVC) and the informally named Cowal Igneous Complex (CIC). West of the CIC, sediments of the Wagga and Girilambone Groups were deposited contemporaneously in a volcanic arc marginal basin known as the Wagga Basin. Seafloor spreading in the Wagga Basin was accompanied by the extrusion of the Narragudgil Volcanics. The Late Ordovician to Early Silurian Benambran Orogeny marks the end of Ordovician arc volcanism and sedimentation. Deformation associated with the Benambran Orogeny probably initiated the Gilmore, Parkes, and Coolac-Narromine Fault Zones. The Wagga Group was thrust over the volcanic arc rocks (along the Gilmore Fault Zone) and volcaniclastic and turbidite sequences were folded. Crustal thickening and heating associated with the Benambran Orogeny produced large volumes of principally felsic S-type magma that was emplaced throughout the Lachlan Fold Belt.

Intermittent igneous and volcanic activity continued through to the Late Silurian. At the end of the Silurian, extension and marine incursion (likely resulting from retreat of the subduction zone) initiated the deposition of the sedimentary and volcanic rocks of the Ootha and Derriwong Groups. Rifting within the Ordovician volcanic arc separated the CIC and NPVC and produced the Jemalong Trough. Crustal melting associated with extension produced the Byong Volcanics and several S- and I- type granite plutons. Extensional tectonics was sustained into the Early Devonian and is marked by continued deposition in the Jemalong Trough. Between 410 Ma and 400 Ma (Early Emsian), the tectonic regime changed from extension to compression. This resulted in reverse movement along reactivated structures within the Gilmore, Parkes, and Coolac-Narromine fault zones and the formation of the Booberoi Fault. Inversion of the Jemalong Trough produced the Currawong Syncline and several other folds. Magmas developed during the Emsian are dominantly I-type magmas in contrast to dominantly S-type magmas of the Benambran Orogeny. The last orogeny to affect the Lachlan Fold Belt was the Late Devonian to Early Carboniferous Kanimblan Orogeny, which took place during the accretion of the New England Fold Belt. The Kanimblan Orogeny produced the Tullamore Syncline, Forbes Anticline, reactivated the major fault zones, and produced new faults such as the Bumberry Fault. Limbs of synclines formed in rocks of the Jemalong Trough were steepened and overturned during reverse faulting and parts of the Lake Cowal Volcanic Complex were thrust eastwards, along the Marsden Thrust, over the Jemalong Trough. The Kanimblan Orogeny also sponsored major gold mineralisation in the Silurian granites around West Wyalong and possibly in the Parkes Fault Zone

The Cowal Gold Operation (CGO) deposits (E41, E42, E46, GRE46) occur within the 40 km long by15 km wide Ordovician CIC, east of the Gilmore Fault Zone within the eastern portion of the Lachlan Fold Belt. There is sparse outcrop across the CIC resulting in regional geology largely interpreted from regional aeromagnetic and exploration drilling programs. Siluro-Devonian shallow to deep marine sedimentary units (Derriwong Group and Ootha Formation) and associated acid volcanics overlie the Lake Cowal Volcanics and outcrop in a series of north-south trending hills named the Booberoi Hills and Manna Mountain to the northwest of the E42 deposit.

The Siluro-Devonian rocks are highly deformed, with boudinaged conglomerate and sandstone (Manna Conglomerate) seen in the surface expression of the Booberoi Fault. This Fault is interpreted as the local expression of, or splay off, the much broader Gilmore Fault Zone, a regional zone of deformation containing fault slices of Ordovician to Devonian volcanic, intrusive, and sedimentary sequences. The CIC contains potassium rich calcalkaline to shoshonitic high level intrusive complexes, thick trachyandesitic volcanics, and volcaniclastic sediment piles.

The CIC is a strong regional magnetic high anomaly with a sharp linear western margin, represented by the Gilmore Fault Zone, separating the Lake Cowal Volcanics from the relatively low magnetic response of sediments to the west. Similar Ordovician magmatic rocks are found over a large area of the eastern Lachlan Fold Belt and are commonly associated with copper-gold mineralisation (e.g., Northparkes, Cadia, Peak Hill, and Gidginbung). The CIC hosts the E42 gold deposit, as well as the E41E, E41W, E46 and GRE46 gold prospects. The main diorite intrusion at E42 has a K-Ar dating of  $456 \pm 5$  Ma (Early to Mid-Ordovician).

#### Mineralisation

Gold mineralisation at Cowal is most concentrated to a north-south orientated corridor hosted in second and third order structures marginal to and parallel to the Gilmore Suture. The gold deposits are hosted by a shallowing-upwards sequence of semi-conformable sedimentary, volcaniclastic, and volcanic rocks of trachydacitic and trachyandesitic composition that have been intruded by a diorite sill, andesite dome, and various dykes. The sequence strikes northeast–southwest and dips moderately 30° to 40° to the northwest.

The mineralisation at CGO comprises six deposits: E41E, E41W, E42, Galway/Regal, E46 and GRE46. GRE46 will be discussed exclusively in this section.

The GRE46 zone trends north-south, dips vertical to -70° west, and extends approximately 2km along strike, 200m across strike and at least 1km down dip. Individual lenses in the GRE46 mineralised zone are 1-15m wide, 25-250m long, and extend 50-200m down dip. Lenses consist of narrow high-grade quartz carbonate, pyrite and base metal veins controlled within a structural north-south corridor, broad zones of alteration around lithology contacts and occasional zones of grade enrichment occur in dilatant structures within the deposit known as Quartz Sulphide Breccias. Host lithology varies from poorly mineralised massive



Criteria	Commentary
	intrusive diorite and fine volcaniclastic sediments through to the preferential mineralised trachydacitic lava in the north, lenses of coarse to conglomeritic volcaniclastic sediments and the andesitic Dalwhinnie lava unit to the east. Lithological contacts with strong competency contrasts also provide broad areas of mineralisation. The trachydacite is brittle with common hyaloclastite and peperitic textures, commonly brecciated to peppertic and is both a good geochemical and rheological host for Au mineralisation. Vein orientation at the GRE46 deposit displays a distinct change in orientation on a nominal northing of 37,000mN. Vein in the south of the deposit are generally orientated at 50°/120°. Veins in the north of the deposit rotate clockwise and steep to a general dip direction of 70°/180°.
Drill hole Information	No exploration results have been reported in this release.
Data aggregation methods	No exploration results have been reported in this release.
Relationship between mineralisation widths and intercept lengths	No exploration results have been reported in this release.
Diagrams	No exploration results have been reported in the release; therefore, no diagrams have been produced.
Balanced reporting	No exploration results have been reported in the release.
Other substantive exploration data	No significant exploration activities have occurred during the reporting period.
Further work	Infill drilling to 20x20m and 10x10m if required commenced in June 2021. The program is focussed on the first two years of production and comprises 40 to 50km of drilling.

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Cowal uses DataShed software system to maintain the database. Digital assay results are loaded directly into the database. The software performs verification checks including checking for missing sample numbers, matching sample numbers, changes in sampling codes, inconsistent "from-to" entries, and missing fields. Results are not entered into the database until the QA/QC Administrator approves of the results. A QA/QC report is completed for each drill hole and filed with the log, assay sheet, and other appropriate data.
Site visits	The Competent Person for the Cowal Mineral Resource estimate is based at CGO. All aspects of the Mineral Resource informing data and estimations are reviewed by the Competent Person.
Geological interpretation	Confidence in the geological interpretation is high. The interpretation is based on drilling that ranges from a 25m by 25m spacing to 250m by 250m spacing. The interpretation also incorporates data gathered from mapping of exposures created by the Warraga Decline and associated bulk sample drives (Figure 7). The mapping assists understanding of controls on mineralisation to improve the confidence in the geological interpretation. All available logging, structural, geochemical, geophysical and mapping data is used in the geological interpretation. Interpretations are generated in Leapfrog utilising implicit RBF modelling functionality. Mapping of all available exposures shows close agreement to the geological model.





Figure 7 Underground Backs map, 985mRL

The use of underground mapping has provided better resolution on controls on mineralisation. Geological interpretation is dynamic and updated immediately with the addition of new data.

The geological interpretation of lithology and vein orientation, particularly in the Regal ore body, has been confirmed by 2,600m of mapping in the drill drive cross cuts and the bulk sample drive. Mapping and subsequent drilling has largely confirmed the EW nature of mineralisation in the Regal ore body.

The mapping formed a key learning point in the interpretation of variography for the Northern half of the deposit. Domains in the north were combined with mapping identifying mineralisation clearly crossing lithological contacts. Variography was modified to capture the mapped learnings and direction of greatest continuity for mineralisation.

The influences that affect the continuity of grade at CGO are structure, lithology and alteration, in order of magnitude. Areas of high grade are those with greater frequency of structures intersecting preferential host lithology, such as the core of the E42 resource. These factors have been addressed in the interpretation and domaining of the resource and the estimation process.

The Mineral Resource area which incorporates the E41, E42, E46 and the GRE46 has

Dimensions

Estimation and modelling techniques

the following dimensions, 4,425 m (north), 2,500 m (east) and 1,300 m (elevation).

GRE46 has dimensions of 1,600m (north), 800m (east) and 1,100m (elevation).

Galway Regal open cut (GR\_OC) model is modelled separately from the GRE46UG Model which is developed for underground resource optimisation.

A review of the June 2020 GRE46UG model was undertaken to re-define domains with similar features and continuity of mineralisation. The resource estimation process has underlying assumptions that each domain shares similar characteristics.

Top cutting of assay data is considered appropriate where outliers exist outside the lognormal distribution. These values have the potential to unduly bias grade estimates.

A review was completed to establish the optimum search parameters for the kriging process. Search distances and kriging weights were examined for the effect on kriging variance, slope of regression and negative kriging weights.

Individual domains were reviewed in terms of grade distribution using frequency histograms.

1m composites were formed for use in grade estimation for the GRE46UG model. The decision to use 1m composites for underground was based on the narrow nature of the veins. Datamine software was used to composite data.

Estimation involved the use of Categorical Indicator Kriging (CIK) and Ordinary Kriging (OK) techniques to estimate grade into the domained model. CIK helps to define mineralised material above or below a defined threshold. A probability threshold of 0.4 was used in the April 2020 Estimate. Once defined OK techniques are used to estimate grade into the resource. A discretisation of  $5 \times 5 \times 5$  in the plane x, y, z was used with a minimum sample number of 6 and maximum of 32 for the estimate. Search ellipsoids are based on the modelled semi-variogram ranges for each domain.

Parent block size for the GRE46UG model was selected at 10m x 10m x 10m. Ordinary kriging was completed on all domains and block grades were compared with composite of cut data to ensure kriging grades were represented in block grades. Swath plots were used to compare the modelled gold distributions in relation to composites as well as visual validation on 25m to 40m sections.



Minimum stope size is 15mL x 25mW x 60mH. MR blocks are optimised at 10mL x 10mH x 2mW+ assuming a more selective technique may be employed during production. Only Au was estimated in the Mineral Resource, Ag which is a by-product of the processing has an assumed ratio of 1:1 with Au. Ag has not been accounted for in the estimation of Mineral Resources or Ore Reserves. Validation of the Mineral Resource comprised comparing block grades against the data used to inform the estimate on a domain by domain basis, visual comparison of the informing data against the estimate and the use of swath plots showing grade trends by easting northing and elevation of the input data against the estimate. The GRE46 model has not been reconciled against production. Mineral Resource tonnage estimates are on a dry basis. Moisture The GRE46UG Mineral Resource has been reported using a 1.5g/t Au cut-off grade. Cut-off The applied cutoff grade was chosen following cutoff grade studies which took into parameters account, expected mining costs, metallurgical recovery and revenue assumptions. It is the opinion of the Competent Person that the applied cutoff criteria is appropriate and the reported Mineral Resource meets 'reasonable prospects of eventual economic extraction'. The GRE46 underground Mineral Resource estimate is defined by an underground Mining factors mining shape optimiser using a A\$2,000/oz gold price assumption. The mining method or assumptions is assumed to be sublevel open stoping with pastefill; design parameters and practical mining considerations have been applied accordingly. Geometallurgical samples were collected and analysed during the prefeasibility study. The results have been incorporated into the evaluation and reporting of the Mineral Resource. Metallurgical assumptions are based on the performance of the Cowal processing plant Metallurgical which has been in continuous operation since 2006. Majority of ore to date has been factors or sourced from the E42 open pit. assumptions Metallurgical sample test work was carried out on samples from the GRE46 underground as part of the Prefeasibility Study to support the development of the deposit. A 20kt bulk sample from GRE46 was fed in late 2019 for metallurgical performance. This was too small to demonstrate a sustained performance, but no fatal flaws were encountered. Only primary sulphide ore has been reported within the Mineral Resource estimate. Sulphide ore is processed by crushing, two stage grinding, sulphide flotation, regrind, and CIL recovery. The plant is currently approved to process up to 9.8Mtpa. Cowal has a long history of mining and processing ore. Waste dump and residue Environmental disposal facilities are currently in place in accordance with the required statutory factors or approvals. CGO currently operates the Integrated Waste Landform (IWL) tailings assumptions storage facility which encapsulates the old North and South Tailings Storage Facilities. The IWL has sufficient storage for the underground mine. Future open pit expansion options will require expansion of the tailings storage capacity. CGO has a Water Management System in place. The overall objective of the water management system is to contain potentially contaminated water generated within the project area while diverting all other water around the perimeter of the site. The water management system has the following major components: Up-catchment diversion system; Lake isolation system (comprising the temporary isolation bund, lake protection bund and perimeter waste rock emplacement); and Internal catchment drainage system (comprising the permanent catchment divide and contained water storages). Specific Gravity testing is conducted on all GRE46 drilling drilled after 2018 on a Bulk density frequency of 1 in 10m, with more samples taken through the ore zones. Classification Resource classification for GRE46UG was delineated based on a nominal 40m x 40m drill spacing, the proximity to preferred orientated drilling and geological knowledge and confidence in the estimate. The model was filtered at 0.3g/t, and areas satisfying the resource classification criteria were captured within digitised polygons in 20m plan sections. The block model was then assigned an Indicated classification (RESCAT=2) within the interpreted resource classification polygons. Estimated areas of lower confidence which fall outside of these polygons are assigned an Inferred classification (RESCAT=3). All blocks that have been estimated are flagged with either a 2 or a 3. Areas outside the variogram search distance, which have not been estimated coded 4. The Mineral Resource has been categorised using the guidelines set out in the JORC Code (2012). The Mineral Resource comprises a mixture of Indicated and Inferred Mineral Resource. No material has been categorised as a Measured mineral resource due to the extreme grade variability and potential errors associated with a local estimate at the drill density achieved. The Mineral Resource is considered an appropriate global estimate.

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Audits or reviews The Mineral Resource estimate and Mineral Resource categories appropriately reflect the views of the competent person and is reported in accordance with the JORC Code (2012).

As part of the external review process, Optiro produced a check estimate of the GRE46 Mineral Resource. Comparison of the Optiro model and the Evolution model shows a difference of 16% in tonnage and 3% in grade, with the Optiro check estimate being lower in both cases. Investigations into the differences in the reported Mineral resource indicate that the estimate is sensitive to the top caps applied on the input sample data within the estimation process. Optiro does not consider the top-cut values applied by CGO to be an error but recommends a review of applied top cuts be undertaken for future Mineral Resource estimates.

AMC Consultants Pty Ltd (AMC) completed a site visit and review of the GRE46 Mineral Resource estimate in May 2021. A detailed examination of the inputs and outputs from the MROR were assessed against the overarching principles recommended by the JORC Code, 2012 Edition1 (JORC Code). The review includes assessment of compliance and whether or not industry best practice is applied. AMC does not consider there are any high-risk factors for the Mineral Resources at CGO. AMC recommend however that further refinement of the domaining and estimation practices occur once additional infill drilling is completed to improve estimation at a local scale.

The Feasibility study has been reviewed internally by Evolution Transformation and Effectiveness (T&E) team. T&E are an oversight group within Evolution independent of the study team. The T&E team have identified the inherent risk present in accurately estimating grades on a local scale due to the inherent grade variability and complex geology present. The T&E team have recommended that a phase of infill 20m by 20m spaced drilling and associated grade control drilling be completed to accurately define and demarcate the limits to economic mineralisation to support mine planning and production activities.

Discussion of relative accuracy/ confidence

of Depending on lithology and confidence in the geological interpretation, intermittent areas within the resource category polygon may be lower than the nominal classification variables to avoid the 'spotted dog' effect. The current CIK methodology results in a qualitative estimate of mineralised domains and the domains are highly dependent on the interpretation of the variography. This results in a robust global estimate that will require significant close spaced, grade control drilling to determine the short-range variability.

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

Criteria	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	The Ore Reserve estimate is based on the current Mineral Resource estimate as described in Section 3. The Mineral Resource estimate is reported inclusive of the Ore Reserve estimate. The Ore Reserve has been declared at the point where ore is delivered to the ROM pad at the processing facility.
Site Visits	The Competent Person is an employee of Evolution Mining Limited and is based at the operation. The Competent Person has reviewed the technical and economic assumptions used in the preparation of this Ore Reserve.
Study Status	A Feasibility Study (FS) has been completed on the development of an underground mine on the GRE46 deposit at the Cowal Gold Operation (CGO).
Cut-off parameters	At the commencement of the study, a Hill of Value (HoV) analysis was conducted using the outputs from the Pre-Feasibility Study (PFS) as the inputs into the HoV analysis. The analysis considered both capital and operating costs for the project. This analysis estimated the maximum Net Present Value (NPV) and cash flow generated by the project by analysing various tonnage and grade scenarios inclusive of all Mineral Resources. A range of cut off grades and production rates were assessed from 1.5-2.5g/t Au and 1.6-2.1Mtpa based on scenarios evaluated during the study. The HoV analysis was undertaken using a gold price of A\$2,000/oz and concluded a stope generation cut-off grade for the project between 1.8-2.1g/t delivered the highest NPV and free cashflow. In the results of this analysis, there was negligible difference in the range of results between 1.8-2.1g/t. Given the project goal of maintaining optionality, minimising capital start-up, minimising start-up risk and stepped acceleration to a higher production rate, the 1.8g/t stope set was chosen. The Ore Reserve stopes were individually assessed to ensure they were economic based upon their location and the specific costs associated with the extraction of each respective stope. The analysis used a base case gold price of A\$1,450/oz and varied the gold price in increments of 10% above and below the base case. The analysis concluded that 98% of the stope set was economic at a gold price of A\$2,000/oz was required.



Criteria	Comment	ary					
Mining factors or assumptions	Mining me pastefill w deposit. Th while ensu Cowal. Ac The stope with some prior to pro	thod assessment as the most appri- nis allowed maxin uring no surface cess to the orebo extraction seque transverse stope duction related a	ts indicated t opriate minimum extractio subsidence dy will be via nce based or extraction. G ctivity. Infill dr	hat sub-l ng metho n of the e due to a decline the stud Grade cor illing com	evel open d for the economic p the depose positione dy is predo introl infill d immenced in	stoping (SLO GRE46 under portion of the d sit being unde d on the hangin pminantly longi irilling will be re n June 2021 ta	S) with ground eposit, r Lake ngwall. tudinal equired rgeting
	a spacing assumptio pastefill.	n as part of the	ith second pa study was a	ll stope	g to 10x10 voids are	to be backfille	. А кеу эd with
	Mineable s from Desw are include	stope shapes we rik, according to s ed in Table 1.	re created us tope design	ing the Sparamete	Shape Opt ers establis	timiser (SO) so shed in the stu	oftware dy and
	Optimal stope dimensions were determined through a geotechnical assessment. A sublevel development interval of 30m was selected and typical stope dimensions are shown in Table 5. The orebodies vary in consistency along strike and across strike with both single and double sublevel intervals used to optimize production rate.						
				Max	Min		1
			Strike	Stope	Stope		
			Length	Width	Width	Stope	
	Zone		(m)	(m)	(m)	Height (m)	4
	Regal No	rth	15	25	3.2	30-60	-
	Regal So	uth and Dalwhinr	ie 15	40	3.2	30-60	_
	Endeavou	ir and Galway	15	25	3.2	30-60	J
	Table 5 - St	ope Dimensions					
	Stope dilu Sloughing	tion was estimat (ELOS) analysis	ed by under as part of the	taking ar e study. T	n Equivale This includ	ent Linear Ove led hangingwal	rbreak II (HW)
	and footw overriding increases estimated	all (FW) dilution fault dilution wh at depth in line y from the Mineral	estimates w nen mining r vith Table 6 Resource mo	which we near the and the a odel.	re escalat Glenfiddi associated	ted at depth a ich fault. The d material grad	and an ELOS de was
	Depth	ELOS FW (m)	ELOS HW (	(m)			
	0-400	0.2	0.5				

$\mathbf{T}$				
800+	1.0	1.3		
600-800	0.5	0.8		
400-600	0.3	0.6		

Table 6 - Total ELOS

Where a stope is adjacent to the Glenfiddich Fault, a defined ELOS is used as shown in Table 7.

Fault Related ELOS HW		
<b>Distance from Fault</b>	ELOS (m)	
0-10	2.1	
10-30	1.35	
30-40	0	

Table 7 - Fault Related ELOS

Additional stope dilution has been applied in the schedule to account for pastefill. For a single exposure, 2.5% dilution has been added, and for multiple exposures, 5% dilution has been added with the associated material assumed to contain no metal. Ore and waste development have a dilution factor of 10% applied with the associated material assumed to contain no metal. Mining recoveries were set at 100% for development activities, and 95% for stoping activities.

Each stope included in the Ore Reserve was required to have a minimum of 75% Indicated material. The inferred material included in the Ore Reserve is approximately 2.9% of estimated contained metal. Inferred material included in the Ore Reserve is the result of extraction method to access of the Ore Reserve and stope dilution. This material is deemed to be an integral part of the Ore Reserve mine plan and not separable and as such is included in the financial analysis.

All material mined underground will be trucked to surface to the Run of Mine (ROM) pad or waste dump.

The GRE46 Underground Ore Reserve is dependent on the continuation of the open pit and low-grade stockpile processing plan. At the time of reporting, the Ore Reserve from the Cowal open pit operations and stockpiles will continue to be processed beyond the GRE46 Underground Ore Reserve. All modifying factors will be reconciled once production commences.



/	Criteria	Commentary
	Metallurgical factors or assumptions	Metallurgical test work is ongoing as the mineral resource is extended. Geometallurgical testwork completed as part of the study indicates an average weighted life of mine Au recovery of 87%. Processing of ores will be through the current plant which has been in operation since 2006. Laboratory test-work of underground ores indicates they will respond similarly to the current hard rock sulphide ores being processed from the existing open pit adjacent to the GRE46 underground.
		The current processing facility utilises commonly used crushing and grinding circuitry followed by a combination of gravity, flotation and cyanide leaching methods for the recovery and extraction of gold. These processes are widely used throughout the mining industry in similar applications. No new or novel processes are proposed.
		Metallurgical test-work has been performed on 44 individual ore samples from the underground mining region. These samples have been selected to provide both spatial coverage and ensure all lithology types are represented. 5 lithology types have been identified within the underground mine region: lava, conglomerate, fine sediments, dalwhinnie and diorite. Each lithology type has been assigned it's own recovery factor based on the metallurgical test-work results. The ore variability test work program involved testing each individual sample under standardised conditions for flotation response, gravity recoverable gold, cyanide leaching of flotation tails and flotation concentrates, comminution parameter assessments, abrasiveness, geochemistry, preg-robbing index and the sensitivity of Au recovery to flotation feed P80. In addition to this limited cyanide detox test-work has been undertaken to ensure the current cyanide destruction process utilised on site is suitable for future ores.
		All data generated by the laboratory test-work program has been assessed for the presence of deleterious elements. No deleterious elements have been found that will impact the expected performance of the ores and are considered to be in-line with the current ores being processed. No pilot scale tests have been conducted and the 20kt bulk sample processed in 2020 was found not to be representative. The underground ores will be blended at an average 15% of the total process feed. As such bulk testing is not considered necessary
		Recovery is applied in the Ore Reserve estimate by lithological unit in the mine plan based on the mill feed schedule.
		<ul> <li>The following process plant modifications have been included in the study:</li> <li>a second primary jaw crusher dedicated to the treatment of underground ore. This crusher will remove tramp metal from the underground ore feed</li> </ul>
		<ul> <li>an additional FTL elution circuit and carbon regeneration kiln</li> <li>a deslimed tailings circuit located at the process plant's tailings area to supply tailings to the surface pastefill plant for operational backfill activities. The pastefill plant design parameters are based on a specification of 150m<sup>3</sup>/h.</li> </ul>
	Environmental factors or assumptions	CGO has a long history of mining and processing ore. Waste dump and residue disposal facilities are all currently in place in accordance with the required statutory approvals. CGO have completed depositing tailings in the North Tailings Storage Facility (NTSF) and the South Tailings Storage Facility (STSF) and have transitioned to deposition into the first stage of the Integrated Waste Landform (IWL). The IWL began construction in FY20 to adequately accommodate tailings in the current LOM plan and construction is ongoing. A lift to the IWL will be required based on the current Ore Reserve mine plan which is included in the study.
		CGO has a Water Management System in place. The overall objective of the water management system is to contain potentially contaminated water generated within the mine site area while diverting all other water around the perimeter of the site.
		The Water Management System has the following major components: up- catchment diversion system; lake isolation system (comprising the temporary isolation bund, lake protection bund and perimeter waste rock emplacement); and internal catchment drainage system (comprising the permanent catchment divide and contained water storages).
		All waste material that is planned to be mined from underground will be stored on site under existing environmental approvals. The waste rock planned to be mined from underground is deemed to be similar in nature to waste rock planned to be mined from the adjacent open pit operations and will not require any additional treatment to be stored on site.
	Infrastructure	As Cowal is an established mine site, all major infrastructure is already in place (i.e. processing plant, power, water, magazine etc.); modifications and/or expansions to these facilities are accounted for in the study. Provision for construction and operation of a pastefill plant, surface workshops and auxiliary mining offices have also been included. All infrastructure required underground

**Evolution Mining Limited** 



	Criteria	Commentary
		such as service bays, explosives magazine and services such as primary ventilation and dewatering to support mining has been considered in the study. A labour and accommodation assessment was conducted as part of the study. A key outcome of the accommodation assessment was the requirement to construct an accommodation village in West Wyalong. A road will need to be upgraded on site to facilitate the delivery of bulk commodities to the pastefill plant precinct.
	Costs	Costs have been estimated based on Early Contractor Involvement (ECI) for all underground mining activities and first principles build-up of capital infrastructure. Cost estimates for overhead expenses including G&A and processing were derived from current operational forecasts for CGO and where applicable modified to account for changes relating to the study. Contract mining has been assumed for life of mine under a fixed and variable commercial arrangement. Estimated rates were sourced from two mining contractors as part of the ECI process.
		A government royalty of 4% is applicable to metalliferous mines in NSW, payable on the ex-mine value (value less allowable deductions) of the processed gold. After allowable deductions a rate of 3% was applied.
		The financial model is in Australian dollars.
	Revenue factors	All financial assumptions are in Australian dollars. Transportation and treatment charges have been derived from the existing site operating model. These costs are not anticipated to change with respect to the study and Ore Reserve estimate. The gold price of A\$2,200/oz has been used to generate revenue for the Ore Reserve estimate. Evolution uses an internal gold price assumption of A\$2,200 for Life of Mine (LOM) planning which is set with reference to both historical prices and consensus broker forecasts.
		This gold price is assumed to be constant for the mine plan associated with the Ore Reserve estimate.
	Market assessment	All gold production from CGO is sold to banks or precious metals refineries based on either the observable spot price on the day of the sale or delivered into hedge contracts with banks based on the observable forward price on the day the hedge was originally established. Evolution uses an internal gold price assumption of A\$2,200 which is set with reference to both historical prices and consensus broker forecasts.
	Economic	GRE46 Underground is an economically robust project, generating a strong NPV. A sensitivity analysis was carried out over a range that aligns with the uncertainty with the level of study and the project was found to be sensitive to gold price, grade, operating costs, project capital costs, sustaining capital and recovery in descending order of relevance. For all sensitivity scenarios modelled the project remained viable.
		and Ore Reserve estimate.
		The strategic value of the underground project to CGO has also been considered with the view that the full potential of the underground is yet to be fully realised. Going forward the Mineral Resource and Ore Reserve will be updated with additional data and the project metrics will be further reviewed, refined, and reported.

Other

The Ore Reserve has demonstrated that extraction can be reasonably justified. A voluntary planning agreement is currently progressing with the Bland Shire Social Council as part of the Development Consent process. All other applicable agreements are deemed to be in place under the current operations.

All proposed mining activities are entirely within Evolution's existing Mining Lease's ML1535 and ML1791. Our existing mining lease was granted following the Native Title Act right to negotiate process in 2003. As such, the existing native title approvals continue to apply and we will continue to honour the agreements made with the native title parties.

The underground project is planned to be developed under Lake Cowal. Lake Cowal is an ephemeral lake which has the potential to contribute to an inrush or environmental event. In order to reduce any risk posed by the lake, underground stope voids will be backfilled with pastefill and subsidence will be monitored. In addition to this a crown pillar has been designed as part of the study to ensure geotechnical stability of the rockmass between the lake and underground workings.

Both a geological fault and rock mass condition model have been generated as part of the study. This along with existing site geological information has informed the anticipated performance of underground excavations. If geological conditions differ from those documented in the study the outcome may differ.



Criteria	Commentary
	There are no material legal or marketing agreements associated with the study or Ore Reserve estimate. The GRE46 Underground Project is currently subject to statutory approvals which are under assessment with the Department of Planning, Industry and Environment (DPIE). Secondary approvals such as a Mining Operation Plan (MOP) and High Risk Activity (HRA) will also need to be assessed and or approved prior to the commencement of additional mining activities. In the opinion of the Competent Person there is no reasonable grounds that statutory approvals will not be granted in the timeframes outlined in studies.
Classification	The classification of the GRE46 Underground Ore Reserve reflects the view of the Competent Person and is in accordance with the JORC 2012 Code. Probable Ore Reserves have been derived from economically viable, Indicated Mineral Resources only, no Proved Ore Reserves have been declared.
Audits or reviews	The Feasibility Study has been reviewed internally by Evolution Transformation and Effectiveness (T&E) team. T&E are an oversight group within Evolution independent of the study team. Additionally, an Independent Project Review (IPR) on the Mineral Resource and Ore Reserve was undertaken by AMC Consultants Pty Ltd (AMC). These reviews included numerous observations and recommendations covering both technical and reporting elements. In general, these reviews have highlighted the geological risk in the deposit, and a program of infill drilling is required prior to commencing production activities. Recommendations from AMC associated with the reporting of Ore Reserves were subsequently considered and or included in this Ore Reserve estimate. In particular further refinement of modifying factors, cost and revenue factors, the mine plan and improved documentation were recommended.
<i>Discussion of relative accuracy/ confidence</i>	The accuracy of the Ore Reserve estimate is mostly determined by the order of accuracy associated with the Mineral Resource model, the ground conditions expected and the metallurgical inputs. Risk analysis was undertaken on the Mineral Resource in the form of a conditional simulation study to understand the potential grade variability from the estimated stope grades used for the Ore Reserve estimate. This analysis was then used to provide direction in prioritising the mine plan to minimise geological risk and grade uncertainty.
	Modifying factors such as dilution, recovery, costs, and other mine planning parameters are based on study inputs that may vary upon the commencement of underground development and production. The modifying factors were estimated using standard industry practice and benchmarked against similar operations. Any deviation from these estimates may have an impact on the Ore Reserve estimate.
	The Mineral Resource is deemed a global estimate. There is a possibility that the stoping layout may change with increased orebody knowledge which may in turn affect the modifying factors and cost estimate and have an impact on the Ore Reserve estimate.
	In the opinion of the Competent Person, the modifying factors and long-term cost assumptions used in the Ore Reserve estimate are reasonable.
	It is the opinion of the Competent Person that the Ore Reserve estimate is supported by appropriate design, scheduling, and cost estimate. As such there is a reasonable expectation of achieving the reported Ore Reserves commensurate with the Probable classification.
	No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate. The Ore Reserve estimate is best described as global.