# ASX ANNOUNCEMENT

15 February 2023

# Positive Scoping Study Delivers Robust Economics for Austral's Lady Colleen Copper Project

## Key highlights:

- Austral Resources has received an initial evaluation of the economics of mining the copper (Cu) Mineral Resource at the Company's 100% owned Lady Colleen Project, located on an existing granted Mining Lease (ML90170).
- The independent Scoping Study, prepared by CSA Global, indicates that construction of an open cut mine at Lady Colleen is viable. Austral has identified clear opportunities for improvements in cost economics and intends to evaluate these opportunities through a Pre-feasibility Study.
- Production rate and mine life are expected to grow with continued resource definition and extensions – current study includes production from Mineral Resource of approximately 44k tonnes of Cu at a cut-off grade of 0.7% Cu.
- Study economics reflected in pre-tax IRR of approximately 38% over approximately 5 years and pre-tax $NPV_{7.5}$ of A$60M – ranging from A$15M to A$94M with a median estimated value of A$55m.
- Further key metrics coming out of the Scoping Study include:
  - Total copper production of approximately 44k tonnes from both heap leach and flotation processing methods.
  - Payback period of approximately 2.6 years at C1 costs and Cu sales price of A$12,000.
  - C1 operating costs of approximately US$2.78 per lb[1].
- Lady Colleen's current total Mineral Resource is 2.8MT @ 1.9% Cu (at a 0.7%Cu cut-off), which is part of Austral's current total JORC Mineral Resource Estimate of 420kt.
- Austral plans to follow through on key recommendations coming out of the independent Scoping Study to further improve the economics of the proposed mine, including:
  - 91% of Lady Colleen's Mineral Resource is categorised as Measured and Indicated. Further drilling aimed at upgrading remaining 9% Inferred Mineral Resources to Indicated Mineral Resources.

[1] USD AUD FX 0.69

- The high-grade core of the Lady Colleen Mineral Resource is currently open along strike and down plunge, with exploration success from the drilling planned in 2023 with the potential to increase the resource base of the Lady Colleen Project.
- Optimise pit wall angles to minimise waste movement requirements.
- Progress metallurgical test work to increase level of confidence in recoveries.
- Hydrogeological/hydrological work to estimate the aquifer water inflows and their effect on the pit walls.
- Detailed estimation of sink rates determining the production rates in the next stage compatible with industry standards.
- Estimate the capital costs, operating costs, royalties, tax and payments.
- Ongoing conversion of Mineral Resources into proven and probable Ore Reserves.

**Cautionary Statement**

*The Scoping Study referred to in this announcement has been undertaken to determine the potential for the production and sale of a Copper concentrate from Austral's Lady Annie Project. The Scoping Study is a preliminary technical and economic study of the potential viability of the production and sale of a Copper concentrate from the Lady Annie Project based on low level technical and economic assessments (+/- 30% accuracy) that are not sufficient to provide any assurance of an economic development case. The heap leach and flotation processes have been examined within this Scoping Study. Further evaluation work and appropriate studies are required before the sale of copper concentrate can be included in an economic development case.*

*Approximately 91% of the life of mine production is from a measured and Indicated Mineral Resource estimate and 9% is from Inferred Mineral Resources that have not been upgraded at this time[2]. The Company has concluded it has reasonable grounds for disclosing a Production Target, given that the Scoping Study assumes that, on average, production is from 91% Measured or Indicated Resource category. There is a lower 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 or Scoping Study assessment will be realised. The inclusion of Inferred Resources into the production profile is not a determining factor of the Project's economic viability.*

[2] Appendix 1, ASX release 28 October 2022

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*The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.*

*To achieve the potential production indicated in the Scoping Study, funding sourced from current operational cashflows and from potential capital-raising activities will likely be required at the commencement of the Project. Investors should note that there is no certainty that the Company will be able to raise funding when needed, however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to fund the incremental development of the Lady Annie Project. It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the price of the Company's existing shares.*

*Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.*

Copper producer **Austral Resources Australia Ltd (ASX:AR1)** (**Austral** or the **Company**) is pleased to announce the release of a Scoping Study prepared by CSA Global-that examines the viability of constructing an open cut mine at the Company's Lady Colleen Project. The construction of this mine would add significantly to both Austral's copper production capabilities and its revenue base, which is already trending higher as Mt Kelly's output levels continue to ramp up.

The CSA Report is attached as an Appendix to this announcement and details the key assumptions used in the Scoping Study. The Mineral Resources underpinning the production target have been prepared by a competent person in accordance with the JORC Code and announced on 28 October 2022 as Lady Colleen ore grade Increases by 200%.

The next stage of project development commences with a Pre-feasibility Study. When that is completed (and the technical and economic viability of the Lady Colleen Project is confirmed by this Study) a timeframe for development and production will be finalised and communicated.

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**Austral's Managing Director and CEO, Dan Jauncey, commented:**

*"We are thrilled to release the initial Scoping Study for our 100%-owned Lady Colleen Copper Sulphide Mining Project. The results have exceeded our expectations and demonstrate the significant potential of this Project.*

*The overall performance of the project opportunity is a direct consequence of our team's unwavering efforts to prove up the economic viability of the current proven copper resource at Lady Colleen. With the base case for building the mine now delivered, we are quickly moving to add to this exciting development. Our team is now progressing additional exploration activities that are expected to further upgrade the mine resource, and flowing from this, viability metrics.*

*Ahead of any such upgrades, the initial Study's findings have already increased the chance of the robust and economically viable copper sulphide deposit at Lady Colleen being developed. A mine there will provide a material boost to Austral's revenue base. It would further cement our position as both a copper producer and an explorer with a still highly prospective project book.*

*I want to thank all of our stakeholders for their continued support, and I look forward to sharing more positive updates with you as the Project progresses. The future is looking bright for Lady Colleen Copper Sulphide Mining, and I couldn't be more excited about the possibilities that lie ahead."*

This announcement is authorised for market release by the board.

**FOR FURTHER INFORMATION PLEASE CONTACT:**

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## About Austral Resources

Austral Resources Australia Ltd is an ASX listed copper cathode producer operating in the Mt Isa region, Queensland, Australia. Its Mt Kelly copper oxide heap leach and solvent extraction electrowinning (SXEW) plant has a nameplate capacity of 30,000tpa of copper cathode. Austral has developed its Anthill oxide copper mine which has an Ore Reserve of 5.06Mt at 0.94% Cu. The Company expects to produce 40,000t of copper cathode over a four-year period from mid-2022.

Austral also owns a significant copper inventory with a JORC compliant Mineral Resource Estimate and 2,100km$^2$ of highly prospective exploration tenure in the heart of the Mt Isa district, a world class copper and base metals province. The Company is implementing an intensive exploration and development program designed to extend the life of mine, increase its resource base and then review options to commercialise its copper resources.

## Competent Person's Statement

The information in this announcement that relates to Mineral Assets, Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on and fairly reflects information compiled and conclusions derived by Mr Ben Coutts, Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Coutts is Exploration Manager of the Company. Mr Coutts is a geologist and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results and Ore Reserves (2012 JORC Code). Mr Coutts consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the exploration results cross referenced in the announcement.

## Ore Reserve and Mineral Resource Estimate Statements

Detailed information that relates to Ore Reserves and Mineral Resource Estimates is provided in Austral Resources Prospectus, Section 7, Independent Technical Assessment Report. This document is available on Austral's website: www.australres.com and on the ASX released as "Prospectus" on 1 November 2021. The Company confirms that it is not aware of any new information or data that materially affects the estimates of Mineral Resources and Ore Reserves as cross referenced in this release and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not changed.

# ASX ANNOUNCEMENT

## Appendix 1. Key Austral ASX announcements

| DATE | TITLE |
|---|---|
| **1 Nov 2021** | Austral Prospectus |
| **3 Nov 2021** | Austral lists on ASX |
| **9 Nov 2021** | Anthill and Mt Kelly development underway |
| **17 Nov 2021** | Anthill blasting commences |
| **7 Dec 2021** | Thiess signing |
| **14 Dec 2021** | Updated Company presentation |
| **11 Jan 2022** | Mining commences at Anthill |
| **3 Feb 2022** | Offtake and Prepayment Agreement secured with Glencore |
| **31 Mar 2022** | Austral's Anthill Mine Ore Shipments Commence |
| **26 Apr 2022** | Exploration update |
| **4 May 2022** | RIU Conference presentation |
| **6 Jun 2022** | Austral exploration update |
| **8 Jun 2022** | Glencore (MIM) JV |
| **8 Jun 2022** | Resources Rising Stars Presentation |
| **28 Jul 2022** | Lady Colleen Drilling Update |
| **2 Aug 2022** | Drilling at Flying Horse |
| **9 Aug 2022** | Maiden Mineral Resource at Enterprise |
| **11 Aug 2022** | Successful Placement |
| **26 Aug 2022** | Operational and Strategic Update |
| **5 Sep 2022** | New Drilling at Lady Colleen |
| **16 Sep 2022** | Austral Board Approves Scoping Study for Lady Colleen |
| **26 Sep 2022** | Austral and Glencore Finalise Agreements for $8.3M Spend |
| **27 Sep 2022** | Lady Colleen Assays Confirm 5m @ 5.74% Cu |
| **13 Oct 2022** | Step-out Drilling Delivers 6m @ 2.95% Cu at Lady Colleen |
| **28 Oct 2022** | Lady Colleen Grade Increases by 200% |
| **9 Nov 2022** | Rock Chip Assays of 16.05% Cu Drive 2023 Drill Targets |
| **23 Dec 2022** | Production and Scoping Study Funding |
| **9 Jan 2023** | Commercial Production and Positive Operational Cashflow |

# MEMORANDUM

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**To:** Shane O'Connell
**Cc:** Andrew Beaton, Bronagh Freeman
**Date:** February 14, 2023
**From:** Marck Maramat, Senior Mining Engineer
Khairulla Aben, Principal Mining Engineer
**Report Nº:** R119.2023

**Re:** **Lady Colleen Scoping Study**

## INTRODUCTION

Austral Resources Australia Ltd ("AR1" or "the Company) has engaged CSA Global to conduct a Scoping Study for the Lady Colleen Copper deposit located in Queensland. This engagement follows the Whittle optimisation work AR1 completed in December, where potential economic pits have been identified in four different scenarios.

This scoping study involved reviewing and modifying the input parameters as required and running an optimisation in Whittle using an updated resource block model. The block model was prepared externally by John Horton from ResEval. The pit shell generated at a selected revenue factor was used to generate a high-level strategic mine schedule. Only the pit shell was created at this stage, and the pit designs will be created after the required geotechnical information is obtained.

This strategic mine schedule and some high-level capital and operating cost estimates were then fed into a cost model to evaluate the Project's financial outlook.

## INPUT PARAMETERS

The inputs for this study were supplied by Austral Resources Australia Ltd, or CSA Global (where detailed information was missing) and align closely with the December 2022 Whittle optimisation work with one of the main differences that the Heap Leaching of the oxide and low-calcium transition material was included in the updated work. Parameters are outlined below in Tables 1 to 4.

### Financial Input Parameters

*Table 1: Financial Input Parameters*

| Input | Unit | Value |
|---|---|---|
| Currency | AU$ | AU$ |
| USD to AUD conversion factor | AUD per USD | 1.44 |
| Discount rate | % | 7.5 |
| Price for Copper | $AU/t | 12,000 |
| Price for Gold | $AU/oz | 2,600 |

| Input | Unit | Value |
|---|---|---|
| Government royalties | %revenue | 4% (20% discount considered) |

The government royalty for the heap leach product currently has a 20% discount, and it is assumed the same discount will also be applicable to the concentrate. This needs to be confirmed in the later stages of the Project.

*Table 2: Mining Input Parameters*

| Input | Unit | Value |
|---|---|---|
| Mining recovery | % | 95.0 |
| Mining dilution | % | 5.0 |
| Overall slope angle | Degrees | 40 |
| Mining costs (inc. D&B) | AU$/t | 4.50 |
| Mining cost adjustment factor | AU$/t/m depth | 0.01 |
| Rehabilitation cost | AU$/t waste | No allowance made |
| Maximum sink rate | m/year | 120 |
| Maximum concentrator feed | Kt/month | 130 |

A mining recovery and dilution study, along with the Selective Mining Unit (SMU) study, are required at the next stage of the Project to confirm the assumptions.

The Client provided the maximum sink rate from experience on the Anthill project, but it needs to be estimated in more detail in the next stage.

A geotechnical study is required to confirm the overall slope angle assumptions.

*Table 3: Processing and Selling costs*

| Input | Unit | Value |
|---|---|---|
| **Froth Floatation** | | |
| Processing | AU$/dmt ore | 25.00 |
| Transport Cost (to Mt. Isa Concentrator) | AU$/dmt ore | 15.00 |
| **Heap Leaching** | | |
| Heap Leach (Ox and Low-Calcium Trans) | AU$/dmt ore | 17.60 |

*Table 4: Concentrate Specifications and Deductions*

| Input | Unit | Value |
|---|---|---|
| Concentrate Grade | %Cu | 23.00 |
| Freight Charge (ship to offshore Smelter) | AU$/t conc | 200.00 |
| Smelting Charge | AU$/t conc | 115.20 |
| Refining Charge/Sales Cost | | |
| Per payable Gold | AU$/oz | 7.20 |
| Per payable Copper | AU$/lb | 0.115 |
| Heap Leach (power station for electroplating) | AU$/t Cu | 850.00 |
| Percent Payability | | |
| Copper | % | 95.70 |
| Gold | % | 90.00 |
| Minimum Payable concentrate metal grades | | |
| Gold | g/t conc | 1.00 |

| Input | Unit | Value |
|---|---|---|
| **Recoveries:** | | |
| **Floatation - Copper** | | |
| TRANS | % | 54.00 |
| FRESH | % | 90.00 |
| **Floatation - Gold** | | |
| TRANS/FRESH | % | 80.00 |
| **Leaching - Copper** | | |
| OXIDE/TRANS | % | 85.00 |

Metallurgical recoveries and other parameters require a more detailed study at the next stage.

## Net Payable Metal Price

The net payable price for each metal was calculated and used as the selling price in Whittle. The calculations are summarised in Table 5 below.

*Table 5: Calculation of Net Metal Prices for the Pit Optimisation*

| Description | Unit | Gold | Copper - Floatation | Copper – Heap Leach |
|---|---|---|---|---|
| Metal Price (Copper) | $/t Cu | | **$12,000** | |
| Refining Charge | $/lb Cu | | $0.115 | |
| | $/t Cu | | ($254) | |
| Concentrate deductions | | | | |
| Smelting Charge | $/t conc | | $115 | |
| | $/t Cu | | ($501) | |
| Freight Credit Charge | $/t conc | | $200 | |
| | $/t Cu | | ($870) | |
| | | | | |
| Deducted Metal Price | $/t Cu | | **$10,375.60** | |
| | | | | |
| Metal Price (Gold) | $/oz | **$2,600** | | |
| | $/g | **$83.59** | | |
| Refining Charge | $/g | ($0.23) | | |
| Deducted Metal Price | $/g | **$83.36** | | |
| | | | | |
| Concentrate Grade | %Cu | - | 23.0% | - |
| Payability | % | 90.00% | 95.70% | 100.00% |
| Net Metal Price (before royalty) | $/g Au | **75.02** | - | - |
| | $/t Cu | **-** | **$9,929.44** | **$11,150.00** |
| Government Royalty | %revenue | 4.00% | 4.00% | 4.00% |
| | $/g Au | ($3.00) | - | - |
| | $/t Cu | - | ($397.18) | ($446.00) |

| Description | Unit | Gold | Copper - Floatation | Copper – Heap Leach |
|---|---|---|---|---|
| Net Metal Price (after royalty) | $/g Au | $72.02 | - | - |
| | $/t Cu | | $9,532.27 | $10,704.00 |

## OPEN PIT OPTIMISATION

An optimisation was run in Geovia Whittle software based on the parameters summarised above to get optimal pit limits at different metal prices using revenue factors from 0.9 to 2.0 at 0.05 increments.

Measured, Indicated, and Inferred Mineral Resources were included in the optimisation, with Inferred on average 9% of the total Resource in the resulting pit shell.

The results from the optimisation run are outlined below in Table 6. The Revenue Factor 1 pit shell was selected for high-level mine scheduling.

*Table 6: Whittle Output Summary by Revenue Factor*

| Pit | RF | Total Rock (MT) | Ore (MT) | Waste (MT) | SR | Au (oz) | Au (g/t) | Cu (tonnes) | Cu (%) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.90 | 25.2 | 1.63 | 23.6 | 14.5 | 3,652 | 0.070 | 26,715 | 1.64 |
| 2 | 0.95 | 43.2 | 2.68 | 40.5 | 15.1 | 5,845 | 0.068 | 44,569 | 1.67 |
| ***3*** | ***1.00*** | ***45.1*** | ***2.85*** | ***42.2*** | ***14.8*** | ***6,137*** | ***0.067*** | ***46,608*** | ***1.64*** |
| 4 | 1.05 | 45.1 | 2.91 | 42.2 | 14.5 | 6,212 | 0.066 | 46,871 | 1.61 |
| 5 | 1.10 | 46.4 | 3.06 | 43.4 | 14.2 | 6,445 | 0.065 | 48,265 | 1.58 |
| 6 | 1.15 | 48.2 | 3.24 | 44.9 | 13.9 | 6,792 | 0.065 | 49,870 | 1.54 |
| 7 | 1.20 | 49.2 | 3.38 | 45.8 | 13.5 | 7,014 | 0.064 | 50,812 | 1.50 |
| 8 | 1.25 | 50.1 | 3.54 | 46.6 | 13.2 | 7,283 | 0.064 | 51,746 | 1.46 |
| 9 | 1.30 | 53.1 | 3.89 | 49.2 | 12.7 | 7,945 | 0.064 | 54,007 | 1.39 |
| 10 | 1.35 | 54.2 | 4.09 | 50.1 | 12.3 | 8,212 | 0.063 | 54,995 | 1.35 |
| 11 | 1.40 | 57.4 | 4.52 | 52.9 | 11.7 | 9,077 | 0.063 | 57,162 | 1.27 |
| 12 | 1.45 | 57.8 | 4.70 | 53.1 | 11.3 | 9,283 | 0.061 | 57,676 | 1.23 |
| 13 | 1.50 | 60.1 | 5.04 | 55.1 | 10.9 | 9,810 | 0.061 | 59,306 | 1.18 |
| 14 | 1.55 | 61.1 | 5.33 | 55.7 | 10.5 | 10,207 | 0.060 | 60,180 | 1.13 |
| 15 | 1.60 | 62.8 | 5.64 | 57.2 | 10.1 | 10,678 | 0.059 | 61,432 | 1.09 |
| 16 | 1.65 | 64.6 | 6.07 | 58.5 | 9.6 | 11,149 | 0.057 | 62,803 | 1.03 |
| 17 | 1.70 | 65.6 | 6.36 | 59.2 | 9.3 | 11,522 | 0.056 | 63,595 | 1.00 |
| 18 | 1.75 | 67.3 | 6.66 | 60.7 | 9.1 | 11,949 | 0.056 | 64,668 | 0.97 |
| 19 | 1.80 | 68.1 | 6.91 | 61.2 | 8.9 | 12,229 | 0.055 | 65,284 | 0.95 |
| 20 | 1.85 | 68.6 | 7.22 | 61.4 | 8.5 | 12,570 | 0.054 | 65,886 | 0.91 |
| 21 | 1.90 | 71.4 | 7.65 | 63.8 | 8.3 | 13,041 | 0.053 | 67,462 | 0.88 |
| 22 | 1.95 | 72.0 | 7.97 | 64.0 | 8.0 | 13,375 | 0.052 | 68,059 | 0.85 |
| 23 | 2.00 | 73.4 | 8.28 | 65.1 | 7.9 | 13,668 | 0.051 | 68,878 | 0.83 |

Compared to the December Whittle work, the shell selected in this study is very close in shape and size, with a slight increase in tonnes and metals, while the average copper grade has decreased to 1.64 from 1.76. These changes are primarily attributed to the inclusion of a Heap Leach plant to process oxide material and transitional material with a

Calcium content of < 2%. The comparison with the December Whittle work is summarised in Table 7 below. It is important to note that the Au and Cu metals reflected do not yet consider payability.

*Table 7: December 2022 Whittle Work (Case 2) VS January 2023 Scoping Study*

| Pit | RF | Total Tonnes MT | Waste MT | Ore MT | Au Oz | Au grade g/t | Cu Tonnes | Cu Grade % |
|---|---|---|---|---|---|---|---|---|
| **December 2022 Whittle Study** | 1 | 42.4 | 40.0 | 2.44 | 5490 | 0.070 | 42,944 | 1.76 |
| **January 2023 Scoping Study** | 1 | 45.1 | 42.2 | 2.85 | 6137 | 0.067 | 46,608 | 1.64 |
| **Difference** | | 2.65 | 2.24 | 0.41 | 647 | 0.00 | 3,664 | -0.12 |
| **%** | | 6% | 6% | 17% | 12% | -4% | 9% | -7% |

Figure 1 and 2 shows a comparison between the two studies at two different orientations.

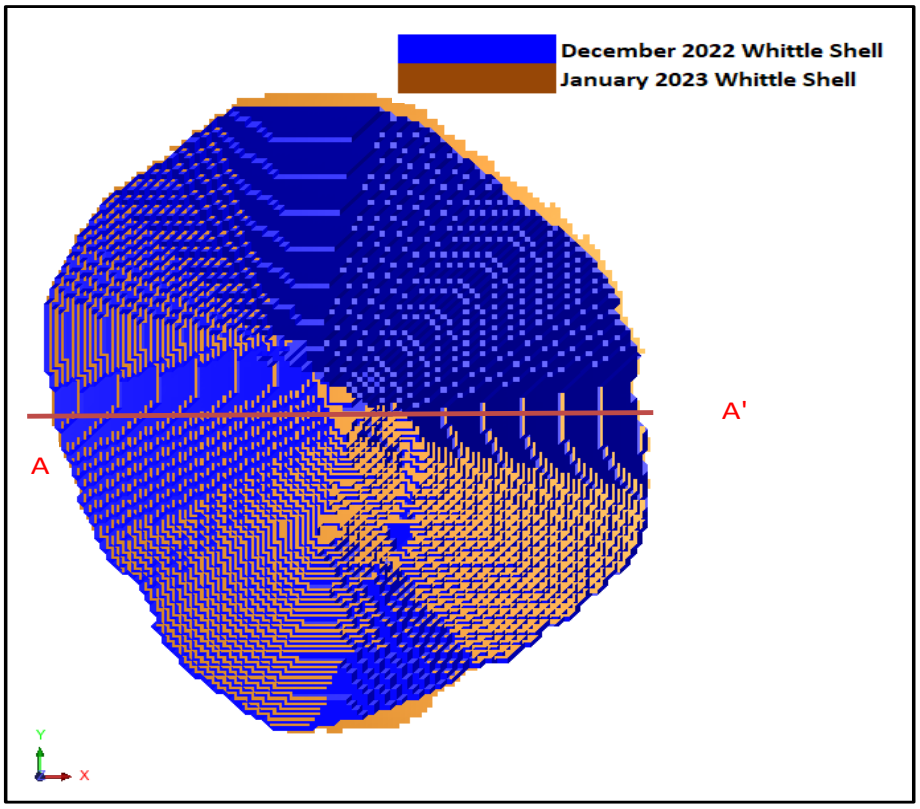


*Figure 1: Plan View*

The resulting pit dimensions are 500m wide, 600m long, and approximately 220m deep.

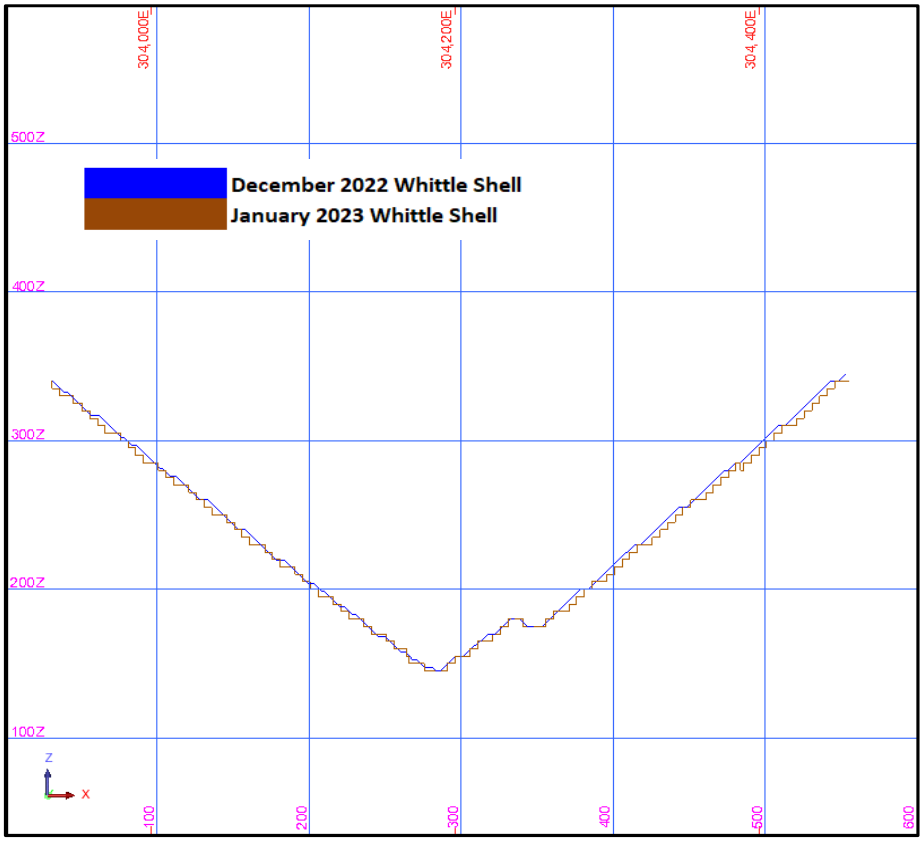


*Figure 2: Vertical Section along A---A' looking North*

## MINE SCHEDULE

A high-level mine schedule was generated in Whittle to indicate annual material volume movement and metal grades based on a plant throughput capacity.

The mining rate used was based on previous experience of Austral Resources, being 1.6 million tonnes per month, but also considers a limit of 120 meters per year maximum sink rate, which needs to be evaluated in further studies as the pit dimensions are 500 meters by 600 meters, which will limit the mining zones.

The Client recommended the concentrator feed limit as a maximum of 130 thousand tonnes per month.

There was no limit put on the Heap Leach, as also recommended by the Client.

CSA Global has also considered pushbacks and staging to optimise the timing of mining by allowing early access to ore and, thus, generating positive cashflows earlier in the Project's life, ultimately maximising the NPV. However, as recommended by the Client, only the RF1 shell was used as one single stage ultimate pit.

Table 8 shows the schedule that was selected for this Scoping Study.

It is important to note that only material matching the minimum paid metal grade criteria was included in the Schedule and the following Cost model.

As mentioned, only 9% of the Inferred material is included in the schedule. However, it is essential to note that there is a higher share of inferred material in year 1 of the Schedule, which needs to be upgraded to at least Indicated in the further stages.

The schedule starts from year 1 as it is considered that the mining works will begin in 2023 with the site being prepared. However, detailed costs and timing will be calculated in the next stage.

*Table 8: Mining and input into Processing by Period*

| Period | Waste | Heap Leaching (OX&TR) | | Flotation (TR) | | | Flotation (FR) | | | Proportion of the Measured Resources | Proportion of the Indicated Resources | Proportion of the Inferred Resources |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Years | tonne | tonne | Cu, t | tonne | Cu, t | % | % | Cu, t | Au, oz | % | % | % |
| 1 | 19,031,262 | 156,530 | 854.1 | 12,207 | 137 | 11 | 27% | - | - | 37% | 36% | 27% |
| 2 | 18,235,543 | 115,526 | 1,153.1 | 54,456 | 712.5 | 59.6 | 6% | 11,017.8 | 1,761.9 | 38% | 57% | 6% |
| 3 | 4,912,529 | - | - | - | - | - | 9% | 31,799.2 | 3,508.9 | 14% | 77% | 9% |
| 4 | 33,515 | - | - | - | - | - | 6% | 3,387.9 | 368.5 | 1% | 93% | 6% |
| Total | 42,212,849 | 272,056 | 2,007 | 66,663 | 849 | 70 | 9% | 46,205 | 5,639 | 23% | 69% | 9% |

*metal numbers might differ with Table 7 as metals were calculated more accurately (more decimals) and due to the minimum payable grade material being filtered.

**numbers might not sum up due to rounding.

OX – oxide material, TR – transition material, FR – fresh material

The Schedule is mainly based on the Measured and Indicated Resources (91%) with only 9% of Inferred Resources included

## MINING EQUIPMENT

Depending on the availability, the equipment types might vary. Contractor Mining is assumed in the scope of this work.

It should be noted that the current Contractor has large equipment types. However, performing a Trade-off study at a later stage is recommended to evaluate the most economical option.

## COST MODEL

A high-level cost model was created, summarised in Table 10, based on the mine schedule and the input parameters provided. It excludes capital costs, depreciation, and tax that are not specified in the input parameters.

*Table 10: High-Level Cost and Revenue Model Summary*

| **Physicals Summary** | ***Units*** | **Totals** |
|---|---|---|
| **Mining summary** | | |
| Total potential ore tonnes mined | *t* | 2,846,551 |
| Total waste tonnes mined | *t* | 42,212,849 |
| Total tonnes mined | *t* | 45,059,400 |
| | | |
| **Processing summary** | | |
| Potential ore tonnes to HL | *t* | 272,056 |
| Cu | *t* | 2,007 |
| | | |
| Transition potential ore tonnes to FP | *t* | 66,663 |
| Cu | *t* | 849 |
| Au | *oz* | 70 |
| | | |
| Fresh potential ore tonnes to FP | *t* | 2,507,832 |
| Cu | *t* | 46,205 |
| Au | *oz* | 5,639 |
| | | |
| **Total Production** | | |
| Cu recovered after HL | *t* | 1,706 |
| | | |
| Cu recovered after FP | *t* | 42,043 |
| Payable Au recovered after FP (considering the minimum grade in concentrate) | *oz* | 3,647 |
| **Mining Operating Cost** | | |
| Total | *AUD* | 223,626,990 |

| Physicals Summary | *Units* | Totals |
|---|---|---|
| **Processing Cost** | | |
| Total | *AUD* | 69,150,561 |
| **Potential ore transportation cost** | | |
| Transportation to concentrator | *AUD* | 38,617,425 |
| **Total Operating Cost** | | |
| Total Mining Operating Cost | *AUD* | 223,626,990 |
| Total Processing Cost | *AUD* | 69,150,561 |
| Total transportation cost | *AUD* | 38,617,425 |
| Total Operating Cost | *AUD* | 331,394,976 |
| **Smelting and Freight Cost** | | |
| Total Copper | *AUD* | 57,617,231 |
| **Royalties** | | |
| Total | *AUD* | 20,005,538 |
| **Revenue** | | |
| **Revenue before royalty** | | |
| Revenue from HL | *AUD* | 19,022,480 |
| Revenue from FP Cu | *AUD* | 472,606,414 |
| Revenue from FP Au | *AUD* | 8,509,562 |
| Total | *AUD* | 500,138,457 |
| | | |
| **Revenue after royalty** | | |
| Revenue from Product | *AUD* | 480,132,918 |
| **Cashflow** | | |
| Undiscounted Cashflows (Pre-tax)[1, 3] | *AUD* | $91,120,712 |
| **Discounted Cashflow (Pre-tax)[1, 2, 3]** | ***AUD*** | **$60,486,112** |
| **IRR (Pre-tax)** [1, 3] | ***%*** | **38.9** |
| **Payback period (Pre-tax)** [1, 3] | ***years*** | **2.6** |

1 only Pre-tax numbers are provided, as the Client indicated that the tax credits are being discussed

2 no preparation year was considered

3 the economics in the Scoping Study can range +-30%, but The Discounted Cashflow can variate with the selected parameters and the metal price change +-10% between AUD$18 million to AUD$94, respectively.

## SENSITIVITY ANALYSIS

A high-level sensitivity analysis was performed using the cost model prepared on the Pre-tax discounted Cash flow. It is important to note that the taxes were not considered for this exercise, except for the Royalties.

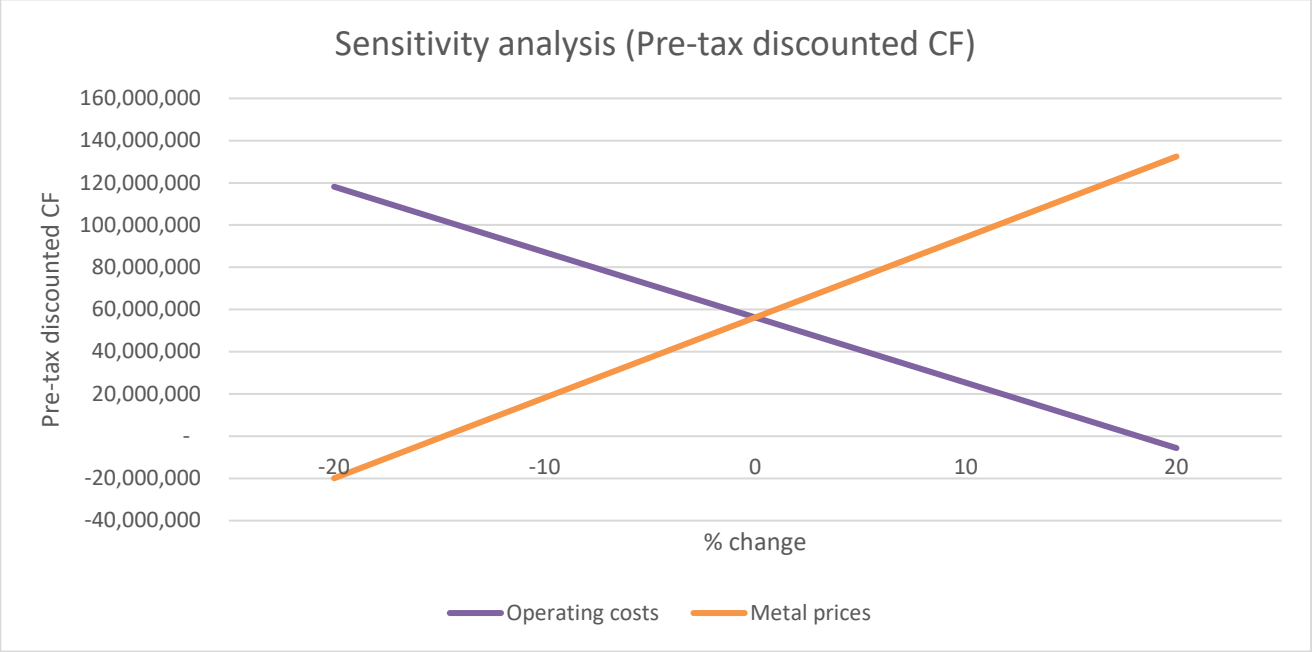


*Figure 3: Sensitivity analysis*

The sensitivity analysis was not performed on the capital costs as those were not considered in this study, because the plan is to use most of the current infrastructure, contractor mining and existing heap leach and Mt Isa concentrator.

The performed sensitivity analysis has shown that the Project is similarly sensitive to the changes in the operating costs and the metal prices, indicating that at +-10% change, the project economics is still positive and becomes negative only at closer to 20% change in any of those. This is, again, only considering the Pre-Tax Discounted Cashflow.

## CONCLUSIONS AND RECOMMENDATIONS

The schedule above shows sufficient material to supply the Heap leach for 2 years and the Concentrator for around 3 years. The work was performed including all Mineral Resource categories and none of those were converted into Ore Reserves at this stage due to the additional work and detailazations required.

The project's first years require much waste stripping to expose more economical materials earlier in the mine life.

The recommendations for the Lady Colleen project, based on this Scoping Study, are:

- Further geological drilling is required to upgrade the Inferred Mineral Resources included in this study, to Indicated Mineral Resources.
- Undertake geotechnical drilling and investigation to ensure the pit walls are as steep as safely possible to minimise the waste movement requirements, as the waste stripping is one of the main drivers of the economics of the Project.
- Hydrogeological/hydrological work to estimate the water inflows and their effect on the pit walls.
- An update of the results is required after the metallurgical testwork is completed.
- More detailed equipment selection and scheduling (especially sink rates) are required in the next stage.
- Estimate/detail the capital costs, other costs, royalties, tax and payments.
- Detailed dilution and losses in the later stages with potential Selective Mining Unit analysis (SMU).
- Owner-operator VS Contractor trade-off analysis.
- Continue upgrading the Mineral Resource category for the ore body to allow for more detailed study work with a higher degree of confidence.
- After completing the required detailazations and research, convert Mineral Resources into Ore Reserves.

## REFERENCES

Lady Colleen Whittle Modelling 7July2022.pdf

Lady Colleen Whittle Modelling 2Dec2022.pdf

“Input data from Client.docx”, meeting notes email from Shane O’Connel to Patrick Maher, 9-Jan-2023

Inputs were provided by Andrew Beaton

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