CARAVEL
MINERALS

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CARAVEL COPPER PROJECT

PRE-FEASIBILITY STUDY

JULY 2022

Competent Persons Statements

The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Mr Peter Pring. Mr Pring is Senior Exploration Geologist with Caravel Minerals. Mr Pring is a shareholder of Caravel Minerals and is a member of the Australasian Institute of Mining and Metallurgy. Mr Pring has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Pring consents to the inclusion in this report of the matters based on information in the form and context in which they appear.

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd). Mr Barnes is a shareholder of Caravel Minerals. Mr Barnes is a member of both the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Barnes has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes consents to the inclusion in this report of the matters based on information in the form and context in which they appear.

The information in this report that relates to Ore Reserves is based upon information and supporting documentation prepared by and mine planning work prepared by Mr Steve Craig (CEO of Orelogy Consulting Pty Ltd). Mr Craig is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Craig consents to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Information in this announcement relating to Mineral Resources is extracted from the ASX release dated 23 November 2021. Caravel Minerals Limited confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed. Caravel Minerals Limited confirms that the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement.

Previous Disclosure

The information in this report is based on the following Caravel Minerals ASX Announcements, which are available from the Caravel Minerals website www.caravelminerals.com.au and the ASX website www.asx.com.au:

4 March 2022
Drilling Results – Bindi Copper Deposit

4 November 2021
Scoping Study – Caravel Copper Project

23 November 2021
Major Mineral Resource Upgrade – Caravel Copper Project

15 June 2022
PFS Update - Caravel Copper Project

These announcements are available at the Company's website **caravelminerals.com.au**

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

Forward-looking Statements

This document may include forward looking statements. Forward looking statements include, but are not necessarily limited to, statements concerning Caravel Minerals planned exploration programs, studies and other statements that are not historic facts. When used in this document, the words such as 'could', 'indicates', 'plan', 'estimate', 'expect', 'intend', 'may', 'potential', 'should' and similar expressions are forward looking statements. Such statements involve risks and uncertainties, and no assurances can be provided that actual results or work completed will be consistent with these forward looking statements.

Caravel Minerals Pre-Feasibility Study

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Orelogy Mining and Ore Reserve
Knight Piesold Tailings
Dempers & Seymour Geotechnical Engineering
Trepanier Mineral Resources
Fortin Pipelines Water Pipeline
Sensorem LiDAR
Western Power Power
ECG Engineering Power
ALS Laboratories Metallurgical Testwork
Aurifex Metallurgy
Preston Consulting Approvals
Mattiske Consulting Flora
Western Wildlife Fauna
Dortch Cuthbert Indigenous Heritage
Global Groundwater Process Water
Smith Drilling Water Exploration
Minera Mining Automation and Electrification
Civmec Construction
Qube Bulk Transport
Braemer ACM Shipping
FTI Consulting Financial Modelling

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Alasdair Cooke Executive Director
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Jason 'Vossie' Vos Mining Manager
Peter Pring Exploration Manager
Chantal Hartstone Stakeholder and Social Advisor
Mick Klvac Approvals and Compliance Manager
Bruce McLarty Commercial Manager
Lauritz Barnes Geology and Resource Advisor
Daniel Davis Financial Administration
Eamon Byrne Financial Consultant

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DIRECTORS AND COMPANY SECRETARY

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Alasdair Cooke Executive Director
Steve Abbott Managing Director
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EXECUTIVE SUMMARY

The Caravel Copper Project Pre-Feasibility Study (PFS) has defined a robust project that can produce 62,000 tpa of copper in concentrate at low cost (C1 ~US$1.72/lb Cu) generating strong cashflows over an initial 28-year mine life.

Detailed technical, environmental and commercial studies indicate the Project can be built and operated with low operating costs, low technical risks, minimal environmental impact and positive economic and social outcomes.

With the accelerating transition to renewables and electrification over the next decade, copper is forecast to become the world's most in-demand metal. Located in the number one mining jurisdiction in the world the Project is one of very few large undeveloped copper projects globally that can be brought into production in this timeframe. The Project's large resources, technical simplicity, access to existing infrastructure and a sound social, economic and political setting all contribute to the attractive investment fundamentals for the Project.

This report provides a high-level summary of the Caravel Copper Project Pre-Feasibility studies. More detailed study information can be made available to shareholders and other interested parties by contacting the Company.

The Project is based on a very large porphyry copper mineralisation system stretching over 30km, within which a number of deposits host resources currently reported at 2.84Mt of contained copper (cut-off grade 0.1%). Located in the WA Wheatbelt approximately 150km north of Perth these deposits are a new style of mineralisation for the region and are presently the largest undeveloped copper resources in Australia. The current Resource is primarily hosted in the Bindi and Dasher deposits which represent 6km of the 30km long system (Figure 1). Other known mineralisation within the system is still to be fully delineated.

Copper is hosted by a simple chalcopyrite mineralogy and is readily recovered via a conventional crush-grind-float circuit to produce a clean concentrate product with very low deleterious elements. These types of concentrates are readily marketable and highly sought after by smelters.

Ore will be mined and processed at low cost due to the low waste to ore strip ratios (around 1.3:1 including pre-strip life of mine), low processing costs, large scale of operation and low-cost power. The low costs allow a low cut-off grade at 0.1% Cu, which creates potential for further large increases in the Resource from within the extensive porphyry complex.

Mining to low cut-off grades allows very simple, open-pit bulk mining using large-scale equipment. Mine planning is based on extensive use of automation and electrification of the mining fleet, with a fully autonomous haulage fleet using electric power from a 'trolley assist' system. The use of Automation, Communication and Electrification (ACE) technologies is a key part of Caravel's planning to maximise safety and efficiency and reduce environmental impact. These technologies and the Project's location will also provide a very attractive and flexible work environment.

Process plant design is based on two identical trains each of 13.9Mtpa capacity, delivering a total capacity of 27.8Mtpa and producing around 62,000 tonnes per annum of copper in concentrate. Constructing the plant as dual trains was planned to allow a staged development, but further studies have shown that construction of a single process train for ~27Mtpa may offer substantial capital savings and lower operating costs, with substantial benefits to the financial metrics of the Project.

Additional studies are in progress for the ~27Mtpa single train design and are expected to be completed in August, at which time the capital and operating costs presented in this study will be revised. In parallel with the single train study, other opportunities to increase capacity and further reduce capital and operating costs are being reviewed. In particular:

- High Pressure Grinding Rolls (HPGR) to replace the SAG mills, with the potential for substantial savings in power consumption
- Coarse Particle Flotation, to increase throughput and improve water conservation
- Molybdenum circuit, to recover molybdenum into a separate concentrate as a by-product
- Bulk Ore Sorting, to reject waste early in mining or processing and improve head grades.

Further evaluation studies of these options are continuing and will be presented in later updates.

Environmental surveys and other studies for the permitting and approval of the project are well advanced with EPA referral planned for H2 2022. Project financing and a final investment decision are expected to be completed in 2024, with construction during 2025 and 2026 and first production in the second half of 2026.

The present timeline for the Project's development aligns well with forecasted global copper supply deficits increasing over the second half of this decade. In an environment of rapidly increasing demand for copper combined with fallen rates of discovery and development of new projects, there are very few large projects globally that can be brought to production in this timeframe. The Caravel Copper Project is well placed to become a substantial new copper producer with low operating risks and low processing costs at a time of growing demand, tightening supply and forecast higher metal prices.

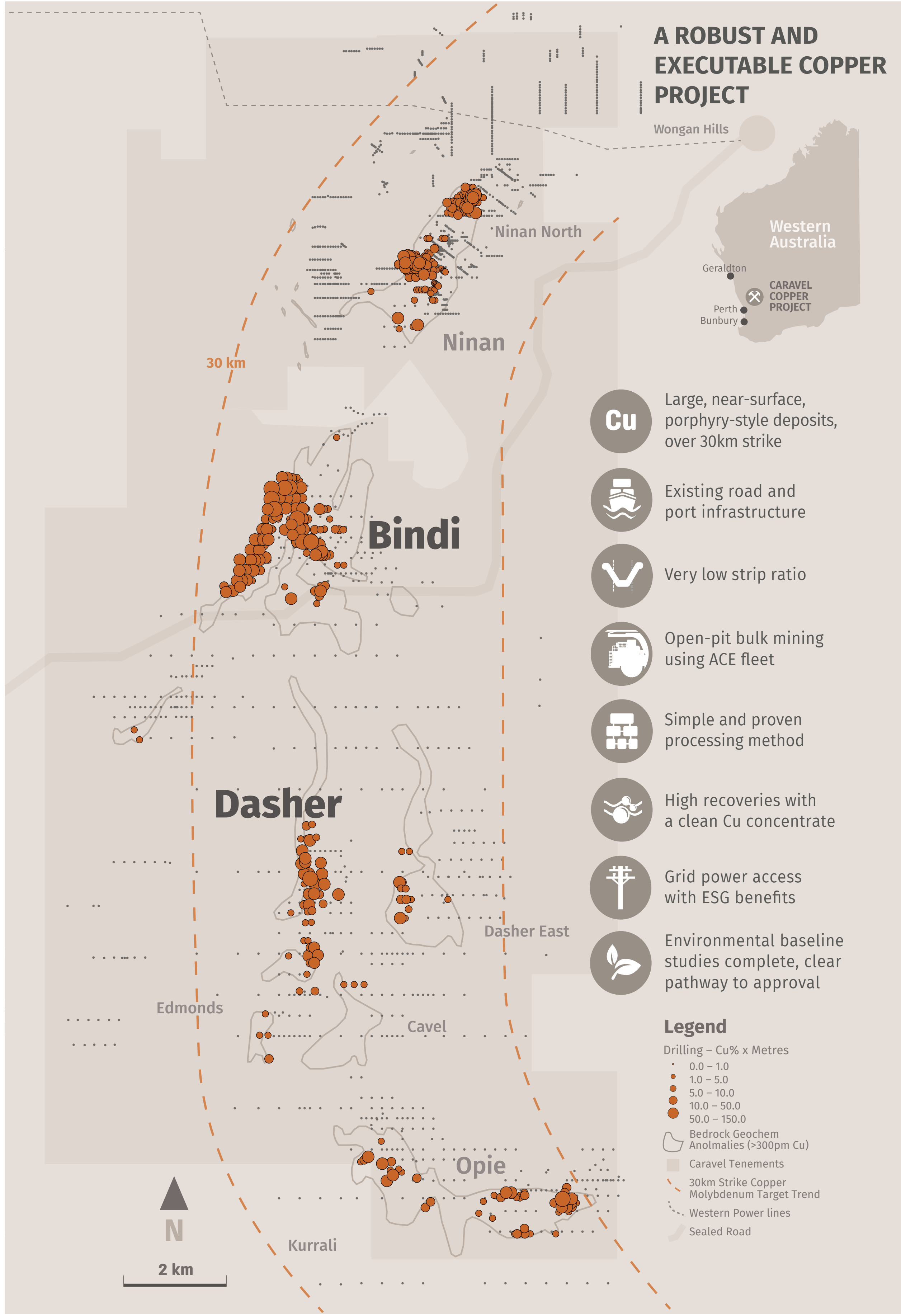


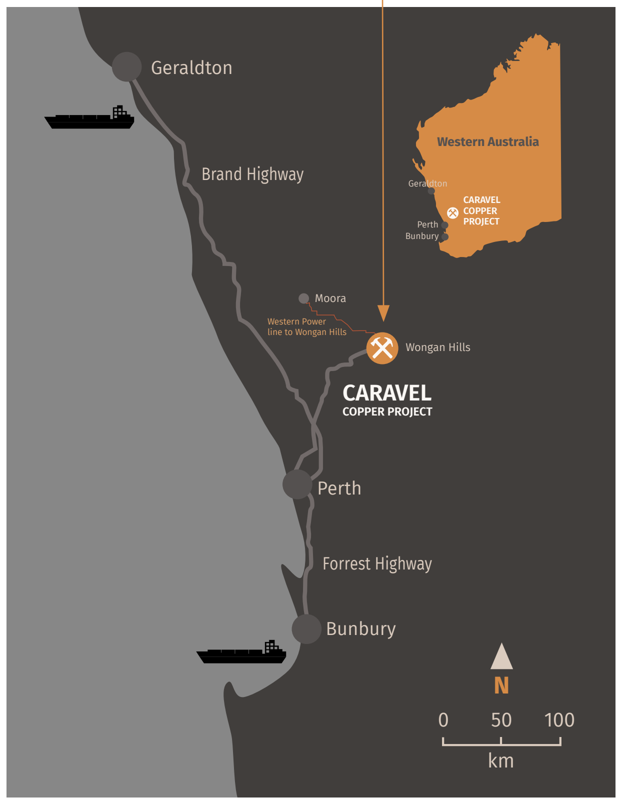
Figure 1*. Fundamental project attributes for a robust and executable WA project.*

THE PROJECT

Location	150km north-east of Perth, Western Australia
Tenements	E70/2788, E70/3674, E70/3680, R70/0063, MLA70/1410, MLA70/1411, GPLA70/262, GPLA70/263
Mineralisation	Porphyry-style chalcopyrite sulphide mineralisation associated with foliated granitic gneiss
Ore Reserve	583.4Mt at 0.24% copper
Mineral Resources	1.18 Billion tonnes @ 0.24% Cu and 48 ppm Mo for 2.84Mt of contained copper (0.1% Cu cut-off)
Mining Method	Conventional open-pit using ACE technologies including: diesel-electric haul trucks and electric drills and shovels
Operating Structure	Owner-miner
Processing Capacity	27.8Mtpa throughput
Processing Flowsheet	Primary crushing, secondary crushing, grinding by SAG and ball mill with a pebble crushing circuit, followed by conventional rougher and cleaning flotation, thickening and filtering
Recovery	~92% Cu
Power	Existing access to grid-power from WA State (SWIS) grid, with renewable energy mix
Water	Borefield ~60km to the west with associated pipeline
Concentrate Export	Concentrate trucked by public road 340km to Bunbury Port or 400km to Geraldton Port

Caravel Copper Project (100% Owned)

- **Status** Pre-Feasibility (complete)
- **Production of Copper in Concentrate** ~62,000 tpa



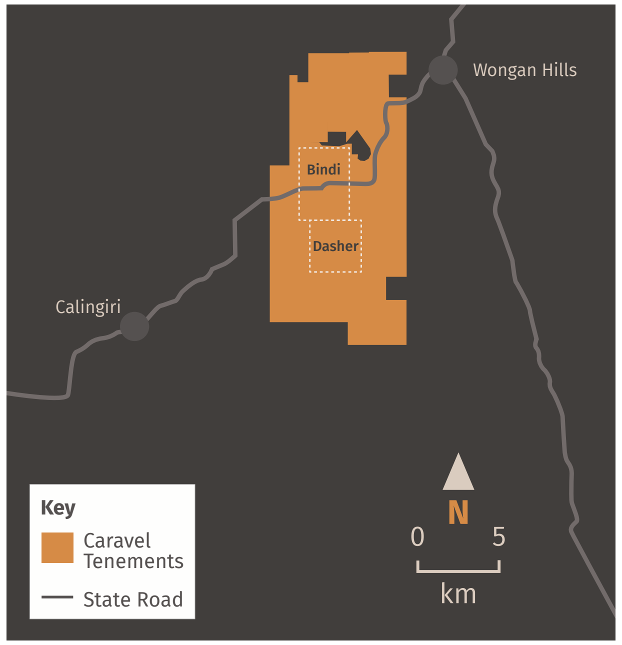


***Figure 2**: Caravel Copper Project and tenement location.*

INVESTMENT HIGHLIGHTS

- **28 YEARS** — Mine Life Resources likely to support longer life
- **#1 WA** — Best Mining Investment Jurisdiction Fraser Institute 2021
- **USD $1.72/lb CASH COSTS** — After By-product Credits
- **AISC USD $2.55/lb** — All-in Sustaining Costs
- **AUD $4.62B PRETAX** — Net Cashflow
- **~62KTPA PRODUCTION** — Copper in Concentrate ~130 million pounds per annum
- **CAPEX AUD $1.2B** — Dual Train Processing Plant and Infrastructure
- **AUD $309M INITIAL** — Mining Equipment
- **AUD $189M INITIAL** — Mining Pre-strip
- **NPV AUD $1.1B PRE-TAX** — 7% Discount Rate
- **IRR 14.7%** — Internal Rate of Return
- **Cu 2.84Mt** — Mineral Resource Contained Copper
- **1.3:1 LOW STRIP RATIO** — Life of Mine
- **~25%** — Clean Concentrate Cu: Chalcopyrite

MAIDEN ORE RESERVE*

Caravel Copper Project Maiden Ore Reserve (JORC 2012) statement includes:

- **583.4Mt at 0.24% copper**
- **1.42Mt contained copper (at 0.10% cut-off)**
- **Proven Ore Reserves of 105.4Mt for 0.28Mt contained copper**
- **Probable Ore Reserves of 478.0Mt for 1.14Mt contained copper**
- **81.6% of the Project's 28-year mine life is in Ore Reserve**
- **Ore grades for the first 5 year's mine schedule are >0.28% copper**

*Ore Reserves reported in detail Page 16

PROJECT SCHEDULE* AND BENEFITS SNAPSHOT

2022				2023				2024				2025				2026			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PRE-FEASIBILITY STUDY		DEFINITIVE FEASIBILITY STUDY							PROJECT FINANCING			CONSTRUCTION						OPERATIONS	

Royalties	Around $1 Billion over the initial 28-year mine life
Workforce	350 to 450 permanent positions

*Project Schedule provided in detail Page 48

COPPER MARKET AND CONCENTRATE

The copper market is forecast to experience significant demand growth over the next decade.

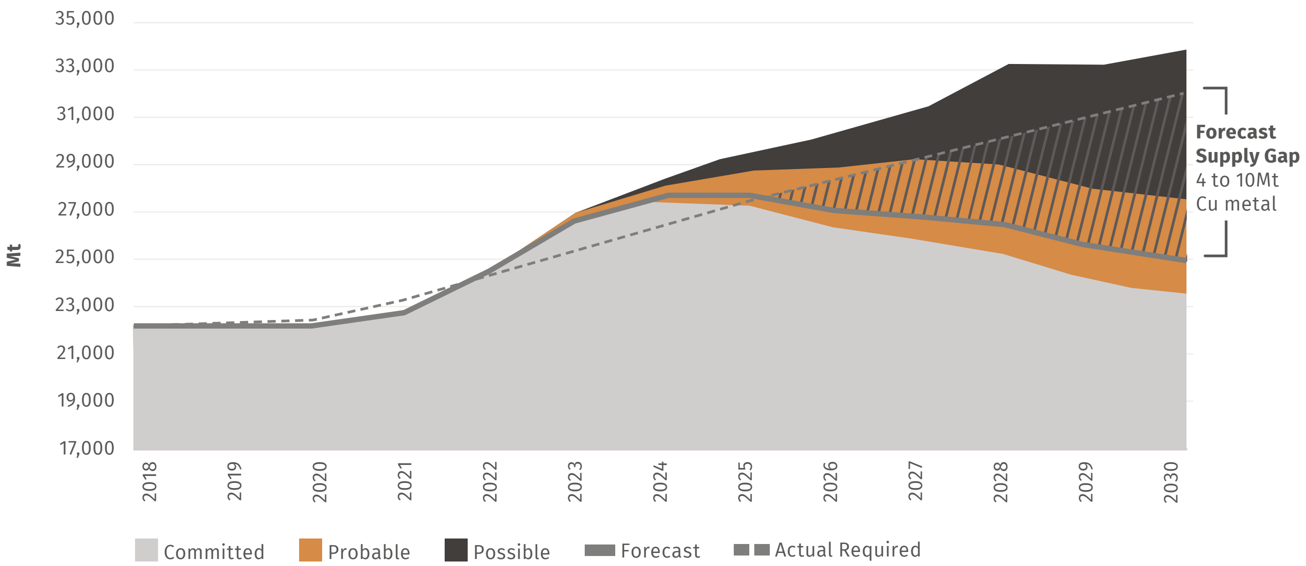
Continuing urbanisation in Asia allied with rapid growth in electric vehicle manufacture and increasing industrial uses in the decarbonisation of the global economy are forecast to increase demand from around 25Mtpa in 2021 to well in excess of 30Mtpa by 2030. It is estimated that as much as 10Mtpa of new mine supply is required over this timeframe to meet demand. Based on known expansions and probable new mines various forecasters are predicting a supply gap in the market of between 4Mtpa and 10Mtpa by 2030 (Figure 3).

Concentrate supply is forecast to be at close to equilibrium, or slight surplus by the middle of the decade but a material reduction in production from existing mines and shortage of new mine developments over the second half of the decade are pointing to substantial concentrate supply deficits by 2030 and beyond.

Located in a politically stable jurisdiction, with access to existing high quality transport and energy infrastructure, the Caravel Copper Project is well positioned to capitalise on the increased copper demand.

Copper metal prices have escalated significantly over the past 3 years with the LME cash price around USD2.70/lb in 2019 increasing to trade consistently in a range USD4.20/lb to USD4.50/lb since March 2021. Forecasters are generally expecting some pull back in metal prices across 2023 and 2024 with prices recovering above USD4.00/lb from 2025 onwards and longer term outlooks above this level. For example Macquarie Bank forecasts prices to trend upwards from USD4.20/lb in 2026 as the supply deficits begin to emerge.

COPPER MINE SUPPLY FORECAST (Mt)



Source: Various company reports, CRU, Wood Mackenzie, ICSG, Macquarie Strategy, March 2022.

Figure 3*: Copper mine supply forecast.*

COPPER CONCENTRATE

Results from PFS metallurgical testwork indicate that Caravel will produce a clean, marketable concentrate grading ~25% copper with very low impurities. An indicative concentrate analysis based on PFS testwork is provided in Table 1.

The Project's concentrate is likely to be attractive to copper smelters seeking clean product for blending with other concentrates containing impurities above threshold levels, allowing them to meet increasingly strict import and operating conditions being imposed on the smelting industry.

Arsenic (As) in particular is undesirable to smelters and is increasingly being seen in high concentration in many copper concentrates. Penalties for As usually start above 0.1 – 0.2% and concentrates >0.5% are not permitted to be imported to some countries. Caravel copper concentrate levels for arsenic are <0.01%, at least ten times lower than the threshold level that penalties would apply, making it ideal for blending. Other impurities such as Cadmium (Cd), Selenium (Se), Antimony (Sb) and Lead (Pb) are at least an order of magnitude or more under the typical threshold limits for smelters.

Credit elements in the concentrate are expected to be silver (Ag) and gold (Au) and potential exists for a separate molybdenum (Mo) concentrate. Testwork indicates both Ag and Au are likely to be present at payable levels in the concentrate and the PFS has assumed a conservative level of payable value based on indicative concentrate specifications.

Testwork for the recovery of Mo has shown a marketable product can be produced as a separate by-product and allowances will be made on the process flowsheet layout to incorporate a Mo recovery circuit but this is not included in the PFS. A final decision on inclusion of the Mo circuit will be made during the DFS and will be dependant on Mo demand and price forecasts at that time.

Metallurgical testwork will be ongoing through the DFS to better characterise and optimise the concentrate specifications to market requirements.

TABLE: 1

CONCENTRATE ANALYSIS RESULTS

Element	Caravel Concentrate
Cu (%)	~25%
Ag (ppm)	118.0
As (%)	<0.01
Au (ppm)	~2
Bi (%)	0.01
Cd (ppm)	<5
Cl (%)	<0.01
F (ppm)	200
Fe (%)	26.5
Hg (ppm)	0.5
Pb (%)	<0.01
Mo (ppm)	65.0
S (%)	29.3
Sb (ppm)	0.70
Se (ppm)	40.0
Zn (%)	0.20

GEOLOGY AND EXPLORATION

Mineralisation at the Caravel Copper Project is hosted by a large porphyry copper system within a highly deformed Archaean granite.

Typical porphyry style quartz veins hosting chalcopyrite and minor other sulphides have been transposed into the dominant foliation trend to present as numerous, narrow stringers of mineralisation within the surrounding quartz-biotite gneiss. The density of the veins and stringers varies with higher density clusters forming the higher-grade ore zones surrounded by a wide distribution of lower density veining forming the lower grade ores (Figures 7 and 8).

The granite host rock, the inferred pre-metamorphic mineral assemblages and general scale and style are all consistent with the porphyry copper model used to describe the style of mineralisation. The regional geological setting is also consistent with a porphyry model with the 30km mineralised trend following the margins of a granite batholith, referred to as the Wongan Batholith, as shown in Figures 5 and 6. The Wongan Batholith sits immediately west of a major north-south trending structure that splays from the regional terrane boundary between the older South West Yilgarn Block and the younger accreted terranes to the east. The boundary is interpreted as a suture remaining after closure of an Archaean subduction zone that was active around 3.0 Ga – 2.7 Ga and is inferred to be related to the formation of the Wongan Batholith, dated at around 3.0 Ga, and associated porphyry intrusions responsible for mineralisation.

Outhwaite (2017) describes in detail age dating work and the tectonic history of the Project area. Host granites and associated mineralisation have been dated at around 3.0 Ga, with subsequent deformation and up to granulated facies metamorphism around 2.7 Ga, coincident with the regional deformation event and also gold mineralisation at Kalgoorlie and the wider Yilgarn goldfields. The Boddington gold deposit, also located in the SW Yilgarn Terrane, is one of Australia's largest gold deposits and a significant copper producer. This deposit also shows affinities with porphyry style mineralisation with diorite host rocks dated around 2.7 Ga.

The ore zones and surrounding rocks often exhibit strong foliation development, strong stretching lineations and later recumbent folding and thrusting. These events are all consistent with the inferred history of the Wongan Batholith as having formed in a sub-volcanic setting on a convergent plate margin with subsequent collision tectonics, probably a major overthrusting event, resulting in the deep burial of the batholith preserving if from erosion which would otherwise have removed all porphyry of such ancient origin. The associated extreme deformation and granulate facies metamorphism has extensively modified the structure and mineralogy of the mineralisation, creating the strong layering and transposed fabrics as well as recrystallising the copper minerals, possibly contributing to their excellent flotation characteristics.

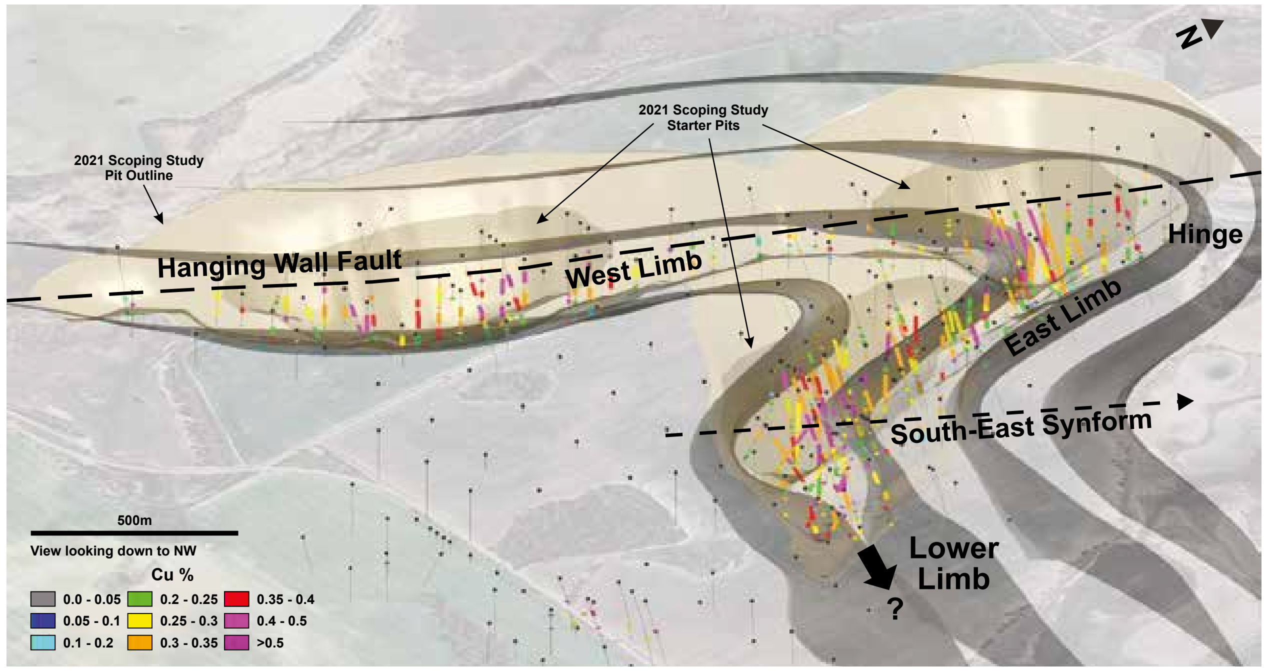


***Figure 4**. Oblique view looking northwest over Bindi showing the main structural form lines, fold hinges and limbs.*

Copper occurs almost exclusively as chalcopyrite sulphides associated with quartz veins. Whilst individual veins may be semi-massive chalcopyrite, the bulk grades are determined by the frequency and thickness of these veins, which may be up to several centimetres thick, though more commonly the sulphide veins are attenuated and in the range of millimetres thick following the main foliation. The frequency of veins or sulphide bands varies on the scale of metres and tens of metres, where copper grades may range > 0.6% over thicknesses of tens of metres with lower grades or barren zones in between.

Molybdenite, pyrite and pyrrhotite may accompany the chalcopyrite, though in much lower levels. Garnet, sillimanite and magnetite are also commonly associated with mineralisation, possibly as products from metamorphism of the primary alteration assemblages. Garnets have an almandine composition and are coarse grained, often overprinting the foliation. Both garnet and magnetite occur in sufficient abundance that they may offer opportunities as by product minerals to be recovered from the tails stream with economics still to be evaluated.

The mineralised zones have undergone higher strain than adjacent barren granites in the footwall. In the higher strain zones the mineralised veins have been transposed into the foliation plane, as shown in Figures 7 and 8.

Detailed geotechnical and structural logging from drill core has identified these foliation trends form well defined groupings that are consistent with the interpretation that the Bindi West and Bindi East Limbs converge to form a NNW plunging fold structure, the closure of this fold is termed the Bindi Hinge Zone (see Figure 4). At the southern end of the East Limb there is evidence for another fold termed the SE Synform (see Figure 4), where the East Limb remains open to the east and may return to surface in an area recently shown to contain significant bedrock copper mineralisation immediately east of the planned Bindi pit. This is described in more detail in this report under the section on Growth Potential. The fold closures are often associated with better grades of mineralisation, possibly due to remobilisation of sulphides into the fold hinges, so the identification of these structural models has been important in both the targeting of better grade areas and the development of the Resource models.

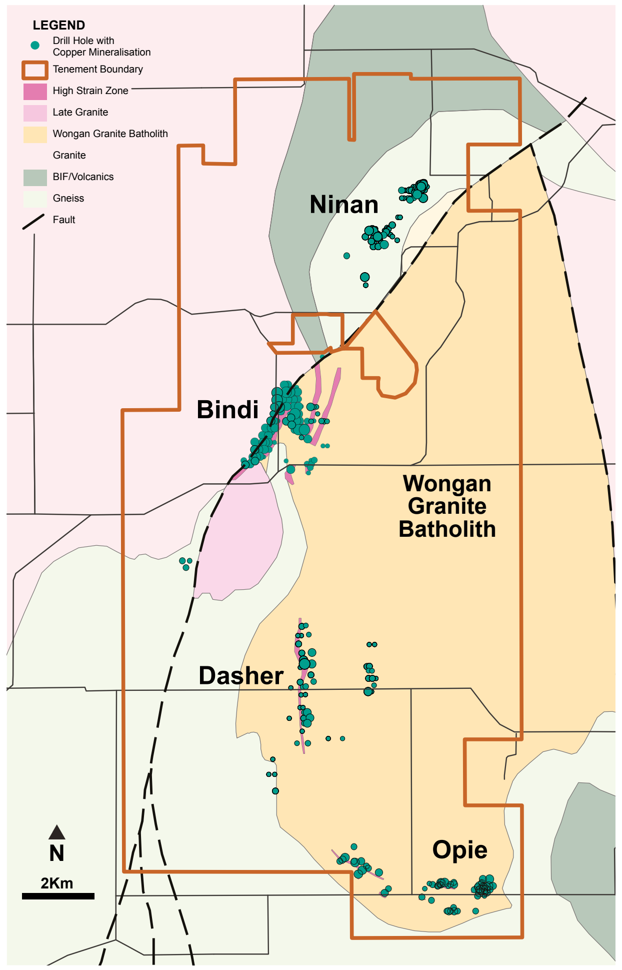


***Figure 5**. Simplified interpreted geology of the Caravel Project area showing the Wongan Batholith and mineralised drill holes.*

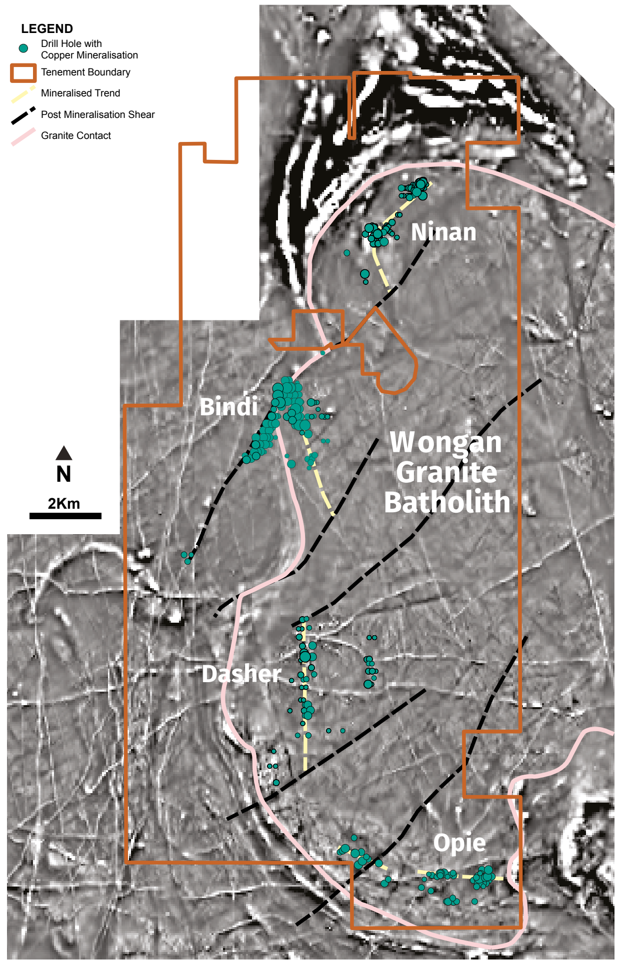


***Figure 6**. Aeromagnetic image of the Caravel Project area showing outline of the Wongan Batholith and location of the main deposits.*

EXPLORATION HISTORY

Between 2005 and 2013 Dominion Mining collected and analysed approximately 200,000 regional roadside soil geochemical samples throughout the WA Wheatbelt primarily looking for gold. From this data areas of anomalous copper were identified and followup drilling was conducted. This lead to the first discovery of mineralisation in 2010 when RC drilling intersected pervasive chalcopyrite-molybdenite mineralisation over widths of up to 250 metres.

Caravel Minerals acquired Quadrio Resources, the subsidiary company holding the Project exploration licences, in 2013 when Dominion was taken over by Kingsgate Consolidated. Further exploration between 2013 and 2015 resulted in the discovery and delineation of a large system of copper mineralisation with significant associated molybdenum, and to a lesser extent associated silver and gold. Further infill drilling between September 2015 and March 2016 resulted in the estimation of a maiden JORC Resource in 2017.

In 2016 a Scoping Study was published by Caravel and JV partner First Quantum Minerals Limited on what was then called the 'Calingiri Project'. The Calingiri Project (Cu, Mo, Au, Ag) was recognised by the WA Government in 2017 and included in the Geological Survey of Western Australia Major Projects map. The Project was renamed to the Caravel Copper Project in 2018.

A 2019 updated Resource estimate formed the basis for a new Scoping Study which confirmed potential for a long-life project with strong economics. Since then significant further delineation drilling and detailed infill drilling programs have been completed to define higher grade zones within the Bindi East Limb and Hinge Zone.

In November 2021 the current JORC Mineral Resource was published with an estimated 1.18 Bt @ 0.24% Cu for 2.84Mt contained Cu (0.1% Cu cut-off).

Through 2021 and early 2022 a program of diamond core drilling across the Project Resources, collected material for metallurgical testwork and geotechnical logging. Elsewhere preliminary geotechnical drilling was completed to test sites for mine infrastructure and tailings dams. Groundwater observation water bores were installed across the Project area over the past 5 years to develop a detailed groundwater model.

In 2022 a program of sterilisation AC drilling was undertaken to test areas peripheral to the Bindi resource that may be impacted by future mine infrastructure. This resulted in the discovery of the Bindi Far East prospect and possible extensions to surface of the Bindi Lower Limb.

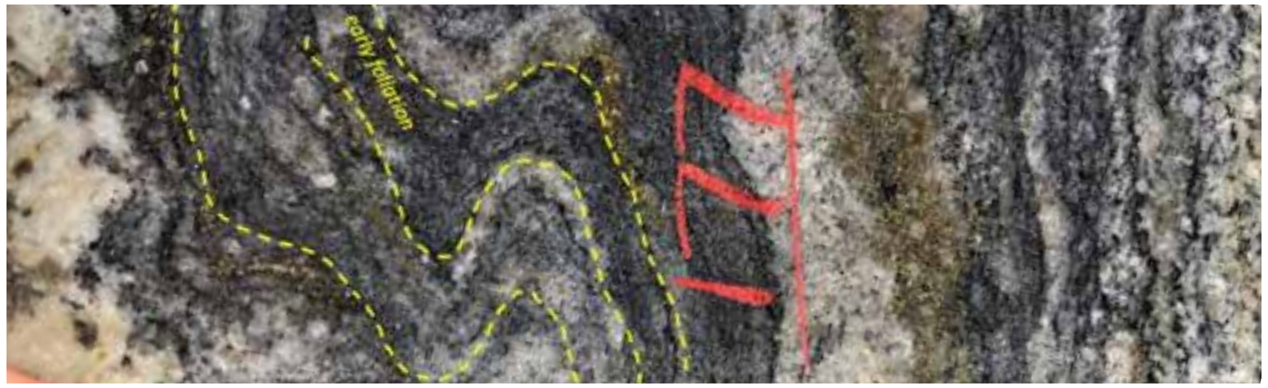


Figure 7*. Drill core showing late folding of early foliation and veins.*

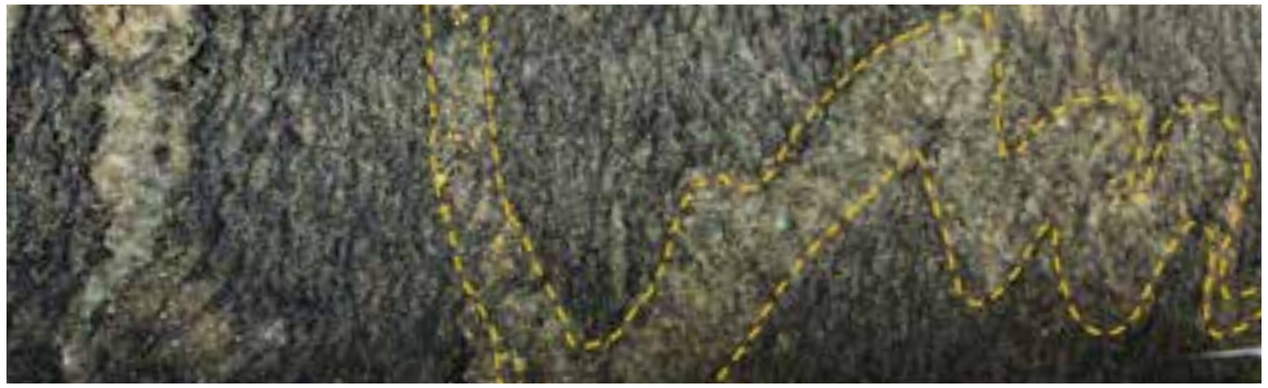


Figure 8*. Drill core showing early veins being transposed into dominant foliation.*

Figure 9*. Drill core showing high grade chalcopyrite and pyrite in a late quartz vein.*

MINERAL RESOURCES

The JORC Code 2012 Mineral Resource estimate reported in November 2021 totals 1.18 billion tonnes @ 0.24% Cu and 48 ppm Mo for 2.84Mt of contained copper (0.1% Cu cut-off see Table 2).

Table 2: Caravel Copper Project[1] November 2021 Mineral Resource at various Cu cut-off grades

CU CUT-OFF (%)	Mt	Cu (%)	Mo (ppm)	Cu (t)
0.10	1,180.6	0.24	48	2,843,700
0.15	874.9	0.28	57	2,457,200
0.20	678.7	0.31	64	2,116,600
0.25	481.2	0.35	71	1,671,600
0.30	305.2	0.39	80	1,189,400

Note: appropriate rounding applied

Approximately 8,974.5 metres of diamond drilling and 39,536 metres of RC percussion drilling has been completed at Bindi, including 7,740 metres of core and 20,233 metres of RC since 2019 predominantly on the Bindi East Limb and Hinge (Figure 13). The 2021 Mineral Resource announced in November 2021 incorporates these recent drilling results to better delineate the grade and distribution of copper-molybdenum mineralisation in the Bindi Hinge Zone and Bindi East Limb, which are to be the first areas developed.

The drilling also significantly extended the resource at depth and improved the continuity of mineralisation, particularly within several higher-grade zones within the East Limb and Hinge Zone areas (Figure 14).

At Bindi, 105Mt (at 0.1% cut-off grade) of the shallower resource (top 150m) is now defined as Measured Resource and has been converted to Proven Reserves in the PFS. At the higher cut-off grades that will be used in the early mine plan this is expected to include sufficient ores to cover the first 5 years of mining, providing high confidence in the mine schedule.

The mineralised domain interpretations were based upon a combination of geology, supporting multi-element lithochemistry and a resource boundary defined by applying a +0.1% Cu cut-off grade. No oxide material is reported as part of the resource.

The Mineral Resources (including Bindi, Dasher and Opie) are classified as a combination of Measured, Indicated and Inferred, based on confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and available bulk density information.

Table 3, 4 and 5 summarise the Caravel Copper Project Mineral Resource by resource classification using 0.1%, 0.15% and 0.25% Cu cut-offs. Table 6 includes a breakdown by deposits at a 0.1% Cu cut-off.

Table 3: Caravel Copper Project November 2021 Mineral Resource (using 0.1% Cu cut-off)

CATEGORY	Mt	Cu (%)	Mo (ppm)	Cu (t)
Measured	105.2	0.27	67	287,300
Indicated	574.1	0.24	47	1,390,200
Inferred	501.3	0.23	45	1,166,200
Total	**1,180.6**	**0.24**	**48**	**2,843,700**

Note: appropriate rounding applied

Table 4: Caravel Copper Project November 2021 Mineral Resource (using 0.15% Cu cut-off)

CATEGORY	Mt	Cu (%)	Mo (ppm)	Cu (t)
Measured	90.3	0.30	73	268,600
Indicated	416.9	0.29	56	1,191,900
Inferred	367.7	0.27	54	996,700
Total	**874.9**	**0.28**	**57**	**2,457,200**

Note: appropriate rounding applied

Table 5: Caravel Copper Project November 2021 Mineral Resource (using 0.25% Cu cut-off)

CATEGORY	Mt	Cu (%)	Mo (ppm)	Cu (t)
Measured	56.3	0.35	82	198,900
Indicated	229.3	0.36	70	822,300
Inferred	195.6	0.33	69	650,400
Total	**481.2**	**0.35**	**71**	**1,671,600**

Note: appropriate rounding applied

[1]*Caravel Copper Project combines Bindi, Dasher and Opie deposits.*

Copper Resource Growth 2016 to 2021

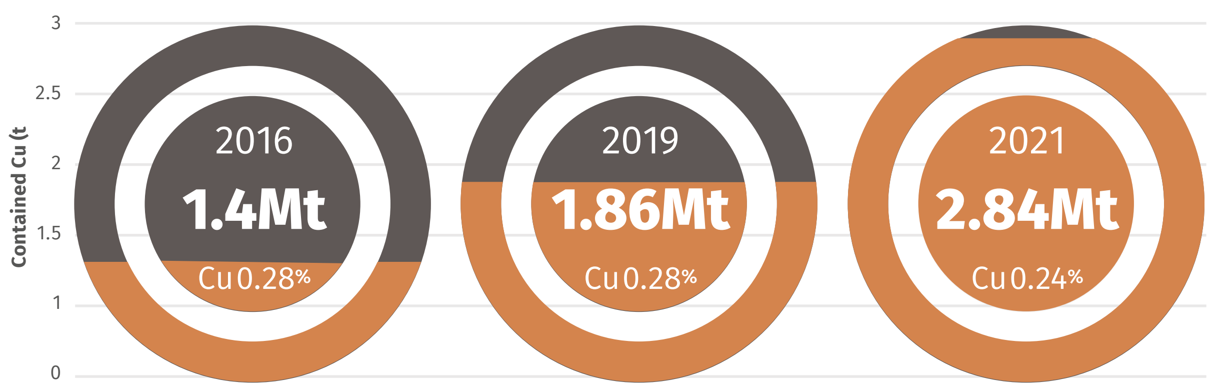


***Figure 10**: Resource growth by contained copper since 2016 maiden resource.*

Table 6: Caravel Copper Project November 2021 Mineral Resource by deposit using 0.10% Cu cut-off

DEPOSIT	CLASSIFICATION	Mt	Cu (%)	Mo (ppm)	Cu (t)
Bindi	Measured	105.2	0.27	67	287,300
	Indicated	424.4	0.23	49	974,400
	Inferred	372.9	0.22	45	833,700
	Total	**902.5**	**0.23**	**49**	**2,095,400**
Dasher	Measured	–	–	–	–
	Indicated	131.7	0.28	43	364,100
	Inferred	124.8	0.25	46	321,700
	Total	**256.5**	**0.27**	**45**	**685,800**
Opie	Measured	–	–	–	–
	Indicated	17.9	0.29	40	57,700
	Inferred	3.6	0.30	33	10,900
	Total	**21.5**	**0.29**	**39**	**62,600**
Total	Measured	105.2	0.27	67	287,300
	Indicated	574.1	0.24	47	1,390,200
	Inferred	501.3	0.23	45	1,166,200
	Total	**1,180.6**	**0.24**	**48**	**2,843,700**

Note: appropriate rounding applied

Figure 11 presents the Grade vs. Tonnage curves for the total Caravel Copper Project Mineral Resource (combining the Bindi, Dasher and Opie deposits) and Figure 12 presents the Grade vs. Tonnage curves for the Bindi deposit.

CARAVEL COPPER PROJECT COMBINED GRADE AND TONNES (MEAS + IND + INF)

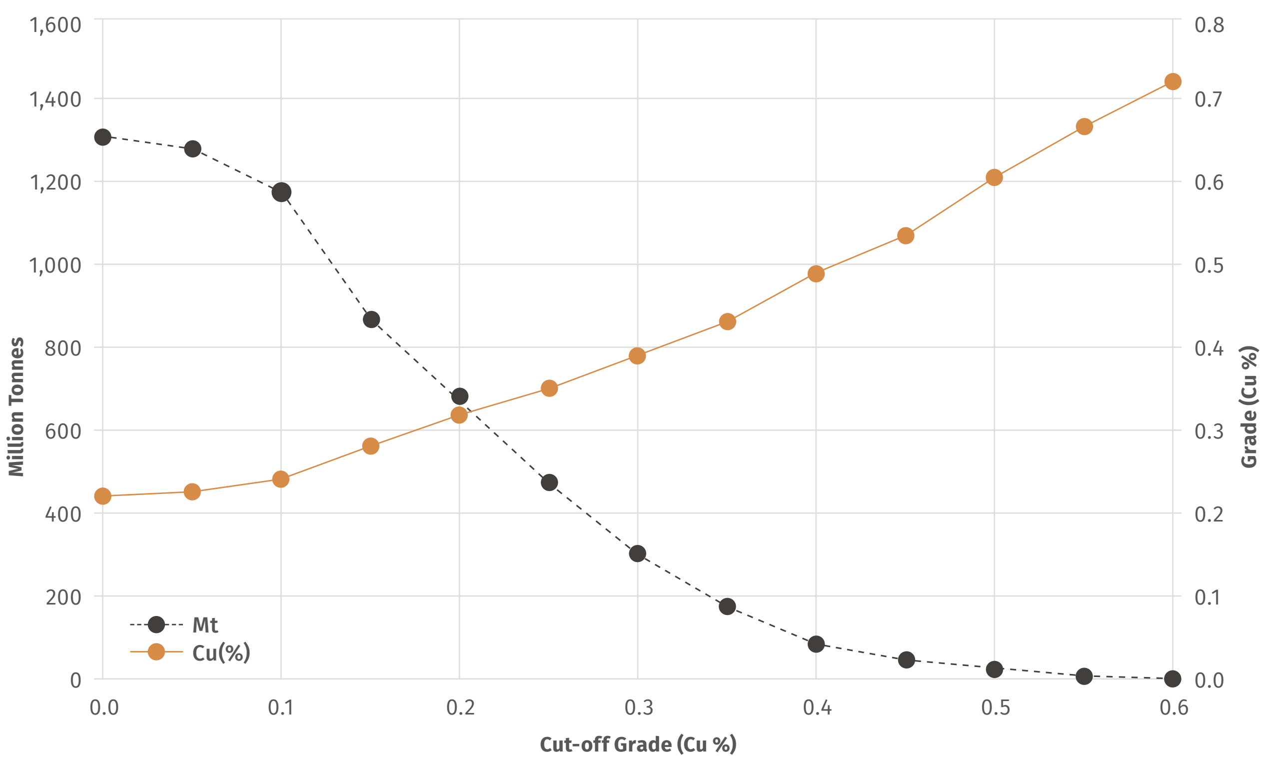


***Figure 11**: Grade vs. Tonnage curves for the combined Caravel Copper Project November 2021 Mineral Resource.*

BINDI GRADE AND TONNES (MEAS + IND + INF)

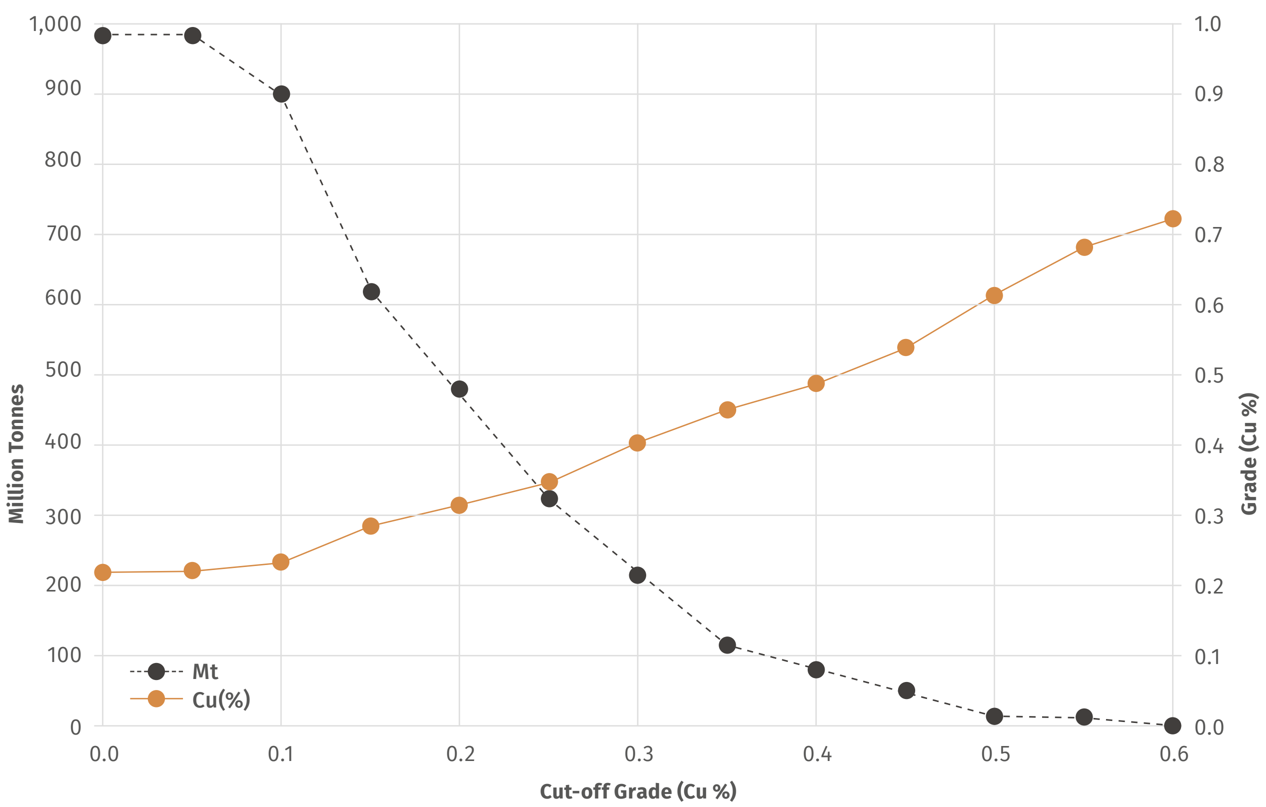


***Figure 12**: Grade vs. Tonnage curves for the Bindi Deposit November 2021 Mineral Resource.*

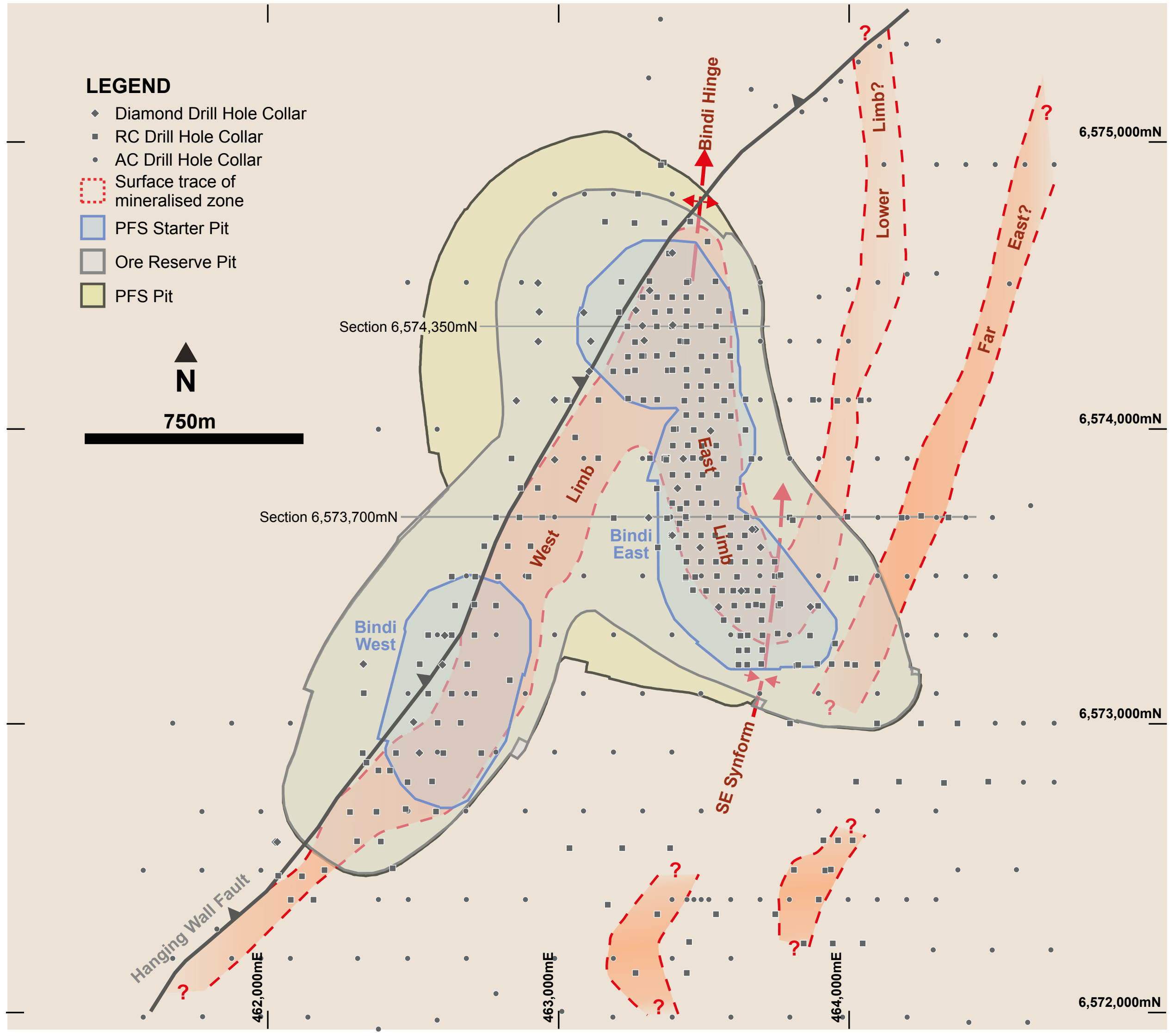


***Figure 13**: Plan of Bindi copper deposit with interpreted geology showing the optimised pit shell stages and resource drill collars.*

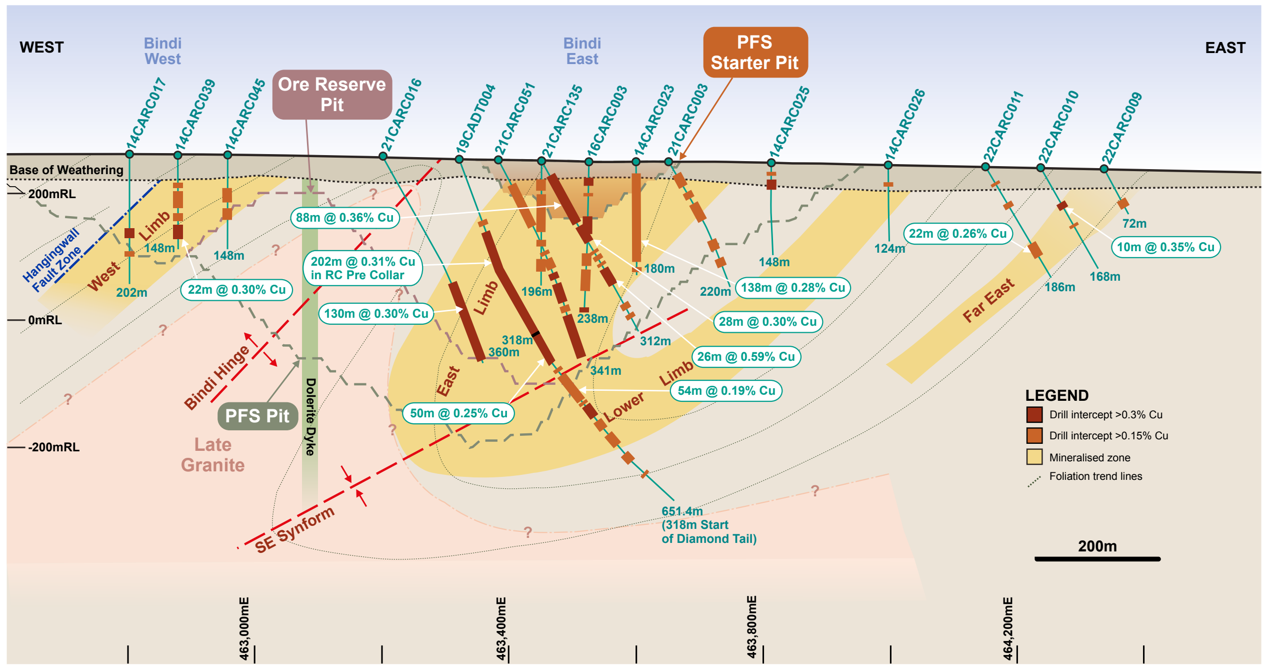


***Figure 14**. Typical cross section (6,574,350N) through the Bindi Hinge zone illustrating width and grade of mineralisation and low stripping ratios.*

ORE RESERVES

The Project has Proven and Probable Ore Reserves of 583.4Mt at 0.24% Cu for 1.42Mt contained Cu, at an average strip ratio of 1.3:1, including all pre-strip, as detailed in Table 7.

The Ore Reserve for the Project is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, JORC Code 2012.

The competent person for the reserve estimate is Mr Stephen Craig, CEO with Orelogy. Mr Craig is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Craig has sufficient experience relevant to the style of mineralisation, the type of deposit and the activities planned at Caravel to qualify as a Competent Person as defined in the 2012 JORC Code.

The Caravel Copper Project Maiden Ore Reserve (JORC 2012) statement includes:

- 583.4Mt at 0.24% copper
- 1.42Mt contained copper (at 0.1% cut-off)
- Proven Ore Reserves of 105.4Mt for 0.28Mt contained copper
- Probable Ore Reserves of 478.0Mt for 1.14Mt contained copper
- 81.6% of the Project's 28-year mine life is in Ore Reserve
- On average only 2% of inferred material is mined and processed in the first 20 years of processing

The mine planning component of this study involved mine cost estimation, pit optimisation, mine design and scheduling. The Ore Reserve for the deposit is 583.4 Mt at 0.244% Cu for 1.42 Mt contained copper at an average strip ratio of 1.3:1. Included within the pit design inventory but not the Ore Reserve is 131.5 Mt of inferred material at 0.249% Cu. The Mine Plan supporting the Ore Reserve is based on an open-pit mine using diesel-electric autonomous haulage trucks with electric trolley assist and electric power for drills and face-shovels. Plant throughput assumptions for the Ore Reserve are based on a 27.8Mtpa copper processing facility. Mine planning also utilised inputs from technical specialists including:

- Mineral Resource modelling and estimation – Trepanier
- Geotechnical studies and slope design criteria – Dempers and Seymour
- Modifying factors associated with dilution and mining recovery estimates – Orelogy
- Processing costs, processing recoveries and concentrate grade – Aurifex
- ACE reviews – Minera and Idoba (experts in the application of autonomy)
- Metal prices, royalties and concentrate payability – Caravel Minerals

Table 7: Caravel Copper Project Ore Reserve Summary

STATUS	UNITS		BINDI	DASHER	TOTAL
	Cut-off Grade	Cu%	0.1	0.1	0.1
Proven		Mt	105.4	–	105.4
		Cu%	0.27	–	0.27
	Contained	Cu Mt	0.28	–	0.28
Probable		Mt	369.6	108.4	478.0
		Cu%	0.23	0.27	0.24
	Contained	Cu Mt	0.84	0.29	1.14
Total		Mt	475.0	108.4	583.4
		Cu%	0.24	0.27	0.24
	Contained	Cu Mt	1.13	0.29	1.42

Note: Appropriate rounding applied

Proven Ore Reserves are based on Measured resource materials and Probable Ore Reserves are based on Indicated resource materials, reported within the pit design. The cut-off grade was derived as part of the mine optimisation factoring in processing costs, the copper recovery factor and the copper price with associated selling costs. The result was a cut-off grade of 0.1% Cu which the Probable and Proven Reserves are based on. Mining at Bindi will be sequenced and developed in five stages with a similar approach at Dasher which will be developed in three stages. This allows ore feeds to the mill of >0.28% Cu for the first five years. The schedule also balances the amount of waste stripping in the early years whilst maintaining both a continuous supply of ore at the desired rates and an acceptable vertical rate of advance for each stage (Figures 15 and 16).

There are additional Inferred and unclassified resources below the Bindi and Dasher pits with significant Inferred Resources at Bindi West below the current Ore Reserve. These Inferred Resources have good potential to be converted to the Ore Reserve through further work and thereby extend the Project's mine life.

It should be noted that inferred resources have a lower level of geological confidence and there is no certainty that further exploration work will result in the determination of indicated mineral resources or reserves.

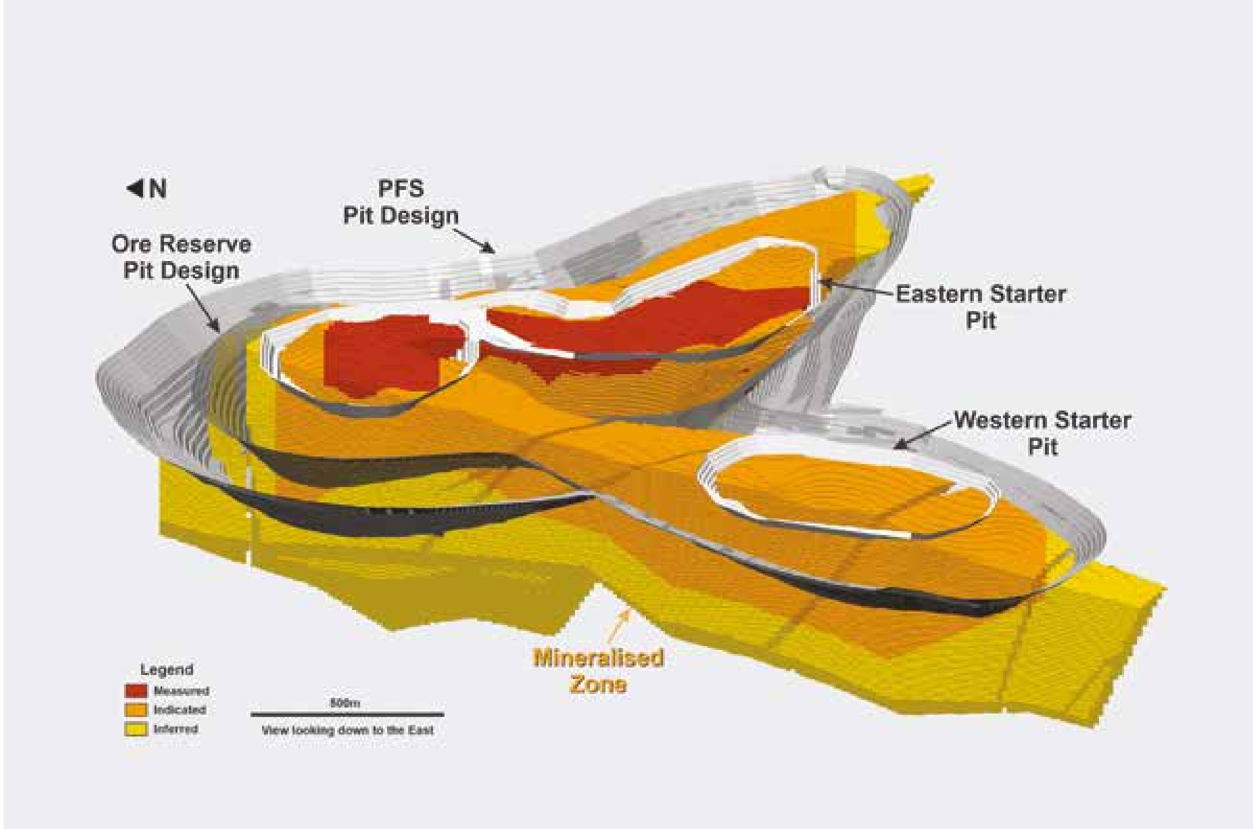


***Figure 15**: Grade distribution within Bindi deposit starter and main pits showing higher grades in the early mining schedule and extensions at depth.*

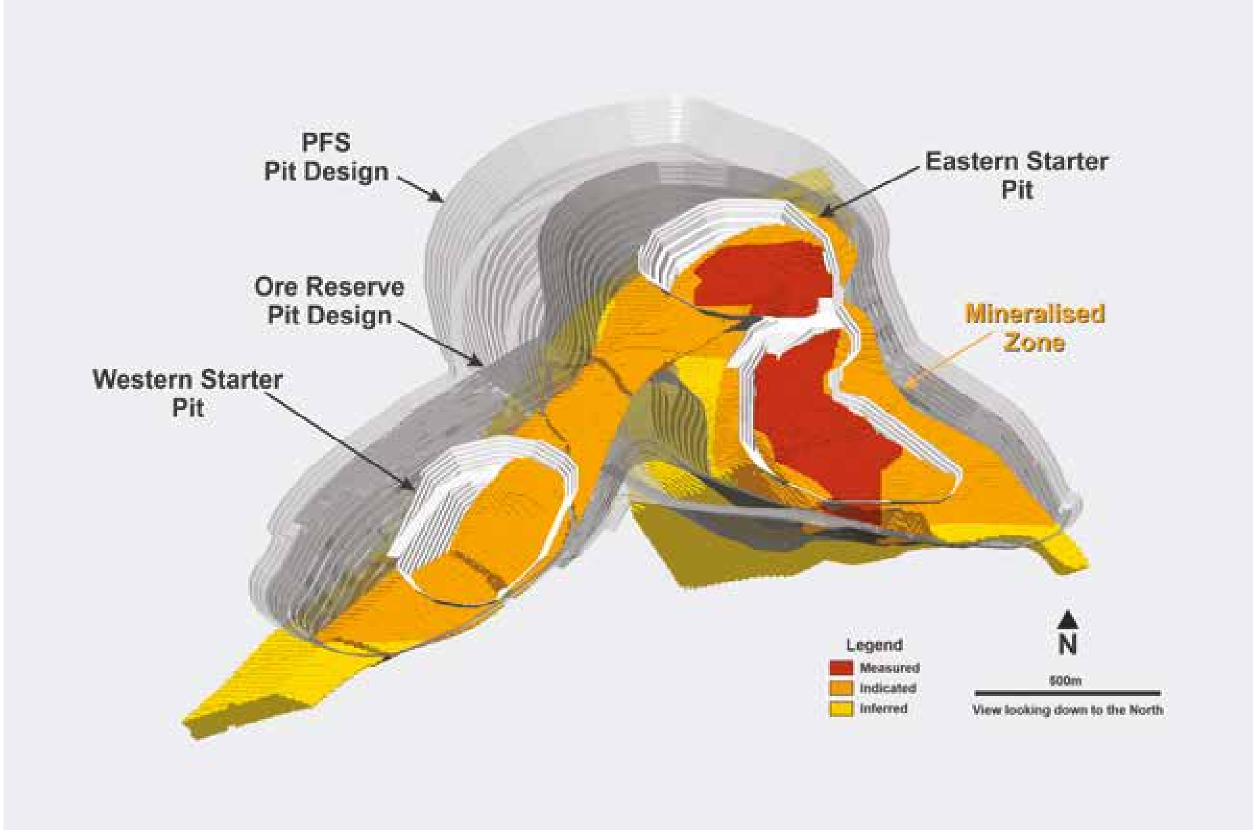


***Figure 16**: Ore Reserve pit designs and Measured, Indicated and Inferred Mineral Resource zones at the Bindi Deposit.*

GROWTH POTENTIAL

There is clear potential to identify further resources within the Project area both as extensions of current resources and through new discoveries along the 30km zone of known mineralisation in the Wongan Batholith.

As a new mineral field, first discovered around 2010, the Wongan Batholith and surrounding areas are in the very early stages of exploration maturity and the thin layer of cover means significant deposits may be concealed. A number of advanced prospects through the area, such as Ninan, Ninan North, Dasher East and Kurrali all have identified mineralisation with grades and widths similar to that found in the current resources. Caravel will continue a program of systematic exploration and there is a high expectation that further new resources will be identified.

In the near term, all the current Resources remain open with potential to be extended at depth or along strike. The steady growth of resources at Bindi is clear evidence of the potential for growth through further drilling and improvement of geological models.

Bindi, Dasher and Opie all have good potential for extensions of existing resources.

Opie has received only limited testing and the main ore shoot remains open down plunge. The wider area around Opie shows numerous mineralised drill intercepts and surface anomalism over around 5km of strike. This remains a high priority area for further exploration once the Project is operating.

Dasher remains open along strike to the south and at depth, with further programs requiring step out drilling. Mineralisation has already been extended over 1,500m to the south of the existing Resource. There is also evidence of folding and potential for repeated limbs of the Dasher ore zone, as seen at Bindi. Further work is planned to test all these options.

At Bindi a number of deep holes into the East Limb identified mineralisation that extends well below and east of the current resource. Structural interpretation indicates a synformal fold structure, termed the SE Synform, which may create a fold repeat of the Bindi East limb toward the east, as shown in Figure 17 and 18. This potential eastern extension has been termed the Lower Limb.

Following the recent discovery of bedrock mineralisation in aircore drilling immediately east of Bindi it is interpreted that the Lower Limb may project to surface in this area. If follow-up drilling supports this interpretation, then the Lower Limb has potential to host significant mineralisation close to the PFS pit eastern wall. Any mineralisation located in this area has good potential to be converted to resources due to the proximity to the current pit.

The Bindi resources all remain open at depth below the East and West Limbs and a number of deep core holes have confirmed the continuity of the mineralisation to depths up to 600m below surface. These holes demonstrate there is good potential to add further Resources below the current pit designs.

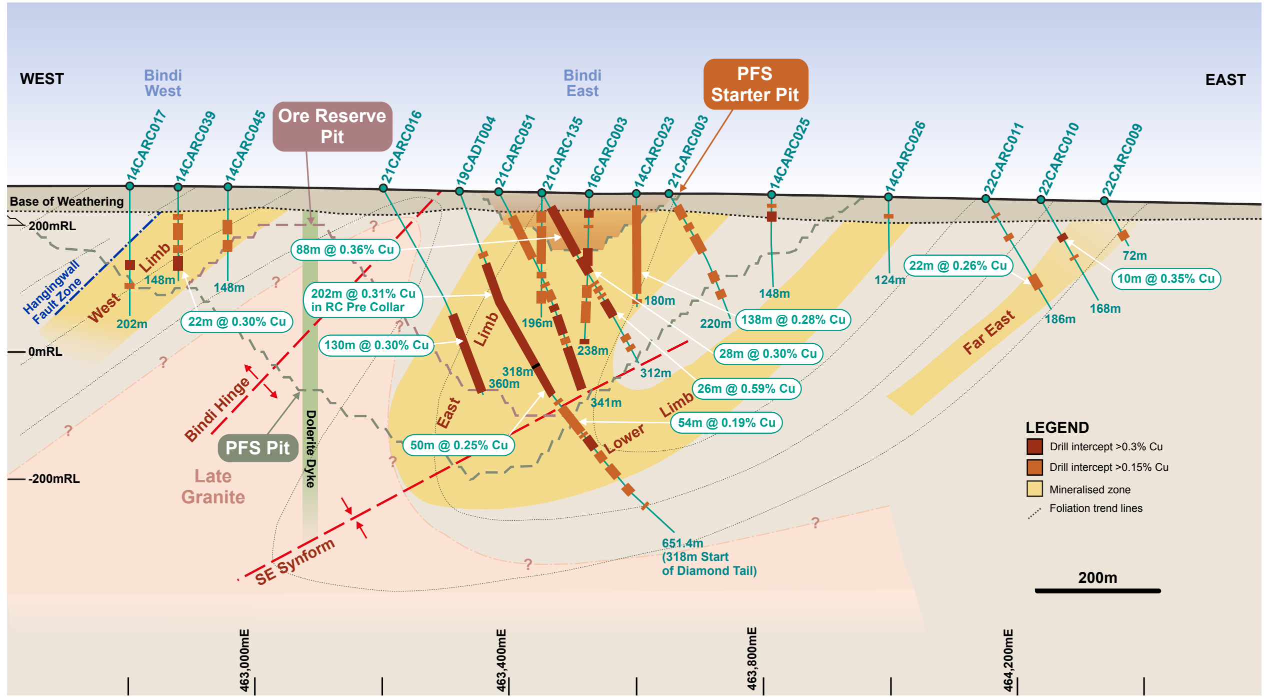


Figure 17: Drilling cross section (6,573,700N) through the Bindi East limb showing the SE Synform, Lower Limb and Far East positions.

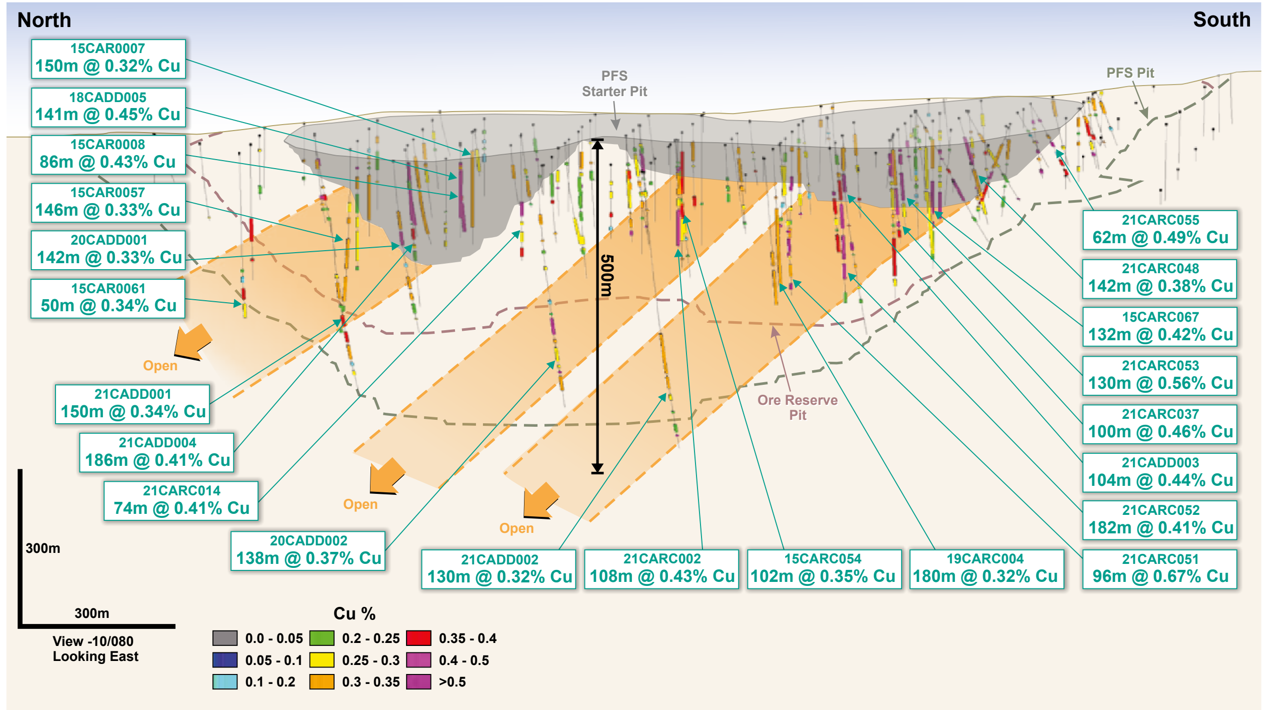


Figure 18: Bindi East Long section showing drill intercepts at 0.2% Cu cut-off with the optimised pit shell stages and north plunging mineralised shoots.

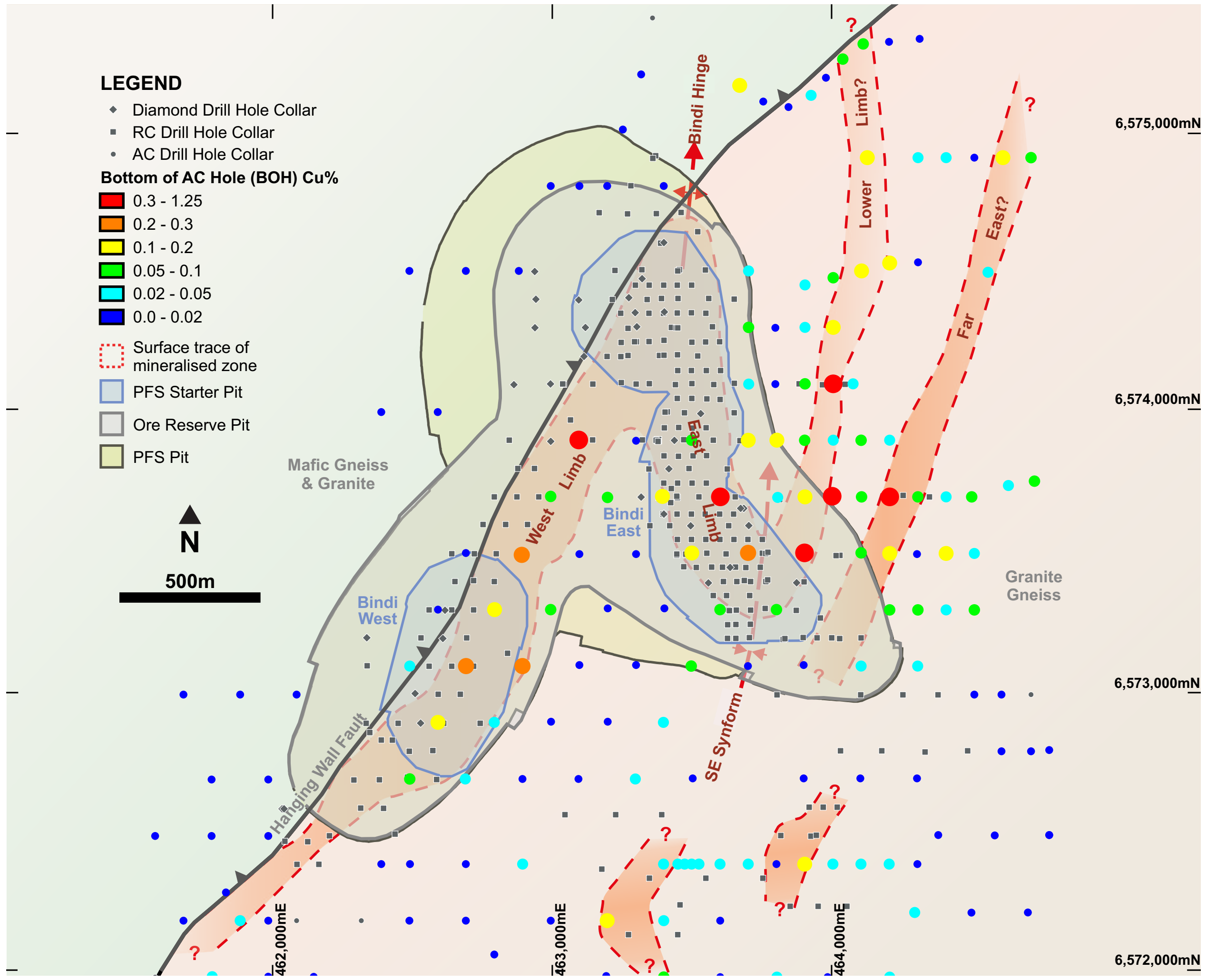


Figure 19: Plan of Bindi interpreted geology with optimised pit shells stages and bottom of hole (BOH) aircore (AC) Cu highlighting the Lower Limb and Far East positions.

MINING OPERATIONS

Mining studies for the PFS have been undertaken by Caravel engineers in association with mining consultants Orelogy performing mine optimisation, design, scheduling and cost modelling and Minera Mining Technologies advising on automation and electrification.

The mining plan is based on an owner-operator model due to the long mine life and the opportunity to utilise technologies such as automation and electric drives that are not currently available with contract mining. Both automation and electrification of the mine fleet require a high level of integration with other mine functions as well as offering significant opportunities for offering better work environments and attracting staff, further supporting the decision to adopt an owner-operator model.

The mine method will be conventional open-pit extraction using RC grade control drilling and autonomous platform rigs for blast hole drilling. Load and haul is based on manned electric shovels and backhoes loading autonomous diesel-electric trucks using trolley assist for grid powered electric drive on ramps and long hauls for both ore and waste.

Initial mine development and overburden pre-strip will provide materials including sand, gravel, aggregate and rock for construction of the Tailings Management Facility (TMF), site roads, Run-of-Mine (ROM) pad and concrete foundations which will lower material sourcing, handling costs and construction time frames.

The Bindi and Dasher deposits have wide ore zones suitable for a bulk mining strategy avoiding the requirement to markup the ore zones for excavation and allowing larger mining equipment. Trade-off studies by Orelogy determined the mining units should be dimensions of 12.5m x 12.5m x 5m with 10 metre bench heights for waste and 5 metre flitch heights for ore.

Grade control of ore is by RC drilling at 15 metre centres on 30m benches, although downhole probes of blast holes are being considered as an alternative grade control method. Drill and blast will be conducted with a combination of autonomous, electric down hole hammer platform rigs and up to three smaller articulated rigs for wall control drilling. The mining fleet is a combination of 550-600 tonne shovels and 340-400 tonne excavators loading 240 tonne trucks.

The overall ore loss and dilution are low due to the strategy for bulk mining at lower grades, which reduces mining risk for unplanned dilution. Assumptions for these parameters are summarised in Table 8.

Table 8: Dilution and Ore Loss Factors

MODEL	DILUTION	ORE LOSS
Bindi	2.7%	0.2%
Dasher	1.6%	2.7%

The large dig blocks allow for efficient and productive dig faces as well as open areas to simplify manoeuvre of the autonomous trucking fleet. The excavators will provide flexibility to establish drop cuts for the shovels and precision mining along the orebody and waste contacts. The shovels will operate in the bulk waste zones and within the wide sections of the orebody.

Ore and waste haulage is planned to use 240 tonne class trucks running diesel-elective drives and fitted with pantographs to draw power from an overhead catenary power line, or 'trolley', installed on the ramps and other longer haul sections, a technique referred to as 'Trolley Assist'. This class of truck matches the shovel and excavator classes and is widely used in WA for autonomous hauling and elsewhere using trolley assist. The wider benefits of autonomous haulage and electric drive are described later.

GEOTECHNICAL STUDIES

Geotechnical analysis by consultants Dempers and Seymour has assessed good to very good geotechnical characteristics in all pits with recommended batters between 60-70 degrees in the fresh rock as shown in Figure 20. The Bindi PFS Pit has been designed with twin ramps down to 260m depth. With the inclusion of the ramps overall wall angles are ~45 degrees.

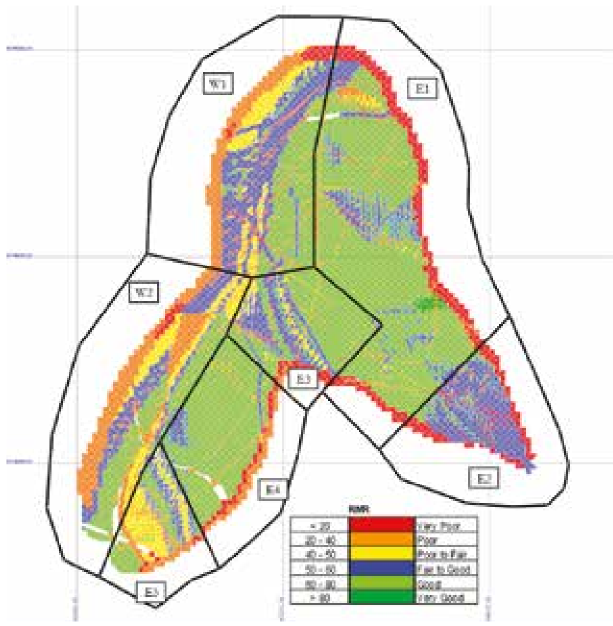


***Figure 20**: Bindi pit geotechnical domains.*

PIT OPTIMISATION AND DESIGN

Open pit optimisation studies were undertaken by Orelogy using the November 2021 Mineral Resource block model developed by Caravel based on ordinary kriging constrained within mineralised wireframes from the geology model. The pit estimation utilised Dassault Systèmes Australia (Geovia) Whittle™ software, which generates a series of nested pit shells using 'Revenue Factors' based on a set of financial and other parameters determined by the PFS studies and described elsewhere in this report.

The studies demonstrated that almost all the resource may be economically extracted and the pits were limited in extent by the resource model.

Whittle™ modelling undertaken on inferred and unclassified material in the optimisation shell resulted in a 100% increase in processed ore tonnes and 230% increase in total tonnage mined. This demonstrated that the material may be extracted economically in the future with additional definition of the current Mineral Resource.

The final PFS pit design for Bindi is presented below (Figure 21). The design includes multiple ramps which ensure efficient and optimal haulage options for the tailings management facility, waste landforms and ROM pad. Parts of the ROM and ore stockpiles can be seen to the south of the pit and the waste landforms to the west.

***Figure 21**: Bindi Pit design for stages 1 to 5.*

The final pit design inclusive of the multiple ramps closely match the Whittle™ optimisation (Figures 22, 23 and 24).

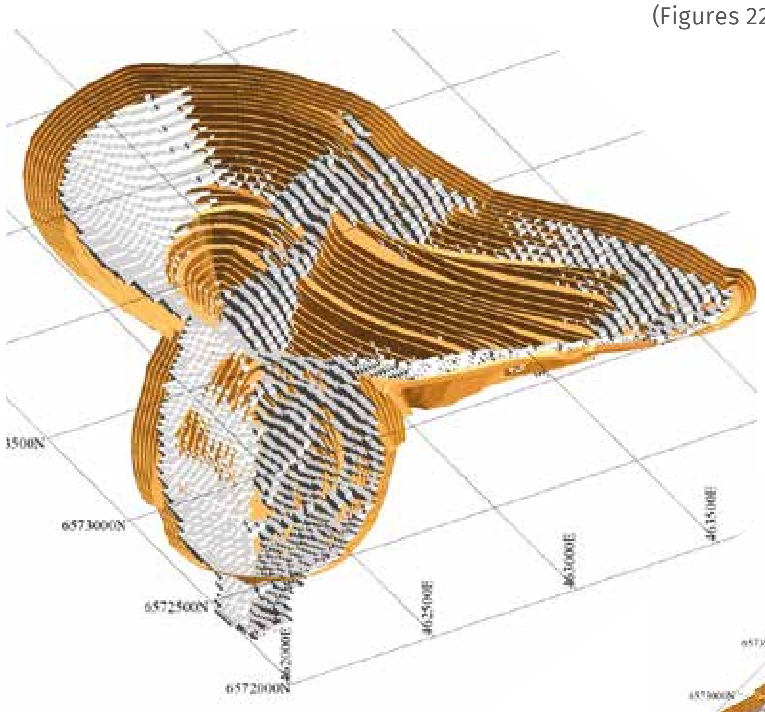


Figure 22*: Optimisation Shell vs Pit Design i.*

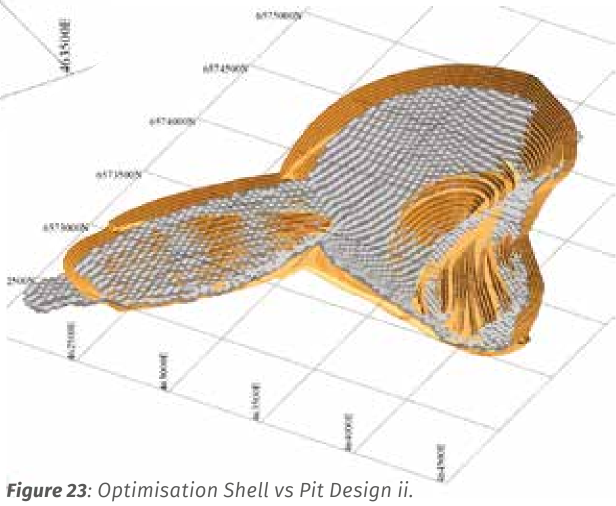


Figure 23*: Optimisation Shell vs Pit Design ii.*

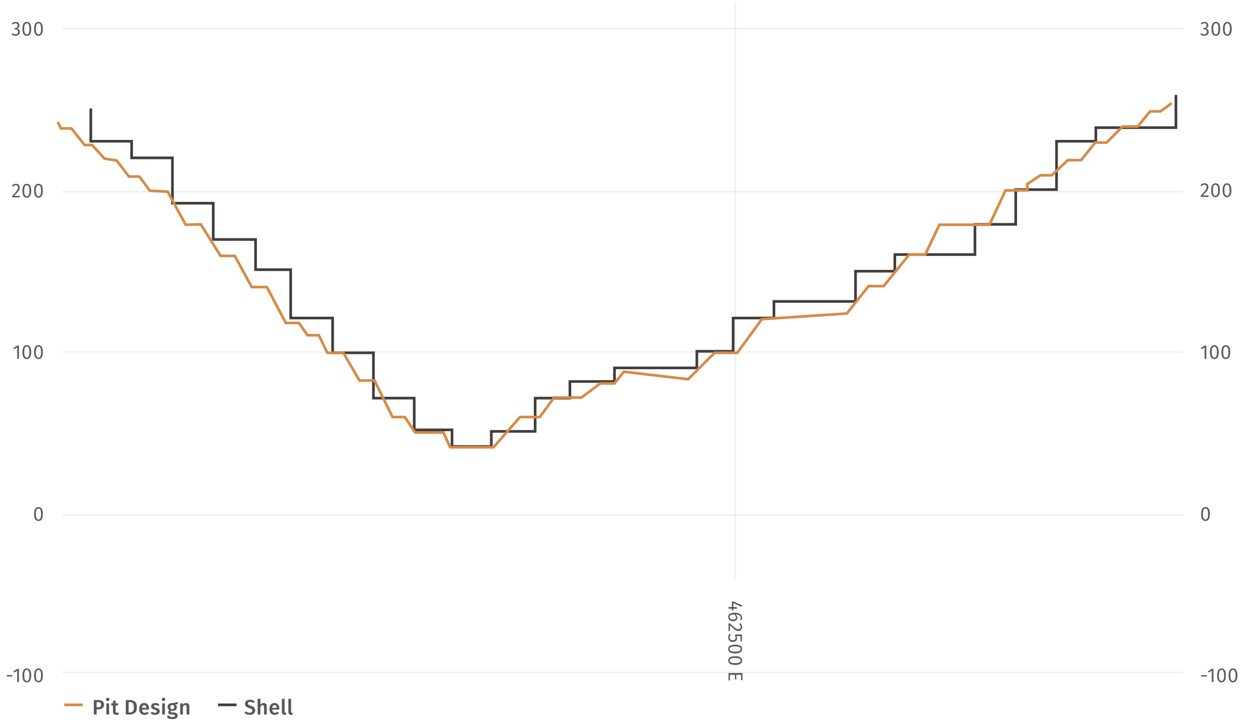


Figure 24*: Optimisation Shell vs Pit Design 6754400N.*

MINING SCHEDULE

Mining commences at Bindi with two starter pits, delivering higher grade ore early in the mine schedule. Bindi will be sequenced and developed in five stages with a similar approach at Dasher which will be developed in three stages. This allows ore feeds to the mill of >0.28% Cu for the first five years of the Project.

The schedule also balances the amount of waste stripping in the early years whilst maintaining both a continuous supply of ore at the desired rates and an acceptable vertical rate of advance for each stage.

Mine Plan has confirmed the ability to deliver ore to the plant at throughput tonnages of 27.8Mtpa with the potential to achieve higher rates if desired. Over 80% of the mine schedule at Bindi comes from Measured and Indicated resources, and the first five years is 100% within the Ore Reserve. Over the 28-year project life the Bindi and Dasher deposits will produce 715Mt of ore at an average grade of 0.24% and a strip ratio of 1.3:1. Mining of the current resources is assumed to finish in year 26 after which time the mill is fed from stockpiles (Figures 25 and 26).

ANNUAL MINING SCHEDULE

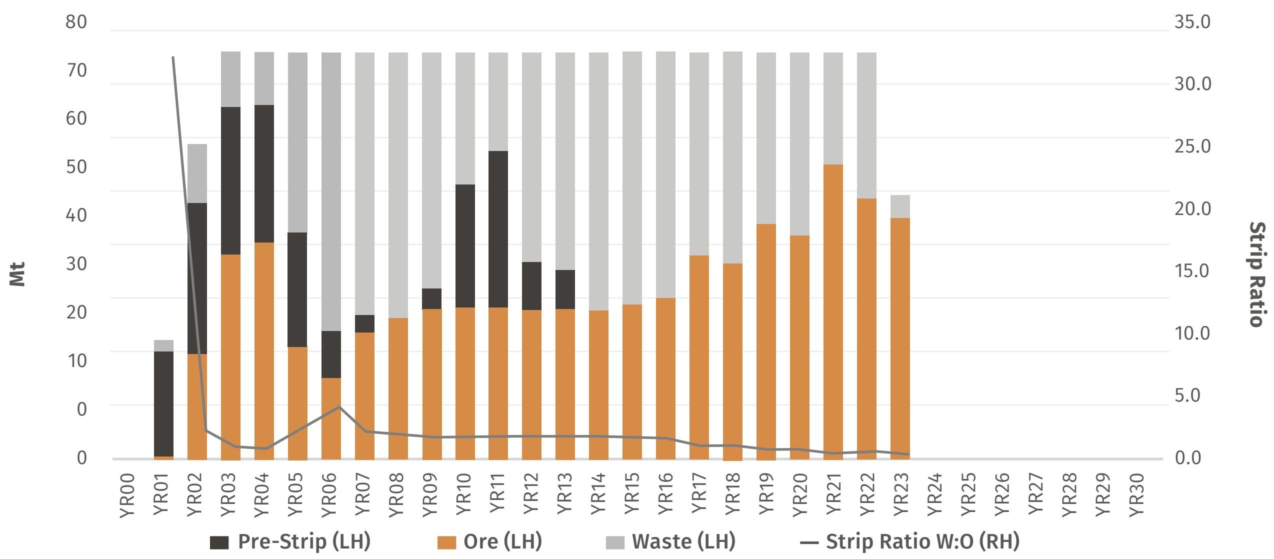


Figure 25*: Caravel Copper Project annual mining schedule.*

ANNUAL PROCESSING SCHEDULE AND FEED GRADE

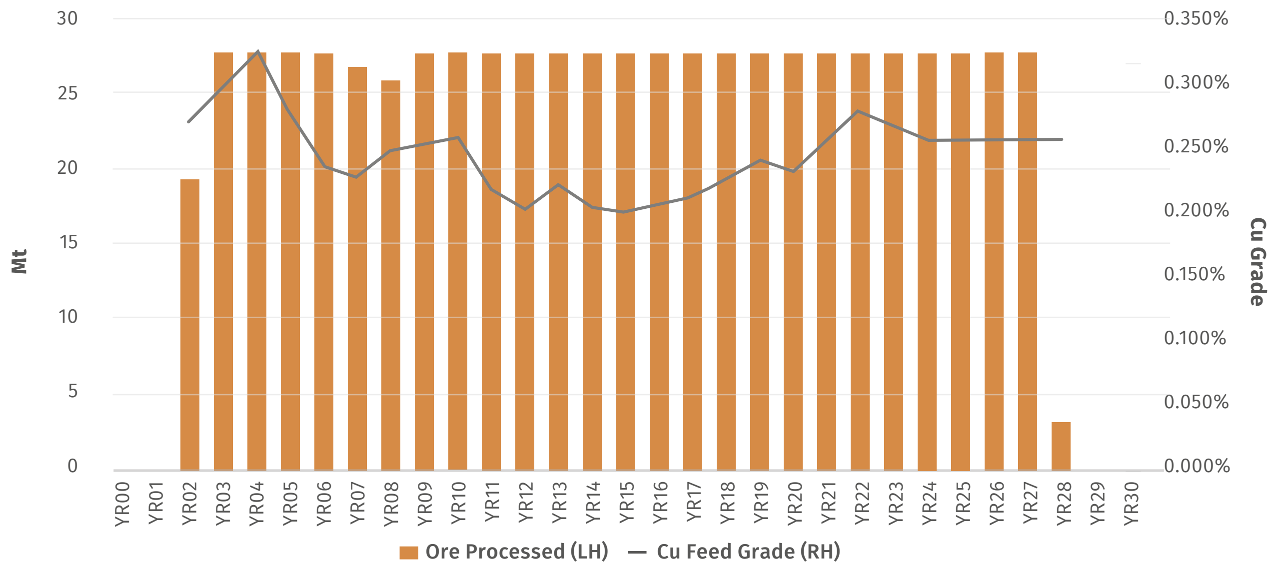


Figure 26*: Caravel Copper Project annual processing schedule and feed grade.*

BENEFITS OF AUTONOMY, COMMUNICATION AND ELECTRIFICATION (ACE)

Western Australia is home to the world's largest fleets of autonomous mining equipment, with a large network of vendors, experienced consultants and operators and associated support services and technology providers. Millions of hours of autonomous operations have created a deep level of experience and maturity in the use of autonomous systems, which initially has been developed within the major mining houses but is now widely available.

The evidence from many operations has shown ACE technologies will improve safety outcomes and deliver operating cost savings. For the Caravel Project the savings are estimated at 16% of C1 cost over the life of operations compared to a conventional manned diesel fleet.

Cost savings for the autonomous haulage fleet (Table 9) are estimated from ~1,000 hour tyre life increase, a 15% reduction in maintenance costs and reduced damage provisions. Further savings come from improved efficiency and increased speeds using autonomous control and trolley assist, which are forecast to reduce the haulage fleet by six trucks. The combination of AHS with trolley assist is expected to improve the overall performance of the trolley system with reduced trolley engagement losses and increased accuracy when approaching the trolley line. This combination of technologies is improving rapidly and are expected to offer well proven solutions within the Project's required timeframes.

Use of cable powered electric shovels and drills reduces diesel consumption over the LOM by around 40%, with additional savings from reduced road haulage and diesel storage costs. A cable management crew has been added to the manning profile to manage this electrification, however autonomous solutions are expected to become available for this task, and drill platforms are expected to become battery powered in the near future.

Communications are an essential part of the ACE technology suite and essential to the autonomous and remote operating strategy. The Bindi and Dasher pit shapes allows for good communications coverage with an overall shallow slope and a central point for transmission antennae using LTE (Long Term Evolution) or WiFi mesh. High-bandwidth, low-latency fibre-optic cable connection is available in Wongan Hills and will be accessed either via a cable link or wireless to provide high-speed and reliable telecommunications to site. This high quality communication link offers significant opportunities for the Project to continue evolving as technology improves (Figure 30).

As the South West Interconnected System (SWIS) increases it's capacity of renewable energy generation the electric mining fleet will further reduce 'its implied emissions as well as reduce exposure to diesel prices. There will also be opportunities to selectively procure higher levels of renewable energy. Technologies will also continue to evolve, particularly as battery technology improves, which is likely to see further replacement of diesel engines by batteries and emissions reductions (Figure 27).

The Project's access to grid power, optic fibre communications and close proximity to technology service providers allows very substantial benefits from the ACE technologies (Figure 30). These provide the Project with opportunities to reduce costs through greater efficiency and reduced labour intensity as well as provide an attractive workplace with higher level skilled positions and improved ESG measures (Figure 29).

Table 9: PFS Fleet Selection

PEAK FLEET SIZE		
EQUIPMENT	CLASS	MAX / TOTAL
Haul Truck	220-240t	36
Excavator Backhoe	340-400t	4
Excavator Shovel	550-600t	2
Front End Loader	11-16m^3 bucket	2
Platform Production Drill	12-15m single pass	4
Articulated Drill	30m	3
Dozer	105-120t	5
Grader 1	25-35t	4
Water Truck	100-150t	5
Wheel Dozer	50t	4
Pump and Trailer	high head	4

ACE FLEET ESG BENEFITS

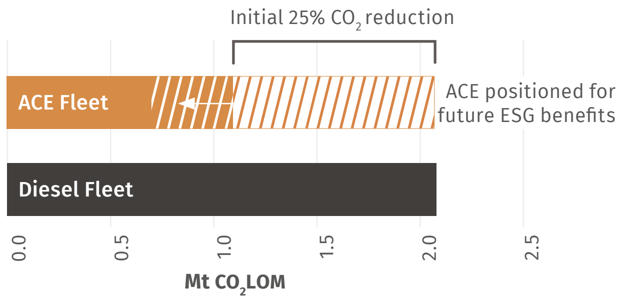


***Figure 27**: ACE Fleet CO_2 emission savings.*

***Figure 28**: Haul truck with trolley assist at an operating copper production project in Canada.*

ACE FLEET COSTS AGAINST CONVENTIONAL DIESEL

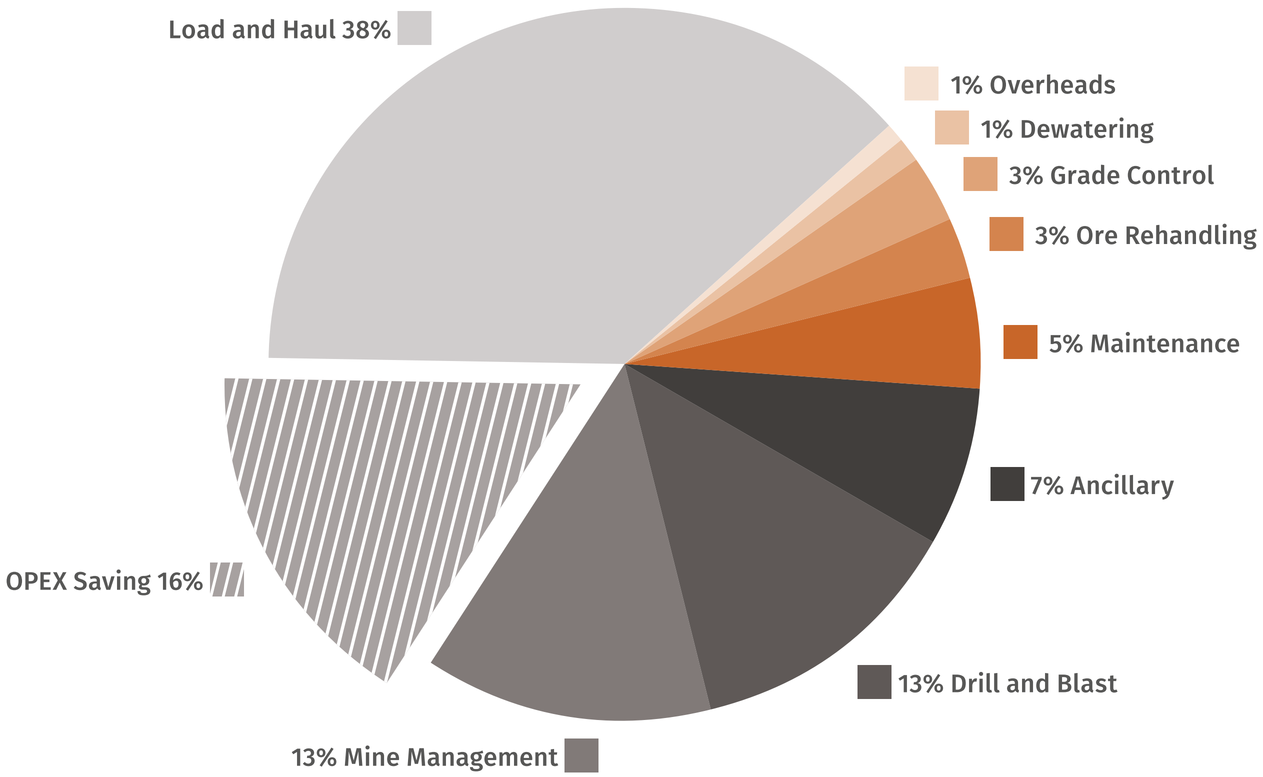


***Figure 29**: ACE Fleet CO_2 emission savings.*

ACE OPERATIONAL MODEL

A Remote Operating Centre (ROC) will play a key role in ensuring a safe and efficient ACE operation.

1 ROC
- Continuously control, monitor and optimise operations
- Offers more attractive work options and flexibility

2 GRID POWER CONNECTION
- Renewable energy mix

3 COMMUNICATIONS
- Existing fibre optic cable
- WiFi mesh
- Mobile communications
- Direct fibre connection

4 DRILL AND BLAST
- Autonomous drilling
- Electric drills
- Autonomous cable management
- Drill hole probes with real-time grade control

5 SHOVEL AND BACKHOE
- Electric shovels
- Blast fragmentation modelling
- Bucket teeth monitoring
- Autonomous cable management
- Load-assist technology

6 HAULAGE
- Autonomous trucks with diesel electric and trolley assist
- Future battery truck trolley line charging
- Fuel agnostic future solutions (hydrogen and ammonia)

7 LONG-RANGE LASER SCANNERS CCTV AND DRONES
- 24 hour CCTV
- Real-time pit, asset and environmental surveys
- Safety and mechanical field inspections
- Pit wall and TMF real-time monitoring

8 CRUSHING COMMINUTION AND PROCESSING
- Plant operations include automation
- Integration with ROC
- Real-time ore performance management
- Power optimisation via equipment utilisation

9 MAINTENANCE
- Data analytics and predictive maintenance with OEMs
- Proximity to Perth consignment parts and components
- Digital inspection
- Asset life maximisation and cost reductions

10 TRANSPORT
- Electric light vehicle
- Potential for electric road train haulage to port
- Nearest port less than 350km

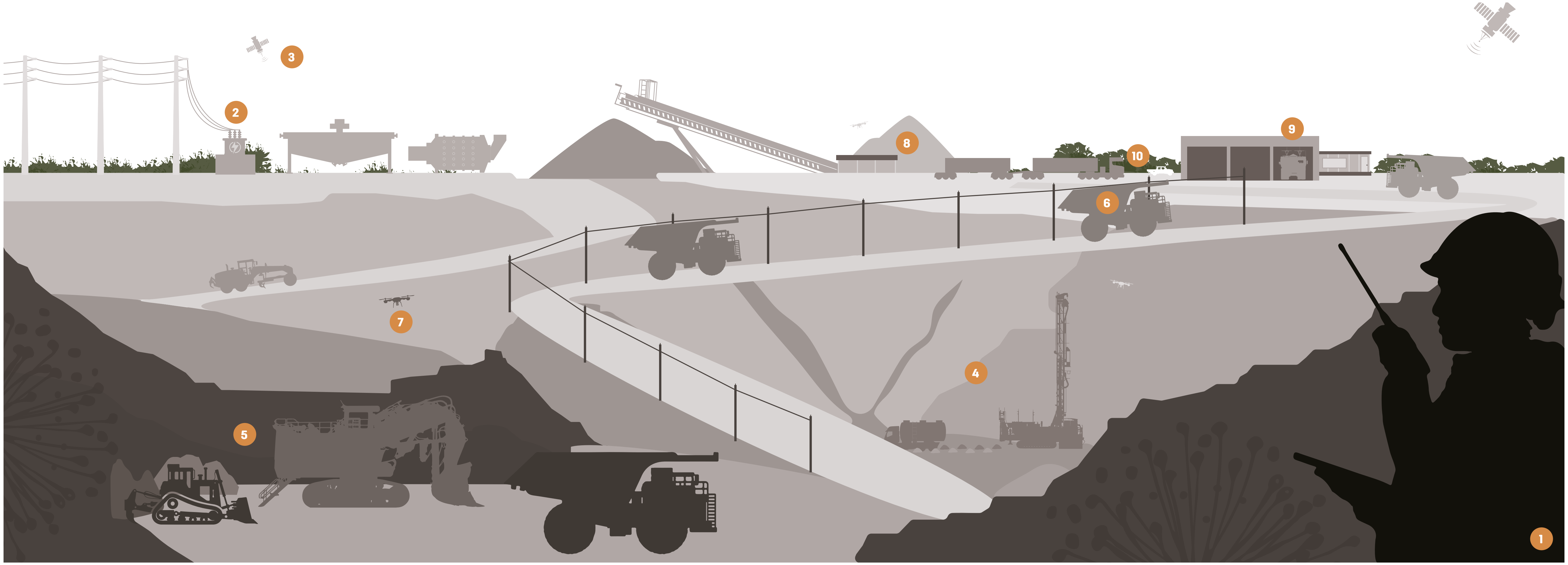


***Figure 30**: ACE Operational Model.*

MINING OPERATIONS OPPORTUNITIES

A number of options have been identified to improve the project economics by reducing costs or increasing throughput at lower marginal cost. These options are under further evaluation during the DFS.

- **Grade Control** – advancements in mine modelling technology have the ability to automate and deliver grade control in real-time. Conventional RC drilling requiring lab sampling, analysis and reporting may be replaced in future by technologies such as MPC Kinetics Sodern's FastGrade™ Logging system delivering more accurate results, in near real-time while providing semi-autonomous operations, reducing costs, improving worker safety and improving the accuracy of mine block models.
- **Drill and Blast** – blast patterns have been identified through fragmentation analysis targeting a P80 of 400mm at the crusher. Caravel and Orica have completed simulations and further work will be conducted looking for controlled wall blast that can eliminate pre-split drilling for savings in blasting up to $0.05/t and increased safety with reduced drilling time under the highwall.
- **Battery Technology** – trolley lines to charge batteries are currently being trialled by other operators. The Project benefits from the autonomous trolley assist through life of asset and diesel savings and is also then well placed for the adoption of batteries in the future. Other autonomous solutions that will be reviewed in the DFS are autonomous dozers, autonomous MMU for explosives delivery and tele-remote or autonomous excavation.
- **Ore Modelling** – ore loss and dilution modelling will be conducted during the DFS. On a purely mining cost basis converting the entire loading fleet to shovel operation would present a mining cost saving of $0.06 – $0.12/t.
- **Shovel Grade Sensors** – advancements in ore sorting will be assessed in the DFS. Of particular interest is XRF bucket sampling currently deployed in a growing list of global mining operations. Estimation of grade in the bucket would further support the conversion of mining to a fully shovel based operation negating ore loss and dilution.

METALLURGY

Metallurgical testwork programs have been performed on a range of representative composites of drill core samples, evaluating flowsheet options and reagent regimes to assess the metallurgical performance of the ores.

All ores tested have exhibited excellent flotation characteristics with rapid float times, very high recoveries and production of a high-quality concentrate.

A process flowsheet has been designed and tested to determine the metallurgical assumptions used in the PFS financial modelling. Further testwork will explore the variability characteristics of the ore zones to provide greater confidence for the DFS and provide design data for project implementation.

COMMINUTION

Comminution programs have included JK Drop Weight, Advanced Media Competency, SMC testing, abrasion, rod and ball mill characterisation parameters. This work showed the material was consistent with regards to comminution characteristics between the two deposits and that the material was moderately hard and competent but amendable to conventional comminution methods.

Key findings from comminution tests are that the Caravel ore is of medium to high competence (A×b in the range of 36.3 to 55.0) and is hard (Bond ball indices between 15.7 and 19.8 kWh/t). An economic optimisation study recommended a primary grind size of P80 180µm be used as a basis of the process design based on throughput and mill size considerations balanced against potential minor loss in recovery. Additional regrind will be applied to the rougher concentrate for the cleaner flotation circuit.

FLOTATION

All ores were found to respond very well to conventional flotation practices. The ore is not considered complex with almost all sulphides being copper (chalcopyrite) or iron-based minerals (pyrite). Apart from copper, recovery of molybdenum, gold and silver have the potential to add revenue. Flotation testwork has shown very high recoveries of copper and what are considered industry typical molybdenum recoveries. The other key observation is the consistency in performance for samples from differing areas of the resource. Rougher flotation, kinetics are fast with copper recoveries approaching the final recovery after five minutes of residence time. Collectors 3418A and xanthates both achieved high copper recoveries in rougher flotation. No lime addition is required in rougher flotation for pyrite rejection. For flotation cleaning, regrinding of the rougher concentrate is required to achieve the liberation of the composited chalcopyrite and to achieve a marketable concentrate grade.

Further refinement of the copper cleaning test conditions are required in future testwork programs to improve the cleaner performance. Indicative copper recovery to cleaner concentrate is in the range of 90-92%. Deleterious elements are present but typically in very low concentrations well below thresholds for penalties. Testwork suggests there should not be any issues in managing these elements as the areas with elevated deleterious elements are isolated and can be blended to ensure concentrate compliance with marketing constraints.

Use of conventional technologies allows simple processing, reducing project risk significantly with regard to achieving throughput, recovery, grade and subsequent cash flow. Future work will focus on providing variability assessment for a conventional roughing-cleaning flowsheet with a regrind step. This flowsheet has been found to provide consistently high recoveries of copper and molybdenum and consistent rougher tails grades almost independent of head grade.

***Figure 31**: Diamond core for metallurgical testwork.*

MINERAL PROCESSING

The plant design for mineral processing is based on conventional crushing, grinding and flotation to recover copper minerals, predominantly chalcopyrite, into a concentrate which is thickened and filtered to produce a marketable product for dry handling and trucking to port for export.

Ausenco have designed and engineered the plant in accordance with the metallurgical specifications described in this report and following best practice from the numerous similar copper processing plants they have designed and constructed globally.

The PFS is based on a design concept using two 13.9Mtpa processing trains installed in parallel at commencement, providing a total processing capacity of 27.8 Mtpa. The dual train design was originally selected to provide flexibility for staging project financing and other requirements for infrastructure and services. Subsequent studies have shown the Project may be developed to it full capacity from commencement with improved financial performance from construction efficiencies and maximising the early cashflow.

This study presents the available engineering and costings for development of the dual train plant design, however an optimisation study is in progress based on constructing the plant as a single train processing 27 Mtpa using the same flowsheet (Figure 32). The single train option is expected to have substantially lower capital and operating costs, with significant benefit to the project financial outcomes. The results of the optimisation study will be reported as an update to this report.

PROCESSING PLANT DESCRIPTION

The processing plant is designed as a conventional copper concentrator suitable for treating low sulphur copper porphyry style ores. Facilities will include crushing, grinding and classification, copper flotation, concentrate and tailings thickening, concentrate filtration, reagent mixing and storage, water and air services and tailings storage facility. An extract of the 3D model for the process plant is shown in Figure 33.

ROM ore is crushed in two stages using a primary gyratory crusher and secondary crusher, with crushed ore reporting to the crushed ore stockpile. Crushed ore is reclaimed from the stockpile and fed to the SABC comminution circuit. SAG mill discharge screen oversize reports to the pebble crusher, with the crushed product recycled to SAG mill feed. SAG mill discharge screen undersize is combined with ball mill discharge and flotation collector and is pumped to the primary cyclone cluster.

Cyclone underflow reports to ball mill feed for further size reduction whilst cyclone overflow reports to the flotation circuit. The copper flotation circuit consists of six forced air mechanical rougher/scavenger flotation cells followed by rougher concentrate regrind and three stages of cleaner flotation. For rougher flotation, Huntsman W22 frother and SIBX promoter are added. Copper rougher and scavenger concentrate reports to the regrind circuit Tower Mill to affect further mineral liberation. Copper rougher and scavenger tailings report to the tailings thickener. The regrind circuit product is fed to the copper cleaner flotation circuit.

The copper cleaner circuit consists of three stages of cleaning and one bank of cleaner scavenger cells. The first and second cleaners together with the cleaner scavenger cells are forced air mechanical tank cells. The third cleaning stage consists of a single Jameson Cell with 70% tailings recycle. Hydrated lime slurry, collector and frother addition is adjusted across the cleaning circuit to maximise recovery.

Concentrate recovered from the first copper cleaner is pumped to the second copper cleaner flotation cells for further upgrading, with the first cleaner tailings gravitating to the cleaner scavenger cells. The copper cleaner scavenger cells recover a low-grade concentrate which is pumped to the regrind circuit. The cleaner scavenger tailings stream reports to the flotation tailings thickener.

The second copper cleaner concentrate is pumped to the Jameson cell for further upgrading, producing final copper concentrate. The tailings from the second copper cleaner cells report back to the head of the first copper cleaner bank and the tailings from the Jameson cell reports to the head of the second copper cleaner bank.

The Jameson cell final copper concentrate reports to a copper concentrate thickener with the underflow product reporting to agitated filter feed tanks. This slurry is then pumped to a pressure filter to produce a copper concentrate filter cake product which is loaded into covered containers for transportation by road to port.

Flotation tailings report to the tailings thickener and the thickened tailings are then pumped to the tailings storage facility. Water reclaimed from the tails storage facility is returned to the process water storage pond.

DESIGN PARAMETERS

The following comminution design parameters were used for circuit modelling:

- 75% crushing circuit availability
- 93% grinding circuit availability
- Bond crushing work index: 18.3 kWh/t
- JK SMC ore competency (A×b): 38.2
- Bond ball work index (106μm): 18.9 kWh/t
- Grind size: P80 of 180μm.

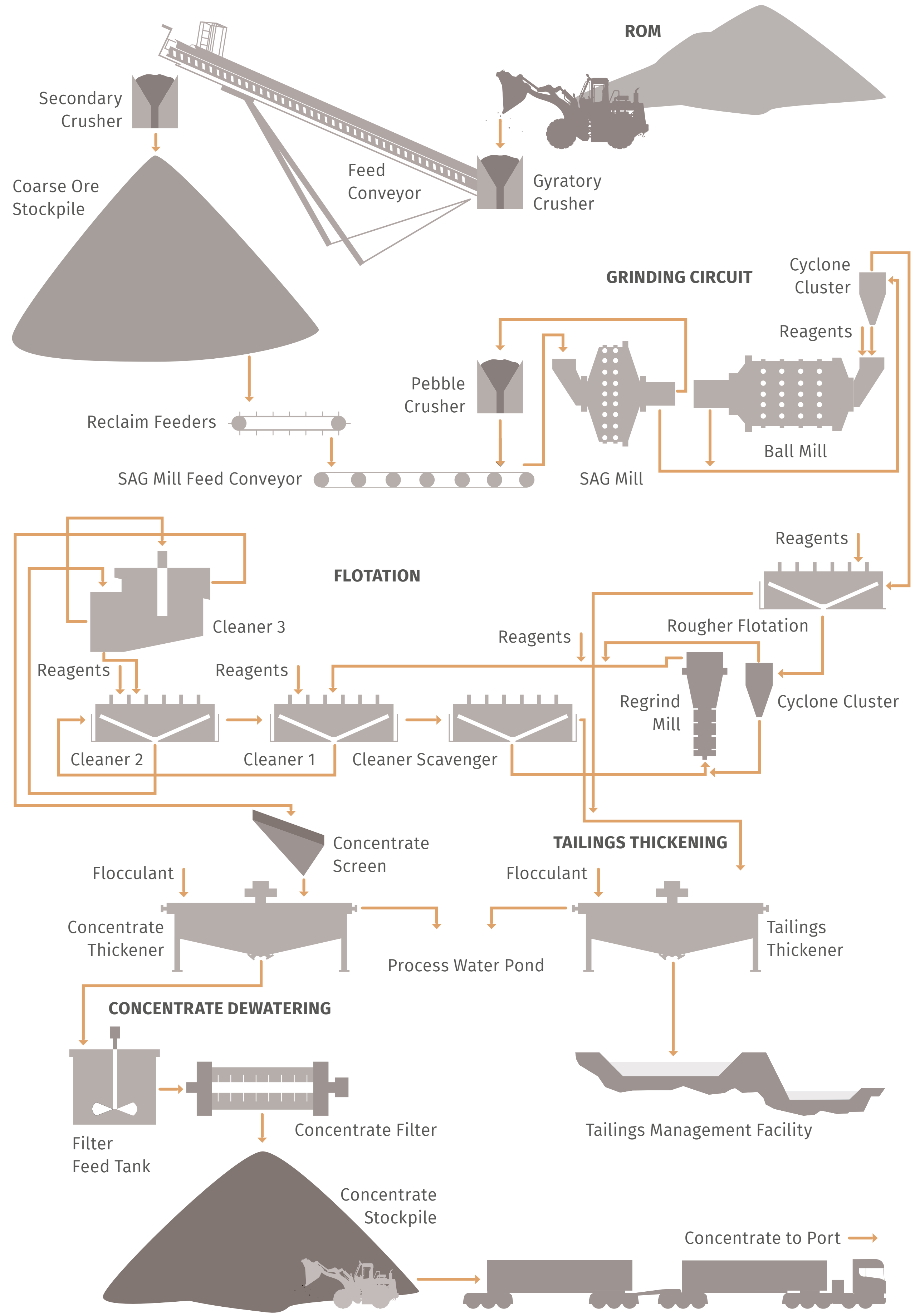


***Figure 32**: Caravel Copper Project Process Flowsheet.*

PFS DUAL TRAIN 27.8MTPA PROCESSING PLANT

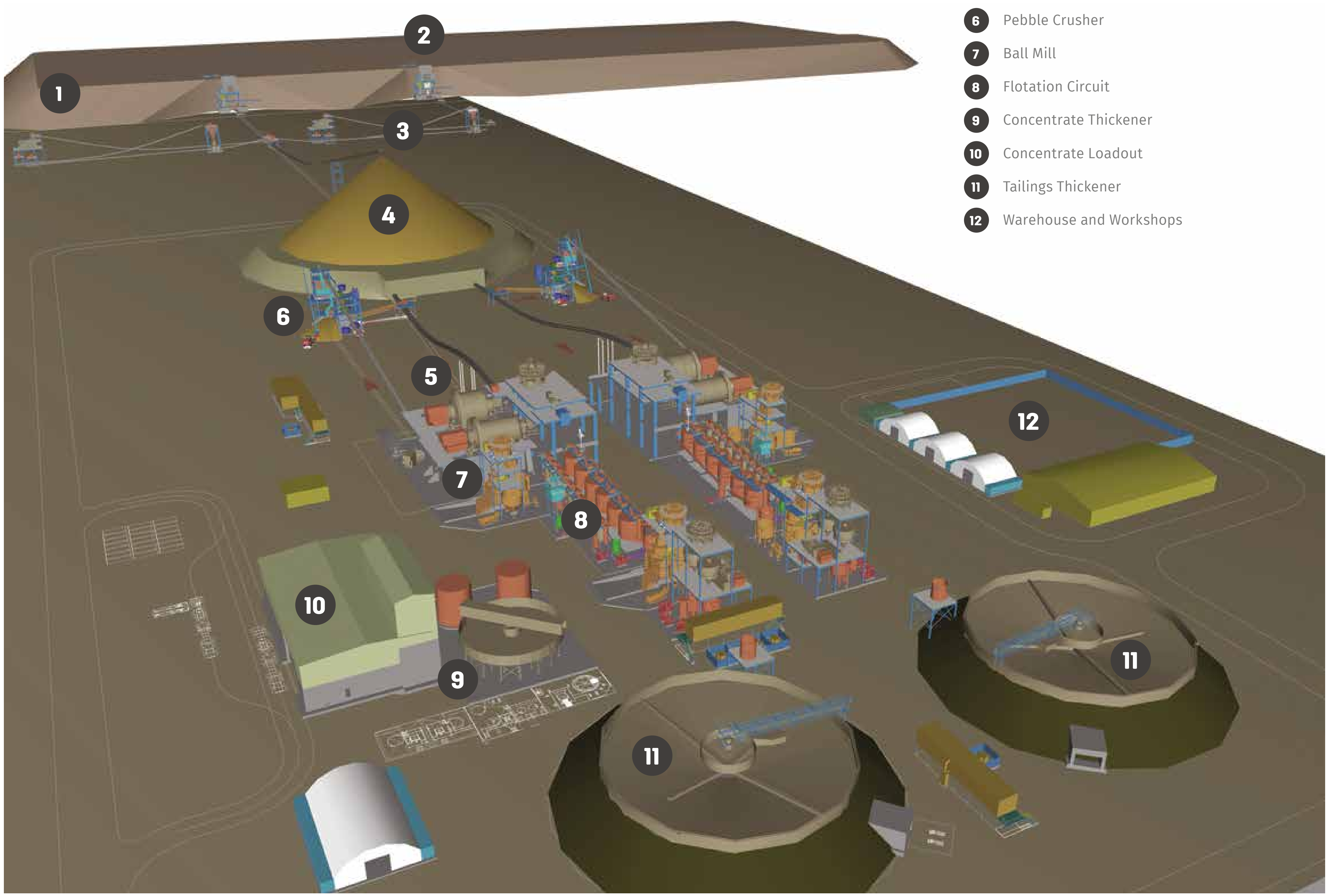


Figure 33: 3D Model of Dual Train Processing Plant.

Legend

1. ROM Pad
2. Primary Crushers
3. Secondary Crushers
4. Coarse Ore Stockpile
5. SAG Mill
6. Pebble Crusher
7. Ball Mill
8. Flotation Circuit
9. Concentrate Thickener
10. Concentrate Loadout
11. Tailings Thickener
12. Warehouse and Workshops

A number of different flowsheet configurations were modelled to evaluate capacities of the processing plant train options. The most capital effective solution was identified as two stage crushing and SABC grinding with a throughput of 13.9Mtpa. Based on this flowsheet a process capacity of 27.8Mtpa may be achieved via installation of two identical process trains.

Key criteria for sizing equipment downstream of comminution includes:

- 93% flotation circuit availability
- 0.25% nominal Cu feed grade
- 0.4% design Cu feed grade
- 34% w/w flotation feed solids concentration
- 20 t/m2/h copper concentrate thickener settling rate
- 60% w/w copper concentrate thickener underflow solids concentration
- 83.7% concentrate filtration equipment availability
- 200 kg/m2/h copper concentrate specific filtration rate
- 10% w/w copper concentrate filter cake moisture
- 0.75 t/m2/h tailings thickener settling rate
- 60% w/w tailings thickener underflow solids concentration

LAYOUT

The plant layout design is based on:

- Site topography and geotechnical features
- Required distances from blast zones, ROM pad, roads and infrastructure
- Compact layout approach, minimising the number of structures (and hence concrete and structural steel) and optimising the flow of key process streams.
- The operability and maintainability of two trains, including ROM pad sizing, a single common stockpile with design allowances for reclaim tunnels and feeders and onsite water storage facilities all sized for the expansion case and included in upfront project capital. Consideration has also been given to a potential conveyor route and tie-in for crushed ore to be transported from the Dasher open pit area.
- Administration, workshop and warehouse locations placed in close proximity to process plant, with consideration given to site access control.
- Mine Infrastructure Area (MIA) located such that it is in close proximity to administration and warehouse areas but allows for heavy vehicle movements to remain separate from light vehicle areas.
- Limiting impact of dust, noise, vibration and visual amenity including placement of certain infrastructure elements off-set from public roads, size and shaping of TSF and waste dumps, and inclusion of fencing and windrows along public road corridors adjacent to project installations.
- Allowance for future installation of an ore sorting plant, CPF or further throughput expansions.

PROCESSING OPPORTUNITIES

A number of options have been identified to improve the Project economics by reducing costs or increasing throughput at lower marginal cost. These options are under further evaluation during the DFS.

- **Ore sorting** testwork and modelling indicates the option of ore sorting remains a potential inclusion for future processing opportunities. Ore sorting provides the ability to concentrate low grade and mineralised waste streams, thereby allowing for a low capital cost plant capacity increase to be achieved.
- **Coarse particle flotation** (CPF) was explored to understand the potential of the technology with a view to saving primary grind capital and operating costs. CPF is likely to be justified on throughput, capital and operating cost opportunities and not on recovery benefits. There is a case to run additional testing in an operating plant and retrofitting a coarse particle process to allow for upgrade capacity as has been implemented at the Cadia operation in New South Wales.
- **Molybdenum performance** is in line with typical industrial experience. An encouraging recovery in excess of 70% has been achieved to date at a grade of 47% molybdenum. The work suggests that with some refinement, marketable molybdenum concentrates should be achievable at typical industry levels of recovery. The addition of a molybdenum circuit whilst not in the current based case will be evaluated in greater detail in the DFS.
- **Single train plant design** studies are in progress for construction of the plant as a Single Train with 27Mtpa throughput, based on the same PFS flowsheet. The Project development is no longer staged so there is no benefit in a dual train design. Initial benchmarking indicates the single train option may deliver substantial reductions in capital and operating costs. These studies are expected to be finalised in August.

The single train option study is also investigating the use of High Pressure Grinding (HPGR) mills instead of the current plan for Semi-Autogenous Grinding (SAG) mills. HPGR mills in similar projects have demonstrated substantial operating cost improvements through reduced power demand and grinding media consumption.

INFRASTRUCTURE AND SERVICES

TRANSPORT AND PORT SOLUTION

The Caravel Project is well located approximately two hours north of Perth and has access to existing public road infrastructure that can facilitate delivery to established public access ports in Bunbury, Geraldton or Kwinana (Figure 35).

The Port of Kwinana has been discounted as an option for the Project given existing congestion and land-based space considerations.

The Ports of Geraldton and Bunbury both have existing metal concentrate shipping operations, both have substantial parcel shipping trade and both are considered suitable for the Project. Qube Bulk Logistics have provided preliminary operating assessments of transporting to and shipping from both Ports. The existing road network capability and the better truck operating cycle times and utilisations have resulted in Bunbury being the preferred export port for the PFS.

Road transport to Bunbury would utilise the existing Main Roads RAV 7.3 road network from the mine gate. Concentrate would be carried on Performance Based Standards (PBS) Triple Combinations with each vehicle having three half height containers for a total payload of 100t. Concentrate would be stored in the containers in Qube's yard at Picton, near the Bunbury port, and when ready for loading would be trucked to the wharf and tipped directly from the containers into the ship's hold (Figure 34).

Shipping parcels have not been determined but are likely to be between 11,000t and 22,000t per shipment and will depend on the nature and destination of offtake arrangements.

Transport and port options will be further refined during the DFS and options for both containerised and bulk storage will be considered. Based on studies to date, bulk options, while available in Geraldton and Bunbury are unlikely to be competitive with the Rotainers.

***Figure 34**: Minesite to port bulk concentrate rotainer loading ship.*

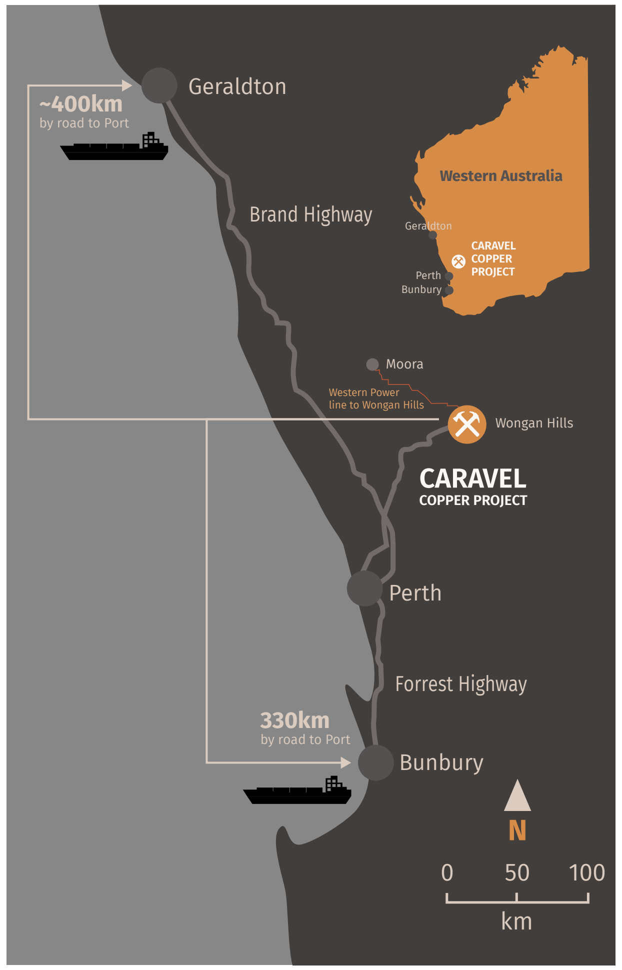


***Figure 35**: Copper concentrate transport and export solution.*

POWER SUPPLY

Project operations will utilise power supply from the existing regional electrical grid adjacent to the site within the South West Interconnected Network's North Country subregion. The Project's maximum power requirements are estimated to be 125MW. Studies indicate this can be supplied through an increase to transmission energisation of the Moora to Wongan Hills 132KV capacity power line and the construction of a new substation.

Installation of additional power connection is also required to transport water from the Project's borefield via a pipeline to the Project site. The borefield abstraction pumps and pipeline pump station power supply of approximately 4MW will be provided via a new small network of power lines connected to the existing 33KV network lines near the town of Gillingarra.

Connection to the electricity grid, adoption of electrified mining equipment and significant scope for offsets gives the Project a pathway towards emissions targets.

Access Applications for the borefield and water pipeline pumping requirements have been progressed with the assistance of ECG Engineering and Ausenco by defining the Project power requirements based on preliminary designs of power infrastructure.

Detailed power infrastructure design will be completed in 2022 and 2023 with a target of receiving access offers from Western Power by Q4 2023 in preparation for construction.

WATER

Caravel will secure water supply for the Project via a combination of developing new water resources and purchasing existing allocations. A remote borefield will be developed and licenced to supply water to the Project (Figure 37).

New regulatory licence applications have been prepared and lodged with regulators to secure the newly identified water resources (Figure 36) and Caravel is developing the appropriate groundwater models and completing the required environmental studies to support the licence applications.

Once abstracted the water from the borefield will be transported to site via a below-ground pipeline. The final pipeline route and detailed design will be completed during the DFS. The borefield and pipeline development will be a significant new regional infrastructure project that has potential benefits for local stakeholders including landowners and local Bush Fire Brigades along the pipeline route.

The drilling program and development of the groundwater model will be completed in H1 2023 with a target of securing water abstraction licences for 16GL/year of water supply in H2 2023.

***Figure 36**: Water pump testing in progress at potential borefield area.*

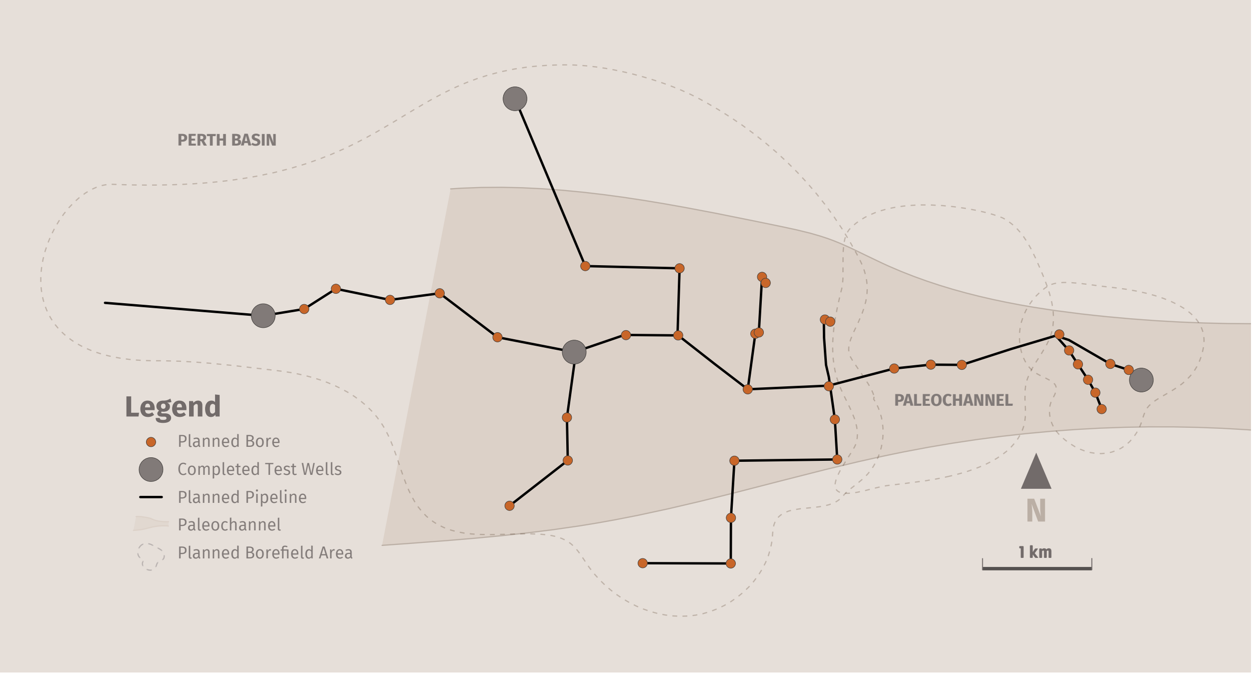


***Figure 37**: Proposed borefield.*

ACCOMMODATION

Accommodation villages will be constructed to meet the project's workforce requirements according to modern standards. A temporary construction village will be required to accommodate early works personnel. It is envisaged that the temporary village will be hired for a period of 18 months and partially demobilised upon completion of construction. A long-term accommodation village will be constructed at a location that is the subject of trade-off studies and consultation with stakeholders. The Project's accommodation village will be designed to high public and residential amenity standards and aim to make a positive contribution to employees and the local area within which it is developed.

TAILINGS MANAGEMENT FACILITY

The Tailings Management Facility (TMF) is located within a broad, low relief, valley which drains from south to north and has hills on the east and west. TMF development will be staged to initially comprise of embankments to the north and south and be bounded to the east by shallow sloping hills and the west by existing hills and the Bindi waste dump. As the facility develops, embankments will be required on the east and west sides and at closure the facility will comprise embankments around the full perimeter.

The design incorporates a basin liner made up of compacted, in-situ, high clay content materials and an underdrainage system. The underdrainage system and upstream toe drains at the embankments are included in the design to maximise recycling of water from the TMF to the process plant.

Tailings will be delivered into the facility by sub-aerial deposition methods, using banks of spigots at regular intervals to maintain the supernatant pond near the decant tower. A decant causeway will extend to the centre of each cell and supernatant recovery will be via several floating turrets located in the pond adjacent to the causeway. Supernatant and rainwater that is reclaimed will be pumped to the process plant via a decant return pipeline (pump and pipeline design by others) over the life of the facility. The active tailings beach will be regularly rotated around the facility to improve tailings density.

Throughout the life of the Project, the TMF will be landformed to be visually integrated and compatible with localised topography. Caravel is exploring sustainable post-mining economic land uses and ecological functions that may provide economic and environmental benefits to stakeholders.

APPROVALS AND SUSTAINABILITY

Project Planning has aimed to minimise the negative impacts on the environment as well as create positive impacts through revegetation and restoration projects around the Project area.

The 28-year life of the Project allows a unique opportunity to apply long-term funding and resources to the problem of restoring degraded land such as the areas affected by water logging and salinisation, one of the major environmental issues in the Wheatbelt. Caravel aims to utilise the saline groundwater from the project area, reduce the water logging and creating an opportunity to restore vegetation in affected areas. The Company will work with other stakeholders to study the hydrology and ecology of these areas in order to implement long-term programs for their sustainable recovery. These programs are expected to include large-scale revegetation projects that may be used to help offset the Project's carbon emissions.

APPROVALS

The regulatory approvals required to construct and operate the Project are well defined and applications for all approvals are currently being prepared. Based on the data collected to date all approvals are expected be obtained in accordance with regulatory and statutory timeframes.

The key primary approvals required, the applicable legislation, the granting authority and the expected timing of the approvals are listed in Table 10.

Table 10: Primary project approvals register

LEGISLATION	APPROVAL	AUTHORITY	TARGET APPROVAL DATE
Environmental Protect Act 1986	Part IV	Department of Water and Environmental Regulation	Q4 2023
Environmental Protection and Biodiversity Conservation Act 1999	Matters of National Environmental Significance	Department of Agriculture, Water and Environment	Q4 2023
Mining Act 1978	Mining Proposal	Department of Mines, Industry Regulation and Safety	Q1 2024
	Mine Closure Plan	Department of Mines, Industry Regulation and Safety	Q1 2024
	Mining Leases MLA70/1410 MLA70/1411	Department of Mines, Industry Regulation and Safety	Q1 2024
	General Purpose Leases GPLA70/262 GPLA70/263	Department of Mines, Industry Regulation and Safety	Q1 2024
	Miscellaneous Licences Water Pipeline TBA Power Line TBA Borefield TBA	Department of Mines, Industry Regulation and Safety	Q1 2024
Heritage Act 2018	Section 18 if required	Department of Planning, Lands and Heritage	Q1 2024
Electricity Industry Act 2004	Access Contract (mine and processing)	Western Power	Q4 2023
	Connection Contract (borefield)	Western Power	Q2 2023
Right in Water and Irrigation Act 1914	Section 26D Licences	Department of Water and Environmental Regulation	Q2 2022
	Section 5C Licences Application 047262	Department of Water and Environmental Regulation	Q1 2024

ENVIRONMENT

Comprehensive environmental baseline studies commenced in 2015 and are now completed to a level suitable for submission. These studies have helped build an in-depth understanding of the Project area flora and fauna and provide a framework for responsible project design and informing the Project's regulatory approvals.

The Project area is largely located on cleared farmland and development will mostly avoid the small areas of interspersed native vegetation. Groundwater and surface water modelling has also been considered in the Project design to ensure there are no detrimental impacts on the quality and quantity of water in the surrounding catchment, which are currently heavily degraded due to groundwater and surface salinity. Dust, noise and visual amenity studies are in progress to ensure Project design meets regulatory guidance and parameters.

Importantly, the Project has adopted an electrification strategy to minimise use of diesel fuel. All the major mining fleet will run on either grid connected electric power or will use diesel-electric motors that will connect to the grid when possible (trolley assist). Carbon intensity of the power drawn from the grid will be determined by the final power purchase arrangements. Increasing levels of grid connected renewable generation will make further options available to substantially lower the overall carbon intensity of power consumed. Under this strategy and other mitigations, the Project is expected to have a very low carbon intensity per unit of copper produced.

Based on results to date it is expected the Project will not present any unacceptable impacts to the environment that cannot be managed or offset to the satisfaction of the Environmental Protection Agency (EPA).

The Project will be formally referred to the Western Australian Department of Water and Environmental Regulation (DWER) and the Commonwealth Department of Agriculture, Water and Environment (DAWE) in H2 2022. Caravel's target for final environmental approvals is Q4 2023.

MINING

The pit design, waste rock landforms (WRLs), tailing management facilities (TMFs) and processing plant have been designed with the assistance of expert consultants considering the landscape and the geotechnical characteristics of the Project area. Characterisation of waste rock and tailings, an extensive soil sampling program and geotechnical drilling and analysis are all currently in progress to inform the Mining Act approvals required.

The Mining Proposal (MP) and Mine Closure Plan (MCP) will be prepared following the submission and acceptance of the Part IV Environmental Review Document (ERD). The documents will detail the structural integrity of the mining and processing infrastructure, the methods for management of potential acid forming materials, the processes for closure and the safe, stable and non-contaminating structures remaining following closure.

Caravel's target for the Mining Proposal and Mine Closure Plan approvals is Q1 2024.

***Figure 38**: Field visit as part of heritage survey conducted in 2022.*

NATIVE TITLE AND HERITAGE

The Project is located within the South West Settlement area of Western Australia which is subject to a native title agreement negotiated between the Noongar people and the Western Australian Government. As a result of the South West Settlement, grant of mining tenure for the Project will not be subject to the requirements of the Native Title Act.

The Project area is primarily located within the Yued People's Indigenous Land Use Agreement (ILUA) area. Caravel Minerals has signed a heritage protection agreement with the South West Land and Sea Council representing the Yued People Traditional Owners and is continuing engagement with SWALSC, the Yued People and their new governing bodies.

Caravel has completed extensive archaeological and ethnographic surveys with the Yued group (Figure 38). The final results of the surveys show that there are no significant constraints to the development of the Project. Caravel will continue to work with the Yued group to ensure ongoing management of any identified heritage values associated with the Project.

SUSTAINABILITY

Caravel Mineral's business activities and initiatives aim to create value for project stakeholders through the development of a modern copper project. The framework below (Figure 39) provides an overview of initiatives and activities that are complete, ongoing, committed to or future opportunities. Initiatives will be refined and developed as the Project advances.

5 PURPOSE – Create Value

4 LEADERSHIP – Long-term Viability

3 EFFICIENCY – Smart to Do

↑ Caravel Minerals Led

↓ Business Requirements

2 OBLIGATIONS – Expected to Do

1 COMPLIANCE – Must Do

FOCUS	COMPLETE	ONGOING	COMMITTED	OPPORTUNITY	
5				✔	Restore degraded salt affected land though large scale revegetation projects
				✔	Scope post-mining land uses that could return an economic benefit to stakeholders
4			✔		Available ACE technology adopted for all plant and mobile equipment
			✔		Stakeholder engagement maximising participation in project
3			✔		Design the most efficient operation using latest technology
			✔		Leverage ability to adopt new technology as a result of grid connection
			✔		Project design to have the lowest practicable environmental impact
2		✔			Build and maintain a social licence to operate
		✔			Meet legal obligations and be compliant
1	✔				Governance and business management framework
	✔				Health, Safety, Environment, Community and Quality Management System
		✔			Risks managed according to ISO 31000: 2018 Risk Management – Principles and Guidelines

***Figure 39**: Sustainability activities and initiatives framework.*

STAKEHOLDERS AND COMMUNITY

Throughout the PFS the Company has consulted directly with key stakeholders including landowners, local shires, government, Indigenous groups and local community representatives and suppliers.

The Company will continue an increased program of consultation during the Definitive Feasibility Study. Consultation at this stage will be designed to inform stakeholders of the DFS project parameters and outcomes of a range of studies that will have been completed as to the Project's impact and opportunities.

The feedback received during this program will assist with the development of mitigation and management plans for the Project's construction and operations that will also be the subject of in-depth and ongoing consultation with stakeholders.

Based on input obtained to date there is a high level of stakeholder interest in the provision of employment and business development opportunities at Caravel's operations. Caravel has employed locally where possible and prioritised the use of local goods and services during exploration, technical studies and other field work.

Caravel's project is anticipated to attract additional skilled labour to the region during construction and operations including skilled contractors who could be engaged in other sectors of the local economy.

The Company is investigating tiered delivery of social benefits in addition to the employment and use of local suppliers over the life of the Project.

Figure 40: Autonomous mining vehicle on dedicated haul road.

SAFETY

Creating a safe operating environment is a primary consideration in the design and planning for the Project. The site layout is designed to reduce risk from identified hazards, the most important being traffic interactions.

The autonomous mining fleet removes the workforce from a number of significant hazards in the mine, but requires additional attention to interaction between autonomous and manned vehicles or equipment (Figure 40).

To achieve this the design of road layouts separate heavy vehicle (HV) and light vehicle (LV) haul roads, and use of tunnels will ensure separation of vehicles in the Autonomous Operations Zone (AOZ) shown in Figure 41, where the autonomous mining fleet operates, from all other traffic on the site. Only specially authorised and suitable equipped manned vehicles may enter the AOZ road system, ensuring minimum risk exposure for the majority of the workforce.

Potential safety hazards in the process plant and other operational areas, will be eliminated or minimised though engineering design and construction strategies, including attention to the layout to reduce risk exposure and planning for off-site modular builds of key sections which allows on site assembly with lower risk exposures during construction.

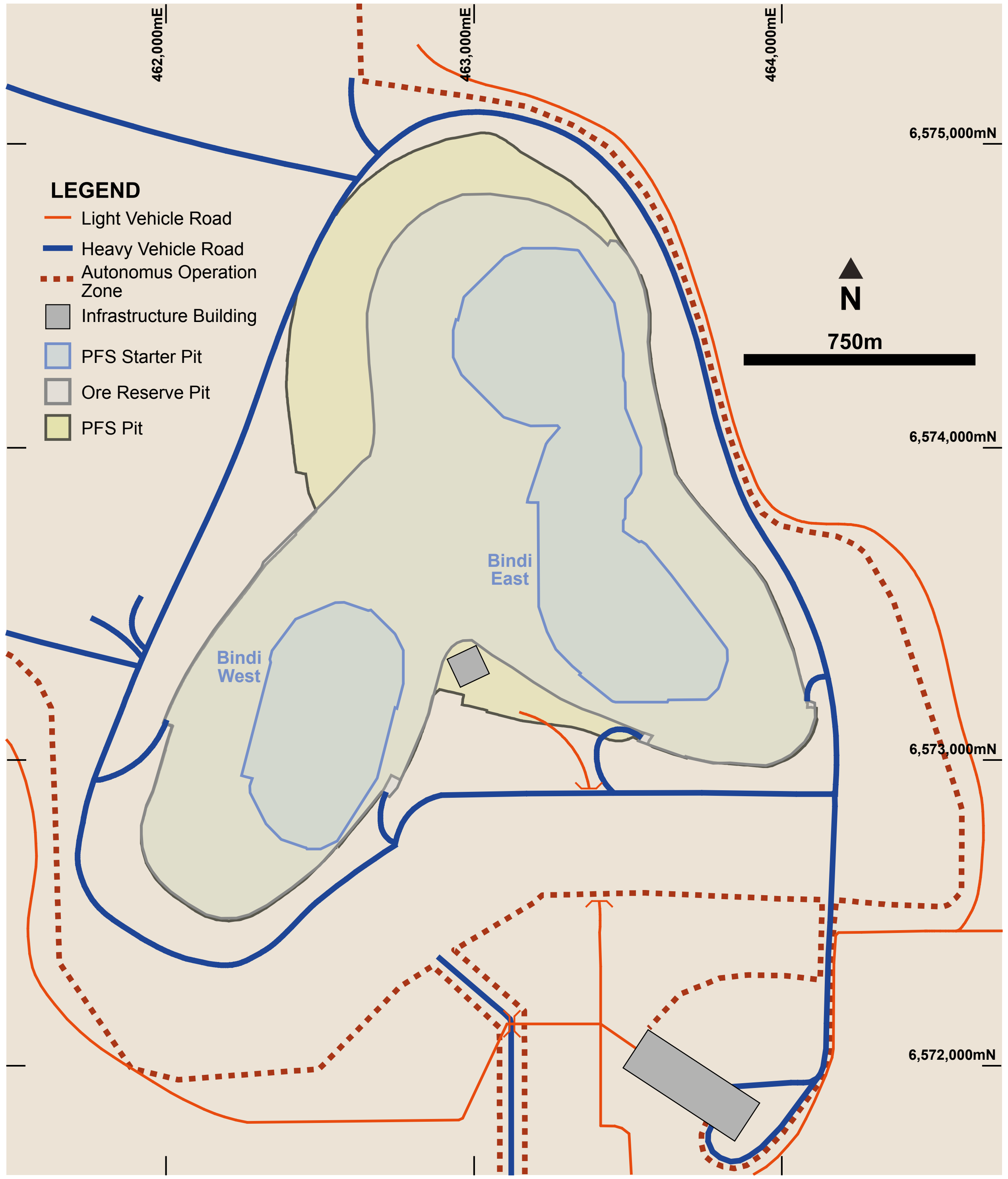


Figure 41: Autonomous Operations Zone (AOZ) road layout separating autonomous and manned vehicle movements.

PROJECT SCHEDULE

YEAR	2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TARGET	PRE-FEASIBILITY STUDY		DEFINITIVE FEASIBILITY STUDY							PROJECT FINANCING		
EXPLORATION AND MINERAL RESOURCE	Resource, Met and Geotech Drilling					Update Resource						
TENURE	Mining Lease Agreements					Infrastructure Tenure Agreements				Grant		
METALLURGY	DFS Met Testwork											
MINING	DFS Mining Reserve Update											
PROCESSING DESIGN AND ENGINEERING	Processing Design And Engineering								FEED			
WATER	Define Water Resources					Permits and Licences Assessed				Permits and Licences Granted		
POWER	Access Application				Assessment and Final Design and Access Granted							
APPROVALS	Referral Preparation				Referral Assessments – EP Act Part IV and EPBC Act					Received		
LOGISTICS AND SHIPPING	Transport Options Study											
MARKETING	Strategic Partner and Offtake Agreement Negotiations											
FUNDING						Project Financing						
LONG-LEAD AND CRITICAL EQUIPMENT	Construction and Operations Camp Planning							Early Works Infrastructure and Progress Long-Lead Items				
STAKEHOLDERS	Layout Finalisation				Stakeholder Engagement			Social Impact Assessment and Management				

2025				2026			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION						OPERATION	

Figure 42: *Caravel Copper Project estimated schedule detailing activities during feasibility.*

INITIAL 28 YEAR COPPER PROJECT

FINANCIALS

1. FINANCIALS

All dollar amounts given are in Australian dollars unless otherwise specified

PFS financial modelling for the Caravel Copper Project was performed by the global business advisory firm FTI Consulting. Modelling using the base case assumptions confirms a robust and executable project with a capital intensity that compares favourably to similar scale copper projects.

Technologies such as automation and electrification using grid power access, coupled with a low strip ratio, good metallurgical attributes and simple logistics allow for substantial cost advantages throughout Project operations.

The base case model assumes a long-term price of US$4.00/lb Cu and exchange rate of US$0.72:A$1.00. Over the current 28-year project mine life, modelling demonstrates that the Project will generate cumulative pre-tax cashflows of $4.62B on net revenues of $17.55B.

Initial capital required to construct the dual train process plant, site infrastructure, tailings storage, borefield and owners' costs is estimated to be $1.2B. Initial costs for Mining equipment are estimated at $309M, which is expected to be arranged under vendor financing. A further $189M has been provided for the initial pre-stripping of the overburden at Bindi.

Utilising a 7% real discount rate, the Project generates a pre-tax, project level, Net Present Value (NPV) of $1.1B and pre-tax IRR of 15%. The Project is forecast to repay up-front development capital within seven years from the start of production.

1.1 Capital Costs

Initial capital costs of $1.205M comprise capital expenditure of $1.149M (including contingencies) to construct the process plant, site infrastructure, tailings storage and borefield, as prepared by lead engineer Ausenco, and $56M of estimated owners' costs. The estimate accuracy is ±25% and is equivalent to an AACE Class 4 estimate. To support the development of capital and operating cost estimates within a ±25% accuracy, the study defined the process design, process flow sheets and mass balance based on results from metallurgical test work. This formed the basis for equipment sizing, development of mechanical and civil model, preliminary discipline material take-offs and market-based pricing for major equipment.

Mining capital costs are based on detailed costings provided by equipment vendors in consultation with Caravel mining engineers and mining consultants Orelogy. Mining costs for the PFS are based on an owner operator fleet utilising automation and electric power technology (ACE). The mining fleet has been priced using detailed vendor information. It is expected that vendor financing will be available for the purchase of mining fleet and discussions on terms are in progress

Construction and mining capital expenditure is summarised by major area in Table 11.

Table 11: Caravel Copper Project Capital Costs

Capital Expenditure A$m	Initial Year 0 to 3	Incremental Year 4 to 28	Sustaining	Closure	LOM
Process Plant and Site Infrastructure					
Plant Direct Costs	680				680
Site Infrastructure	113				113
Tailings Storage Management	51	182			234
Water Supply	69				69
Owner Costs and Indirects	172				172
Contingencies	111				111
Mine Infrastructure	8		12		20
Plant and Infrastructure Sustaining			580		580
	1,205	**182**	**592**	**–**	**1,979**
Mining Equipment	309		399		708
Mining Pre-strip	189	291			480
Rehabilitation				50	50
Total Capital Expenditure	**1,702**	**474**	**991**	**50**	**3,216**

1.2 Operating Costs

The mine plan utilises diesel-electric trucks, electric drill rigs and shovels and takes advantage of cheap grid connected electric power. These proven technologies allow substantial advantages in fuel cost, emissions reduction, performance, and availability compared to a manned electric fleet.

Low mining cost rates, coupled with a conventional open-pit with a strip ratio as low as 0.4:1 in the initial five years, provide an important fundamental advantage for the Project.

Good, low variability metallurgy in a standard crush, grind float and filter operation allows for high recoveries and provide an excellent concentrate quality, whilst the benign tailings and flat terrain structurally lower build and operating costs.

The life of mine cost estimates for mining and processing are as follows:

Life of Mine Unit Operating Costs (A$/t)	Operating	Sustaining	Pre-Production	All-In-Cost
Mining ($/t mined)	2.32	0.25[1]	0.49[2]	3.06
Processing and site administration ($/t processed)	6.59	1.07[3]	1.61[4]	9.26

1 Mine equipment and properties
2 Initial and expansion pre-stripping, properties and equipment
3 Tailings management and plant maintenance
4 Processing plant build inclusive of contingencies

The estimated C1 Cash cost is US$1.72/lb Cu after by-product credits.

Table 12: Caravel Copper Project C1 Costs

Life of Mine Unit C1 Costs US$[1]	$/lb Sold
Mining Costs	0.44
Processing Cost	1.01
Site and General Administration	0.09
Logistics	0.21
Treatment and Refining Costs	0.16
By-Product Credits[2]	(0.19)
Total	**1.72**

1 A long-term FX value of A$1 = US$0.72 was used in converting USD to AUD

2 Grade, commodity pricing and payability for the by-product credits were as follows:
Silver 1.45g/t, US$18/oz and 60.8%
Gold 0.022g/t, US$1,700/oz and 31.4%

1.3 Financial Analysis

Table 13 provides a summary of the financial analysis, which demonstrates that the Caravel Copper Project is economically viable.

Table 13: Life of Mine Financial Economics

Life Of Mine Financial Economics (A$)	LOM
Cu Revenue (net of payability and TCs/RCs)	$17,555M
Net Cash Flow (pre-tax)	$4,622M
Pre-tax NPV (7% discount rate)	$1,066M
Pre-tax IRR	14.7%
Capital Payback Period	6.8 years

Summary of the main assumptions:

- Exchange rates – An exchange rate of 0.72 US$ per A$ was used to convert the US$ market price projections into Australian currency.
- Discount rate – Caravel Minerals considers 7% to be an appropriate discount rate based upon the Australian risk-free interest rate, low risk profile of Western Australia as reported by Fraser Institute and the Project's proximity to major infrastructure.
- All costs and sales are presented in constant Q2 2022 A$, with no inflation or escalation factors considered.
- All related payments and disbursements incurred prior to commencement of construction are considered as sunk costs.

1.4 Sensitivity

The following are the major sensitivities of the Project.

Table 14: Sensitivity Analysis of NPV Outcome (A$M- pre-tax basis @ 7%)

Sensitivity Analysis	-15%	-10%	-5%	base	+5%	+10%	+15%
Cu Price	(37)	331	698	1,066	1,434	1,801	2,169
Cu Grade	(11)	348	707	1,066	1,425	1,784	2,143
All Operating Costs	475	672	869	1,066	1,263	1,460	1,657
Capital Costs	736	846	956	1,066	1,176	1,286	1,396
Milling Costs	779	874	970	1,066	1,162	1,258	1,353
Mining Costs	832	910	988	1,066	1,144	1,222	1,300

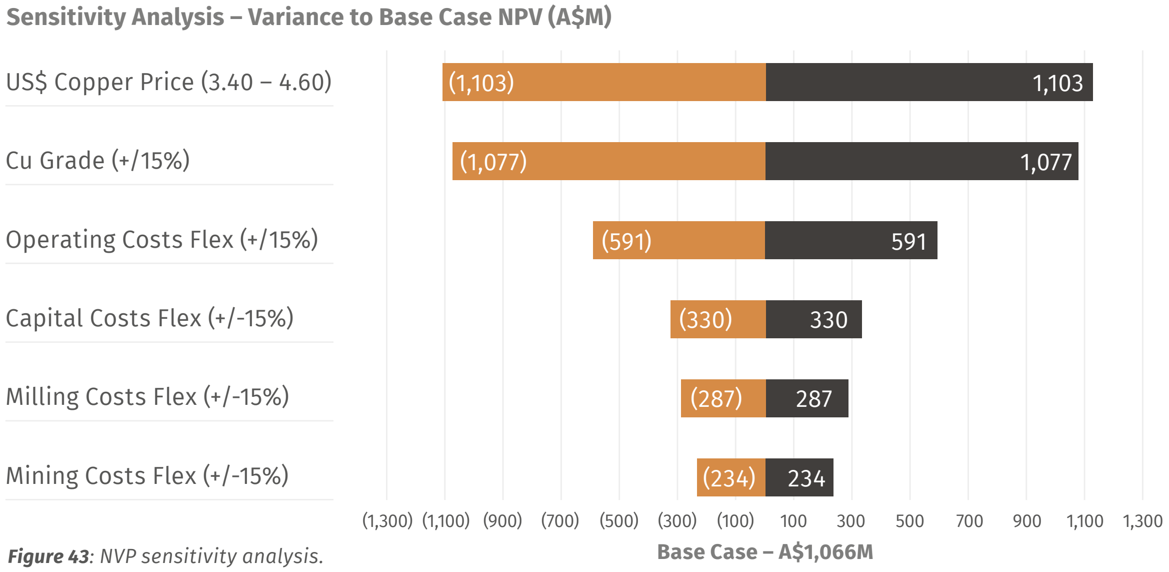


***Figure 43**: NVP sensitivity analysis.*

No exchange rate sensitivity has been performed, due to a perceived strong, historical, correlation between the AUD:USD exchange rate and USD denominated copper prices, which in effect creates a natural hedge between AUD:USD exchange rates and USD commodity prices

1.5 Project Funding

The Caravel Copper Project remains one of very few projects globally with >60,000tpa Cu potential production that is well advanced and has a clear pathway to development. With the current forecasts of substantial copper deficits in the coming years, Caravel is very well placed to be ready for financing and development at a time of significant demand for copper.

1.6 Basis of C1 and All-in-Sustaining costs

C1 (Direct Costs) = Mining + Processing + Site General and Administration – By-Product Credits + Logistics + Refining Charges

All-In Sustaining Cost = Mining + Processing + Logistics + Site General and Administration – By-Product Credits + Concentrate Freight + Refining Charges + Royalties + Rehabilitation + Sustaining Capital + Corporate General and Administration

All-In Cost = AISC + Capitalised Pre-Production Costs