

ASX ANNOUNCMENT

23 October 2017

ASX Code: CMM

ABN: 84 121 700 105

Board of Directors:

Mr Heath Hellewell Executive Chairman

Mr Guy LeClezio
Non-Executive Director

Mr Stuart Pether Non-Executive Director

Issued Capital:

Shares 572.4M Options 55.7M Share Price A\$0.077 Market Cap. A\$44.1M

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KARLAWINDA FEASIBILITY STUDY OUTLINES ROBUST, HIGH MARGIN GOLD PROJECT

SUMMARY

- A Feasibility Study completed on the 100%-owned Karlawinda Gold Project, located near Newman in the Pilbara region of Western Australia, has outlined a technically and financially robust project.
- The Feasibility Study is based on the development of a single large open pit mine at the Bibra deposit and an associated 3.0Mtpa CIL plant.
- The Feasibility Study is based on the Ore Reserve of 21 million tonnes @ 1.06g/t Au containing 713,000 ounces of gold. The Project has an initial 6.5 year life of mine based on current Ore Reserves only.
- Average life of mine production of around 100,000oz per annum with estimated cash operating costs of \$991/oz and all in sustaining costs (ASIC) of \$1,025/oz.
- The Project generates an undiscounted pre-tax operating surplus of \$413M from total revenue of \$1,091M and a pre-tax NPV₈ of \$144M and an IRR of 31%
- Estimated capital cost for the processing plant and associated infrastructure is \$133.3M (plus a contingency of \$13.1 million).
 Payback is estimated within three years of first production.
- The Feasibility Study provides the foundation for the development of the Karlawinda Gold Project into a significant operation in a new and emerging gold district.
- The Board has approved the Feasibility Study and the commencement of development activities. Subject to the completion of suitable financing arrangements, it is expected the Project will proceed to construction early in the second quarter of 2018.
- With the completion of the Feasibility Study and concurrent with the Project financing process, Capricorn will immediately recommence exploration activities at Karlawinda, as it seeks to maintain its strong record of resource growth at the Project.

Note: All references to \$ refers to Australian Dollars unless otherwise specified.

MANAGEMENT COMMENT

Capricorn's Executive Chairman, Heath Hellewell, said "The release of a positive Feasibility Study confirming the potential for a robust high-margin gold project at Karlawinda is a watershed moment for our Company.

This study provides us with the confidence that the Karlawinda Gold Project will become a significant new Western Australian gold mine, with a strong production profile, low forecast operating costs and the ability to generate strong financial returns over its initial 6.5 year life and beyond.

With certainty now around the State Government gold royalty, and based on what are now high confidence capital and operating cost estimates, we are confident that the development of the Project will proceed, subject to financing.

As our exploration programs once again ramp up, we are excited about the endowment potential of the region and the opportunities that exist within our current exploration targets. We look forward to delivering on the outstanding upside and potential for growth in our resource and reserve inventory as we continue to work towards first gold production.

The growth in the Project's resources, the delivery of the maiden Ore Reserve and the completion of a Feasibility Study in less than two years since acquisition of the Project is a major achievement by all our staff and contractors. We now look forward to developing the Project over the coming months with the aim of first gold production in June Quarter 2019".

KARLAWINDA FEASABILITY STUDY

Capricorn Metals Ltd ("Capricorn" or the "Company") (ASX: CMM) is pleased to announce that it has completed the Feasibility Study for the 100% owned Karlawinda Gold Project, located approximately 60km south east of Newman in the Pilbara region of Western Australia.

The study is based on the maiden JORC 2012 compliant Ore Reserve estimate of **21 million tonnes @ 1.06g/t Au for 713,000 ounces** ¹ for the Bibra deposit as released to the ASX on the 7th August 2017 (Table 1).

TABLE 1: BIBRA DEPOSIT JORC OPEN PIT ORE RESERVE ESTIMATE (\$1500/ounce assumption)

	PROVED RESERVES		PROBABLE RESERVES			TOTAL RESERVES			
DATE	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)
July 2017	-	-	-	21	1.06	0.713	21	1.06	0.713

Notes:

- Ore Reserves are a subset of Mineral Resources
- Ore Reserves conform with and use the JORC 2012 Code definitions
- Ore Reserves are calculated using a gold price of A\$1500/ounce
- Ore Reserves are calculated using a cut-off grade between 0.40g/t and 0.47g/t Au
- Mining dilution methods applied result in a reduction of 13% of reportable Au ounces
- All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of summation

¹ Capricorn report that it is not aware of any new information or data that materially affects the information included in the Ore Reserve announcement dated 7th August 2017 and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not Materially changed.



TABLE 2: KARLAWINDA FEASIBILITY STUDY RESULTS

	Karlawinda Gold Project	Total Mineral Resources						
Indicated	28.9Mt	1.10 g/t	1.03 Moz					
Inferred	2.4Mt	1.06 g/t	0.084Moz					
Total Resources	31.3Mt	1.10 g/t	1.114Moz					
	Bibra Ore Reserves							
Probable Reserve	21.0Mt	1.06 g/t	0.713Moz					
	Processing Plant & Infra	structure Capital Costs ²						
3.0 Mtpa Process Plant		A\$M	90.7					
Plant Infrastructure		A\$M	8.7					
Other Infrastructure		A\$M	20.5					
Owners Costs		A\$M	13.4					
Contingency		A\$M	13.1					
Total		A\$M	146.3 ³					
Capital Cost / LOM Gold Produc	tion	\$A/oz	221					
Capital Cost / Pre-Tax NPV			1.02					
LOM Sustaining Capital Costs ⁴		A\$M	22.8					
	Production	n Summary						
Life of Mine (LOM)		Years	6.5					
LOM Strip Ratio		Waste:Ore	4.7:1					
LOM Gold Production		OZ	660,955					
LOM Average Annual Gold Prod	luction ⁵	OZ.	101,685					
Processing Rate - oxide		Mtpa	3.75					
Processing Rate - primary		Mtpa	3.0					
LOM Average Gold Recovery		%	92.6					
	LOM Opera	ating Costs						
Mining		A\$/t milled	13.8					
Processing (oxide)		A\$/t milled	9.9					
Processing (primary)		A\$/t milled	13.0					
Processing (average LOM)		A\$/t milled	12.0					
Administration		A\$/t milled	2.6					
C1 Costs ⁶		A\$/oz	991					
AISC ⁷		A\$/oz	1025					
	Project E	conomics						
LOM Revenue (A\$1650/oz)		A\$M	1091					
LOM Pre-Tax Operating Cashflo	w (A\$1650/oz)	A\$M	413					
NPV ₈ (Pre-Tax)		A\$M	144					
IRR (Pre-Tax)		%	31					
Payback (Post-Tax)		Years	3.1					

Excludes mining fleet
 May include rounding adjustments
 Includes mine rehabilitation and closure costs
 Excludes final quarter of production
 Includes royalties equating to \$82.90/oz
 Includes sustaining capital costs equating to \$34.50/oz



The study confirms the robust nature of the Karlawinda Gold Project with an attractive life of mine average annual production rate of approximately 100,000 ounces of gold at low forecast average production costs (AISC) of \$1,025/oz.

The Project is based on open pit mining, from a single large multi-stage open pit, with contract grade control drilling, contract drill and blast and owner operator load and haul. Ore is treated through a 3Mtpa plant using standard "off the shelf" processing technology including single stage crushing, SAG/SABC grinding and gravity recovery along with conventional cyanide leaching and recovery (carbon in leach).

The Company has obtained a granted Mining Lease for the Project along with a signed Native Title access agreement, base line and detailed environmental studies have been completed and the process of obtaining other key permits and approvals has commenced, with no obvious impediments to fully permitting the Project.

Following completion of the Feasibility Study the Capricorn Board has approved the development of the Karlawinda Gold Project. Subject to suitable financing arrangements and a final investment decision, construction of the Project is anticipated to take around 64 weeks. It is expected that construction will be undertaken by way of a fixed price EPC contract and a formal EPC tender process has commenced with four shortlisted contractors.

The total capital cost estimate for the 3.0Mtpa plant, project infrastructure and owner's costs, including a contingency allowance of \$13.1 million, is \$146.3 million. Capricorn is currently targeting first gold production from Karlawinda in the June Quarter 2019.

Exploration undertaken by Capricorn at Karlawinda during 2017 has led to a significantly improved understanding of the mineralisation controls at the Bibra deposit. The Company believes this knowledge can not only be applied to extensional exploration of the Bibra gold system, but also across the rest of the Project area, including key exploration targets at K3 and Francopan.

The Karlawinda Gold Project exhibits significant gold endowment potential and with the Project now underpinned by a robust Feasibility Study, Capricorn will immediately recommence exploration with an objective of significantly increasing the resource and reserve base for the Project.

A summary of the Feasibility Study follows as Appendix One.

For and on behalf of the Board

Heath Hellewell Executive Chairman

For further information, please contact:

Mr Heath Hellewell, Executive Chairman

Email: enquiries@capmet.com.au

Phone: (08) 9212 4600



Competent Persons Statement

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled or reviewed by Mr. Michael Martin who is Chief Geologist and a full-time employee of the Company. Mr. Michael Martin is a current Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and types of deposit under consideration and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Martin consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Exploration Results or Mineral Resources is based on information reviewed by Mr. Peter Langworthy who is Executive General Manager Geology, and a full-time employee of the Company. Mr. Peter Langworthy is a current Member of the Australian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and types of deposit under consideration and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Langworthy consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Ore Reserves for Bibra is based on information compiled by Quinton de Klerk. Mr de Klerk is an employee of Cube Consulting PL and is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM, #210114). Mr de Klerk has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. de Klerk consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Capricorn Metals confirms that it is not aware of any new information or data that materially affects the information included in the previous ASX announcements on Mineral Resources (10/4/2017), Metallurgy (19/6/2017) and Ore Reserves (7/08/2017) and, in the case of estimates of Mineral Resources, Ore Reserves, Plant operating costs and Metallurgy, all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially changed from previous market announcements.

Forward Looking Statements

This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation of belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. The detailed reasons for that conclusion are outlined throughout this announcement and all Material Assumptions are disclosed.

However, forward looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements.

Such risks include, but are not limited to resource risk, metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as governmental regulation and judicial outcomes.

For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

The Company has concluded it has a reasonable basis for providing the forward-looking statements that relate to the Karlawinda Feasibility Study that are included in this announcement and which has been prepared in accordance with the JORC code (2012) and ASX Listing Rules.



APPENDIX ONE:

KARLAWINDA GOLD PROJECT FEASIBILITY STUDY – EXECUTIVE SUMMARY

1. INTRODUCTION

The Karlawinda Gold Project ("Karlawinda" or the "Project") is located approximately 1200 km north-east of Perth and 60 km to the south-east of the town of Newman in the Pilbara region of Western Australia.

Newman is a moderately sized regional centre with well-established mining support services, due primarily to extensive iron ore mining operations in the area. The town lies on the Great Northern Highway, a major arterial road through northern Western Australia that provides connections to Perth and Port Hedland. It has an airport located approximately 10 km to the south-east, which handles approximately 4500 aircraft movements per annum. Both Qantas and Virgin Australia operate regular passenger transport flights between Newman and Perth.

Capricorn's tenure (granted and applications) overlies four pastoral leases, Sylvania, Weelarrana, Bulloo Downs and Ethel Creek stations. The mining lease ML 52/1070, was granted on 23rd November 2016, and lies wholly on Weelarrana Station. Seven miscellaneous licenses (L 52/174, 175, 177, 178, 179, 180 and 181) were applied for in third quarter 2017 to facilitate the development of a site access road, borefield, potential and planned powerlines and a communications tower.

Gold was first discovered at Karlawinda in 2005 by WMC Resources Limited, whilst exploring for nickel. The original discovery, the Francopan deposit, is located some 3km south-east of the Bibra deposit. The Bibra deposit, the subject of this study, was discovered by Independence Group NL ("IGO") in 2009 following acquisition of the Project from BHP Billiton Limited.

IGO spent approximately \$12 million on exploration, resource drilling and completed a scoping study on the Bibra deposit which resulted in the definition of a resource of 18 Mt at 1.1 g/t for 650 800oz of gold. In 2015, IGO sold the Project to a private company, Greenmount Resources Pty Ltd ("Greenmount") and, in February 2016, Malagasy Minerals Limited (subsequently renamed Capricorn) completed the acquisition of Greenmount. Since the discovery of the Bibra deposit, approximately \$32 million has been spent on the Project to date, including approximately \$20 million by Capricorn.

Since acquisition of the Project, Capricorn has undertaken two additional phases of resource drilling, resulting in two updates to the resource. The first, published on 4th July 2016, totalled 25.5 Mt at 1.1 g/t for 914 000oz of gold, the second announced on 10th April 2017 totalled 31 Mt at 1.1 g/t for 1.114 Moz of gold and is the resource used for this study.

Between February and July 2016, Capricorn undertook a Scoping Study that drew heavily on the technical studies undertaken by IGO and utilised the July 2016 resource. Based on the outcome of the Scoping Study, the Capricorn Board approved the commencement of this Feasibility Study (FS).

The Scoping Study identified additional work within each study discipline that would be required to be undertaken to complete a FS. This report summarises the outcome of each of those studies and the technical and financial conclusions of the FS.

Table 1 details the FS study areas and the specialist consultants engaged by Capricorn.



Table 1: Feasibility Study Team

STUDY AREA	CONSULTANT
Geology & Mineral Resources	Capricorn Metals and Optiro
Environmental	360 Environmental
Social Impact	360 Environmental
Hydrogeology	Groundwater Resource Management (GRM)
Surface Hydrology	GRM
Mining Geotechnical	Peter O'Bryan & Associates
Mining Studies and Ore Reserves	Cube Consulting and Entech
Blasting and Fragmentation Studies	George Boucher Consulting
Metallurgy	Minelogix, ALS and Gekko
Process Plant Design & Non-process Infrastructure	Mintrex and Orway Mineral Consultants
Civil Geotechnical	MHA Geotechnical
Tailings & Waste Rock Geochemistry	Graeme Campbell & Associates
Tailings Storage	Land and Marine Geological Services and CMW Geosciences
Financial Modelling	Capricorn Metals and Ironstone Capital

2. GEOLOGY & MINERAL RESOURCES

On the 10th April 2017 Capricorn released an updated Mineral Resource estimate for the Karlawinda Gold Project (**Table 2**, **Figure 1**) comprising **31 million tonnes** @ **1.1 g/t Au for 1 114 000 ounces**.

The Bibra deposit is part of a large-scale Archaean aged gold mineralised system. Most of the mineralisation at Bibra is hosted within a package of deformed meta-sediments and is developed along two parallel, shallow dipping structures; the Main Footwall Lode and the Main Hanging Wall Lode. Recent exploration has also identified another potentially significant zone of mineralisation known as the Portrush Trend further into the hanging wall of the system. Laterite mineralisation has developed over the structures close to surface. The deposit is oxidised to average depths of between 50-70 m.

The drilling database consists of good quality Reverse Circulation (RC) and diamond drillholes with most holes drilled at a grid spacing of 25 m x 25 m or 50 m grid within the Bibra pit area. In total 130 483 metres of drilling has been completed at the Bibra deposit consisting of 77 diamond drillholes (12 330m [9%]) and 880 Reverse Circulation drillholes (118 153m [91%]). Field quality control was implemented during the program consisting of measurement of sample recovery, collection of field duplicates and the insertion of certified reference material (CRM) and blanks.

The RC and diamond drillhole samples were sent to Intertek laboratories in Perth, where the samples were oven dried. After drying, the core samples were crushed to a nominal 2 mm and then both RC chips and diamond samples were pulverised to provide a pulp sample for analysis. QA/QC protocols have been executed to a high standard. QA/QC programs were implemented to test the quality of drilling, assaying and logging. Drilling quality was tested through recovery and split ratio testing through the ore zones. Assaying accuracy showed overall good accuracy for all the CRM's submitted. An analysis of the drilling programs shows that, like many orogenic gold systems there is an inherent issue with assay precision due to the coarse gold distribution within the Bibra deposit. To facilitate an increase in the overall assay precision to sufficiently high confidence levels, most of the ore grade samples (>0.3 g/t Au) had four assays completed. The four assays were then averaged to create a preferred grade to use in the resource estimate. An independent review of this process was undertaken and it determined that the actions taken were sufficient to mitigate any risk with assay precision.



Three-dimensional wireframes were created to constrain the mineralisation and allocate geology to the block model. These were built using sectional interpretation and visualisation of the mineralisation in three-dimensions. There are four main mineralised domains at Bibra, which include six individual high-grade domains. Outside of Bibra additional lodes are also present at Southern Corridor, southern Port Rush trend including Easkey and the southern extension of the Main Hanging Wall Lode. The mineralised domains were defined with a cut-off grade of 0.3 g/t Au with higher grade domains at 1.0 g/t cut-off grades.

An ordinary kriging block model was created to estimate the Bibra mineralisation. Variography was undertaken on domains and the resultant variogram used to undertake kriging neighbourhood analysis to optimise the block size, search distances and minimum/maximum sample numbers used. Top-cuts were applied to sample composites in 8 domains, with 11 samples cut. Three estimation search passes were used for each domain. Water immersion and gamma density measurements were assigned to the block model using the three-dimensional geological model. The block model was validated through a combination of visual checking, domain assay vs block model grade, Swathe plots and quantitative kriging measures.

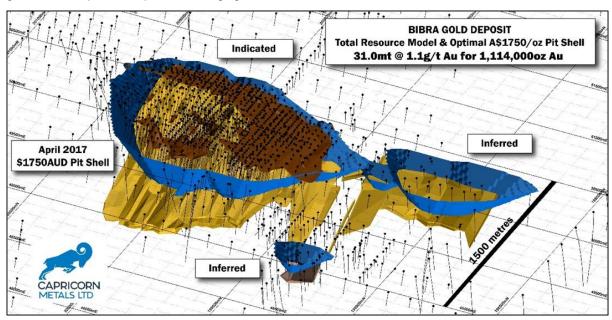


Figure 1: Bibra, Easkey and Southern Corridor deposits - drillholes, mineralisation and resource shell.

The resource estimate was completed and reported in accordance with the guidelines in the JORC Code (2012).

The resource model has been classified as Inferred and Indicated for material within a conceptual A\$1750 optimised pit shell based upon, geological confidence, grade continuity, drill spacing, kriging quantitative measures and economics. It has been determined through the implication of the above measures that all the material that lies in the northern pit is all classed as Indicated and the material that lies in the southern pit and the small pit to the west is classified as Inferred.

Table 2: Karlawinda Gold Project JORC open pit Mineral Resource estimate. (A\$1750/ounce assumption)

	INDICATED RESOURCES		INFERRED RESOURCES			TOTAL RESOURCES			
Date	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Moz)
April 2017	28.9	1.10	1.03	2.4	1.06	0.084	31.3	1.10	1.114



ORE RESERVES

On the 7th of August 2017 Capricorn released the maiden JORC 2012 compliant Ore Reserve estimate for the Bibra deposit of 21 million tonnes @ 1.06g/t Au for 713,000 ounces (Table 3). The Ore Reserve is contained within a detailed staged open pit design (Figure 2) with a Stage One stripping ratio of 2.9:1 and a life of mine stripping ratio of 4.7:1 (Table 4). The Stage One pit shells contain predominantly laterite and oxide mineralisation.

Table 3: Bibra Deposit JORC open pit Ore Reserve estimate. (A\$1500/ounce assumption)

	PROVED RESERVES		PROBABLE RESERVES			TOTAL RESERVES			
DATE	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	(Mt)	(g/t Au)	(Moz)	(Mt)	(g/t Au)	(Moz)	(Mt)	(g/t Au)	(Moz)
July 2017	-	-	-	21	1.06	0.713	21	1.06	0.713

Notes:

- 1. Ore Reserves are a subset of Mineral Resources
- 2. Ore Reserves conform with and use the JORC 2012 Code definitions
- 3. Ore Reserves are calculated using a gold price of A\$1500/ounce
- 4. Ore Reserves are calculated using a cut-off grade between 0.40g/t and 0.47g/t Au
- 5. Mining dilution methods applied result in a reduction of 13% of reportable Au ounces (refer Material Assumptions, page 5)
- 6. All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of summation

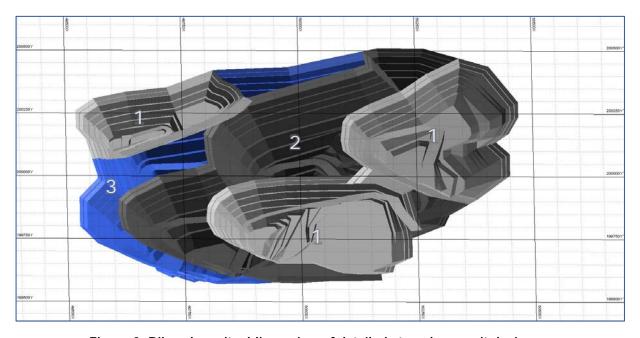


Figure 2: Bibra deposit, oblique view of detailed staged open pit designs.



Table 4. Bibra Ore Reserve, by staged open pit design.

Pit Stage	Tonnes	Grade (g/t Au)	Ounces	Strip Ratio (Waste:Ore)
1A	554,000	0.9	16,000	5.4:1
1B	1,630,000	1.2	63,000	3.1:1
1C	2,892,000	1.05	98,000	2.4:1
2	8,172,000	1.03	271,000	4.9:1
3	7,777,000	1.06	266,000	5.5:1
TOTAL	21,025,000	1.06	713,000	4.7:1

4. MINING

The Bibra deposit will be mined by open pit mining methods using conventional mining equipment. The FS assumes that load and haul will be undertaken as an owner operator which utilises a peak operating fleet of four 100 tonne haul trucks and eight 130 tonne haul trucks, a 300 tonne, 200 tonne and 100 tonne excavators along with ancillary equipment including dozers, graders, loaders and watercarts. Drill and blast activities and grade control drilling will be undertaken on a contract basis. Detailed fragmentation modelling was undertaken by George Boucher Consulting to determine appropriate blasting techniques and powder factors in the various ore and rock types. Drill and blast will be on 5m benches in ore and 5m and 10m benches in waste. Grade control drilling will be undertaken by reverse circulation drilling, predominantly on a spacing of 10m x 10m, which targets the main zones of mineralisation and a 5m x 8m pattern in more discrete hanging wall lodes. Grade control hole orientation in the first 20 metres of the pit (including laterite zones) will be vertical and thereafter is planned with inclined holes at 60 degrees to the east.

MINE DESIGN & SCHEDULING

Cube Consulting provided open pit mine engineering services, the work comprised open pit optimisation studies on the indicated and inferred resources of the Bibra deposit, open pit designs, pit production scheduling, and pit infrastructure design.

Following the pit optimisation and shell selection, final pit and staged designs were completed (Figure 3, Figure 4, and Figure 5). The pit will be mined in three stages with the first stage comprised of three oxide pits. A comparison of the final pit design results and pit optimisation shell selected for the design is shown in Table 5.

Table 5: Comparison of Bibra pit optimisation and final design.

	Ore (tonnes)	Grade Au (g/t)	Insitu Ounces	Waste (tonnes)	Total (Tonnes)
Optimisation_Shell 41	21 091 043	1.07	723 524	97 243 862	118 334 905
Bibra Final Design	21 025 598	1.06	713 302	97 976 347	119 001 945
Difference	-65 445	-0.01	-10 218	731 174	667 040
	-0.3%	-0.7%	-1.4%	0.8%	0.6%

A life of mine open pit production schedule (Figure 6 and Figure 7) was prepared using the staged designs and based on the primary target of achieving the mill production feed rate which varied between 3.0 Mtpa and 3.75 Mtpa. This was achieved throughout the mine life without exceeding any practical physical mining limits. Pit

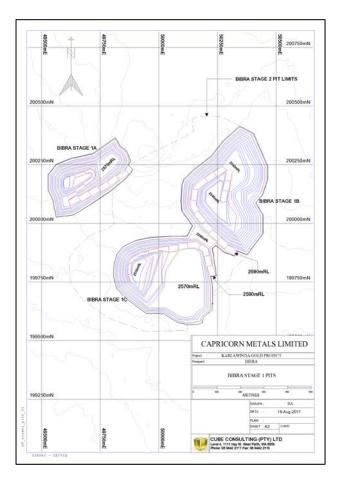


production is planned to commence one quarter prior to the treatment of ore to provide waste material for infrastructure requirements and to ensure that mill feed material is available for commissioning.

Pit production is planned to peak at around 7 Mt per quarter and this rate is maintained for just over one year before dropping to a consistent rate of approximately 4.5 Mt per quarter for almost 3 years. The production profile then follows a natural downward trend with mining sourced only from the Stage 3 pit as the mine plan approaches completion.

The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, defer waste movement, minimise rates of vertical mining advance, utilise planned process plant capacity and expedite net cash flow in a safe manner. The open pit has been scheduled based on realistic mining productivity with readily achievable mining rates along with consistent material movements.

The schedule also smoothed material movement profile across periods to ensure uniformity in fleet mobilisation across years while also avoiding ore stockpile build-ups over extended periods. A major scheduling constraint applied to this schedule was a limit on the vertical rate of advance. It was required that no pit or stage would have a vertical advance of more than 60 metres annually. This constraint was based on Cube Consulting' experience in similar mining operations.



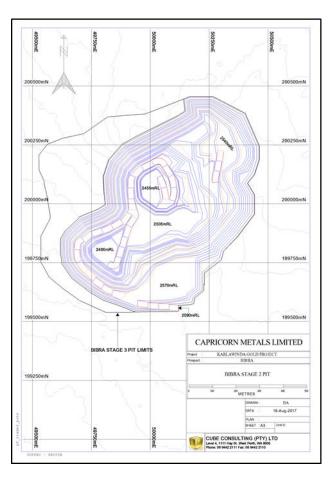


Figure 3 and 4: Bibra Stage One pit designs (left) and Stage Two pit design (right).



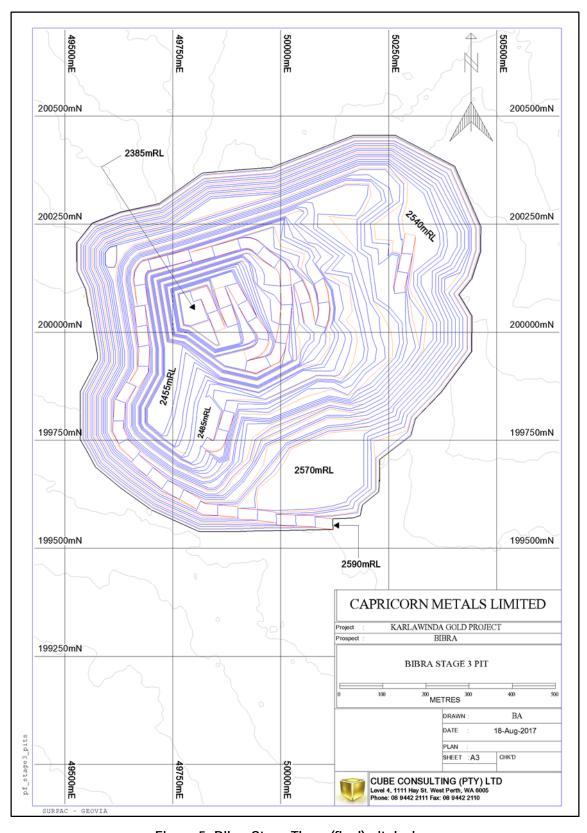


Figure 5: Bibra Stage Three (final) pit design.



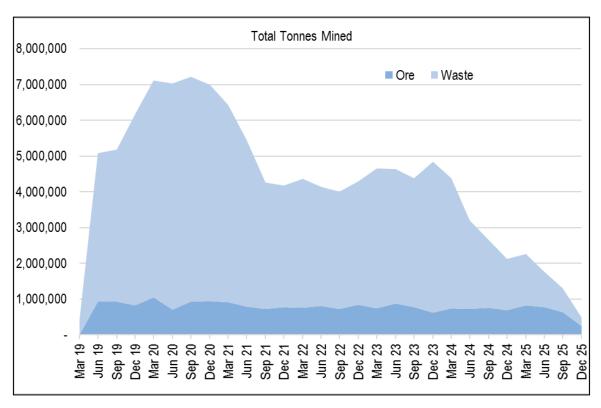


Figure 6: Bibra pit production schedule.

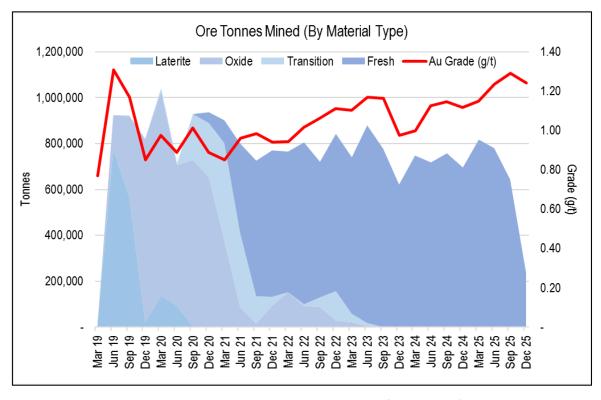


Figure 7: Bibra pit production schedule (by ore type).



MINING GEOTECHNICAL ASSESSMENT

Planned pit walls at Bibra will be mined through, para-amphibolite, amphibolites, mafic schist, tuff sandstone and tuff siltstone rocks and their weathered equivalents. Maximum final pit wall heights of up to 215 m will be limited to the north-west corner of the pit. Other wall sectors range in height from approximately 50 m to 150 m.

INVESTIGATIONS & FINDINGS

Geotechnical assessment of ground conditions influencing pit wall design at Bibra and excavation requirements from the Scoping Study were based on 11 HQ3 geotechnical investigation diamond drillholes. Five additional geotechnical drillholes were drilled and assessed to improve the understanding of the north and west walls for the FS.

Structural conditions and weathering depths assessed from the FS geotechnical drilling were generally consistent with those identified in the previous investigation. Deliberate targeting of a fault structure interpreted to intersect the planned north wall found an additional set of structures as expected.

Rock strength at Bibra is governed predominantly by rock weathering grades and alteration. The proposed Bibra pit walls from surface to 60m depth will comprise completely to highly weathered rocks, with 1 m to 10 m of transported material overlying the in-situ regolith. In general, rock weathering grades decrease, and intact rock strengths increase with depth.

The standing groundwater level is located approximately 10 m below natural surface at the 580 mRL.

Data from drill core (Figure 8) indicate that the dominant structural geological features comprise:

- Flat lying to shallow north-west dipping foliation, joints, veins, contacts and shears
- Steep to sub-vertical north-east striking joints and shears.
- Moderately steep joints, veins, contacts and shears dipping towards the north and south-west

Laboratory measurement of intact rock uniaxial compressive strengths (UCS) indicate results ranging from "weak" to "very strong". Direct shear laboratory test results indicate residual friction angles of typical planar defects range from approximately 30° – 38°.

Future wall rocks at Bibra are interpreted to range from "poor" in weathered rock to "very good" in fresh rock (RMR rock mass classification values range from 20 to 82).

PIT WALL DESIGN & DEVELOPMENT

Based on assessed rock mass conditions, it is considered that wall stability at Bibra above the top of fresh rock will be governed dominantly by the low strengths of the transported cover and weathered rocks. Stability is also expected to be influenced locally by the presence, orientation and shear strength of relict defects exposed in or located close behind the planned pit walls.

Wall stability within the fresh rocks will be governed predominantly by structural conditions including local ground conditions related to major structural features.

The recommended pit design parameters assume dry ground and wall rock conditions.

The eastern pit wall (footwall to lode) designed at very shallow angles for both local faces (\leq 30°) and overall slopes (\leq 20°) is expected to be inherently stable and not likely to be adversely affected by low rock strengths or geological structures.

The lateral geotechnical domains are presented in **Figure 9**. Wall design parameters are presented in **Table 6**. and summarised for the main west wall in **Figure 10**.



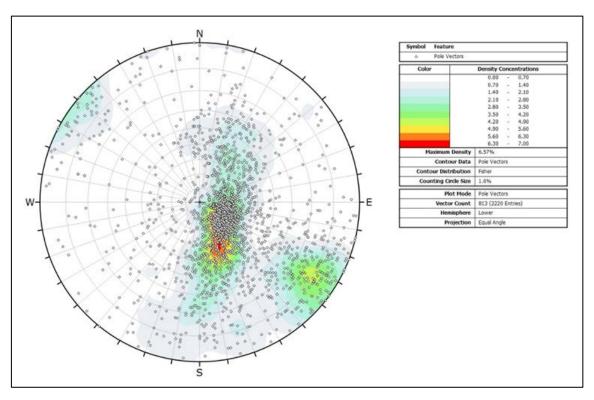


Figure 8: Bibra structure orientations from geotechnical drill hole logging.

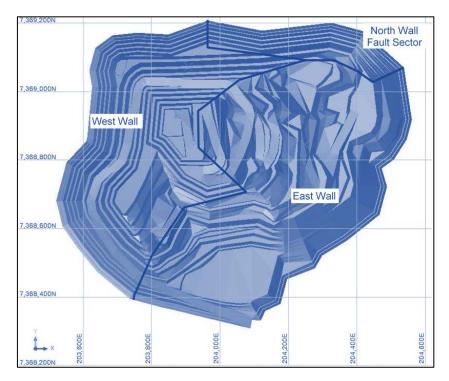


Figure 9: Bibra pit design & geotechnical design sectors.



Table 6. Bibra Wall Design Parameters.

West Wall (Hangingwal	II)	
Face Height	10m	Natural surface (I 590mRL) to 560mRL
	15m	560mRL to 545mRL
	20m	545 to 385mRL (proposed base of mining)
Face Angle	45°	Surface to base of transported sands and gravels (1-10m)
-	50°	base of transported to 560mRL
	60°	560mRL to 525mRL
	70°	425 to 385mRL (proposed base of mining)
Berm Width	5m	At 580mRL
	4m	At 570mRL and 560mRL
	6m	545mRL
	7m	At 525mRL and at 20m intervals vertically below 525mRL
	20m	Geotechnical berm – required where no ramp pass occurs
		within a slope segment comprising four 20m high faces
Inter Ramp Angle	39°	within saprolite
	54°	within good quality fresh rock
North Wall (Fault Zone))	
Face Height		All face heights consistent with west wall design
Face Angle		All face angles consistent with west wall design
Berm Width	5m	All berms above 545mRL increased by 1m width
		All other berm widths consistent with west wall design
Inter Ramp Angle		37° within saprolite
, ,		Fresh rock not encountered within this design sector
East Wall (Footwall)		
Face Height	≤ 30m	in weak materials where face angles are ≤ 30°
_	≤ 15m	in fresh rocks
Face Angle	≤ 35°	above the base of complete oxidation
3	≤ 65°	in fresh rocks - if required
Berm Width	5m	every 30m vertically in weak materials
	4-6m	in fresh rocks – depending on face height and angle
Inter Ramp Angle	35°	Surface to 585mRL
	≤ 30°	Below 585mRL (exclusive of ramp)



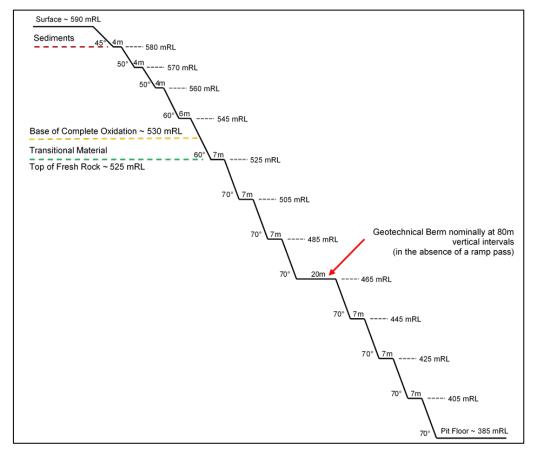


Figure 10: Bibra West Wall Design Parameters.

5. PROCESSING

METALLURGY & COMMUNITION TEST WORK

The metallurgical processing flowsheet selected for Karlawinda, has been based on the results of test work conducted on 32 composites samples prepared from 779 metres of drill core, totalling 90 ore intervals. The testing of Bibra ore encompassed 27 variability composites samples, from the five different weathering horizons, two master composites samples of primary mineralisation, and three master composites samples of oxide mineralisation. The primary mineralisation in the fresh rock, accounts for approximately 70% of the mill feed, while oxide mineralisation in the laterite, saprolite and transition horizons account for the remainder.

Detailed metallurgical test work was carried out as part of the FS during the period of November 2016 to June 2017. Previously two historical test work programs had been completed in 2012 and 2013, under the supervision of IGO. The following conclusions can be drawn from the FS and the historical metallurgical test work programs.

The Bibra ore is classified as free milling, with a high gravity recoverable gold component (up to 45%). Overall, gravity plus leach gold recoveries are in the range of 93% to 96% (**Table 7**).

As weathering of the mineralisation increases, denoted by a decrease in the amphibolite content and a corresponding increase in clay content, the ore hardness, competency and abrasiveness decreases. The primary ore is classified as hard (Bond ball mill work index 14-15 kWh/t) (**Table 8.**), with a relatively high resistance to impact breakage (A*b 34.4). With weathering, the ore changes to become moderately hard (Bond ball mill work index 9-13 kWh/t), and is soft and of low competency (A*b ~100). The laterite horizon which overlays the lodes, is hard to very hard (Bond ball mill work index 18-20 kWh/t), and is not particularly competent (A*b ~70). In testing, it was observed that as the fineness of the grind coarsens from a P_{80} of 90 μ m to a P_{80} of 120 μ m, the bond ball mill work index decreases for all ores except the laterite.



The Bibra ore is in the moderate to low range of abrasiveness, with abrasiveness decreasing as the ore becomes more weathered.

The Bibra ore has a significant gravity recoverable gold component, with approximately 40% to 45% of the gold in the fresh rock recoverable by gravity in a production scale gravity circuit. The gravity concentrate is highly amenable to treatment by intensive cyanidation. As weathering of the mineralisation increases, the portion of gold that is gravity recoverable decreases to approximately 20% to 30%. The gravity gold size in the primary mineralisation is typically of a moderate to coarse size and, with weathering it becomes finer, but moderate to coarse gold still occurs. The laterite horizon, which hosts secondary gold mineralisation, has very fine gold which is not as amenable to recovery by gravity.

A gravity-leach processing flowsheet was demonstrated to not only improve leach kinetics and extractions, but also reduces leach residence times and reagent consumptions as coarse gold is removed prior to the leach circuit. The lowering of the leach feed head grade through removal of gold by gravity does not impact leach kinetics. Gold recoveries and gold tail grades are influenced by grind size, they appear to be independent of the head grade.

Leaching of the Bibra ore, while a low oxygen consumer, is sensitive to dissolved oxygen levels. Oxygen improved leach kinetics and recoveries compared with the use of air. With low dissolved oxygen levels, leaching does become sensitive to cyanide concentration.

The primary and oxide mineralisation styles in the Main Hanging Wall and Main Footwall Lodes are similar in leaching behaviour. The laterite, which hosts a secondary gold mineralisation and is much finer than the gold mineralisation in the primary ore, displays faster leach kinetics and limited grind and cyanide sensitivity.

Average sodium cyanide consumptions are in the range of 0.3 kg/t to 0.4 kg/t. While the clay content of the oxide ore results in a higher lime consumption of 1.9 kg/t, the pulp viscosity is not likely to cause processing issues at relatively high pulp densities (circa 50% w/w solids). All Bibra ores are characterised with relatively low viscosities, and an increase in pulp density from 45% to 50% had minimal impact on leach recoveries or reagent consumptions.

The Bibra ore is relatively clean, with minimal to no cyanide or oxygen consuming gangue minerals present in the ore, leading to low residual WAD cyanide levels (<50ppm) in the leach circuit tailings solution.

Table 7: Bibra ore gold recovery test work summary.

				Recovery (Based on	sed on FS Resource Grade)		
Test	Ore Type	Grade (g/t) Units		Scoping Study Recovery (%) (P80 grind size)	FS Recovery (%) (P80 grind size)		
	Laterite	1.4	%	-	< 10		
Crowity	Oxide	1.0	%	-	25		
Gravity	Transition	1.0	%	-	45		
	Primary	1.1	%	24	45		
	Laterite	1.4	%	92.1 (125 µ)	94.1 (150 µ)		
Overall	Oxide	1.0	%	89.0 (125 µ)	92.8 (150 µ)		
Overall	Transition	1.0	%	90.0 (125 μ)	91.8 (150 µ)		
	Primary	1.1	%	91.4 (106 µ)	92.5 (106 µ)		
Average		1.09	%	90.4	92.6		



Table 8: Bibra ore communition test work summary.

Test	Ore	Units	Result
SMC (A*b)	Oxide Primary		89 30
BBWI	Oxide Primary	kWh/t kWh/t	13.0 14.5
UCS	Primary	Мра	54
Abrasion Index	Oxide Primary	g g	0.07 0.23

PROCESS ENGINEERING

The Karlawinda process plant is designed to treat 3.0 Mtpa of primary ore, producing an average of 100 000oz of gold per annum from the Bibra deposit. During the treatment of the laterite and oxide material, expected during the initial two years of operations, the process plant is designed to treat 3.75 Mtpa and therefore some plant components have been up-sized to achieve this higher throughput.

The process flow diagrams for the Karlawinda process plant have been developed from the process design criteria prepared by Minelogix in consultation with Mintrex. The plant design comprises:

- Crushing Circuit
- Crushed Ore Stockpile
- Grinding and Classification
- Gravity Recovery
- Leaching and Adsorption
- Elution and Electrowinning
- Smelting.

Modelling of the comminution circuit was undertaken by Orway Mineral Consultants (OMC) in consultation with Mintrex and Minelogix. Several potential comminution flowsheets were modelled for a variety of oxide, laterite and primary ore blends to define optimum equipment sizing and configuration. This process resulted in the selection of a Single Stage Semi Autogenous Grind (SAG) milling circuit for processing of predominantly oxide ore blends in years 1 and 2 (Figure 11) and the addition of a ball mill to create a SAB circuit in year 3 to facilitate processing of predominantly primary ore blends (Figure 12). The rating of the ball mill is designed at 2.5MW, but a larger mill could be installed to increase throughput without any further downstream modifications. It is expected that a second-hand ball mill could be sourced during year 2 of operations; however, the cost of a new mill is assumed in the sustaining capital costs.

PROCESS PLANT CIVIL GEOTECHNICAL STUDY

Geotechnical investigation of the plant site was carried out by MHA Geotechnical (MHA).

The field work for the investigation comprised:

- Excavation of 16 test pits across the proposed plant site
- Rotary diamond core drilling of 8 boreholes within the footprint of major structures within the plant site, inclusive of in-situ geotechnical testing
- Recovery of disturbed soil samples for laboratory testing
- Recovery of undisturbed (push tube) soil samples for laboratory testing.

The general sub-surface profile is consistent across the site. A surficial layer of alluvium is generally present beneath the plant site, varying between 1 m and 2 m in thickness.



The alluvial cover consists of medium dense to dense silty sand with gravel and medium dense to dense sandy silt with gravel underlain by cemented alluvial gravels, regionally known as the "Wiluna Hardpan". A pisolitic lateritic duricrust (laterite) is present beneath the cemented alluvial gravel. The underlying lower saprolite is classified as low to medium strength weathered rock.

It is unlikely that significant groundwater will be encountered during footing construction. Where encountered, seepage rates are expected to be low due to the fine grain size of in situ soils.

MHA have confirmed that it is feasible to design and construct the plant structures at the proposed locations.

MILL PRODUCTION SCHEDULE

Mill production feed rate is maintained at the full design capacity throughout the mine life. The first five quarters of mill feed comprise laterite and oxide material with a small amount of transition material being introduced to the mill feed from the second quarter of the second year of production. This transition feed gradually increases as the pits are developed, displacing the oxide material. Primary material is introduced to the mill feed from the first quarter of third production year, which displaces transition material until the second quarter of the fifth production year after which the mill feed is comprised of only primary material (Figure 13).

Run of mine stockpiles are planned to serve as a buffer between the pit production and the mill feed. End of quarter stockpile balances peak at just over 300kt of mill feed material in the LOM schedule. Stockpile balances are reported in the four separate material types (Figure 14). No low-grade stockpile strategy has been applied in the schedule.

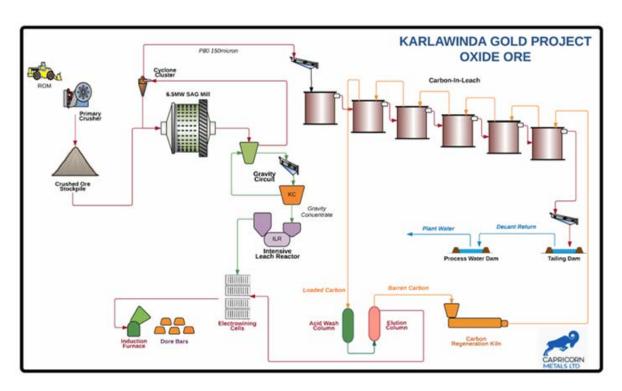


Figure 11: Karlawinda process flow diagram oxide ore.



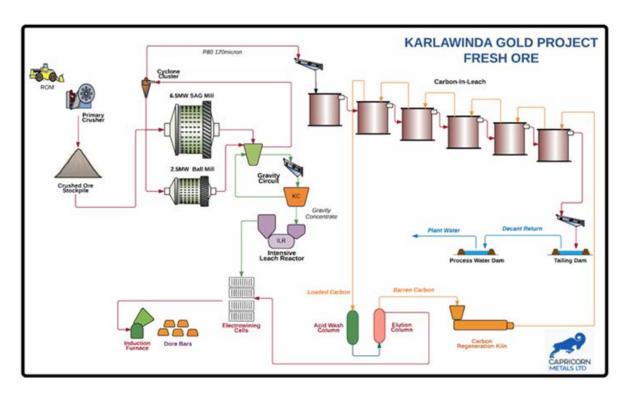


Figure 12: Karlawinda process flow diagram primary ore.

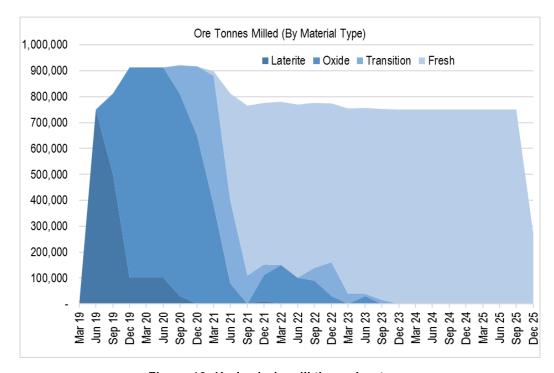


Figure 13: Karlawinda mill throughput.



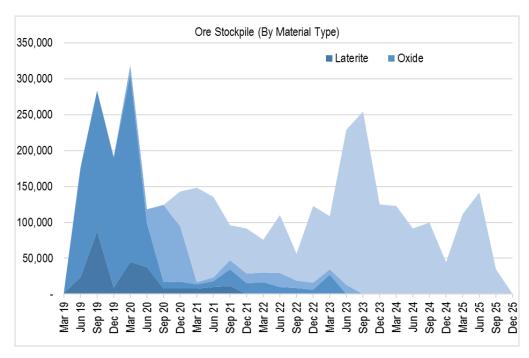


Figure 14: Karlawinda ore stockpile movement.

6. TAILINGS STORAGE FACILITY

Capricorn proposes to construct a Tailings Storage Facility/Integrated Waste Landform (TSF/IWL) to store process tailings from the Karlawinda processing plant. The TSF/IWL has been designed to store 21 Mt of tailings over a 6.5 year life. The TSF/IWL will have a basal area of approximately 100 ha and will have a maximum embankment height of 18.5 m. The TSF/IWL will be constructed as part of the mining operations with the TSF being located within a waste stockpile (Figure 15).

A starter embankment will be constructed to provide nominally 1 year's storage life. The starter embankment will be a zoned embankment comprising an upstream zone of low permeability roller compacted silty sand and a downstream zone of traffic compacted laterite gravel material. The maximum embankment height of the starter embankment will be approximately 6.5m and incorporates a cut-off trench excavated into cemented laterite gravels (ferricrete) to reduce seepage losses. The TSF embankments will be raised in a minimum of two stages 5m vertical lifts against the waste stockpile. The embankment stages will utilise compacted silty/clayey material sourced from within the pit area or adjacent waste stockpiles. The waste stockpile will be constructed progressively over the life of the mine.

Surface water will be removed from the TSF by a pontoon mounted decant pump located within a rock-ring type central decant structure. Return water will be pumped directly to the process plant for reuse. The decant structure and decant causeway will also be raised along with the perimeter embankments.

Prior to clayey tailings consolidating and 'sealing' the TSF basin, the TSF basin will be partially 'lined'.

Seepage, stability, deformation and water balance analyses and a dam break assessment were performed as part of the development of the design. An allowance for the temporary storage of 1% average exceedance probability (previously the 1 in 100-year average recurrence interval) of a 72 hour duration storm event has been made in the design.

CIVIL GEOTECHICAL INVESTIGATIONS

Geotechnical investigations of the TSF were carried out by MHA. MHA confirmed that it is feasible to design and construct the TSF at the proposed location.

The field work for the investigation comprised:



- Excavation of 48 test pits across the proposed TSF site
- Rotary diamond core drilling of 4 boreholes within the footprint of the proposed TSF embankment wall alignment, inclusive of in-situ geotechnical and permeability testing
- Recovery of disturbed soil samples for laboratory testing
- Recovery of undisturbed (push tube) soil samples for laboratory testing.

Remoulded constant head permeability tests were carried out on 6 compacted samples from within the proposed TSF footprint and embankment foundation. In addition, in-situ falling head permeability tests were carried out within the proposed TSF footprint and embankment foundation. These permeabilities range between 8.3 E-6 m/s to 9.73 E-9 m/s.

Constant head permeability tests were carried out on core samples collected from two boreholes at depths between 3.2 m and 6.4 m along the proposed TSF wall alignment. The test results indicate a permeability of 2.04 E-9 m/s to 5.24 E-10 m/s.

The surficial site soils are regarded as semi-pervious to pervious and the underlying dense gravels (cemented at depth) and laterites are considered impermeable.

Approximately 150 mm – 300 mm of topsoil will need to be stripped from the TSF embankment extents and basin areas, and stockpiled at designated locations around the perimeter of the facility.

The sandy gravel horizon encountered throughout the TSF area is typically cemented (dense to very dense) with excavation refusal on the upper surface of all the pits. It is expected that excavation through this horizon for the embankment cut off trench will be undertaken with suitable ripping and excavation plant (D9N tracked dozer with single tine, 30 tonne excavator with single tooth ripping tine or similar). Allowance has also been made for drill and blasting the embankment cut off trenches and borrow areas.

The cemented gravels and laterite are expected to produce a suitable structural fill and will provide good erosion protection.

It is expected that sufficient quantities of suitable construction materials can be won from borrow excavations within the basin area to construct the TSF embankments and basin liner systems, apart from a suitable low permeability Zone A material, which will be sourced from clay-rich oxide waste material from pre-production mining of Stage1 pits.

No readily available borrow source for material suitable for use as a drainage medium was located on site. This material will be required to be imported from off site. Alternatively, the cemented alluvial gravel and laterites could potentially be crushed to produce a suitably graded material.



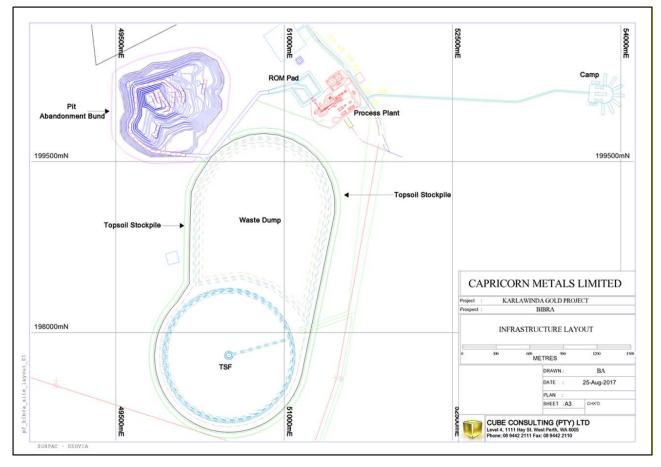


Figure 15: TSF/IWL location and design.

7. HYDROGEOLOGY AND RAW WATER SUPPLY

Capricorn engaged Groundwater Resource Management (GRM) to undertake the groundwater and surface water studies for Karlawinda to a Feasibility Study level of assessment. Since mid-2016 several programs of hydrogeological field investigations have been completed at Karlawinda including;

- Groundwater exploration drilling and airlift-recovery testing as part of the water supply study.
- Airlift-recovery testing to assess of potential inflows into the Bibra pit as part of the mining hydrogeological studies.

The groundwater exploration drilling identified the presence of an extensive shallow weathered dolomite aquifer in Bangemall Group rocks to the west of Bibra, as well as an adjacent fracture zone aquifer, which is thought to have a significant regional extent. These aquifers have been tested and assessed with;

- Drilling and installation of 11 groundwater monitoring bores.
- Installation of five production bores, with four bores (KPB02 to KPB05) installed in the dolomite aquifer, and one bore (KPB01) installed in the fracture zone aquifer.
- Test pumping of the five installed production bores each with 48-hour constant rate pumping tests.

Airlift-recovery results from the Bibra pit testing indicate that combined inflows into the low permeability central and southern areas of Bibra may be up to around 5 L/s. With inflows in the higher permeability northeast part of the pit potentially ranging up to around 10 to 15 L/s, giving a combined inflow of around 15 to 20 L/s.



During years 1 and 2 of operation when oxide ore is treated at the increased throughput of 3.75 Mtpa; the raw water demand is higher (13.1 ML/day) before reducing from year 3 onward to 10.7 ML/day, when the throughput reduces to 3.0 Mtpa.

Results of the hydrogeological investigations have been analysed and results used to develop a conceptual hydrogeological model of the Karlawinda area as well as construct a 3D, numerical, finite difference groundwater model of the Karlawinda groundwater catchment. The modelling results found that the local groundwater system should be able to supply the expected water demand for the mining and processing operation at Karlawinda for the currently proposed 6.5-year life of the Project. A total of 15 production bores may be required to meet the expected water demand, of which 10 of the bore sites remain to be selected and investigated.

SURFACE WATER MANAGEMENT

As a part of its evaluation of the Project, the Company commissioned GRM to complete a hydrological assessment. Significant findings of the study were:

- The Project lies near the top of a very small upstream rainfall catchment basin, of 7.1 km². There are no significant watercourses in the immediate vicinity of the proposed mine facilities, with only several relatively minor, ephemeral drainages that report in a southerly direction from the regional watershed towards Savory Creek some 11 km south of the Project. These drainages are ephemeral and likely only carry runoff following significant rainfall events. However, flows will occur periodically during the summer months from late December to March, when the potential exposure to high intensity cyclonic or tropical depression related rainfall is greatest. Consequently, runoff will report to the watercourses in the vicinity of the Project and, on occasion, flows may be high and may cause flooding if appropriate measures are not in place.
- Flood protection and surface water management measures required at the proposed Project are relatively modest and likely to comprise the following:
 - o 3.4km long single, continuous flood protection berm around the pit (set back sufficiently from the ultimate pit crest to also serve as an abandonment bund)
 - 2.8km long roadside diversion channel constructed along the upstream (Northern) side of the mine access road to provide flood protection to both the pit and proposed plant and mine services area facilities.

A sedimentation pond will be constructed to temporarily store runoff from the plant and mine services area areas prior to release.

The findings from the study have been used in the preliminary design of surface water management measures at the Project.

8. NON-PROCESS INFRASTRUCTURE

Karlawinda is a greenfields development and no infrastructure or services exist at the Project site. The Project has proximal access to significant existing infrastructure and services in the town of Newman, located 60 km to the northwest (Figure 16).

Newman is serviced by road from the Great Northern Highway (National Route 95) and via an airport comprising a single sealed airstrip, located 10 km to the south of the town adjacent to the Great Northern Highway. The town supports significant proximal mining operations including the Mt Whaleback operation, located six kilometres west of the town.

The Project will leverage off this existing infrastructure. The Newman airport will be utilised to bring fly-in/fly-out (FIFO) personnel to and from Perth, whilst the Great Northern Highway will allow road access to the Project from Perth or Port Hedland for the delivery of equipment and supplies. Personnel will be transported from the Newman airport by bus to the Karlawinda accommodation village.



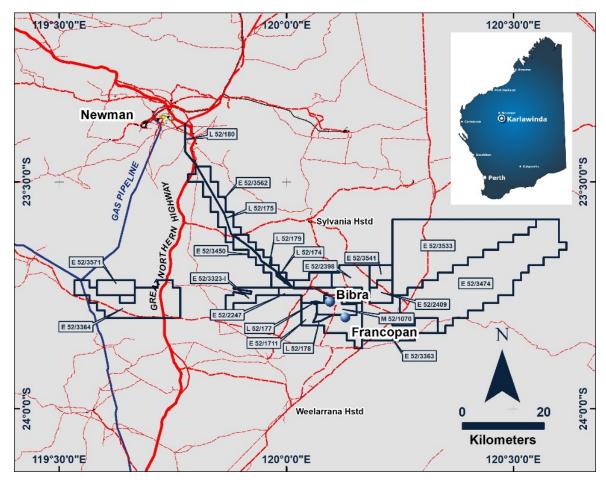


Figure 16: Karlawinda Gold Project tenement location map.

Being a greenfields development, all required site infrastructure and services are to be constructed for the Project. Major site infrastructure items to be constructed include site and internal access roads, mine equipment service facilities, a 200-man accommodation village and site infrastructure buildings.

MAIN SITE ACCESS ROAD

Access to the site by road will be via existing an unsealed gravel road, which extends from an intersection with the Great Northern Highway, 31 km south of Newman. This existing road formerly provided access to the Coobina mine site. The unsealed road runs east to a point approximately 19 km from Sylvania Station, where a new 31 km length South-Eastern road alignment will be formed along existing station tracks to the Project.

The site access road extends past the process plant site turn-off to provide access to the accommodation village.

INFRASTRUCTURE BUILDINGS

The site infrastructure buildings will be located south of the process plant, adjacent to the site access road entry. The following site infrastructure buildings will support the Project:

- Administration Office
- Plant Workshop
- Maintenance Office
- Ablution Block
- Crib Room
- Laboratory
- Plant Store
- Process Control Room.



POTABLE WATER SUPPLY

Potable water will be produced by treating a portion of the raw water stream. Water quality analysis undertaken on a sample of raw water bores indicated a total dissolved solids content of ~500 mg/L. The raw water will undergo a two-stage treatment, firstly through a containerised Multi-Media Filtration plant, following which it will be softened through a water softening plant. The treated, softened water will be pumped to both the process plant and the accommodation village. Treated water for the process plant will be pumped to both the elution make-up water tank (for use in the elution process) and to the plant potable water tank where it will be recirculated through a Sodium Hypochlorite Sterilisation plant to maintain the correct amount of free chlorine in the water making it suitable for human consumption.

POWER SUPPLY

The Feasibility Study assumed that power for the Project will be supplied under a long-term power purchase agreement (LTPPA), with an Independent Power Producer who will establish a gas fired power station on site. The LTPPA is based on providing a secure supply for the estimated 13.3 MW power requirement of the Project. The LTPPA requires no capital contribution from Capricorn as the cost of capital will be amortised as part of the supply tariff over the LTPPA. The power station will be constructed within 100 m of the processing plant and the power point of supply will be the 11 kV terminals of the associated sub-station main 11 kV switchboard. Tariff metering will occur at the point of supply.

Capricorn has other options with respect to the supply of power to the Project including a reticulated power solution from Alinta's 210 MW gas-fired power station at Newman. It is Capricorn's intention to further assess the economics of reticulated power versus a gas-fired station (fueled by LNG, CNG or natural gas from the Goldfields Gas Transmission pipeline) and the company will continue to engage with various parties in this regard.

The annual power consumption estimated for the Project is provided in **Table 9**. These values include the higher milling power consumption from year 3 onwards when a ball mill is added to the circuit.

Annual Power Consumption – By Area					
Process Plant Area	Average Annual Consumption (GWh)				
Area 10 – Primary Crushing	1.67				
Area 20 – Milling & Classification	73.10				
Area 30 – Leaching & Adsorption	7.70				
Area 40 – Tailings Management	0.25				
Area 50 – Metal Recovery & Refining	0.57				
Area 60 – Reagents	0.04				
Area 70 - Services	2.88				
Area 80 - Infrastructure	3.34				
Total	89.53				

Table 9: Annual process plant power consumption – by area.

Power distribution within the plant area and vicinity will be at 11 kV and 415 V. The main power supply line from the 11 kV terminals will be an underground 11 kV cable to the plant HV switch room.

ACCOMODATION VILLAGE

Capricorn will construct a 200-man accommodation village approximately two kilometres to the east of the process plant. The village will be inclusive of all accommodation units and support facilities – dining room, wet mess, kitchen, laundries, toilet block, office and store room, communications room, gym and outdoor sports court.

The village will be owned by Capricorn and operated by a catering and accommodation service provider on a long-term operating contract. The village contractor will be responsible for all operations at the accommodation village including catering, cleaning and maintenance activities.



Dedicated water, electrical, sewerage and communication systems will be constructed at the accommodation village to support the village operation.

9. ENVIRONMENTAL

BASELINE ENVIRONMENTAL STUDIES

To provide a comprehensive overview of the existing environment and to identify any potential impacts that may occur due to the Project, Capricorn has commissioned numerous ecological and environmental studies and investigations across the area. These include:

- Level 1 Reconnaissance Flora and Fauna Survey Project area
- Level 1 Reconnaissance Flora and Fauna Survey Access road
- Detailed Flora and Vegetation Survey
- Vertebrate Fauna Review
- Targeted Bilby and Mulgara Survey
- Invertebrate Risk Assessment
- 2 Stage Invertebrate Survey
- 2017 Social Impact Assessment
- Hydrogeological Feasibility Study
- Baseline Hydro-Meteorological Study & Surface Water Management
- Characterisation of Mine Waste
- Geochemical Assessment of Oxide and Primary Ore Tailings

FLORA AND VEGETATION

There are no significant botanical constraints for the Project based on the studies completed to date, since:

- No threatened flora species pursuant to the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and/or gazetted as Declared Rare Flora pursuant to the Wildlife Conservation Act 1950 were recorded during the 2010 and 2016 surveys.
 - Three Priority flora species as listed by Department of Biodiversity, Conservation and Attractions were recorded during the surveys, *Eremophila pilosa* (Priority 1), *Eremophila rigida* (Priority 3) and *Rhagodia* sp. *Hamersley* (Priority 3).
- No listed Weeds of National Significance or Declared under the Biosecurity and Agriculture Management Act 2007 (BAM Act).

None of the vegetation types recorded are considered to represent a State or Federal Threatened Ecological Community or Priority Ecological Community.

TERRESTRIAL VERTEBRATE FAUNA

The works completed to date shows that there are no significant constraints to the development of the Project in regard to vertebrate fauna:

- Six of the bird species observed are listed under State and/or Australian Government legislation, however significant impacts are not anticipated.
- None of the native mammal or reptile species recorded during the survey are listed under State and/or Australian Government legislation.
- Five broad fauna habitat types were identified in the survey area of which none are identified as fauna habitats of conservation significance.
- No Bilbies, Mulgara or their signs were recorded during the targeted Bilby and Mulgara survey assessment and the possibility of the Bilby and Mulgara occurring in the Survey Area is considered unlikely.



INVERTEBRATE FAUNA

The Project is not subject to constraints with regard to subterranean fauna.

- No recorded troglomorphic or stygofauna species were recorded within the borefield or Bibra pit area.
- No Short-Range Endemic species were found at the Project area.

MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

A key piece of legislation related to environmental approvals, permitting and impact assessment for mines in Western Australia is the Federal EPBC Act. Several species are protected under this legislation and are considered matters of national environmental significance (MNES). For the purpose of determining the risks to MNES associated with the Project, an EPBC Act Protected Matters Database Search (PMST) for the proposed development site was undertaken. The PMST search was centred on the current proposed mine site with a 10km buffer.

No MNES are likely to be significantly impacted by the Project.

CONCLUSION - ENVIRONMENTAL

Based on the detailed site surveys, the proposed Project meets the EPA objectives for all key environmental factors and no MNES will be significantly impacted by the Project activities.

The environmental approval pathway is well understood and the absence of known constraints suggests that the approvals can proceed without undue delay.

10. SOCIAL IMPACT

360 Environmental was commissioned to undertake a desktop Social Impact Assessment (SIA) in order identify the key stakeholders affected by the Project, identify the major social related risks and opportunities as a result of the Project and develop mitigation and management controls for the significant risks via a Social Impact Management Plan (SIMP).

The SIA identified no social impacts that are a significant constraint to the development of the Project.

The SIA also assessed several opportunities created by the Project, which included local investment opportunities within the Shire, increased demand for local skills, increased employment opportunities and the potential increase in the younger demographics and younger working professionals within the Newman locality.

11. PROJECT APPROVALS

TENURE

Mining Lease M 52/1070 was granted on 23 November 2016. The Company has applied for seven Miscellaneous Licenses to facilitate the construction of a site access road, powerlines as required and the erection of a microwave tower. The Miscellaneous Licenses are expected to be granted between December 2017 and February 2018.

The Company entered into a Land Access Agreement with the Nyiyaparli Native Title Party on 18 November 2016, which provides the Nyiyaparli with various benefits, including a production based royalty. In exchange, the Nyiyaparli will do all things within their control, to assist in gaining Project approvals. This agreement covers the Mining Lease and all other tenure necessary to facilitate the Project.

ENVIRONMENTAL APPROVALS

Environmental approval for the Project is governed by the *Environmental Protection Act 1986* (EP Act). Several pathways to approval are available to Project proponents depending upon the environmental sensitivity of the site, the level of environmental site investigation that has been undertaken and the likelihood of triggering any of the 10 EPA Environmental Factors.



Given the knowledge and understanding of the Project environment, the Company has decided to proceed with approval via a Native Vegetation Clearing Permit (NVCP).

WORKS APPROVAL AND LICENSING

A Works Approval under Part V of the EP Act is required prior to construction of the Project. Environmental conditions for construction are provided to the proponent by the Department of Water and Environmental Regulation (DWER) and once agreed, construction can commence.

At the completion of construction, a compliance document must be prepared and submitted to DWER for the grant of a licence enabling production to commence.

MINING PROPOSAL

The Company is required to submit for approval, a Mining Proposal to the Department of Mines, Industry Regulation and Safety (DMIRS) that includes a mine closure plan and an Environmental Management Strategy (EMS).

MINING REHABILITATION FUND

All tenement holders operating under the Mining Act 1978 are required to report the total area of disturbance on an annual basis and pay a levy to the Mining Rehabilitation Fund based on the tenements Rehabilitation Liability Estimate (RLE).

MINES SAFETY AND INSPECTION ACT

The Mines Safety and Inspection Act takes a risk based approach to managing safety. The Company will be required to prepare a Project Management Plan (PMP) and submit it to DMIRS prior to the commencement of any operations at the site, including construction.

WATER AND IRRIGATION ACT

The Company currently holds a 26D licence to construct the remaining bores on-site to provide adequate water for the Project.

To allow the Company to abstract water from the borefield the Company must seek and be granted, a 5C licence. The Company is currently preparing its application for a 5C licence.

OTHER ACTS AND REGULATIONS

The Project will be subject to other acts and regulations including:

- Controlled Waste Regulations
- Dangerous Goods Saftey Act 2004
- Aboriginal Heritage Act 1972
- Bushfires Act 1954
- State Public Health Act 2016.

12. HUMAN RESOURCES AND OPERATIONAL MANAGEMENT

Capricorn's overall operations strategy is to exploit the reserves by using large scale mining methods to feed a purpose-built processing plant. The mining and processing activities will be supported by facilities, systems, services and infrastructure that are sufficient in magnitude, fit for purpose, and based upon existing models and methods used at other gold operations within Australia.

The Resident Manager – Karlawinda Operations (RM) will be responsible for overall site operations and will report to Capricorn's Chief Operating Officer (COO). The total operating manpower required by the Project is 183 people. A further 20 (not all concurrent), contractor personnel are estimated to be required at various times over the course of operations to support Capricorn personnel. Of the 183 people required on an ongoing basis to operate the Project, Capricorn personnel account for 153. Contractors will be utilised for grade control drilling, drill and blast



and catering services as well as for training, personnel transport and general freight services. Accommodation will be provided for 200 people at the Karlawinda village with overflow either accommodated by short term "hoteling" of the village rooms or by the short term hiring of rooms in Newman.

Due to the proximal location of the operation to Newman, the operation will utilise the established mining infrastructure and services of the town where possible. The population of Newman and the surrounding region is not sufficient to provide a workforce for the operation and most of personnel will be sourced from Perth and operate on a fly-in, fly-out (FIFO) basis.

The operations strategy is based on the use of directly employed personnel in full time positions, except for drill and blast, grade control and catering operations which will be undertaken by contract personnel.

The mining, processing and maintenance operations will run 24 hours per day, seven days per week. It is anticipated that these functions will operate on two 12-hour shifts per day. The work roster, hours of work and manning levels are designed to attract sufficient trained personnel to man the operation and to best utilise the staff having to commute on a FIFO basis from Perth.

All drill and blast and grade control operations will be carried out by suitably experienced contractors. The drill and blast contractor will also be responsible for the magazine and explosives supply, storage and management and secondary breaking in the open pit.

Run of mine (ROM) stockpile management will be shared by the Project mining and processing departments. The mining department will haul ore directly from the open pit and stockpile it onto the ROM pad into various graded stockpiles (fingers). The processing department will re-handle the ore from the fingers using a front-end loader and feed the primary crushing plant with the required processing blend.

OCCUPATIONAL HEALTH AND SAFETY AND ENVIRONMENTAL

In addition to complying with requirements of the various statutory Acts and Regulations which govern workplace health and safety in WA, the Project will develop and implement a site-wide occupational health and safety management system to govern site operations. The key driver behind the development and implementation of these OHSE management systems is the Company's commitment to providing a safe and healthy working environment for all staff, contractors and visitors to the Project.

The following objectives will form the core of the OHSE management systems developed by Capricorn for implementation at the Project:

- Ensure compliance with statutory regulations and maintain constant awareness of new and changing regulations.
- Aim to eliminate or control safety and health hazards in the workplace to achieve industry benchmark standards for OHSE.
- Develop and maintain a workplace culture that fosters behaviour among employees which reinforces that each employee is responsible for their own health and safety as well as that of their fellow employees.
- Maintain the highest possible levels of staff morale.
- Ensure effective communication of the OHSE management system policies, standards and procedures.

13. ECONOMIC EVALUATION

CAPITAL COST ESTIMATE

The purpose of the capital cost estimate is to provide current costs suitable for use in assessing the economics of the Karlawinda Gold Project and to provide the initial control of capital expenditure. The estimated Project capital cost is \$143.3 million including an allowance of \$13.1 million for contingency.

The capital cost estimate for the process plant and some supporting infrastructure (**Table 10**) is based upon an EPC (Engineer, Procure and Construct) approach.



The capital cost estimate has been prepared as a detailed level Feasibility Study and is presented in Quarter 2 2017 (Q2 2017) Australian dollars to an accuracy level of +/-15% with a 90% level of confidence. **Table 10** summarises the capital cost estimate for the Project:

Table 10: Capital cost estimate summary.

Description	Estimate (\$)
Process Plant (EPC)	\$90,710,858
Plant Infrastructure (EPC)	\$8,678,844
Infrastructure	\$20,496,750
Owner's Costs	\$13,389,703
Total	\$133,276,155
Contingency	\$13,067,422

OPERATING COST ESTIMATE

Operating cost estimates have been prepared for the Karlawinda Gold Project to allow for modelling of the proposed processing schedule, considering the variability of the ore feed blend over the initial three years of operation. Two operating cases have been considered:

- 3.75 Mtpa Throughput 100% Oxide Ore
- 3.0 Mtpa Throughput 100% Primary Ore.

Metallurgical testwork and process engineering has identified significant variability in ore characteristics between the various ore types. The financial modelling reflects the proposed processing route through the early operational years and therefore, the operating costs have considered the two different operating cases to allow the processing costs to match the mining and milling schedules.

All costs are in Australian dollars and reflect an estimate accuracy of \pm 15% as at Quarter 2 2017 (Q2 2017) with a 90% level of confidence.

An overall life of mine (LOM) summary of operating costs is presented in **Table 11** and is based on total ore processed over the six and a half year LOM of 21.0 million tonnes.

Table 11: Life of mine operating cost summary.

LOM Operating Cost Summary			
Operating Costs	LOM \$M	\$/t (processed)	\$/oz (recovered)
Mining	290.9	13.8	440.1
Processing & Maintenance	251.9	12.0	381.1
General & Administration	54.3	2.6	82.2
Realisation Costs	3.0	0.1	4.5
Sustaining Capital (incl. closure costs)	22.8	1.1	34.5
Sub-Total	622.9	29.6	942.4
Royalties	54.8	2.6	82.9
Sub-Total	54.8	2.6	82.9
AISC	677.7	32.1	1025.3

FINANCIAL ANALYSIS

The financial analysis is based on a gold price of A\$1,650/oz (US\$1,287/oz and AUD:USD exchange rate of 0.78) which approximately equates to the current spot price and assumes first production of ore in the March 2019 quarter and first gold production in the June 2019 quarter.

Based on the operating cost estimates for mining, milling and administration, capital cost estimates for initial development capital and sustaining capital, metallurgical recoveries for the various ore types, the mining schedule and other operating and cost parameters of the Feasibility Study, a discounted cashflow analysis was undertaken to generate a Net Present Value of the Project. At a gold price of A\$1,650/oz and using an 8% discount rate the



Project generates an NPV of \$143.8 million, an IRR of 30.5% and a payback period of 3.1 years. The Karlawinda Gold Project is a robust project and the NPV is sensitive to gold price, head grade, metallurgical recovery, operating costs and capital costs (in descending order of sensitivity).

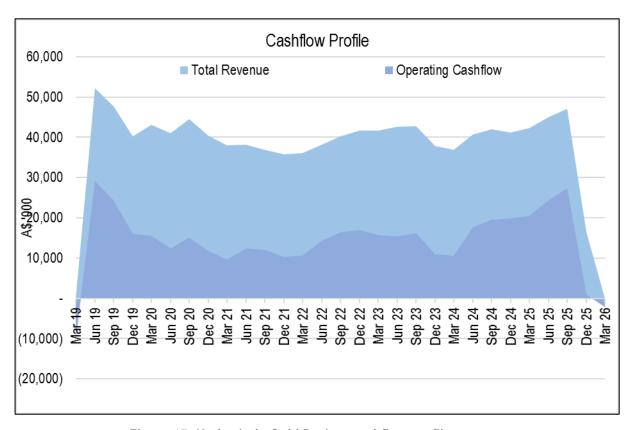


Figure 17: Karlawinda Gold Project cashflow profile.

PROJECT FINANCE

Capricorn intends to finance the construction of the plant and associated infrastructure through a combination of Project debt and equity. Given the level of interest and understanding of the Project, Capricorn is confident that the Project will be financed on attractive terms. Capricorn intends to undertake owner/operator load and haul, it is envisaged a significant portion of the fleet applicable to those activities will be financed through an equipment finance facility.

Preparations for the Project financing have been underway for several months, including the appointment of legal counsel, Independent Technical Expert, completion of a detailed financial model and on-going discussions with interested financiers. Capricorn will shortly commence a formal Project financing arrangement process, which is expected to be completed in early 2019 upon the execution of a Facility Agreement.

14. RISK ASSESMENT

A risk workshop was held with participation from all key participants in this Feasibility Study.

A total of 227 risks were identified of which four had a High ranking after considering current controls and recommended actions, 13 had Medium-High ratings and 34 had Medium rankings, with the balance of 176 having a Low ranking.



All the risks identified for the Project are common to resource Projects around the world. Similarly, the control measures adopted for each of the risks are those that might be adopted by any resource developer. The risk profile of the Project should be familiar to any financial institution that regularly funds resource Projects.

As with any risk assessment, the risk ranking assumes the diligent application of the control measures and recommended actions. Capricorn is confident that it has diligently and consistently applied those control measures.

In common with most resource Projects, robust processes for the collection of geological data, interpretation and analysis, form the basis for developing a sound Project. The resource modelling methodology, and the processes that underpin it have been independently reviewed and endorsed, thereby mitigating, as far as possible, the risk that there is a fundamental error in the foundation of the Project.

15. PROJECT IMPLEMENTATION

Capricorn has built the Project implementation strategy around the goals of attaining the best possible Project execution outcome in terms of price, schedule and safety.

The Project implementation strategy is based on most packages being completed using a builder to design and construct, which is often referred to as Engineering, Procurement and Construction (EPC) or a turnkey approach. With the EPC approach, the design risk is allocated to the contractor (or builder).

Prior to the award of the process plant contract and the commencement of site development activities, Capricorn has identified a pre-award schedule for financing and EPC tendering activities. Financing and process plant tendering activities are running concurrently following completion of the FS.

The Project duration from the formal award of the process plant contract to the commencement of ore commissioning (practical completion) is scheduled to be a period of 64 weeks.

This schedule is based on the pre-award activities being completed within the estimated timeframes.



Section 4: Estimation and Reporting of Ore Reserves

The Company has relied upon its previously reported information, in respect of the matters related to sections 1, 2 and 3. (Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code (2012) explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to an including of the Ore Resources.	The Mineral Resource estimate for the Bibra deposit which formed the basis of this Ore Reserve estimate was compiled by the Capricorn Competent Persons utilising relevant data. The estimate is based on 880 Reverse Circulation (RC) holes and 77 diamond holes of exploration drilling and assay data. The data set, geological interpretation and model was validated using Capricorn's internal and Quality Assurance and Quality Control (QAQC) processes and reviewed by an independent external consultant. Ordinary Kriging was utilised to estimate the resource. The individual block size for estimation was 5 m x 12.5 m x 5 mRL., with subblocking at 1.25m x 3.125m x 1.25m for effective boundary definition. The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits	additional to, or inclusive of, the Ore Reserves. Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	 The Competent Person did not conduct a site visit. This because: He is already familiar with the region Due to the presence of transported cover, there are no outcrops, mine workings or infrastructure to inspect on the ground.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan	The Ore Reserve estimate is the result of a Feasibility Study (FS) completed by a team consisting of Capricorn personnel and independent external consultants. That study is complete except for some non-material components, with all major capital and operating costs finalised to within the tolerances expected in a FS.
	that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The proposed mine plan is technically achievable. All technical proposals made for the operational phase involve the application of conventional technology which is widely utilised in Western Australia. Financial modelling completed as part of the FS shows that the project is economically viable under current assumptions. Material Modifying Factors (mining, processing, infrastructure,
		environmental, social and commercial) have been considered during the Ore Reserve estimation process.



Criteria	JORC Code (2012) explanation	Commentary
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Variable economic cut-off grades have been applied in estimating the Ore Reserve. Cut-off grade is calculated in consideration of the following parameters: Gold price Operating costs including ore costs (eg grade control, ROM re-handle) Process recovery Transport and refining costs General and administrative cost Royalty costs. Cut-off grades are 0.47g/t Au Laterite, 0.40 g/t Oxide. 0.44g/t Transitional, 0.47g/t Fresh
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The Bibra deposit will be mined by open pit mining methods utilising conventional mining equipment. Final pit and interim stage designs were completed as part of the FS. The final pit design is the basis of the Ore Reserve estimate. The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, defer waste movement and capital expenditure, utilise proposed process plant capacity and expedite free cash generation in a safe manner. Project capital costs were estimated as part of the FS, and mining operating costs obtained from contractor budget quotes and independent studies on owner-operated mining.



Criteria	JORC Code (2012) explanation	Commentary
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been completed by an external consultant based on field logging and laboratory testing of selected dedicated diamond drill core samples from 16 geotechnical diamond drillholes. The recommended geotechnical design parameters assume dry slopes on the basis of adequate dewatering and/or depressurisation ahead of mining. The low-angle dip of the deposit (28° to West) allows for a designed overall wall angle on the Footwall (Eastern side of pit) between ramps of 25°. The western wall (Hanging Wall) of the pit is designed to have an overall slope of 47°, however a decision on that final wall angle will not need to be made until at least 3 years into the mining operation, and following expected learnings from interim wall performance. A separate hydrogeological report was prepared by independent consultants which considered the infrastructure required to effectively dewater the open pit and pit slopes. This study was supported by the development of test bores and airlift testing analysis.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used.	Only open pit mining has been considered in the Resource and Reserve studies. Mining dilution and recovery modifying factors were simulated by modelling to a Selective Mining Unit 5mX; 6.25mY; 2.5mZ (SMU) which attempts to simulate the capability of the mining method. The re-blocking technique dilutes fully into the SMU size and the resultant model is then used as a diluted model. The addition of dilution results in a loss of tonnes due to the number of blocks being diluted to below the reporting cut-off grade resulting in a 11% reduction in tonnes, a 2% reduction in in-situ grade and a 13% reduction in contained metal.



Criteria	JORC Code (2012) explanation	Commentary
Mining factors or assumptions	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	The mining schedule is based on supplying variable throughput rates to a processing plant with a name plate capacity of 3.7 Mtpa for Oxide material and 3.0 Mtpa of Fresh material. The mining schedule is based on realistic mining productivity and equipment utilisation estimates and also considered the vertical rate of mining development.
		No Inferred Mineral Resources were used in Ore Reserve calculations, and no Inferred resources are present inside the designed Reserves open pit.
	The infrastructure requirements of the selected mining methods.	The proposed mine plan includes waste rock dumps, a ROM pad, a surface water diversion channel and flood abatement bund, surface dewatering bores, light and heavy vehicle workshop facilities, explosives storage and supply facilities and technical services and administration facilities.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the	A processing flowsheet, materials balance, water balance, equipment identification, mechanical and electrical layouts were all developed to FS standard. A single stage primary jaw crush, Semi Autogenous Grinding and, after Year 2 of operations, Ball Milling (SAB) comminution circuit followed by a conventional gravity and carbon in leach (CIL) process is proposed. This process is considered appropriate for the Bibra ore, which is classified as free-milling. The proposed metallurgical process is commonly used in the Australian and international gold mining industry and is considered to be well-tested and proven technology. Significant comminution, extraction, and physical properties testing has been carried out on approximately 2,000kg of half-HQ and NQ diamond dilling care complete from 24 drillings and 200kg of PQC skin camples.
	specifications?	drilling core samples from 24 drillholes, and 300kg of RC chip samples. This has been carried out on laterite, oxide, saprock, transitional, and fresh ore types which were obtained across the Bibra deposit and to a depth of approximately 200m. Estimated plant gold recovery ranges from 91.8% to 94.1% depending on grind size and ore type. Significant comminution, extraction, and physical properties testing has been carried out on material selected from approximately 2,000kg of half-NQ core. No deleterious



Criteria	JORC Code (2012) explanation	Commentary
		elements of significance have been determined from metallurgical test work and mineralogy investigations.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Baseline environmental studies and Level 1 and Level 2 studies of flora, vegetation, vertebrate fauna, short-range endemic invertebrates and subterranean fauna are all completed. Environmental approvals for the mining and water supply aspects of the project will be assessed by the Department of Mines, Industry Regulation and Safety(DMIRS). Clearing permits are expected to be applied for under part V of the Environmental Protection Act, and to require a Native Vegetation Clearing Permit. The approvals document to the DMIRS will be submitted in Q3 2017. Waste rock and tailings characterisation work has been completed and all waste types and fresh ore tailings are conservatively designated as potentially acid forming low capacity and have limited metal leachate potential. Waste rock and tailings storage locations have been selected based on suitable geographical characteristics and proximity to the pit and plant.



Criteria	JORC Code (2012) explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The project site is within economic distances of existing infrastructure in the east Pilbara region. Services and consumable supplies will be delivered by existing roads, and a new 33km Access Road from the Coobina gazetted road to the Karlawinda Project. Land availability is unlikely to be an issue, with the mining and exploration tenure held by Capricorn more than covering all project needs. The project lies at the northern boundary of the Weeleranna cattle station, with whom the Company enjoys a strong relationship. Tailings disposal is intended to be within an Integrated Waste Landform whereby tailings are encapsulated by mining waste, rather than having separate waste dumps and tailings facilities. The workforce will be Fly In-Fly Out (FIFO) and based at a camp on site during rostered days on. Commercial flights to Newman airport, 55km North of the Project will be used; there will be no on-site airstrip. Pump testing and modelling of the potential yield from the Karlawinda borefield indicate that there is sufficient groundwater to service the needs of the Project for the life-of-mine. This will require the development of 15 water production bores, of which 5 have already been developed, and 20km of pipelines. Miscellaneous licence applications to secure the tenure required for the all infrastructure not covered by Mining Lease are in preparation; Capricorn Exploration Licences already cover all of these intended infrastructure corridors. Power will be generated on site utilising gas delivered by truck, or power may be transmitted from Newman, requiring a 71km powerline construction.



Criteria	JORC Code (2012) explanation	Commentary
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	All capital estimates are based on market rates as at the second quarter of 2017. Plant capital costs have been provided by Mintrex PL, who have designed and costed several plants of this type and scale in recent years. It is assumed that all mining equipment required for the project will be leased through a financing arrangement. The capital cost estimate accuracy is -15% /+15%. Mine development costs were developed from a combination of inputs from Capricorn, Cube Consulting (mining), Mintrex (processing), CMW Geosciences (tailings disposal), GRM (groundwater consultants) and Peter O'Bryan (geotechnical). The basis of estimate is: Owner Operator mining Mobilisation of mining equipment and personnel from Perth Earthworks quantities determined from detailed site investigations by a geotechnical engineer and geological modelling Mine dewatering requirements developed from airlift testing and hydrogeological modelling A mining schedule developed on a quarterly basis A contingency allowance on capital cost items calculated to reflect the relevant level of confidence in the estimate Processing and infrastructure development capital costs have been estimated by Mintrex engineers on the basis of: Earthworks quantities determined from detailed site inspections by a geotechnical engineer Concrete and structural quantities developed from site layouts and similar designs from other projects A mechanical equipment list developed from the recommended process design criteria Budget pricing from local and international suppliers Contingency allowances calculated on a line by line basis relevant to the source and confidence in market rates



Criteria	JORC Code (2012) explanation	Commentary
Costs	The methodology used to estimate operating costs.	The operating cost estimate accuracy is -15% /+15%. Operating costs assume a FIFO scenario with various rosters on site. Mining operating costs have been estimated by Capricorn personnel/consultants on the basis of scheduled material movement and zero based cost estimate for owner mining scenario. Mine design and scheduling were prepared by mining engineers from Cube Consulting. Process and infrastructure operating costs have been estimated by Mintrex on the assumption that: A conventional SAB circuit will be utilised to treat ore at a rate of 3.0 Mtpa for fresh ore with the capability to treat up to 3.75 Mtpa of oxide material. The Ball mill will be needed for fresh rock treatment from the end of year 2. Comminution grind sizes will be in the range of 120µm (Fresh rock) to 150µm (Oxide rock). Power will be generated on site utilising diesel or gas delivered by truck, or power may be transmitted from Newman, requiring a 63km powerline construction. The process plant will be operated by Capricorn employees. The operating cost estimate is considered to be appropriate for the current market in Western Australia.
	Allowances made for the content of deleterious elements.	No allowance is made for deleterious elements since testwork to date on ore from Bibra has not shown the presence of deleterious elements.
	The source of exchange rates used in the study.	Capital Costs for process plant and infrastructure are estimated in 2017 Australian dollars. Foreign currency exchange rates were derived as tabled below.
		Currency Rate (A\$1 = X) Source
		United States Dollar 0.76 Capricorn



Criteria	JORC Code (2012) explanation	Commentary
	The derivation of, or assumptions made, regarding projected capital costs in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private.	Transport charges - Gold bullion transportation and refining charges are derived on the basis of a quote provided by a leading Australian Gold Refinery. An allowance has been made for all royalties, including an allowance of 2.5% of revenue for royalties payable to the Western Australian State Government and an allowance for other royalties payable to private parties (these royalties being commercially sensitive and covered by confidentiality).
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined by an external financial expert group because of current market trends and by peer company comparison. A Life-of-mine (LOM) gold price forecast of A\$1,500/oz (Real 2017) is applied in the financial modelling for the Ore Reserve calculation process. This price forecast was established by Capricorn because of historical A\$ gold price trends over the last 5 years. Over that review period the price of gold has ranged between A\$1,300/oz and A\$1,800/oz and averaged approximately A\$1,500/oz.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	There is a transparent market for the sale of gold.



Criteria	JORC Code (2012) explanation	Commentary
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The Ore Reserve estimate is based on a Feasibility Study level of accuracy with inputs from the open pit mining, processing, sustaining capital and contingencies scheduled and costed to generate the initial Ore Reserve cost estimate. Cost inputs have been estimated from quotations and/or by competent specialists. The Ore Reserve returns a positive NPV based on the assumed commodity price and the Competent Person is satisfied that the project economics that make up the Ore Reserve retains a suitable profit margin against reasonable future commodity price movements. Sensitivity analysis has indicated that the project drivers are gold head grade, gold prices, metallurgical recoveries followed by operating costs; NPV remains favourable for the sensitivity tests within reasonable ranges
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	A Native Title Access Agreement has been signed for the Project (ASX Announcement 24 Nov 2016). Subsequent to the Native Title Agreement, a Mining Lease was granted over the project area (ASX Announcement 24 Nov 2016). Several additional exploration licences have also been granted which add exploration targets and cover the infrastructure corridors prior to finalisation of miscellaneous licences.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or	 Flooding risk has been analysed by an independent external expert and deemed to be minimal, with the project located near the top of a small catchment system. No significant species have been identified that would be significantly impacted by the Project in a manner that could not be adequately managed. Various contract negotiations have commenced. There are reasonable prospects to anticipate that contract terms as assumed in the Ore Reserves estimate will be achieved.



Criteria	JORC Code (2012) explanation	Commentary
	Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	Project commissioning is estimated for 2019.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No inferred Mineral Resource is included in the Ore Reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 The Feasibility Study which forms the basis of the Ore Reserve estimate was subjected to various reviews and audits: Metallurgical testwork was reviewed by Capricorn's consulting metallurgists and process engineers and confirmed to be adequate for a FS. Open pit designs, production schedules and mining cost models were reviewed through Cube's internal peer review system and externally by an independent expert consultancy. The pit designs were further reviewed by the independent geotechnical consultants to confirm the application of the prescribed design parameters The basis of design for the process plant and infrastructure was reviewed by Capricorn's consulting metallurgists and process engineers and was deemed appropriate for a Feasibility Study.



Criteria	JORC Code (2012) explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The Karlawinda FS resulted in a technically robust and economically viable business case. This is deemed to be an appropriate basis for a high level of confidence in the Ore Reserves estimate. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. Gold price and exchange rate assumptions were set out by Capricorn and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

