CALIDUS RESOURCES LIMITED

ASX ANNOUNCEMENT

ABOUT CALIDUS RESOURCES

Calidus Resources is an ASX listed gold exploration company which controls the Warrawoona Gold Project in the East Pilbara district of the Pilbara Goldfield in Western Australia.

DIRECTORS AND MANAGEMENT

Mr Mark Connelly
NON-EXECUTIVE CHAIRMAN

Mr David Reeves
MANAGING DIRECTOR

Mr Keith Coughlan
NON-EXECUTIVE DIRECTOR

Mr Paul Brennan
BUSINESS DEVELOPMENT

Mr Richard Hill
CHIEF FINANCIAL OFFICER

Ms Julia Beckett
COMPANY SECRETARY

calidus.com.au

ASX : CAI

info@calidus.com.au

Suite 12, 11 Ventnor Ave
West Perth WA 6005
AUSTRALIA

29 September 2020

CAUTIONARY STATEMENT

As the production targets and forecast financial information in the Feasibility Study (FS) for the Company's Warrawoona Gold Project utilises a portion of Inferred Resources, the ASX Listing Rules require a cautionary statement be included in this announcement.

The FS referred to in this announcement is based upon a JORC Compliant Mineral Resource Estimate released to the ASX on the 29th June 2020 ("Updated PFS Delivers Increased Reserves and Robust Financials").

The Company advises that the Proven and Probable Ore Reserve and Indicated Resources provide 91% of the total mined tonnage and 84% of the total contained gold metal. The remaining tonnage is comprised of Inferred Resources. There is a low level of geology confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production targets reported in this announcement will be realised. The Company confirms that the use of Inferred Resources is not a determining factor of the Project's viability.

The Ore Reserves and Mineral Resource Estimate underpinning the production targets and forecast financial information in the FS have been prepared by Competent Persons with Competent Persons' Statements attached. The Company has concluded that it has a reasonable basis for providing the forward looking statements included in this announcement. The detailed reasons for this conclusion and the material assumptions underpinning to production targets and forecast financial information are outlined throughout this announcement.

Warrawoona Gold Project, Pilbara

Feasibility Study paves the way for construction of the Warrawoona Gold Project

Confirms strong cash flow generation at Warrawoona with compelling return metrics and further upside potential via the integration of the recently acquired high-grade Blue Spec gold deposit

Key Points

- **Warrawoona Feasibility Study confirms the project will generate strong margins and cashflow**
- **Debt funding process well progressed with indicative terms sheets received and binding agreement expected in the coming Quarter**
- **Study uses cost inputs from Preferred Contractors for major scopes of work from competitive tender process – Mining, Processing Plant, Tails Storage Facility and Power Station**
- **Project Economics (Based on A$2,500/oz):**
  - **Pre-Tax Project Cashflow of $629M, average EBITDA of $110M pa, $NPV_{8\%}$ $408M, IRR 81% and payback of 13 months**
  - **Post-Tax Project Cashflow of $447M, $NPV_{8\%}$ $286M, IRR 69% and payback of 13 months**
- **Average production of 90,000oz a year over first 7 years, peaking at 105,000oz in year five**
  - **Total gold production of 658,000oz over eight-year life of mine based on current minable inventory**
- **Life of Mine All-In Sustaining Costs (AISC) of $1,290/oz**
- **Pre-production capital cost of $120M including contingency and pre-production mining costs**
- **Underground Reserve increases 30% to 120,000oz with further growth potential from planned resource extensional and infill drilling**
- **Early works have commenced with main project construction scheduled to start in the March quarter 2021 to capitalise on the strong gold price and compelling project economics**
- **Calidus site team is in place consisting of General Manager, Construction Manager, Geology Manager, Mining Manager, Mining/Construction Superintendent and Business Services Manager**
- **Final EPA Approval received, on track to be fully permitted by end of year**
- **Recent acquisition of high-grade Blue Spec mine[1] provides immediate opportunity to expand production and free cash flow at Warrawoona. DFS and integration plan to be undertaken during CY2021 in parallel with Warrawoona construction**

1. See ASX Announcement 21st September 2020

Calidus Resources (ASX:CAI) is pleased to announce that the Feasibility Study has confirmed the Warrawoona Gold Project located in Pilbara, Western Australia is set to generate strong cashflow, outstanding financial returns and a rapid payback.

The Feasibility Study includes a 30% increase in the underground Reserves to 120,000oz (from June 2020), with total Project Reserves increasing to 547,000oz (Table 8). This underpins forecast production averaging 90,000 ounces a year in the first seven years, peaking at 105,000oz in year five, at an average AISC of A$1,290/oz.

Based on a gold price of A$2,500/oz, Warrawoona will generate a post-tax internal rate of return of 69% and have a payback period of just 13 months.

With the Feasibility Study completed, Calidus expects to finalise debt funding in the coming quarter, with non-binding and indicative terms sheets having already been received from potential debt financiers.

Early works construction is underway and preferred tenderers have been selected for all major contracts, with main construction scheduled to commence in the March quarter of 2021 once all permits are in place.

The coming period will be pivotal for the Company as infrastructure takes shape on site, debt quantums are confirmed, exploration results received and the proposed acquisition of Blue Spec is included in an expanded mine plan.

Calidus Managing Director Dave Reeves said: "The Feasibility Study confirms the significant technical and economic strengths of Warrawoona."

"The project is set to generate substantial cashflow based on low costs and robust margins and underpinned by extensive Reserves in a Tier-1 location."

"The strong results of this study pave the way for us to complete debt funding in the coming quarter and start main construction early next year."

Mr Reeves said while construction is underway next year, Calidus intends to finalise integration plans for the nearby high grade Blue Spec Mine which Calidus has agreed to purchase. The acquisition has strong potential to significantly increase Warrawoona's total production and cashflow by leveraging the Warrawoona Infrastructure.

1. See ASX Announcement 21st September 2020

KEY PROJECT METRICS

Table 1 - Key Project Statistics

Production Summary	Units	Feasibility Study		
Initial Mine Life	Years	8.3		
Total Ore Mined	oz	17.6Mt @ 1.24g/t for 702koz		
Gold Recovered	oz	658,277		
Processing Rate	Mtpa	Oxide/Transition 2.4Mtpa and Fresh 2.0Mtpa		
Average LOM CIL Metallurgical Recovery	%	94.4%		
Project Development Capital				
Processing Plant	A$M	78		
Non-Processing Infrastructure and Owners Cost	A$M	23		
Contingency	A$M	4		
Project Development Capital	**A$M**	105		
Pre-Production Mining Costs	A$M	15		
Total Pre-Production Capital	A$M	120		
Project Economics				
Gold Price	**A$/oz**	**2,200**	**2,500**	**2,800**
Gold Revenue	A$M	1,448	1,646	1,843
All-In Sustaining Cost (AISC)[1]	**A$/oz**	**1,281**	**1,290**	**1,299**
Project Cashflow (Pre-tax)	**A$M**	**437**	**629**	**820**
$NPV_{8\%}$ (Pre-tax)	A$M	272	408	543
IRR (Pre-tax)	% p.a.	58%	81%	103%
Project Cashflow (Post-tax)	**A$M**	**309**	**447**	**587**
$NPV_{8\%}$ (Post-tax)	A$M	187	286	386
IRR (Post tax)	% p.a.	48%	69%	91%
Payback Period[2]	**Years**	**1.5**	**1.1**	**0.9**

Table 2 – Production Costs

Costs of Production	LOM Unit Cost (A$/t)	LOM Unit Cost (A$/oz)
Open Pit Mining	$18 /t OP Ore	$386 /oz
Underground Mining	$53 /t UG Ore	$279 /oz
Total Mining	$25 /t	$666 /oz
Processing and Maintenance	$16 /t	$422 /oz
Business Services	$2 /t	$56 /oz
Total Cash Cost (C1)	**$43 /t**	**$1,143 /oz**
Royalties	$3 /t	$74 /oz
Sustaining Capital	$3 /t	$73 /oz
Total All-In Sustaining Cost (AISC)	**$48 /t**	**$1,290 /oz**

[1] All-In Sustaining Cost includes mining, processing, site administration, royalty costs and sustaining capital. It does not include exploration, corporate costs and non-sustaining capital.
[2] Payback period is calculated from the month of first gold production.
[3] Calidus is estimated to have carried forward tax losses of $42M at 31 December 2020.
[4] All figures are presented in nominal Australian Dollars unless otherwise specified. Rounding errors may occur.

Table 3 – Mining Yearly Profile

Key Physicals	Units	Total	Pre-Prodn	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Mining												
Open Pit												
Waste Mined	kbcm	**16,876**	498	4,627	5,027	4,469	1,027	1,228	0	0	0	0
Ore Mined	kbcm	**4,907**	124	1,016	1,225	1,292	761	489	0	0	0	0
Strip Ratio	W:O	**3.4**	4	4.6	4.1	3.5	1.3	2.5	0	0	0	0
ROM Ore Mined	kt	**10,622**	256	2,374	2,513	2,605	1,835	1,039	0	0	0	0
ROM Mine Grade	g/t	**1.23**	1.42	1.26	1.29	1.11	1.29	1.16	0	0	0	0
ROM Contained Gold	oz	**419,076**	11,650	95,932	103,847	92,879	75,893	38,874	0	0	0	0
Low Grade Ore Mined	kt	**3,515**	58	620	829	1,014	521	473	0	0	0	0
Low Grade Mine Grade	g/t	**0.38**	0.39	0.39	0.38	0.38	0.38	0.38	0	0	0	0
Low Grade Contained Gold	oz	**43,423**	718	7,700	10,217	12,547	6,425	5,816	0	0	0	0
Total OP Ore Mined	**kt**	**14,137**	**314**	**2,995**	**3,342**	**3,619**	**2,356**	**1,512**	**0**	**0**	**0**	**0**
Total OP Mine Grade	**g/t**	**1.02**	**1.23**	**1.08**	**1.06**	**0.91**	**1.09**	**0.92**	**0**	**0**	**0**	**0**
Total OP Contained Gold	**oz**	**462,500**	**12,369**	**103,632**	**114,065**	**105,426**	**82,318**	**44,690**	**0**	**0**	**0**	**0**
Underground												
Lateral Development	m	**24,602**	0	0	238	2,966	7,723	7,201	5,746	728	0	0
Ore Mined	kt	**3,441**	0	0	0	56	729	975	958	685	39	0
Mine Grade	g/t	**2.16**	0	0	0	2.23	1.96	2.02	2.29	2.39	1.99	0
Contained Gold	oz	**239,031**	0	0	0	4,002	46,030	63,291	70,539	52,711	2,459	0
Total Ore Mined	kt	**17,579**	**314**	**2,995**	**3,342**	**3,675**	**3,085**	**2,487**	**958**	**685**	**39**	**0**
Total Mine Grade	g/t	**1.24**	**1.23**	**1.08**	**1.06**	**0.93**	**1.29**	**1.35**	**2.29**	**2.39**	**1.99**	**0**
Total Contained Gold	oz	**701,531**	**12,369**	**103,632**	**114,065**	**109,428**	**128,348**	**107,981**	**70,539**	**52,711**	**2,459**	**0**

Key Physicals	Units	Total	Pre-Prodn	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Processing												
Ore Processed	kt	**17,579**	0	2,327	2,318	2,242	2,027	2,034	2,000	2,191	2,102	337
Processing Grade	g/t	**1.24**	0	1.28	1.15	1.3	1.49	1.58	1.71	1.19	0.41	0.38
Ounces Recovered	oz	**658,277**	**0**	**90,586**	**80,548**	**85,335**	**92,184**	**98,099**	**104,531**	**78,504**	**24,835**	**3,655**

Table 4 – Cashflow and AISC Yearly Profile

Key Financials	Units	Total	Pre-Production	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Project Cashflow (Pre-tax)	A$M	**629**	**(120)**	**114**	**78**	**71**	**86**	**103**	**157**	**120**	**18**	**2**
All-In Sustaining Cost (AISC)	A$/oz	**1,290**	**0**	**1,226**	**1,361**	**1,334**	**1,528**	**1,447**	**994**	**977**	**1,765**	**2,041**

Table 5 – Gold Price Sensitivity Analysis

Pre-tax	Unit	A$2,000/oz	A$2,250/oz	A$2,500/oz	A$2,750/oz	A$3,000/oz
Project Cashflow	A$M	309	469	**629**	788	948
$NPV_{8\%}$	A$M	182	295	**408**	520	633
IRR	%	42%	62%	**81%**	100%	118%
Post-tax	**Unit**	**A$2,000/oz**	**A$2,250/oz**	**A$2,500/oz**	**A$2,750/oz**	**A$3,000/oz**
Project Cashflow	A$M	217	332	**447**	564	680
$NPV_{8\%}$	A$M	121	203	**286**	370	453
IRR	%	34%	51%	**69%**	87%	106%
Payback Period	Years	2.3	1.4	**1.1**	0.9	0.8

Table 6: Ore Reserves (only Underground Reserve updated from June 2020)

Deposit	Proven			Probable			Total		
	kt	Au (g/t)	koz	kt	Au (g/t)	koz	kt	Au (g/t)	koz
Klondyke Open Pit	2,057	1.0	66	10,014	1.0	335	12,071	1.0	401
Klondyke Underground				1,900	2.1	120	1,900	2.1	120
St George Open Pit				244	1.2	9	244	1.2	9
Copenhagen Open Pit				95	5.5	17	95	5.5	17
Total	**2,057**	**1.0**	**66**	**12,253**	**1.2**	**481**	**14,310**	**1.2**	**547**

WARRAWOONA GOLD PROJECT FEASIBILITY STUDY SUMMARY

1. Introduction

The Warrawoona Gold Project (WGP) site is located 28km South East of Marble Bar accessed by an all-weather road. Marble Bar is two hours travel by road from Port Hedland, Australia's largest port, and provides ease of access to logistic routes, major suppliers and relevant skills base.

Gold was first discovered in the Marble Bar area in 1896 and was mined for around 15 years. The Warrawoona Mining Centre is reported to have produced 745 kg of gold from 25 kt of ore at an average grade of approximately 30 g/t. There are over 200 known historic workings on Calidus tenements. Most of these workings are small scale, targeting the high grade (plus 1 oz/t) mineralisation.

The Warrawoona tenements have remained idle due to fragmented ownership in the area and have never been subject to modern exploration or mining techniques. Since listing in June 2017 and through a series of transactions Calidus has been able to consolidate the Warrawoona tenements, which is the key to unlocking the value from the shallow outcropping mineralisation prevalent throughout the area.

The WGP is located on granted mining leases. A majority of the WGP is located on the Warrawoona Mining Common which is excised from the surrounding pastoral lease.

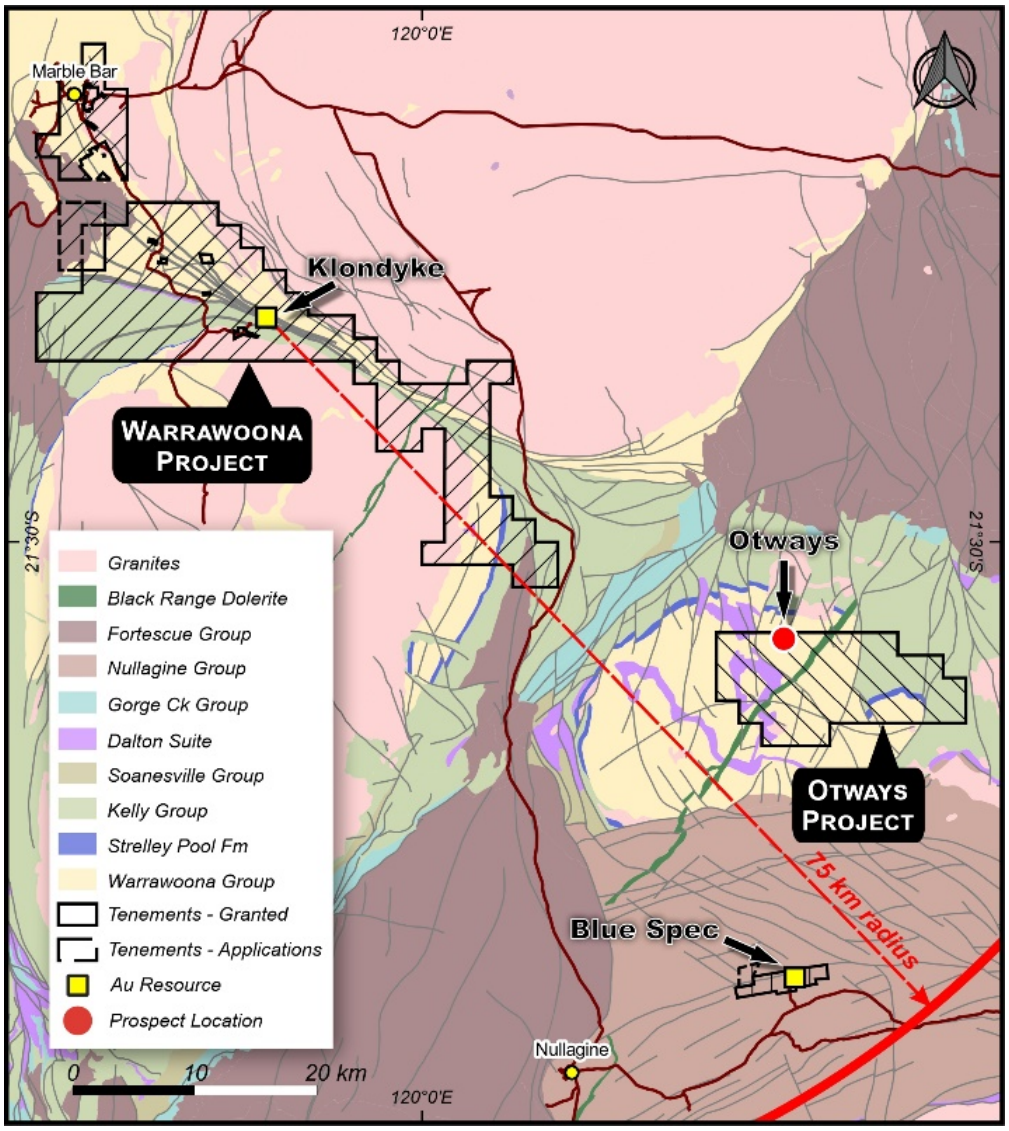

Figure 1: Warrawoona Tenements

2. Study Parameters

The Feasibility Study is based on the following key parameters:

- JORC Compliant Mineral Resource and Open Pit Ore Reserve Statements released to the ASX 29th June 2020 (*Updated PFS Delivers Increased Reserves and Robust Financials*);
- JORC Compliant Underground Ore Reserve statement included in this Feasibility Study;
- Processing Plant constructed under an Engineering, Procurement and Construction (EPC) model;
- 12 month construction phase followed by a 5 year open pit, with underground production commencing year 3 for a total Project life of 9 years;
- Natural gas fired power station is constructed and operated under a Build, Own, Operate (BOO) model;
- Open pit and underground mining being undertaken by mining contractors;
- Non-processing Infrastructure is managed under a Calidus owners team, including construction of the site access road, accommodation village, tails storage facility and aerodrome upgrade; and
- Overall project implementation and management by a Calidus owners team.

Calidus has commenced an Early Works Programme which includes the construction of the 7km Access Road into the Processing Plant location, construction of the 240 person accommodation village, water bore installation and a backbone communications network from Marble Bar (ASX release 17th September 2020 *Construction underway at Warrawoona Gold Project*).

The intent of the Early Works programme is to have the base backbone of infrastructure in place ahead of Final Investment Decision and the completion of permitting to facilitate main project construction in the March Quarter of 2021.

3. Study Team

The Feasibility Study was managed by Calidus with specialist consultants as listed below to complete all aspects of the study:

- Mineral Resource Estimate – Optiro Consultants, Lynn Widenbar and Associates;
- Environmental, Base Line Studies and Project Permitting – Rapallo, Biologic, Woodman, Sticks and Stones, Total Heritage, Nyamal Heritage, Bat Call, Graeme Campbell and Associates, Mine Earth, Lloyd George Acoustics;
- Geotechnical – Peter O'Bryan and Associates, ATC Williams;
- Tails Storage Facility – ATC Williams;
- Hydrology and Hydrogeology – Groundwater Resource Management;
- Processing Plant – GR Engineering Services Ltd (GRES);
- Metallurgy and Testwork – GRES, Metallurgy Management Services, Nagrom, ALS, BV;
- Infrastructure – GRES, Aerodrome Management Services; and
- Mining – Intermine Engineering Consultants, Entech Pty Ltd and Galt Mining.

Major costs items are based on contractor bids which include:

- Open Pit Mining - Macmahon Holdings Limited (Macmahon)
- Process Plant EPC – GRES
- Gas supply – top Bidder price
- Power Station BOO – average of two top bidders
- Tails Dam – Macmahon
- Village Install – Rangecon
- Communication - Telstra

4. Permitting and Approvals

The Warrawoona Gold Project recently received Environmental Protection Agency (EPA) approval from the Western Australian Minister for Environment (ASX release 24th August 2020 *EPA approval and funding update*).

The Commonwealth Department of Agriculture, Water and the Environment (AWE) has its own separate approvals process whereby it can undertake its own assessment under the EPBC Act. The Commonwealth elected to undertake an Accredited Assessment, where they will use the EPA Assessment to use as a base for their decisions thereby streamlining the approvals process. Final approval from the AWE is anticipated in the December Quarter of 2020.

With receipt of Ministerial Approval (EPA) Calidus is now able to submit the Mining Proposal (and Closure Plan) and Works Approval for the main Project Development. Both of these are well advanced and are expected to be submitted in a timely manner to enable the Project to be fully permitted by the end of 2020.

A Project Management Plan is also required to be approved by DMIRS, which predominantly deals with OHS Risk and mitigation and is also being prepared for submission.

Western Australian Permitting Approvals which are applicable to all project developments include:

- Mining Proposal and Mine Closure Plan – administered by the Department of Mines, Industry Regulation and Safety (DMIRS);
- Works Approval and Environmental Protection Act Part V Licencing - administered by the Department of Water and Environment Regulation (DWER);
- Water Licencing - administered by the Department of Water and Environment Regulation (DWER); and
- Project Management Plan – administered by Department of Mines, Industry Regulation and Safety (DMIRS).

In parallel to the above Calidus applied and subsequently received approval for "Minor and Preliminary Works" to complete the 7km Access Road and the installation of the 240 person accommodation village. Received approvals for this were a Native Vegetation Clearing Permit, Mining Proposal and Project Management Plan.

5. Geology and Mineralisation

The Warrawoona Project is located within the East Pilbara Terrane of the Archean Pilbara Craton in Western Australia. The East Pilbara Terrane is characterised by large, dome-shaped composite granitic complexes wrapped by greenstone belts (Figure 1). The granite-greenstone terrane is unconformably overlain by little-deformed volcanic and sedimentary rocks of the Hamersley Province. The Klondyke deposit is hosted within the Warrawoona Group, a package of high-Mg basalt, komatiite and felsic volcanic units, that outcrops throughout much of the East Pilbara Terrane and is one of the more important hosts to Au mineralisation.

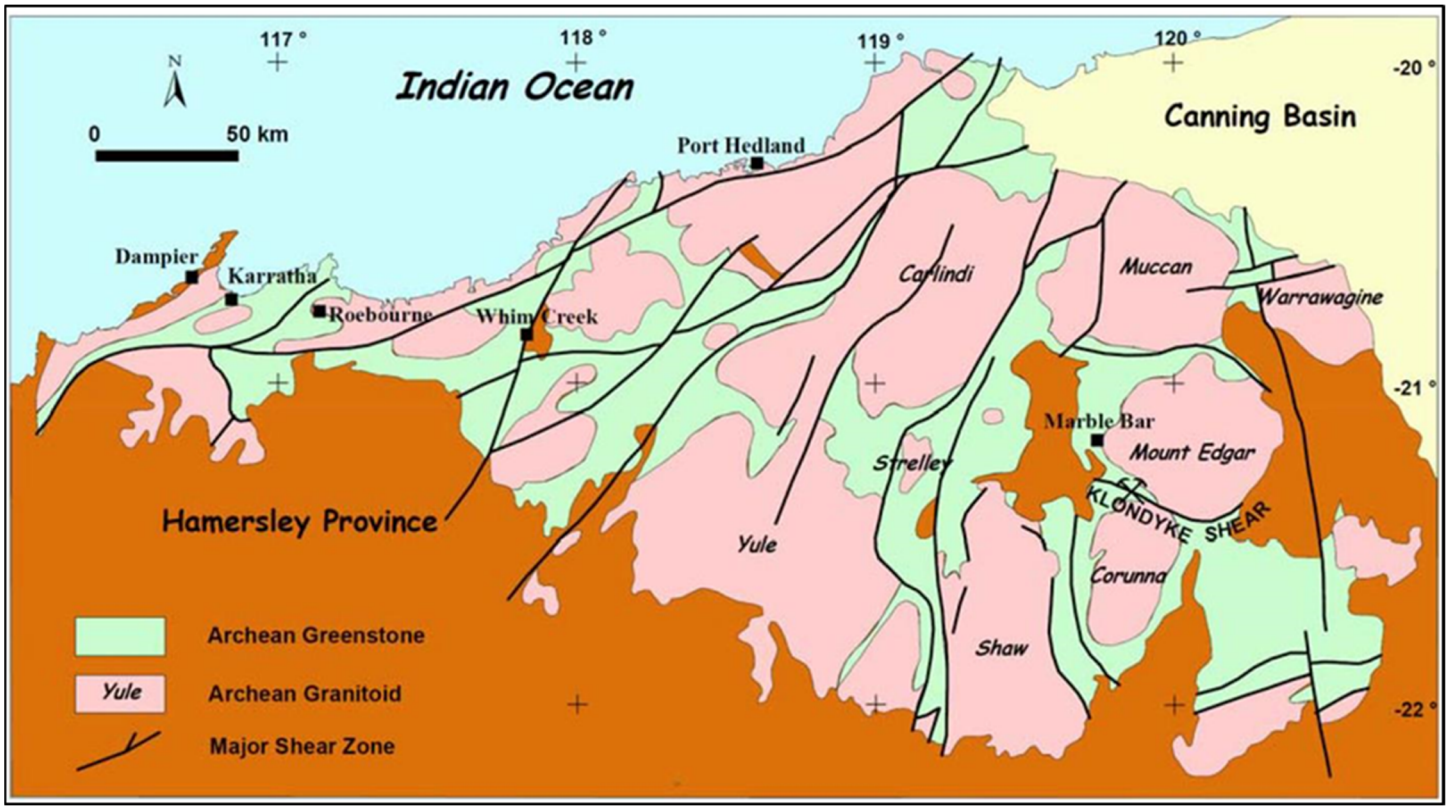

Figure 2: Simplified Regional Geology

The Warrawoona Project mining leases lie within the Warrawoona greenstone belt, a highly tectonised package of rocks sandwiched between the Mount Edgar batholith to the north and the Corunna Downs batholith to the south (Figure 2). Episodic and long-lived diapirism during intrusion of the batholiths has resulted in pervasive deformation throughout the greenstone belt. In the eastern part of the tenement package between the batholiths, the greenstone belt is as narrow as 1.5km wide. To the west, the belt fans out to form a series of narrow, widely spaced mylonite zones with comparatively undeformed rocks between. Gold mineralisation is closely associated with the mylonite zones and with thin chert layers (such as Kopcke's leader at Klondyke) which are interpreted to represent stratigraphic breaks and appear to have acted as a focus for mylonite development, hydrothermal alteration and gold mineralisation.

6. Klondyke Mineralisation

Gold mineralisation at Klondyke is concentrated around the Klondyke shear and is associated with quartz-carbonate-pyrite veins within sericite/fuchsite-carbonate-altered and intensely deformed mafic schists. The shear, and the veins, are sub-vertical or dip very steeply to the south-southwest and strike at about 110°. A 10–50cm-wide black chert band, referred to as Kopcke's leader by the early miners, is exposed within the altered mafic schists. Kopcke's leader is persistent both laterally and at depth and provides a good indication as to the location of mineralisation along strike and down dip. Rock units and quartz-carbonate veins display strong egg-carton boudinage and are marked by a very strong sub-vertical mineral/intersection lineation.

One of the most prominent features of the sections through the ore zone is the profound asymmetry of the alteration, with fuchsite alteration in the footwall (northern side) and sericite alteration in the hangingwall (Figure 3). The alteration

asymmetry implies that Kopcke's leader is located at the contact between two different mafic units: a high-Cr (high-Mg) mafic unit below the chert in which fuchsite is developed and a low-Cr mafic unit above the chert in which sericite is developed. This contact marks an erosion surface with subsequent clastic deposition during a hiatus in volcanism. The Kopcke's leader chert unit has a remarkable strike and depth continuity over the resource area, providing a strong marker unit to guide exploration and resource drilling.

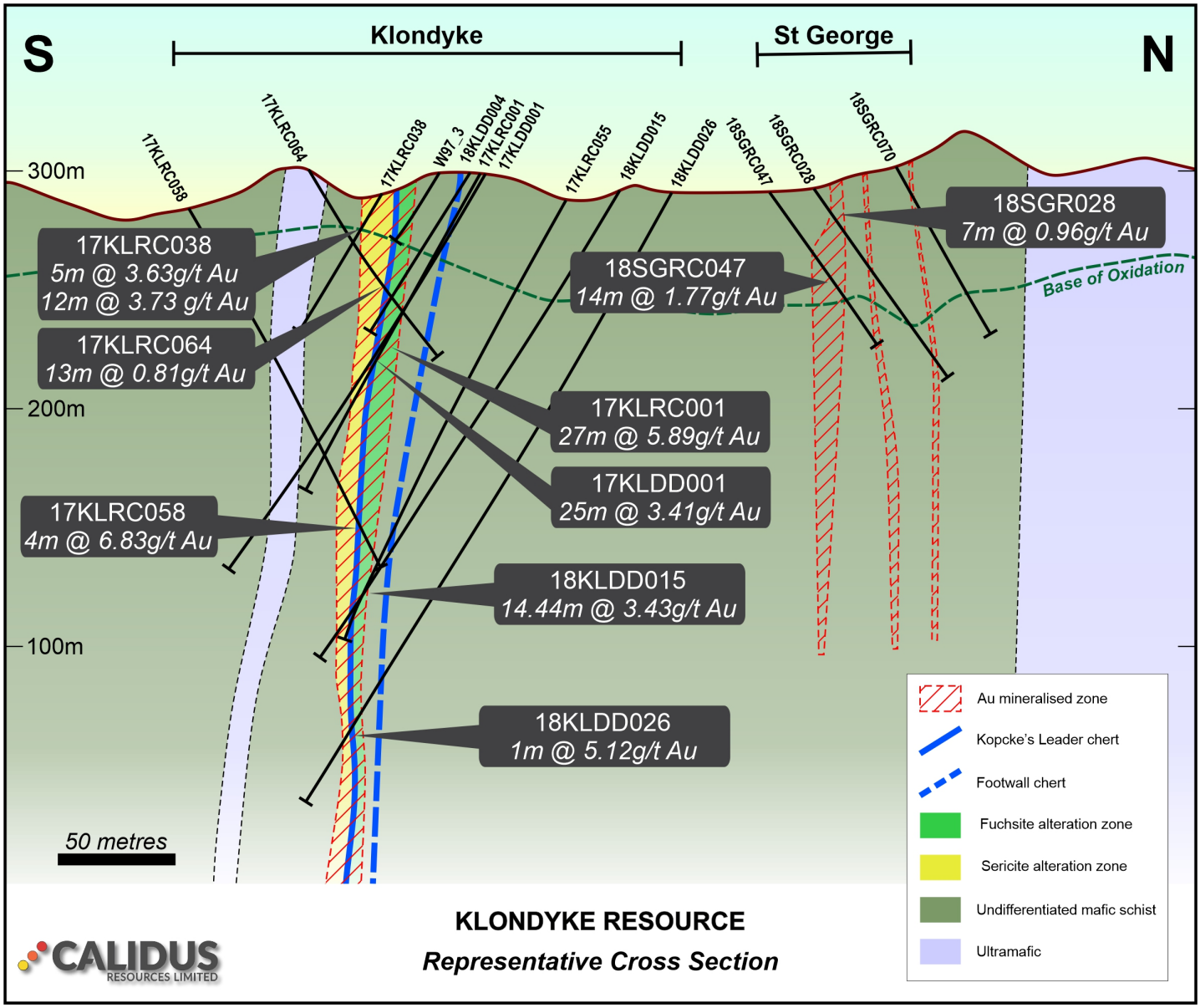

Figure 3: Klondyke Mineralisation

7. Mineral Resource Estimate

The 2020 Open Pit Mineral Resource (ASX release 29th June 2020 Updated PFS Delivers Increased Reserves and Robust Financials), was used as a basis for this Feasibility Study.

An Ordinary Kriged model was developed using a parent cell size of 20m x 10m x 10m (X,Y,Z) versus the 2019 model which used a parent cell of 10m x 2.5m x 2.5m. This change is a result of a Kriging Neighbourhood Analysis (KNA) which looks at drill spacing and number of samples to provide a more robust estimation. The parent cell size is 32 times larger than that used in the 2019 model and generally results in a smoother grade profile due to the large blocks. This OK model was then subject to post processing Localised Uniform Conditioning (LUC). The LUC used a sub cell of 10m x 2.5m x 2.5m to provide more granularity on localised grades within the parent cell. This has been used as the Selective Mining Unit

(SMU) for optimisations and designs and is 250% larger than the previous 2019 model. As a result of the parent cell size and larger SMU unit, significantly more dilution has been introduced into the model but is believed to be more representative of actual ore block sizes for large excavators.

As the underground is a selective mining operation, the smaller sub cell size of 1m x 0.5m by 0.5m (X,Y,Z) as used in the 2019 estimation is considered to be more appropriate and as such has been retained as the method for the updated 2020 underground estimation.

The Mineral Resource has been classified in the Measured, Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including geological continuity, data quality, drill hole spacing, modelling technique, estimation properties including search strategy, number of informing data and average distance of data from blocks.

The total Mineral Resource Estimate is shown in Table 7.

Table 7 - Global Mineral Resource Estimate (Inclusive of Reserves)

Deposit	Cut-Off	Measured			Indicated			Inferred			Total		
	(g/t)	Mt	Au (g/t)	KOz	Mt	Au (g/t)	KOz	Mt	Au (g/t)	KOz	Mt	Au (g/t)	KOz
Klondyke Open Pit	**0.3**	**2.3**	**0.98**	**72**	**29.0**	**0.90**	**844**	**8.3**	**0.81**	**217**	**39.6**	**0.89**	**1,133**
including	*0.5*	*1.6*	*1.21*	*64*	*20.3*	*1.12*	*733*	*5.0*	*1.09*	*176*	*27.0*	*1.12*	*973*
Klondyke UG	**1.5**				**1.0**	**2.87**	**89**	**1.8**	**3.31**	**162**	**2.7**	**2.83**	**250**
including	2.0				0.7	3.36	72	1.2	4.08	130	1.9	3.33	202
Copenhagen	0.5				0.2	5.58	34	0.1	2.65	9	0.3	4.54	43
Coronation	0.5							0.5	2.19	34	0.5	2.19	34
Fieldings Gully	0.5				0.3	1.80	16	0.3	1.87	20	0.6	1.84	36
Total		**2.3**	**0.98**	**72**	**30.4**	**1.00**	**982**	**11.0**	**1.33**	**442**	**43.7**	**1.06**	**1,495**

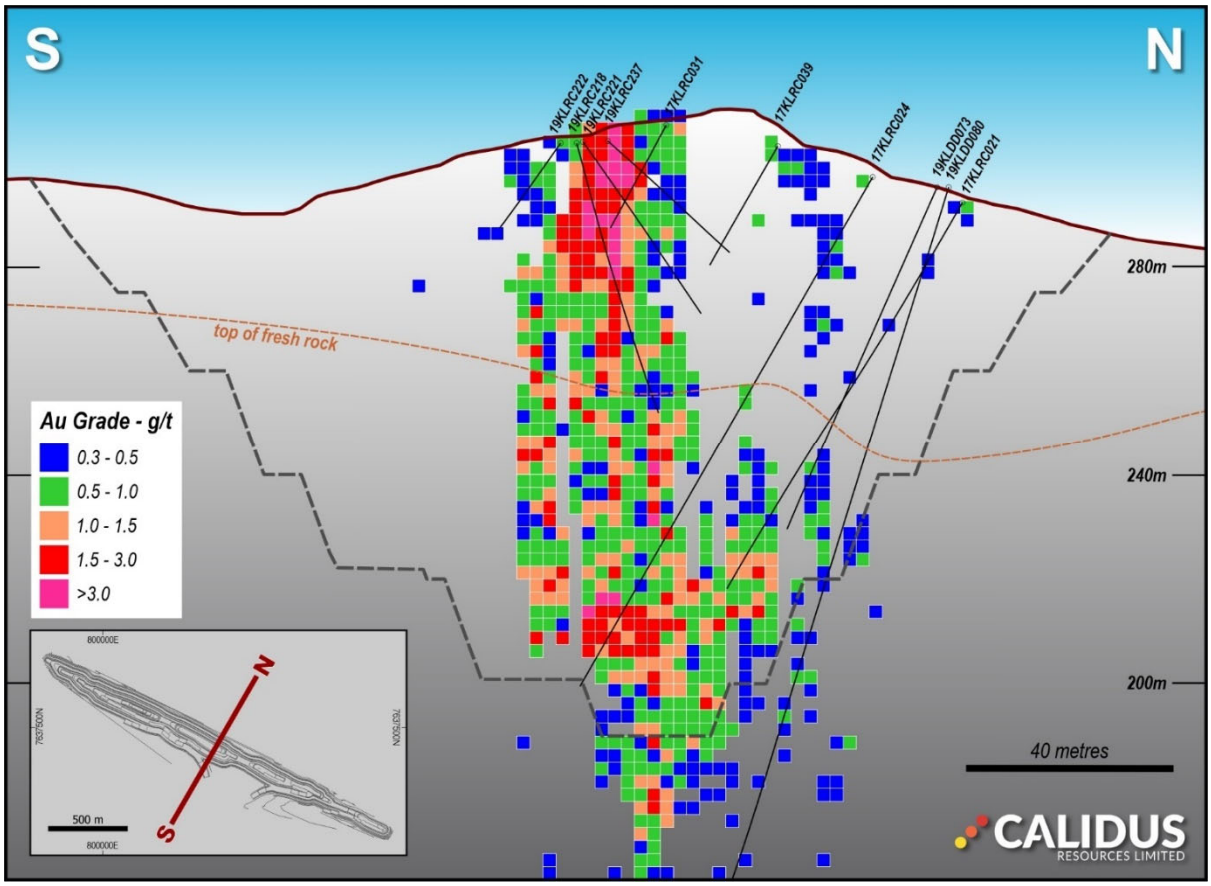

Figure 4: Cross Section through LUC model

8. Geotechnical

Ground conditions influencing wall stability in proposed open pit and underground mining have been assessed by Peter O'Bryan and Associates using current geological interpretations, data obtained from drill core and experience in geotechnical assessment and review in similar geological and geotechnical settings.

Design recommendations for the Klondyke Open Pit (below the first 10m) are 20-25m face heights with angles of 60-70^0 and a berm width of 5-7m. Perimeter blast methods will be used in the formation of final batters.

Design recommendations for the underground are a 25m floor-to-floor level interval, 30m decline standoff, and a hydraulic radius of 7.5m resulting in stable span lengths of up to 30m. Stope support will be provided by appropriately located rib and sill pillars and where practical available development waste rock can be used as unconsolidated stope backfill. Rib pillars are a minimum of 3m length and full height and sill pillars of 10m vertical height are designed to restrict down dip stope spans to 80 vertical metres (3 levels).

9. Hydrology and Hydrogeology

Groundwater Resource Management Pty Ltd (GRM) was appointed to undertake the PFS and FS level groundwater and surface water studies. The groundwater component of the studies has involved field investigations including water exploration bores, data analysis, numerical groundwater flow modelling, and separate post-closure modelling for the Klondyke pit lake.

10. Mine Dewatering

The results of a bore testing programme were used to construct a 3D numerical groundwater flow model to estimate pit dewatering rates and simulate the impacts upon the groundwater environment from mining below the water table. The model simulated dewatering rates based on the mine plans. Results of the modelling indicate that:

- Groundwater inflows to the pit will not occur until nearly 12 months after the start of mining;
- During the first three years of mining (no underground) pit inflows may range from 15 to 25 L/s or less depending on the amount of ex-pit dewatering; and
- From around mid-Year 5 until the end of mining, combined open pit and underground mine dewatering rates could potentially increase up to around 50 L/s.

11. Water Supply

Calidus is targeting 50 L/s from bore fields to ensure sustainable production water is secured in the early years of the project, prior to dewatering rates increasing as outlined above. Under EPA approval Calidus is permitted to abstract 1.6 GL/yr which equates to 50 L/s.

An initial six wells are currently being constructed under the Early Works Programme. Two of these wells are planned for use as initial Construction Water supply and dewatering, with the remaining four being equipped as production bores.

Figure 5: Water Well construction underway

12. Surface Water Management

There are several relatively minor ephemeral watercourses and drainage lines that cross the Project site on the south side of the Warrawoona Ridge in a roughly northeast to southwest direction. Given that the majority of the proposed mining areas are situated within the Warrawoona Ridge with some 80m relief and in the headwaters of both the Brockman Hay Cutting Creek and Sandy Creek (Figure 6), the catchment areas upstream of the proposed project facilities are very limited and impacts on the hydrological regime downstream are expected to be minimal. Consequently, flood protection and surface water management measures required for the project will be relatively modest.

Flood protection works will comprise the following:

- Waste dumps strategically placed along the upstream side of all pits where possible;
- Sections of rock armoured flood diversion bunds and drains placed around pit crests. Bunds will be offset sufficiently such that they can also serve as abandonment bunds; and
- Ex-pit roadside drains to direct runoff away from the pits.

It is envisaged that mobile pumps will be used to remove in-pit run off. Run-off from catchment areas upstream of the TSF will report to the reclaim pond (decant) before being returned to the process plant for re-use. The TSF will function as a zero-discharge facility during operations and sufficient freeboard will be provided on the embankment to store runoff

from upstream areas. At mine closure an engineered spillway will be constructed on abutment of the TSF embankment. Additional information on the TSF is contained in Section 16.

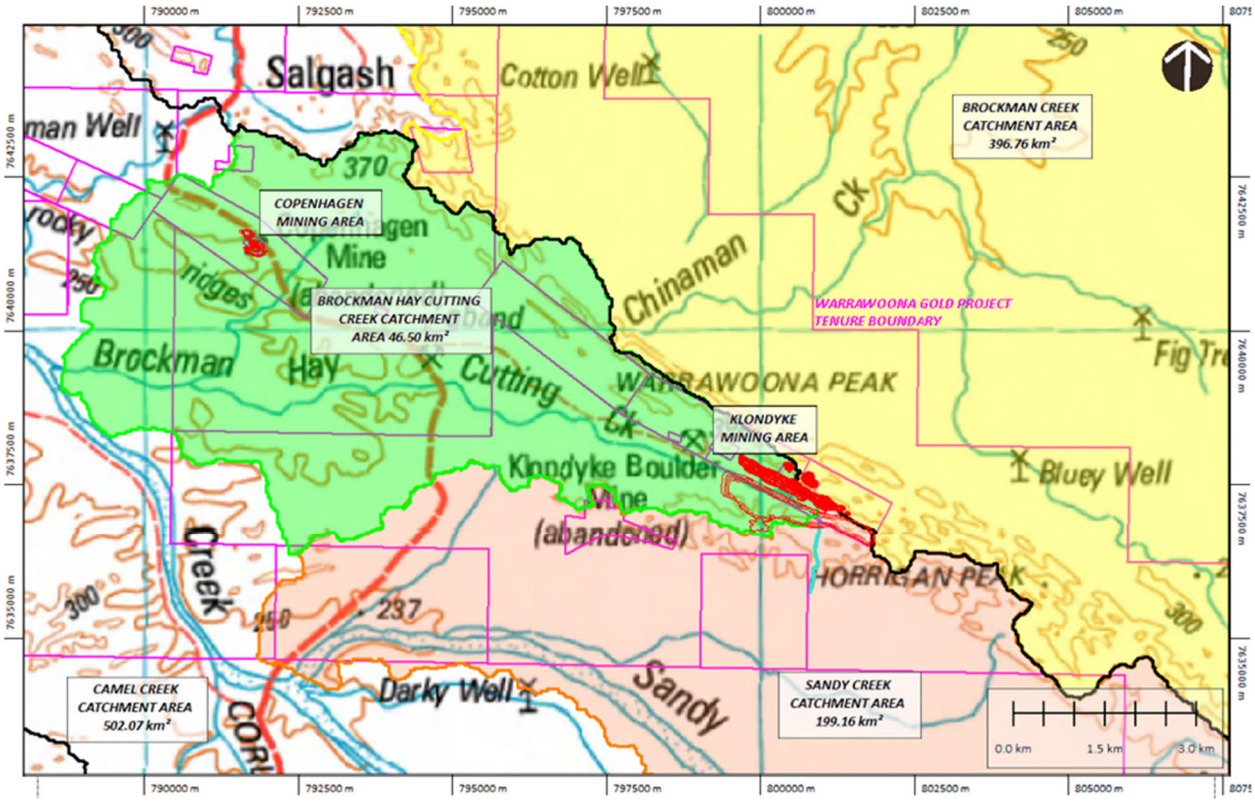

Figure 6: Local Hydrology

13. Mining

Calidus has undertaken a conventional approach to the development of open pit and underground mine designs and schedules supporting this Feasibility Study. Resource models, key assumptions and inputs were provided to external consultants (Intermine Engineering Consultants for open pit studies, and Entech Pty Ltd for underground studies).

Intermine and Entech interrogated the block models generated by Optiro (Klondyke & St George Open Pit), Widenbar & Associates (Klondyke Underground) and Calidus (Copenhagen, Fielding's Gully) undertaking detailed financial analysis utilising Whittle and Deswik MSO software for open pit and underground mining respectively.

These Whittle shells and MSO shapes were subsequently developed into open pit and underground mine designs and investigated further via Excel spreadsheets for economic analysis.

A competitive tender process was undertaken for the Open Pit mining contract. Macmahon Holdings Limited (Macmahan) were awarded the preferred tender status for open pit mining (ASX release 17th September 2020 *Construction underway at Warrawoona Gold Project*).

Early contract engagement with Macmahon has given Macmahon the opportunity to have input into the final open pit mining schedule for the Feasibility Study. Mining rates used in the Feasibility Study are the tendered rates from Macmahon.

Given that the underground does not commence until Year 3 of the Project, the underground schedule was provided to underground mining contractors with a request to provide budget pricing. Macmahon underground rates were also utilised for the Feasibility Study.

Open Pit

The Klondyke deposit will be mined utilising conventional open pit mining methods comprising:

- Clearing, stripping and stockpiling of near surface material in the areas of the pit and proposed waste storage facility;
- Initial pioneering work in pit areas with high topographic relief to establish suitable sized (>35m width) working bench areas for the proposed mine fleet as well as provide material for the TSF embankment construction;
- RC grade control programs to further delineate ore boundaries;
- Load and haul using 100 t – 200t excavators and 100 t rigid trucks using 2.5 m flitch heights; and
- Haulage of ore to the ROM pad stockpiles to be fed to the crusher, and haulage of waste to nearby WRDs or in-pit backfilling.

Open Pit Design

Pit designs were completed for the central Klondyke and St George lodes in accordance with the geotechnical batter and berm configuration guidelines from Peter O'Bryan and Associates.

Due to the variances in topography in the Klondyke & St George project area, it was decided to conduct mining operations in two distinct phases, namely pioneer and production mining.

Pioneer mining will proceed until a 35m mining width is achieved which will allow the full turning circle of a 140-t class truck. Topographical highs within the pit crest were reviewed and natural topography utilised to generate 1:10 ramps to a 35m turnaround bay. Areas above this mining horizon would be selectively drilled & blasted and sequentially mined, commencing at the turnaround bay and advancing to the extremities of the horizon to facilitate safe extraction.

Once Pioneer benches exceeded 35m width, these were demarcated as production areas with normal mining assumptions and productivities applied for scheduling purposes.

The Klondyke Open Pit has been separated into four areas, being King, Cuban, Kopcke and Criterion as shown generally in Figure 7. The naming convention is based on historic underground mines in the area.

In addition to the Pioneer mining outlined above, the intent of the discrete areas is to mine all oxide/transitional material during the early years of the Project. As outlined in Section 15, the Process Design throughput is based on 2mtpa whilst treating fresh and 2.4mtpa whilst treating oxide/transitional.

The final pit at Klondyke has a strike length of 2.4km and width of 240m.

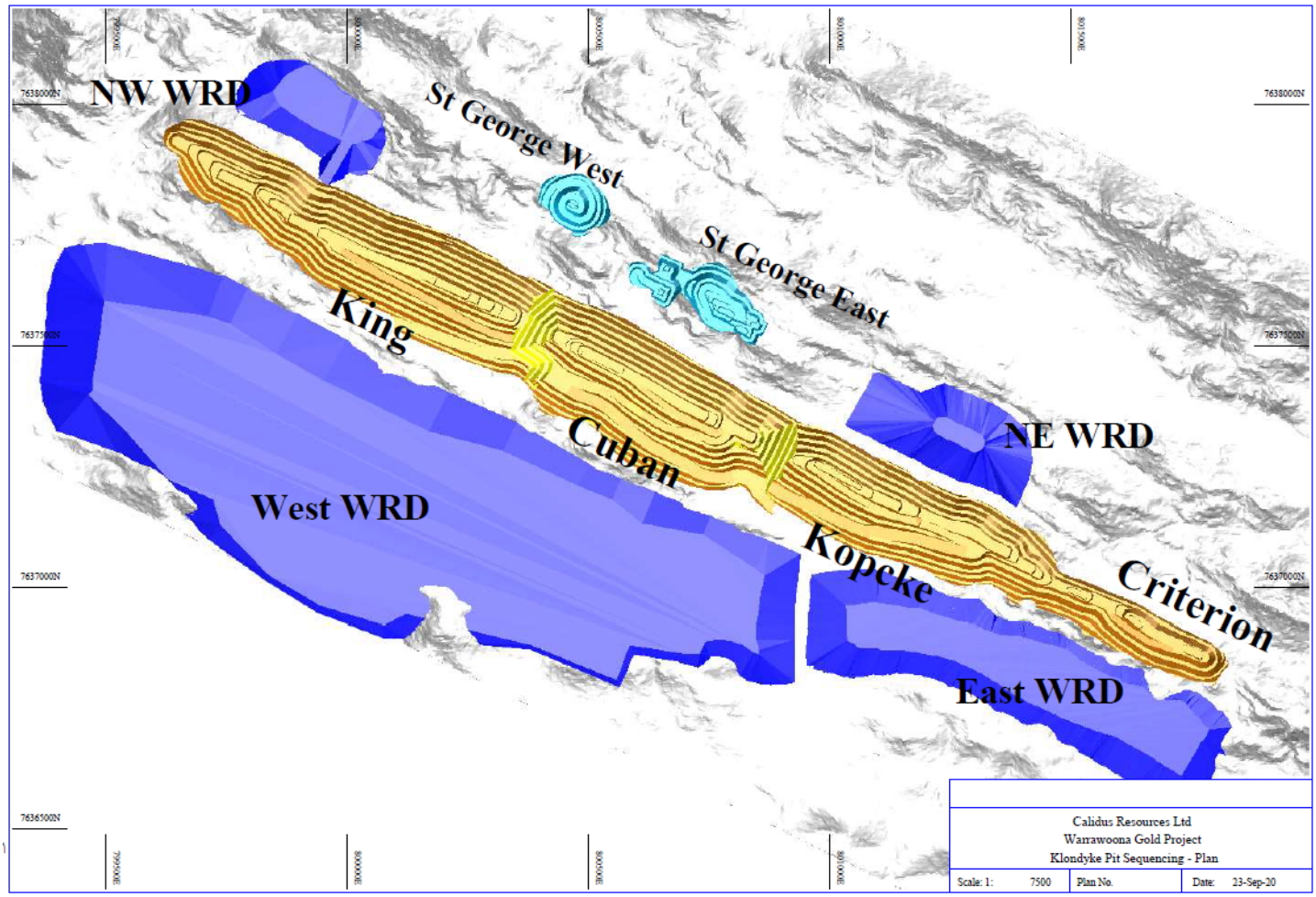

Figure 7: Final 2.4km Klondyke Open Pit and Waste Rock Dump Design

Underground

The underground mine will be accessed via a box cut location adjacent to the mining contractor facilities near the main Processing Plant area (Figure 8) and is located beneath the main Klondyke Open Pit (Figure 8).

The layout has designed for the following reasons:

- The boxcut is located south of the pit close to surface infrastructure;
- The boxcut allows for the underground to be fully independent of the Open Pit, meaning the timing of commencement of the underground can be optimised in subsequent years;
- Capital development is located in the footwall providing better geotechnical conditions;
- Three declines provide adequate coverage along orebody (maximum strike per decline ~700m); and
- The decline develops between the Klondyke and St George Shear Zones to allow positioning for diamond drill Grade Control Drilling ahead of production.

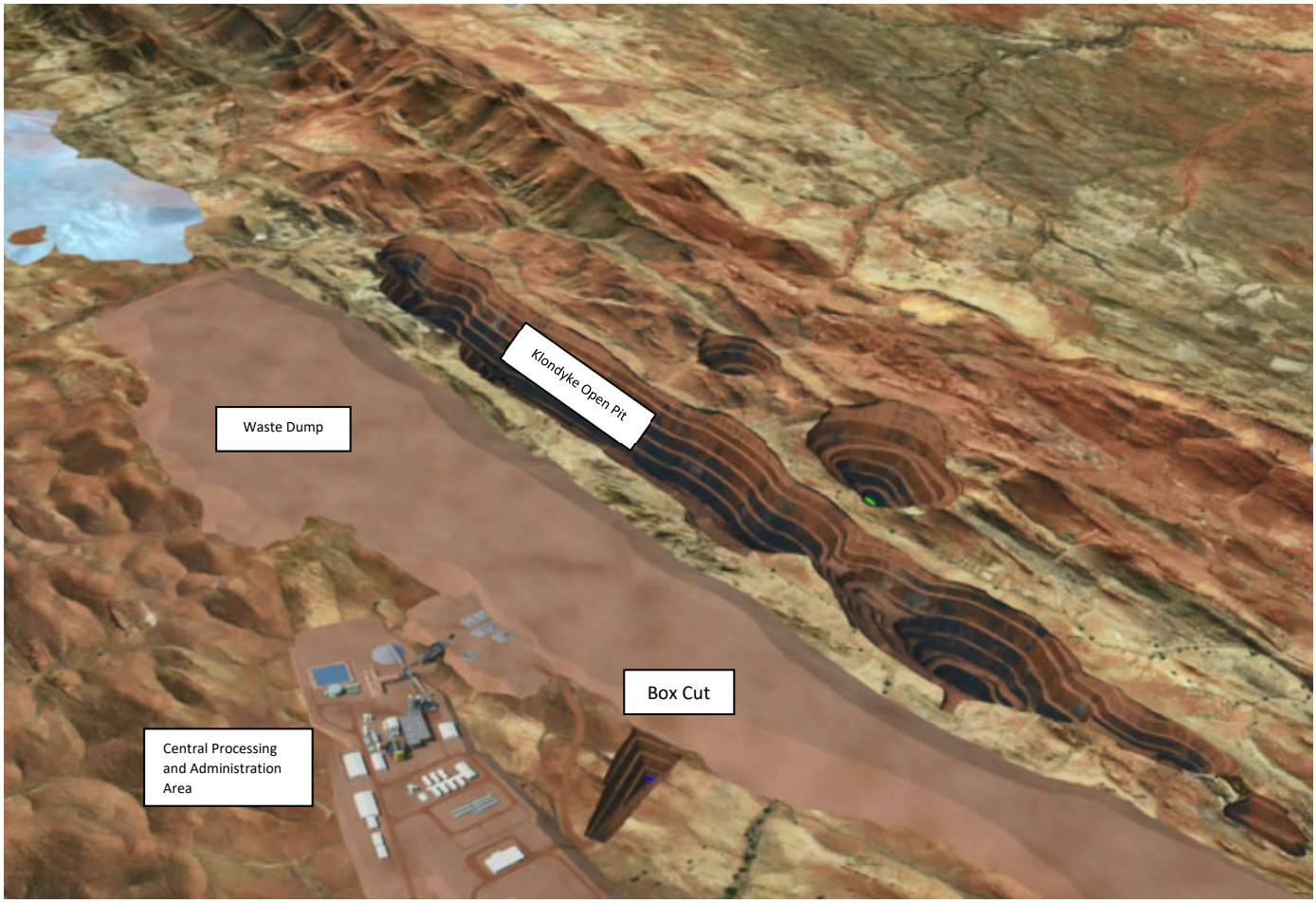

Figure 8: Underground Boxcut location Layout

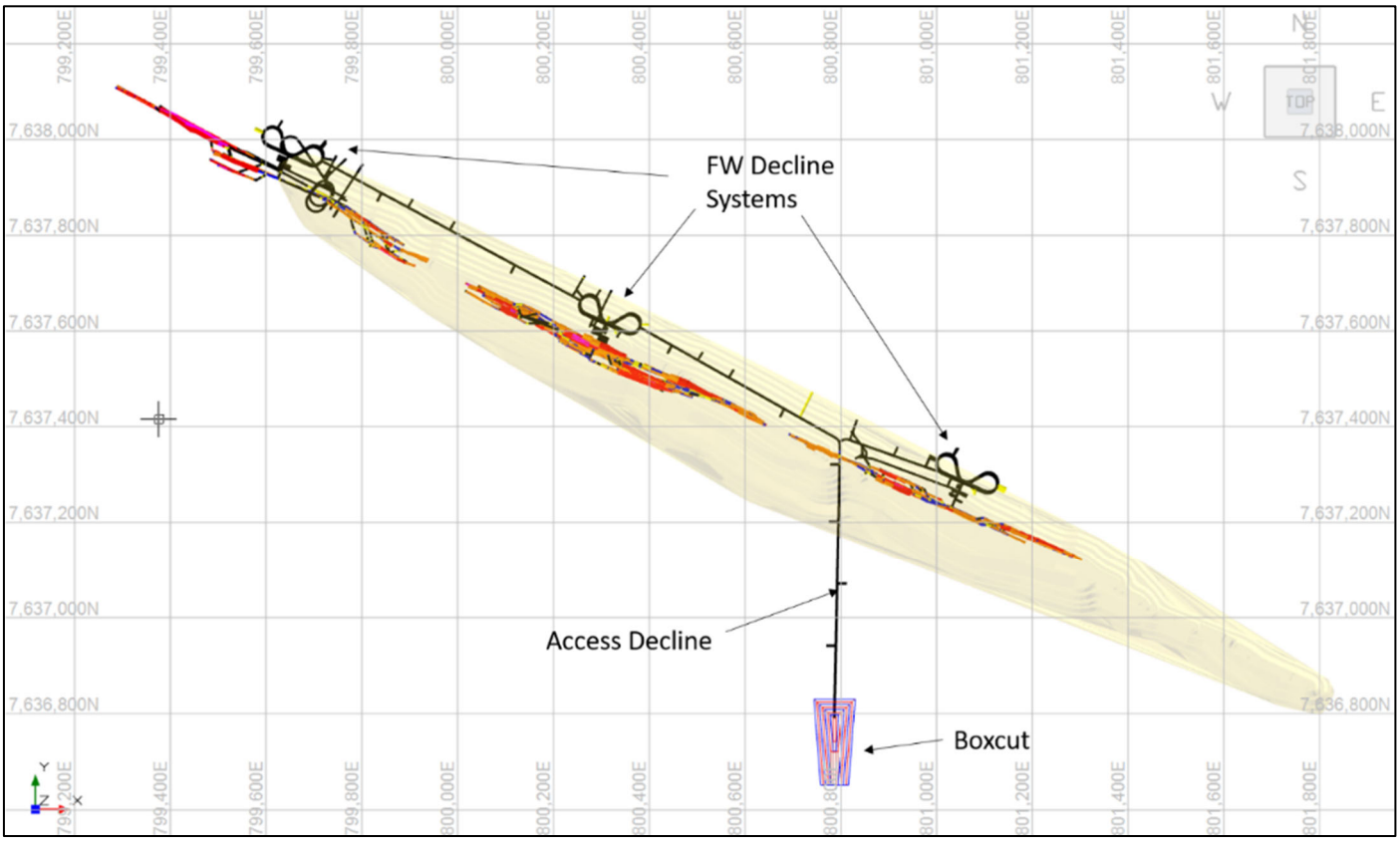

Figure 9: Underground Layout below Klondyke Open Pit

The Klondyke underground mine is accessed via a portal in the boxcut as per above. A single heading access decline will be developed northwards towards the orebody before branching off to develop three decline systems in the Footwall as shown above.

At month 6 of the underground mining schedule, when the initial two declines are established, an initial 3 month close spaced diamond drill programme is planned (Grade Control drilling) to de-risk the central "core" of the underground production. The diamond drill programme utilises the established development as a drill platform, negating the need for additional development to establish dedicated drill positions. This is achievable due to the almost vertical nature of the orebody. During this period, there is no development scheduled which recommences at the completion of the grade control programme.

Underground Design

A stope optimisation process was carried out on the Resource model using Datamine Software's Mineable Shape Optimiser® (MSO). Spatial inputs were derived from geotechnical analysis provided by Peter O'Bryan and Associates (POA) and the recent PFS design. Cut-off grades were calculated based on revenue inputs and mining costs from the recent PFS financial model.

Stopes were designed to a minimum mining width of 2 m and are planned to be drilled with 76 mm holes. 0.5 m dilution in each stope wall was built into the stope shape for a minimum stope void width of 3.0 m as per POA recommendations.

A general mining recovery factor of 95% was applied to allow for ore losses due to bogger recovery and local orebody variability.

A maximum hydraulic radius of 7.5 was advised by POA resulting in stable span lengths of up to 30 m. A pillar aspect ratio (rib pillar strike length: rib pillar width / thickness) of 1.0 has been maintained based on POA advice. The minimum pillar length dimension is 3m. Rib pillar aspect ratios were reduced to 0.8 where the lode is > 5m wide. Rib pillars are planned to be full height. Sill pillars of 10 m vertical height were designed to restrict down dip stope spans to 80 vertical metres (3 levels). Pillar losses were applied in the mining schedule.

Development was subsequently designed to access the stoping blocks. The following describes the underground mine development design approach:

- The planned mining method is top-down longhole open stoping with in-situ pillars retained for support, retreating to a central crosscut. The orebody will be accessed from three declines located to provide maximum ore drive lengths of 400m;
- The mine is planned to be developed using conventional twin boom jumbos;
- Access is by a 5.5 mW x 5.7 mH Decline, commencing from a dedicated box cut adjacent to the processing plant, administration area and workshops;
- A floor to floor level interval of 25 m with a Decline standoff at least 30 m from the orebody has been used as recommended by POA;
- Second means of egress will be via raise bored escape ways collared at surface on the South side of open pit;
- Fresh air will intake through the main decline and several fresh air raises to surface. Return air will be exhausted via dedicated return air raises to surface. All ventilation raise bores from surface are designed at 4.0 m diameter and will collar on the southern side of the open pit; and
- Ground support patterns are as per geotechnical guidance from POA.

The Klondyke underground mine plan was scheduled in Deswik Software's Deswik.Sched® software. Productivity assumptions were derived from industry standards and similar operations in the Entech database. A steady state production rate of 80 kt/month was achieved (Figure 10).

A ventilation model was constructed based on the assumed fleet and mine plan.

The final mine design is shown in Figure 11.

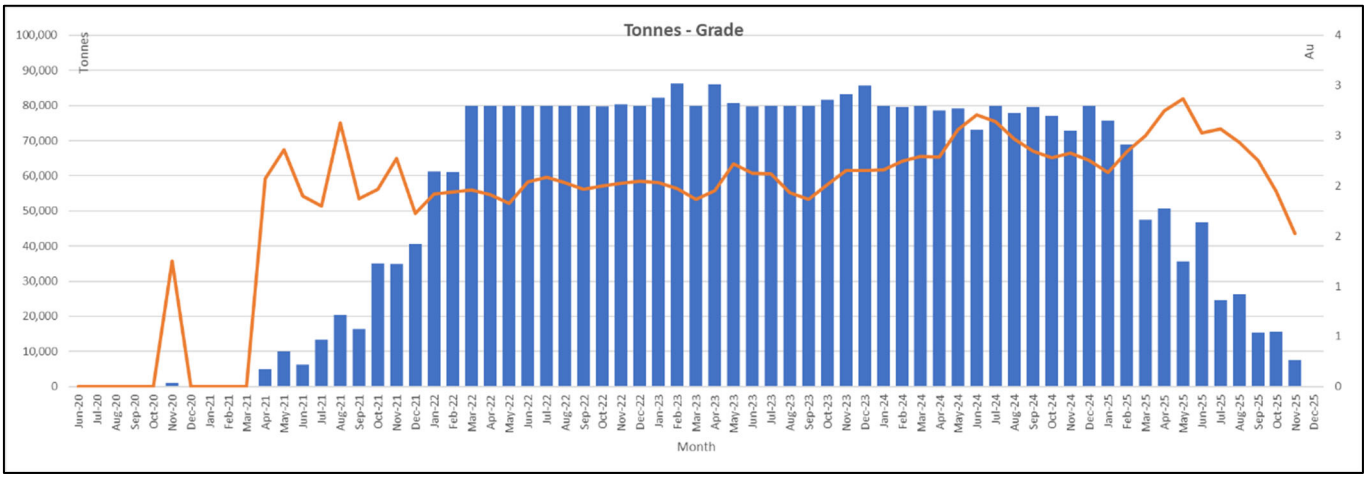

Figure 10: Klondyke UG Ore Production Profile

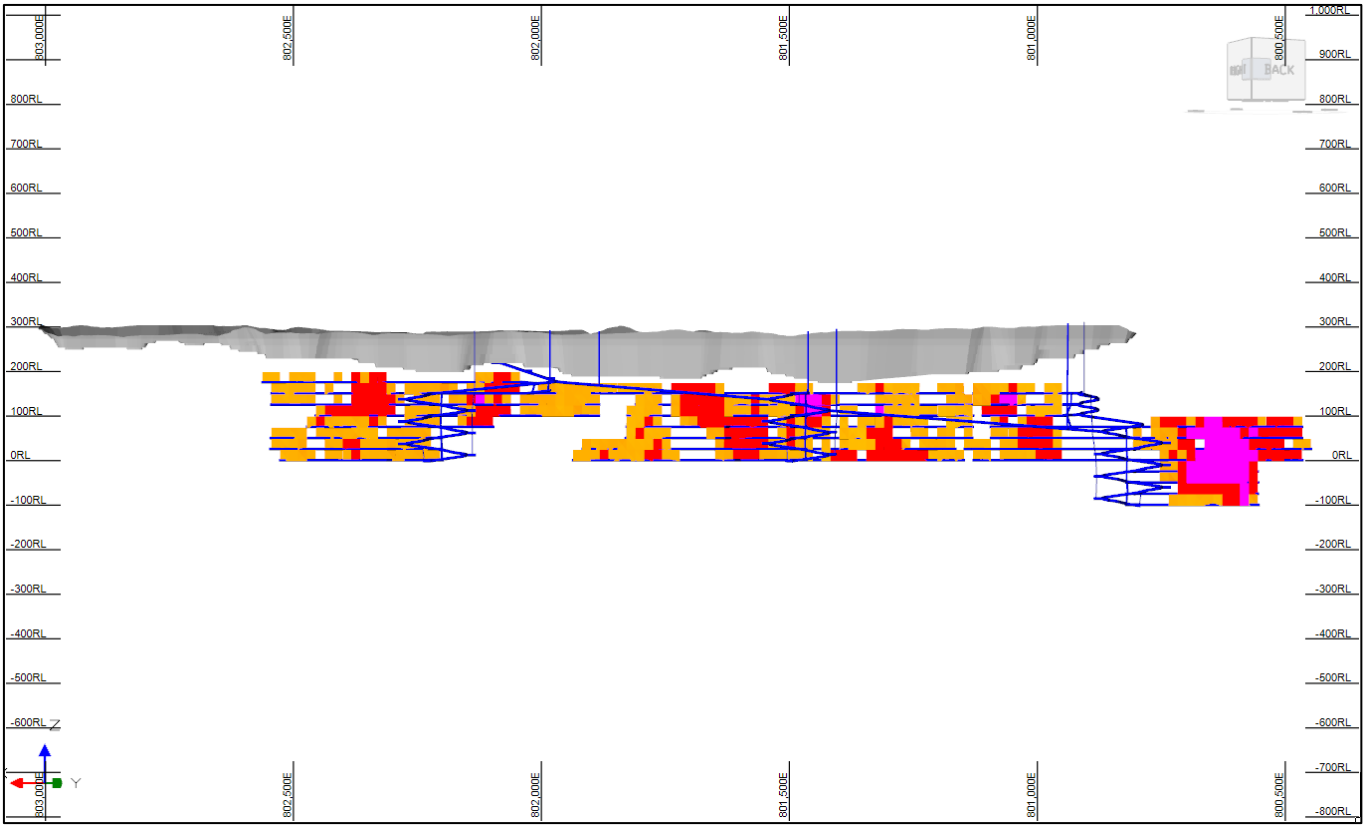

Figure 11: Klondyke UG Mine Design (Long Section Looking South)

The planned underground mine life is 66 months including 3 month delay for a diamond drilling programme once the twin Decline area is reached (Month 6 – 9 of the underground schedule)

Combined Mining Schedule

The final mine schedule comprised:

- Months 1 to 12 are for Processing Plant construction;
- Pioneer Open Pit mining commences in Month 7 and is completed by Month 13;
- Open Pit mining months average 80kBCM per month to reflect reduced productivities whiles dayshift only mining, with a subsequent ramp up to >550kBCM per month post Month 8;

- Full Open Pit mining rates of ~580kBCM per Month commences in Month 14 and continues until Month 42 at which point combined HG available stocks are approximately 1Mt;
- A single digger fleet remains beyond Month 42 mining an average of 180kBCM per month to complete all Open Pit mining by Month 65;
- Underground mining activities commence in Month 34;
- A 3 month delay in UG development activities is scheduled after Month 39 for closed spaced Grade Control drilling;
- The Underground mine schedule starts supplying development ore from Month 44 and stoping ore from Month 49 and continues until Month 99 for a total duration of 66 months; and
- The Processing Plant feed by source area is shown in Figure 12 below.

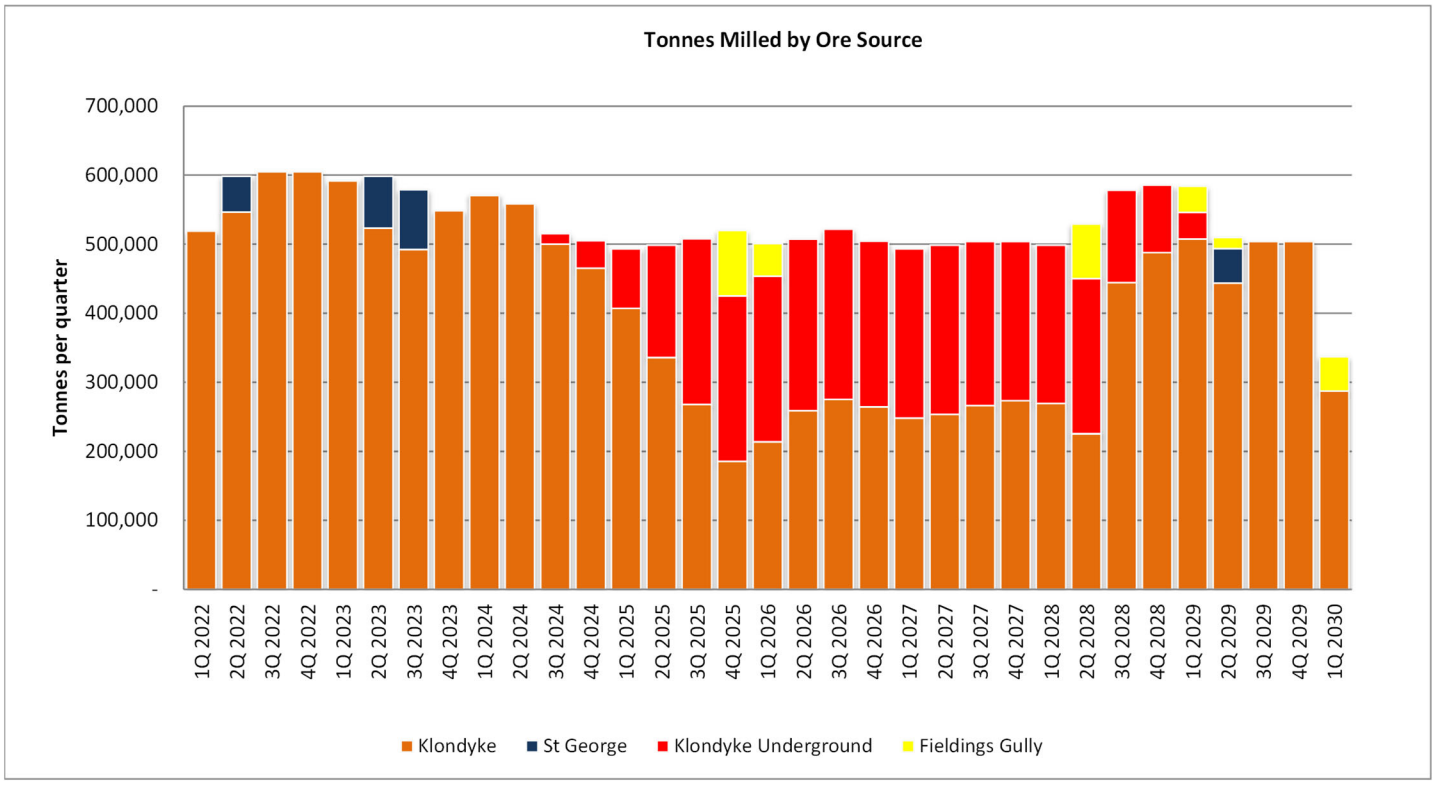

Figure 12: Monthly Plant Feed - Open Pit and Underground

14. Reserve

The Ore Reserve for the Klondyke open pit and underground is shown in Table 8. The Underground Reserve has been updated as part of the Feasibility Study, with the remaining Reserve unchanged from the June 2020 Reserves (ASX release 29th June 2020 *Updated PFS Delivers Increased Reserves and Robust Financials*). The table should be read in conjunction with the information required by ASX Listing Rule 5.9.1 and the JORC Section Table 4 contained in this report.

The split of indicated and inferred material for the mine plan is shown in Figure 13. This demonstrates there is not a great reliance of the use of inferred material and inclusions of inferred material is not a determining factor of the project's viability.

The production targets in the FS are comprised of Probable Ore Reserves (70%), Proved Ore Reserves (12)%, Indicated Mineral Resources (10)% and Inferred Mineral Resources (9)%.

Table 8 - Ore Reserves (only Underground Reserve updated from June 2020)

Deposit	Proven			Probable			Total		
	kt	Au (g/t)	koz	kt	Au (g/t)	koz	kt	Au (g/t)	koz
Klondyke Open Pit	2,057	1.0	66	10,014	1.0	335	12,071	1.0	401
Klondyke Underground				1,900	2.1	120	1,900	2.1	120
St George Open Pit				244	1.2	9	244	1.2	9
Copenhagen Open Pit				95	5.5	17	95	5.5	17
Total	**2,057**	**1.0**	**66**	**12,253**	**1.2**	**481**	**14,310**	**1.2**	**547**

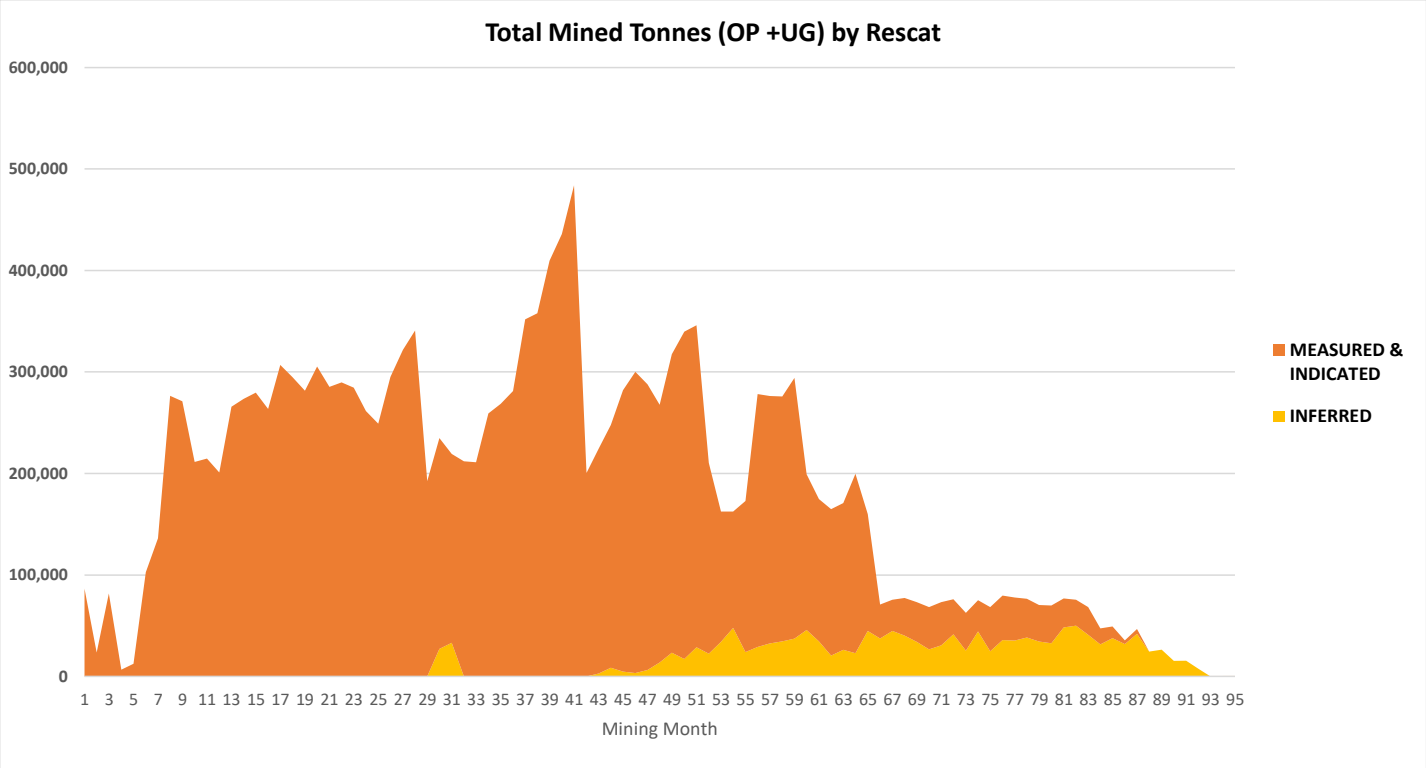

Figure 13: Split of Measured/Indicated; and Inferred Material

15. Metallurgy and Process Selection

Metallurgical testwork programs have been conducted on the Klondyke deposit in four campaigns. Emphasis on this section is placed on the Klondyke DFS test work, with the satellite ore deposits representing a minor component of mill feed and Salient Features are discussed below.

- 2007 – Comminution, apparent density, cyanidation and mineralogy test work completed by SGS for Jupiter Mines on drill core and RC chips;
- 2018 – Scoping Study test work consisting of comminution, apparent density, leaching and gravity recoverable gold (GRG) test work completed by Nagrom on drill core samples. Oxide and fresh ore samples were tested independently;
- 2019 – PFS test work consisting of comminution properties, gravity recoverable gold, leaching test work, grind size sensitivity, thickening tests, cyanide destruction and tailings chemistry. The majority of the testing was completed at Nagrom with ALS conducting the cyanide destruction; and
- 2020 – DFS test work.

The DFS test work campaign focused on increasing the understanding of the deposit at width and depth. Sample selection was to focus on the early years of production and as a result, a larger number of samples were taken from the transitional component of the deposit as this will form the entirety of the mill feed in the first two years of production.

The laboratory scope of work included:

- Comminution tests (SMC, BBWi, BRWi, Abrasion index and Uniaxial Compressive Strength (UCS) tests);
- Head assays on the transitional, fresh and variable composites;
- Grind size sensitivity on the transitional and fresh composites;
- Gravity recoverable gold tests on the transitional and fresh composites;
- Leach optimisation on the transitional master composite including:
    - Cyanide concentration;
    - Pre-oxidation and oxidation with air, oxygen and peroxide;
    - Lead nitrate addition;
    - Cyanide concentration;
    - Leach percent solids;
- Dynamic thickener test work on the fresh composite;
- Development of variable composites and leaching under the optimal conditions established above;
- Carbon adsorption isotherms on the transitional and fresh master composites;
- Cyanide destruction on the transitional and fresh master composites; and
- Preparation of transitional and fresh master composites tailings samples.

Klondyke Comminution Test Work

All samples were subjected to comminution testing. These were combined with the Scoping Study and PFS testing results to produce a database of 29 samples.

A summary of the properties for each ore type is shown in Table *9*.

Table 9: Comminution Property Range by Ore Type

Parameter Range	Units	Klondyke Ore			
Rock Type		Oxide	Transitional	Fresh (Pit)	Fresh (U/G)
Samples Tested	No.	3	12	10	4
Abrasion Index	Ai	0.01 - 0.03	0.02 - 0.12	0.03 - 0.14	0.06 - 0.14
DWi	kWh/m^3	1.0 - 3.0	2.4 - 4.2	3.4 - 6.2	6.8 - 7.2
Axb		172 - 378	65 - 110	50 - 81	40 - 42
Bond Ball Work Index	kWh/t	5.6 - 8.9	7.0 - 12.2	8.0 - 12.0	11.6 - 12.6
Bond Rod Work Index	kWh/t	7.4 - 11.5	11.9 - 15.1	12.7 - 17.9	17.5 - 19.0

The data shows that the ore specific grinding energy (SGE) increases with depth. The comminution circuit has been sized on a 2.0 Mtpa fresh ore production rate. Whilst processing the softer transitional material the mills will have additional capacity and therefore the throughput will be 2.4 Mtpa. The downstream processing facility has been designed to facilitate these rates.

In general the comminution energy requirement is low and the grind size target is relatively coarse. The hardness increases with depth but are not significantly harder. This has resulted in the selection of a Single Stage SAG mill with the ability to run a high ball charge (up to 20%) and a large speed range (60 to 78% CS) to allow process flexibility to match the ore properties.

Klondyke Gold Extraction and Recovery

The 2018 testwork program indicated that 150 microns was the optimal grind size for the ore. To confirm this assessment, the PFS testing was completed in parallel at a P80 of 106 microns and 150 microns, and subsequent 2020 test work for the DFS at 180, 150, 125 and 108 microns.

The transitional ore showed a gradual improvement in gold extraction as the grind size decreased however additional costs associated with power, grinding media and cyanide exceeded the gold revenue and therefore it was determined that a grind size of 150 microns was optimal.

The fresh ore gold extraction was similar at 150, 125 and 106 microns and therefore the revenue was also similar. Based on this 150 microns grind size was determined to be optimal economic grind size.

The grind size selection is line with the previous studies. Results are shown in Table 10 below:

Table 10: Leach Extraction Results

Grind Size (P_{80})	Transitional	Fresh
180 µm	94.2	97.2
150 µm	94.9	97.7
125 µm	95.3	97.8
106 µm	95.7	97.8

Samples from the transitional and fresh master composites were subjected to the eGRG test to determine the gravity gold present in each ore type. The results show that both the transitional and fresh ore contains a significant portion of gravity gold.

The results obtained were used by ConSep for determining the expected gravity gold recovery based on the selected gravity circuit (single QS40 with a CS1000 intensive leach reactor). They expect the gold recovery to be 37% for transitional and 48% for the fresh ore based on gold in the new feed.

A gravity gold recovery of 33% for both ore types has been allowed for in the design. This is intentionally conservative to ensure the leach and elution circuit are suitably sized to handle short periods of gravity circuit downtime, reducing the risk of gold losses.

The gold recovery has been calculated for the transitional ore (combined oxide and transitional) and the fresh ore to match the mining plan and plant design. The recovery is calculated in Table 11.

Table 11: Gold Recovery Calculations

Parameter	Units	Transitional	Fresh	Source
Throughput	tph	300	250	Engineer
Design Head Grade	g/t	1.20	1.50	CAI
Gravity Recovery	%	33.0	33.0	GRG Gravity Modelling
Leach Feed Grade	g/t	0.80	1.00	Calculated
Leach Extraction	%	92.7	90.3	Test Work
Total Extraction	%	95.9	94.3	Calculated
Solution Losses	%	0.80	0.80	Calculated
Total Recovery	%	95.1	93.5	Calculated

Comminution Circuit

The FS considered the following circuits:

- A three stage crushing plant;
- SAG and Ball Mill circuit; and
- Single Stage SAG mill (SS SAG).

The ore is relatively soft and therefore the power savings from utilising a three stage crushing plant were not significant and did not justify the additional capital cost and on-going maintenance requirements that come with this type of circuit.

The SAB circuit capital and operating costs fit in-between the other two circuit options. It is more operationally robust circuit and is not as maintenance intensive as the three stage crushing circuit. A SAB circuit has a wider operating window with respect to ore type and is considered to be a more flexible circuit.

The SS SAG and the SAB circuit are both suited to the Klondyke ore characteristics. A financial analysis was completed between the lower capital, higher operating cost SS SAG circuit against the higher capital, lower operating cost SAB circuit. The payback period was approximately 6 years for the SAB circuit, which could not be justified and therefore a SS SAG option was selected.

The simplified plant flowsheet is shown in Figure 14.

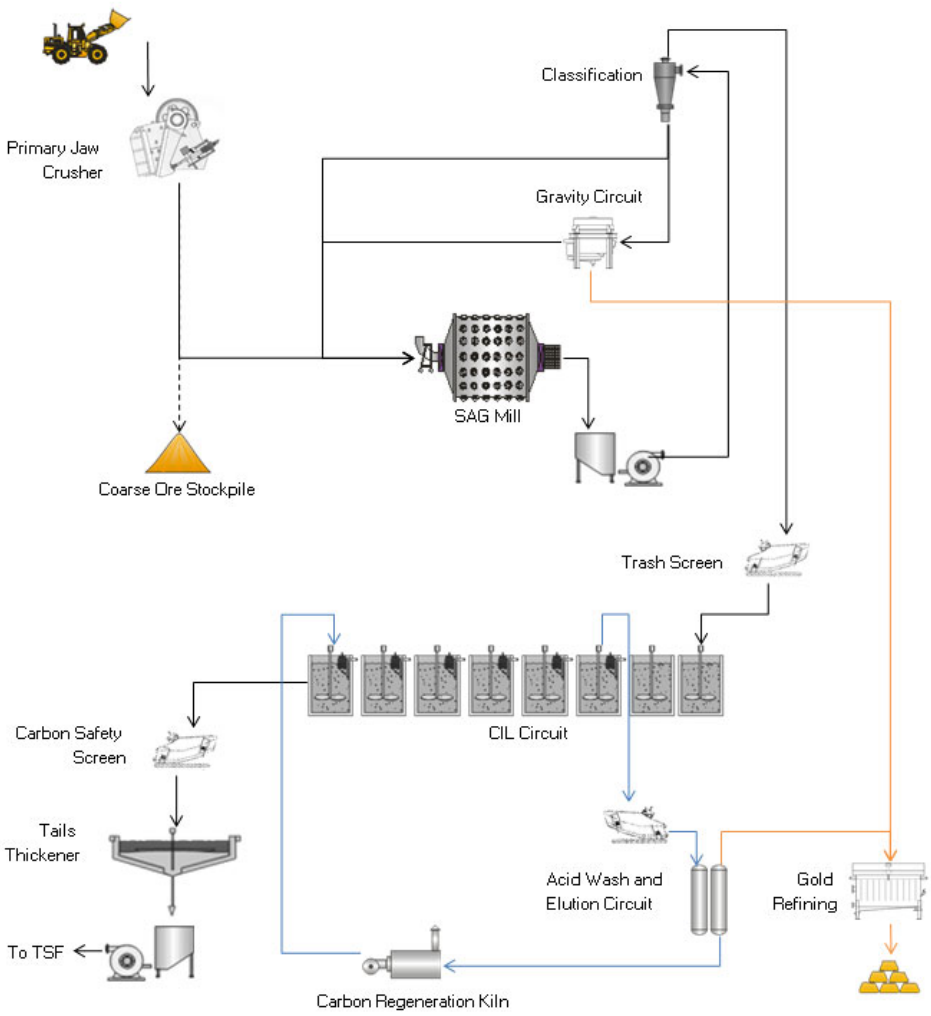

Figure 14: Simplified Process Plant flowsheet

Process Plant

The process plant design has been developed from the outcomes of the metallurgical test work conducted during the FS and all previous study phases. The comminution circuit was sized the basis of processing 100% open pit fresh ore at a rate of 2.0 Mtpa. The transitional ore is softer and as such theoretically a higher throughput is achievable with the selected comminution circuit but to prevent over capitalising the downstream circuit the design feed rate has been limited to 2.4 Mtpa. Design of the conveyors, leaching circuit, thickener and tailings pumps are driven by the transitional ore throughput rate.

The process flow was developed from the process design criteria prepared by GRES and summarised in Table 12.

Table 12: Design Criteria Summary

Description	Units	Transitional Ore	Fresh Ore	Source
Annual Throughput	t/a	2,400,000	2,000,000	
Design Feed Grade	Au g/t	1.20	1.50	
Crushing Circuit				
Type		Single Stage Crush	Single Stage Crush	
Plant Utilisation	%	85	85	Engineer
Required Crushing Rate	t/h	323	270	Calculated
Grinding Circuit				
Circuit Type		Single Stage SAG	Single Stage SAG	
Plant Utilisation	%	91.3	91.3	Engineer
Design Treatment Rate	t/h	300	250	Calculated
Product Size (P_{80})	µm	150	150	Test Work
Gold Recovery				
Leach Tanks	No.	2	2	Engineer
Adsorption Tanks	No.	6	6	Engineer
Leach & Adsorption Residence Time	hrs	24	29	Test Work
Elution Circuit Size	t	5	5	Test Work
Elution Schedule	strips/week	6	6	Engineer
Tailings				
Thickener Diameter	m	20	20	Test Work
Thickener Underflow Density	% solids	65	65	Test Work
Cyanide Destruct Method		Caro's Acid	Caro's Acid	Engineer

The plant design is simple and robust and comprises the following elements:

- Single stage crushing circuit, crushing to a P_{80} of 105 mm.
- Surge bin, reclaim feeder and crushed ore stockpile;
- Single stage SAG mill grinding circuit to produce leach feed slurry with a P_{80} of 150 microns;
- Gravity recovery;
- Leaching and adsorption;
- Tailings and Cyanide Destruction; and
- Elution and gold recovery.

Figure 15 provide the plant and administration area general arrangement and process plant general arrangement.

Sulphide Circuit

A small 100ktpa milling and flotation circuit is included in the capital cost estimate for initial treatment of the high-grade refractory Copenhagen deposit. The plant will produce an approximate 100g/t Au concentrate that will be shipped to a third party processing plant. Preliminary discussions have been entered with several international parties with indicative pricing for the concentrate received.

The sulphide circuit will be a small standalone, modular and transportable plant consisting of flotation cells, concentrate thickener and filter press. The concentrate would be loaded into "bulka bags" for transporting off site in a sealed sea container. It is expected that material will be feed to the plant via a mobile crushing plant and that the plant will be capable of being operated by a single person.

Tails from the sulphide circuit would report to the main CIL processing plant tails thickener for thickening and cyanide detoxification.

Testwork shows a recovery of 90% Au to concentrate grading 120g/t Au. Indicative offtake terms and shipping costs have been included in the financial model for this concentrate.

The Sulphide Circuit is earmarked as a potential processing option for the recently announced Blue Spec acquisition to produce gold- antimony concentrate.

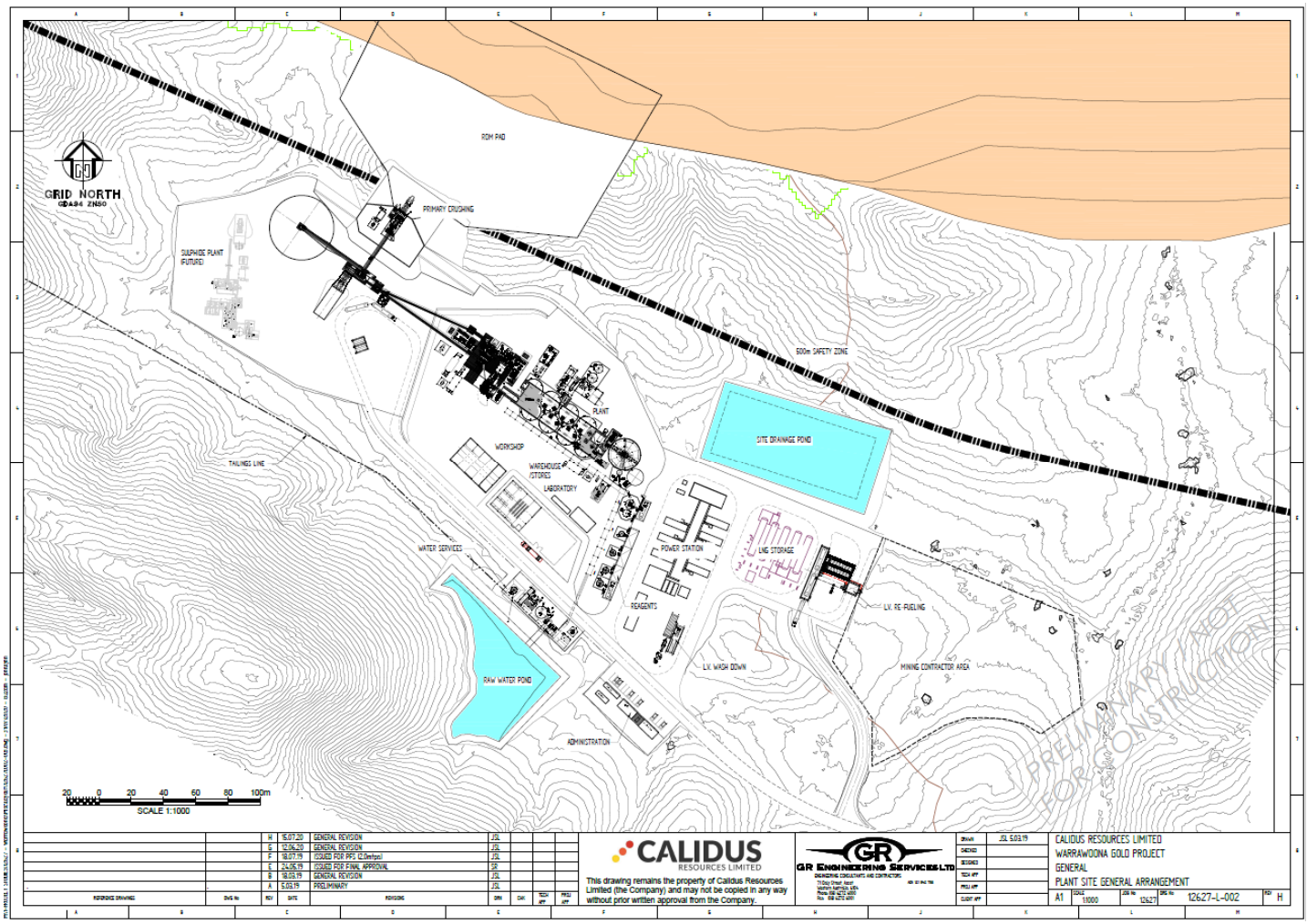

Figure 15: Plant Site General Arrangement

16. Tails Storage Facility

ATC Williams (ATCW) have completed the design of the Tailings Storage Facility (TSF).

The TSF is a valley type facility whereby a cross valley containment embankment approximately 17m high and 250m long will be constructed across a valley downstream of the process plant where a dolerite dyke cross cuts the valley. The tailings impoundment within the valley is approximately 750m wide and 2.3km long with an area of approximately 140ha. Tailings will be discharged down valley from an elevated location approximately 1.5km to the west of the proposed processing plant.

The facility catchment is approximately 5.7km^2 which comprises the tailings storage area, the natural catchment on the valley sides and the western portion of the proposed waste dump area.

Tails geochemical test work for both oxide/transitional and fresh samples indicates that the tails sample has significant acid neutralising capacity due to the calcareous groundmass resulting in a non-acid forming (NAF) classification.

Bleed water and incidental rainfall runoff from the tailings storage area and contributing external catchment will be pumped back to the process plant to be reused.

The general arrangement of the TSF, plant site, waste dump and Klondyke open pit is shown in Figure 16.

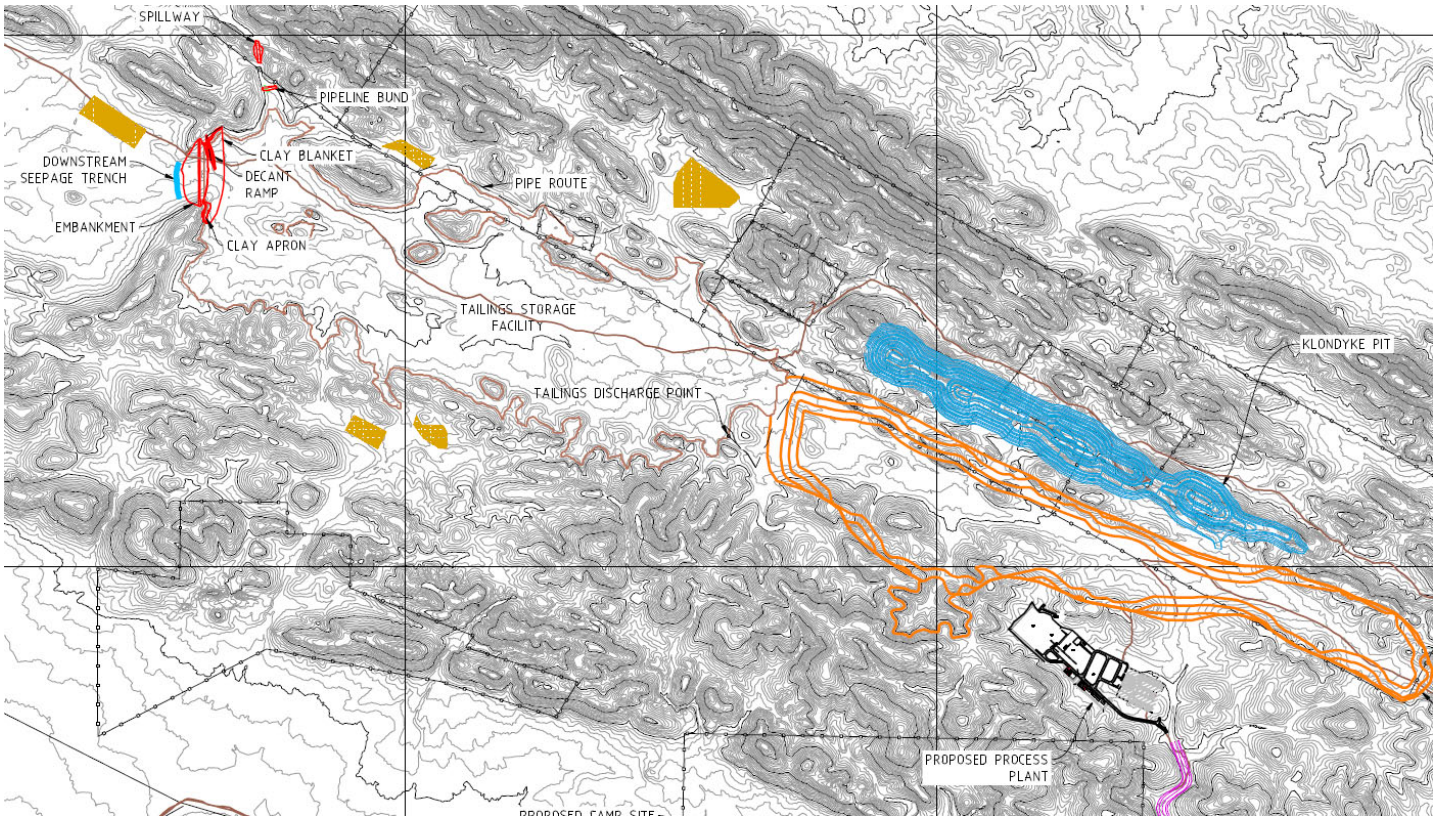

Figure 16: TSF General Arrangement

17. Non-Processing Infrastructure

Non-processing Infrastructure construction will be managed by a Calidus owners team.

The supporting non-processing infrastructure required for the operation of the Project under the owners project scope will include the following works with the pertinent features discussed below:

- Access road (due for completion December quarter 2020);
- Tailings storage facility (refer Section 16);
- Installation of the accommodation village (due for completion March quarter 2021);
- Upgrade of the Marble Bar Aerodrome in a co-funding arrangement with the Shire of East Pilbara;
- Communications network and IT facilities (due for completion December quarter 2020);
- Electrical power generation;
- First fills;
- Water supply including bores providing water for processing and potable supplies; and
- Light vehicles and mobile equipment.

Calidus has commenced an early works scope (ASX release 17th September 2020 *Construction underway at Warrawoona Gold Project*) which will be ongoing until the commencement of main project construction, with the intention of providing the back bone of infrastructure.

The early works scope entails the Site Access Road, Installation of the 240 person accommodation village, establishment of communications network, and installation of water bores that will be utilised for construction, dewatering and production.

Site Access Road

A 7km Access Road is being constructed from the public Corunna Downs Road to the project site. The access road will also be used as a service corridor for electrical and water services from the process plant and administration area to the accommodation village.

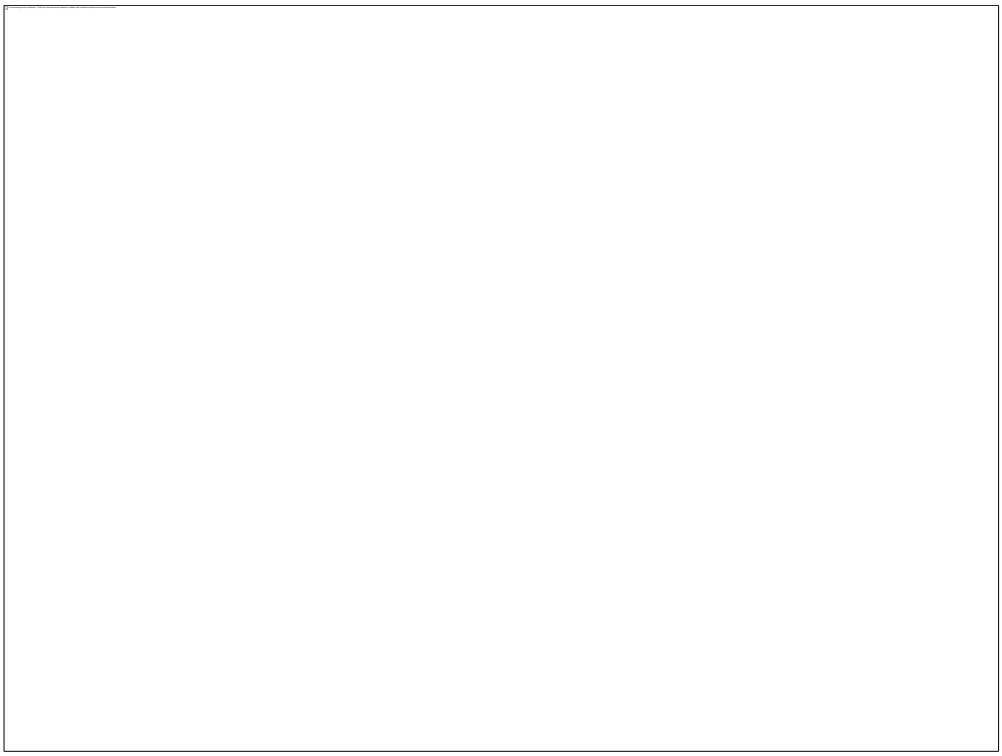

Figure 17: Site Access Road under construction

Aerodrome

An upgrade of the Marble Bar Aerodrome is being contemplated for the Project as part of a syndicated approach between the Shire of East Pilbara and Calidus (ASX release 27th April 2020 *Marble Bar Airport Upgrade*). During the construction phase personnel would travel to site via commercial flights into Port Hedland and bussed to site. The Marble Bar aerodrome upgrade is expected to be completed (including subsequent CASA approval) for commencement of production, at which time Charter aircraft would be utilised to transport personnel.

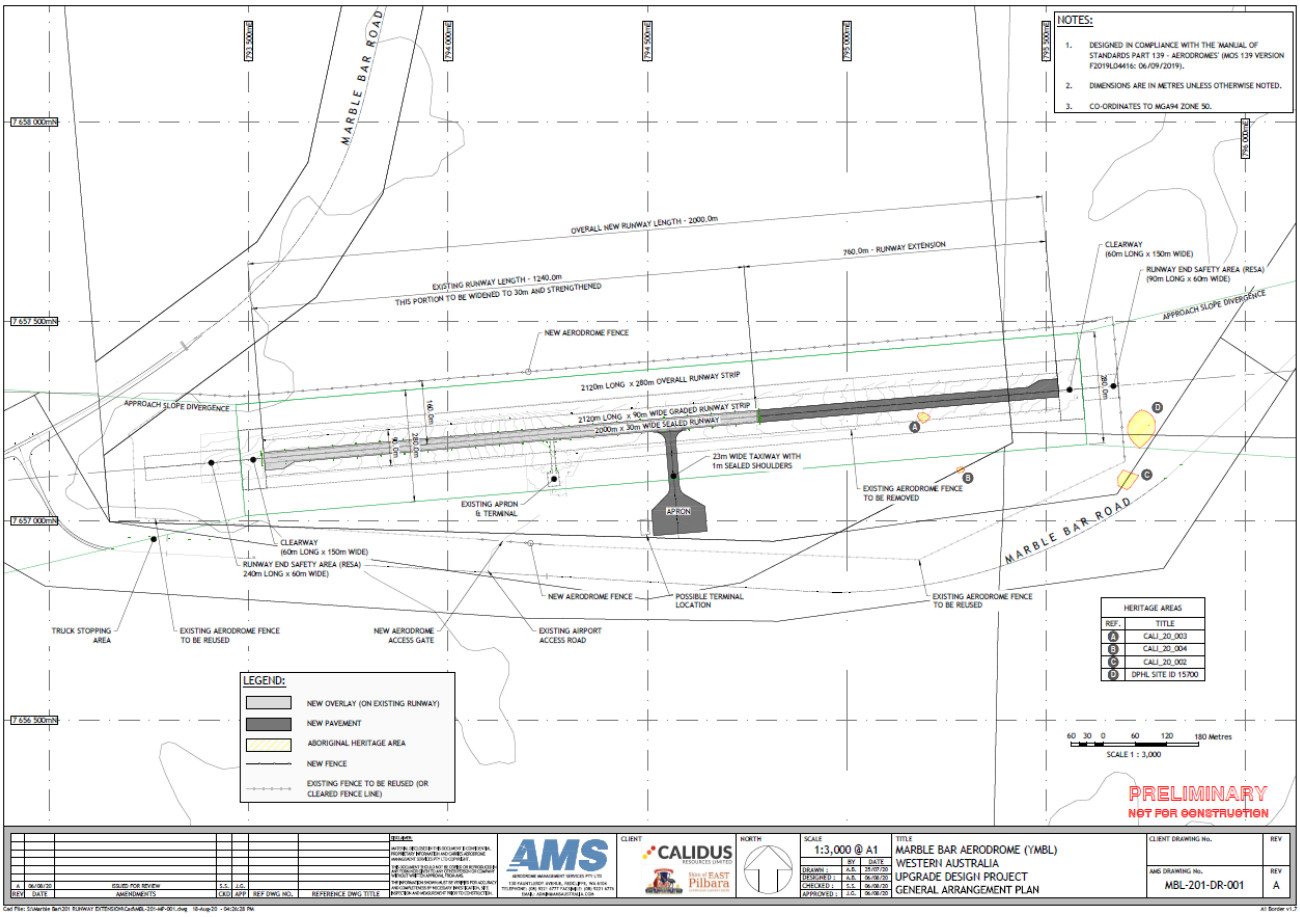

Figure 18: General Arrangement of Marble Bar Aerodrome upgrade

Accommodation Village

A 240 room accommodation village has been purchased for the project which also includes all amenities of kitchen/diner, Gymnasium, Recreation Room, Wet Mess and Laundries. The accommodation village is being installed at a site that is located on the southern side of local relief which provides a natural buffer (insulation) from noise and light from the processing plant and mining operations.

Figure 19: 240 Person Accommodation Village onsite at Marble Bar

Power Station

Electrical power for the mine, processing plant and accommodation village will be provided by a dedicated power station located on the process plant site. This station will consist of natural gas fired reciprocating generator sets with n+1 redundancy. Power will be generated at 11kV and distributed throughout the facilities through substations with respective transformers.

Power will be provided by a contractor under a Build Own Operate (BOO) agreement.

Bulk liquefied natural gas (LNG) fuel will be delivered to site by road tankers. Onsite gas storage and evaporation equipment will be installed adjacent to the power station.

A competitive tender has commenced for the Power Station and LNG Supply. Calidus expects to announce Preferred Tenderer for the Power Station and LNG Supply during the December Quarter.

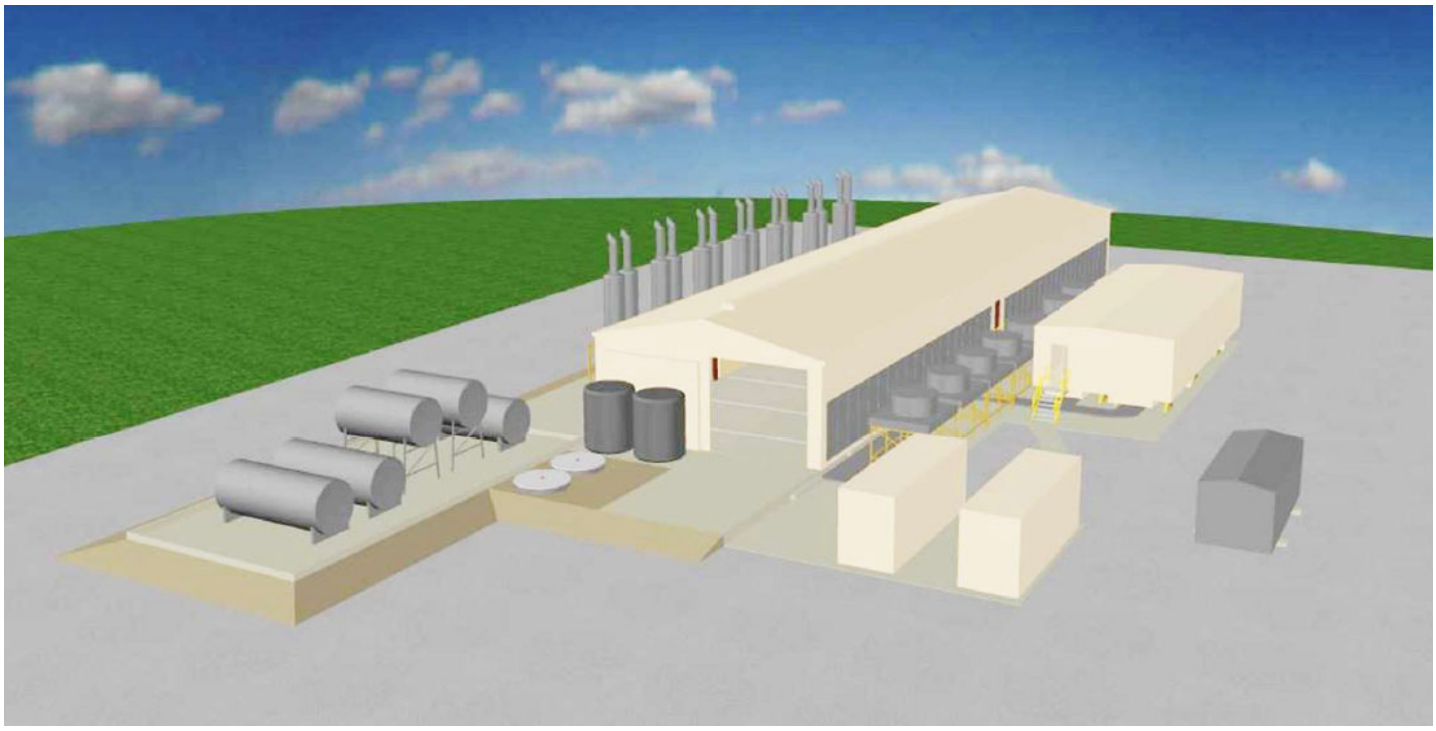

Figure 20: Indicative layout of Power Station

Communications

Site communications will be provided by Telstra through a combination of internet access via a microwave repeater linking the site to the Telstra exchange at Marble Bar and a site based Digital Mobile Radio System.

Waste Management

Sewerage production will be treated in a modular wastewater treatment plant located near the accommodation village. A site landfill facility registered under Rural Landfill Regulation will cater for domestic/putrescible waste from the mine site, kitchen, stores and workshop. Maintenance waste including waste oil will be removed from site using a licenced contractor. A bioremediation facility will be created to treat any contaminated soil from potential hydrocarbon spills.

18. Environment and Social

Calidus staff and representative consultants have and will continue to communicate and liaise with various stakeholders, including the Traditional Owners, Regulatory bodies, the Marble Bar community, Pastoral lease holders and the Shire of East Pilbara.

During formal stakeholder meetings, presentations were given to inform respective stakeholders of the likely Project logistics including a timeline for the various construction and operational aspects.

Calidus will seek to provide preferential opportunities for both Traditional Owners and local Marble Bar residents' as part of the mine operations.

19. Life of Mine Capital Cost Estimate

The capital costs for the Project includes all project development capital, pre-production mining costs (incurred prior to the commencement of gold production), development capital and sustaining capital. The capital costs are summarised in Table 13.

Table 13 - Capital Cost Summary

Capital Costs	Units	Pre-Production	Life of Mine
Processing Plant	A$M	78	84
Non-Processing Infrastructure and Owners Cost	A$M	23	24
Contingency	A$M	4	5
Project Development Capital	**A$M**	**105**	**113**
Pre-Production Mining Costs	A$M	15	15
Sustaining Capital	A$M	0	48
Development Capital	A$M	0	39
Total Capital Summary	**A$M**	**120**	**216**

Project Development Capital

The Project Development Capital estimate developed for the Feasibility Study combines a scope of works based on a Fixed Price Engineering, Procurement and Construction (EPC) contract execution methodology for the CIL process plant and direct associated infrastructure as well as a non-processing infrastructure scope of works controlled by the Calidus owners team with engineering input by the process plant engineer, or other third parties.

EPC Plant and Associated Infrastructure

A key tenor of the Feasibility Study including tendering and award of major Contracts, including the EPC Contract for the construction of the Processing Plant. As per ASX announcement on the 17th September, GR Engineering Services Ltd (GRES) were awarded Preferred Tenderer for the EPC Scope to construct the Processing Plant and associated infrastructure which includes, administration offices, stores, workshops to support the operations.

The EPC Offer from GRES represents the Capital Cost used in the Feasibility Study and is a Lump Sum amount incorporating some minor Provisional Sum amounts for items such as concrete civils for the Power Station.

As part of the award of Preferred Tenderer to GRES, Calidus has also committed to Front End Engineering and Design during the December Quarter including ordering of long lead items, including the SAG mill.

Non-Processing Infrastructure and Owners Costs

The non-processing infrastructure scope includes owners costs of management of construction activities, mining contractor establishment, tailings storage facility construction, installation of the accommodation village, aerodrome upgrade, roads, power reticulation, communications, administration buildings and other owners scope items (refer Section 17).

Non-processing infrastructure will be managed by the owners team with estimates based on quotes received from third parties and first principle estimates.

Owners costs for the project are inclusive of salaries, messing and accommodation, flights, equipment hire (temporary buildings and power), recruitment, communications and project insurances.

Contingency

The Company has received a fixed price EPC estimate for the for the process plant and associated infrastructure and has included an additional 2.5% contingency to cover scope changes. A separate contingency of 10% has been incorporated for non-processing infrastructure and owners costs. An addition a contingency has been added into year 2 of operations for the EPC capital cost of the stand-alone Copenhagen Float circuit.

Pre-Production Mining Costs

Pre-production mining costs incorporates all costs prior to the commencement of gold production and includes setup costs of operational departments, preparations for operations, open pit establishment and build-up of stockpiles in advance of the commencement of processing operations.

Development Capital

The development cost of the Klondyke underground has been incorporated based on a third party developed mine plan and mining costs. The initial capital associated with the development of the decline to first stoping of ore has been capitalised.

In addition to the initial project development capital the construction cost of the standalone Copenhagen float circuit has been incorporated into second year of operations. The estimate is based on an EPC methodology based on quoted prices.

Sustaining Capital

Sustaining capital estimates include ongoing sustaining capital of the processing plant and facilities, p lateral and vertical capital development of the Klondyke underground, and phase 2 tailings dam wall lift.

Breakdown of Sustaining Capital	Unit	Life Of Mine
Site Sustaining Capital	A$M	6
Underground Lateral and Vertical Development	A$M	37
Underground Sustaining Capital Items	A$M	5
Tailings Facility Wall Lift	A$M	1
Total Sustaining Capital	**A$M**	**48**

Excluded Costs

All project expenditure sunk as 31 December 2020 is excluded from capital cost estimates.

20. Operating Cost Estimate

Operating costs were estimated for mine operations, processing and business services based upon the updated life of mine plan.

Pricing for the surface mining costs were based on the tender submission of the preferred mining contractor. Underground mining costs were prepared by Entech in line with market rates.

Labour requirements were determined by GRES, the preferred mining contractor, Entech and Calidus. Salaries were estimated in line with prevailing industry rates. An allowance of 30% on costs has been added to base salary levels to cover annual leave, sick leave, public holidays, long service leave, superannuation, worker's compensation insurance, payroll tax, and training costs.

Flight and accommodation costs are based on quoted estimates received from catering and aviation charter service providers.

Processing costs were prepared by GRES in combination with Calidus. Major reagent prices were sourced directly from vendor budget prices. Major consumables and wear material prices were provided by the vendors at time of tendering. Some of the minor items were sourced from the GRES database from recent similar projects.

Maintenance spares for the processing facility have been calculated by multiplying the capital expenditure for supply and install by a standard maintenance factor from the GRES database.

A power model was created to calculate total site power requirements. Power consumption in the plant for the SAG mill came from the predicted power draw from the mill modelling process. Underground power requirements were determined by Entech. The power cost is derived from a tendered pricing for a natural gas fired Build Own Operate (BOO) Power Station. A temporary power generation arrangement has been provided for in the first 12 months until the power station is built.

Mobile equipment numbers and types were prepared by Calidus.

The total operating cost by each major centre (mining, processing and business services) is shown in Table 14. Government and third party royalties as well as sustaining capital items for each area has been estimated and included in all-in sustaining costs (AISC).

Table 14 – All-In Sustaining Costs

Costs of Production	LOM Cost (A$M)	LOM Unit Cost (A$/t)	LOM Unit Cost (A$/oz)
Open Pit Mining	$254 M	$18 /t OP Ore	$386 /oz
Underground Mining	$184 M	$53 /t UG Ore	$279 /oz
Total Mining	$438 M	$25 /t	$666 /oz
Processing and Maintenance	$278 M	$16 /t	$422 /oz
Business Services	$37 M	$2 /t	$56 /oz
Total Cash Cost (C1)	**$753 M**	**$43 /t**	**$1,143 /oz**
Royalties	$49 M	$3 /t	$74 /oz
Sustaining Capital	$48 M	$3 /t	$73 /oz
Total All-In Sustaining Cost (AISC)	**$849 M**	**$48 /t**	**$1,290 /oz**

Figure 21: Annual Gold Production and AISC breakdown

21. Financial Evaluation

Based on the capital and operating cost estimates a financial model has been developed for the purpose of evaluating the economics of the Warrawoona Gold Project. The full model has the capability to assess the capital structure for the development of the Project, including the Project's debt carrying capacity. The financial evaluation for the Updated PFS has been completed on a 100% project basis and is based on a A$2,500/oz study price. Table 15 shows key economic inputs for the Study.

Table 15 - Key Economic Inputs

Key Economic Inputs	
Gold Price for Optimisations	A$2,200/oz
Plant Construction	12 months
Commencement of Processing	Month 13
Diesel Price	$1.00 per litre
Power Cost	$0.19 per kWh
WA State Government Royalty	2.50%
Overall CIL Metallurgical Recovery	94.4%
Plant Utilisation	91.0%

Table 16 provides a summary of project cashflows and key metrics.

Table 16 - Key Feasibility Outputs and Comparison to the Updated PFS

Production Summary	Units	Feasibility Study			Updated PFS
Initial Mine Life	Years	8.3			8
Total Ore Mined	oz	17.6Mt @ 1.24g/t for 702koz			16.9Mt @ 1.22g/t for 663koz
Gold Recovered	oz	658,277			623,086
Processing Rate	Mtpa	Oxide/Transition 2.4Mtpa and Fresh 2.0Mtpa			
Average LOM CIL Metallurgical Recovery	%	94.4%			94.3%
Gold Revenue					
Gold Price	**A$/oz**	**2,200**	**2,500**	**2,800**	**2,500**
Gold Revenue	A$M	1,448	1,646	1,843	1,558
Pre-Production Capital					
Project Development Capital	A$M	105	105	105	103
Pre-Production Mining Costs	A$M	15	15	15	13
Total Pre-Production Capital	A$M	120	120	120	116
Operating Costs					
Open Pit Mining	A$M	254	254	254	264
Underground Mining	A$M	184	184	184	142
Processing and Maintenance	A$M	278	278	278	257
Business Services	A$M	37	37	37	30
Royalties	A$M	43	49	54	48
Sustaining Capital	A$M	48	48	48	38
Development Capital	A$M	48	48	48	15
Project Cashflow (Pre-tax)	**A$M**	**437**	**629**	**820**	**648**
$NPV_{8\%}$ (Pre-tax)	A$M	272	408	543	423
IRR (Pre-Tax)	% p.a.	58%	81%	103%	88%
Project Cashflow (Post-tax)	**A$M**	**309**	**447**	**587**	**468**
$NPV_{8\%}$ (Post-tax)	A$M	187	286	386	303
IRR (Post-Tax)	% p.a.	48%	69%	91%	77%
Payback Period	**Years**	**1.5**	**1.1**	**0.9**	**1.1**
Cash Cost (c1)	A$/oz	1,143	1,143	1,143	1,113
All-In Sustaining Cost (AISC)	**A$/oz**	**1,281**	**1,290**	**1,299**	**1,251**

The project is most sensitive to changes in gold price, operating cost and capital cost. The $NPV_{8\%}$ and IRR sensitivity to gold price are shown in Table 17.

Table 17 - A$ Gold Price Sensitivity

Pre-tax	Unit	A$2,000/oz	A$2,250/oz	A$2,500/oz	A$2,750/oz	A$3,000/oz
Project Cashflow	A$M	309	469	**629**	788	948
$NPV_{8\%}$	A$M	182	295	**408**	520	633
IRR	%	42%	62%	**81%**	100%	118%
Post-tax	**Unit**	**A$2,000/oz**	**A$2,250/oz**	**A$2,500/oz**	**A$2,750/oz**	**A$3,000/oz**
Project Cashflow	A$M	217	332	**447**	564	680
$NPV_{8\%}$	A$M	121	203	**286**	370	453
IRR	%	34%	51%	**69%**	87%	106%
Payback Period	Years	2.3	1.4	**1.1**	0.9	0.8

The sensitivity of Pre-Tax Project $NPV_{8\%}$ to changes in gold price, operating cost and capital cost is shown in Figure 22 using a base gold price of A$2,500/oz.

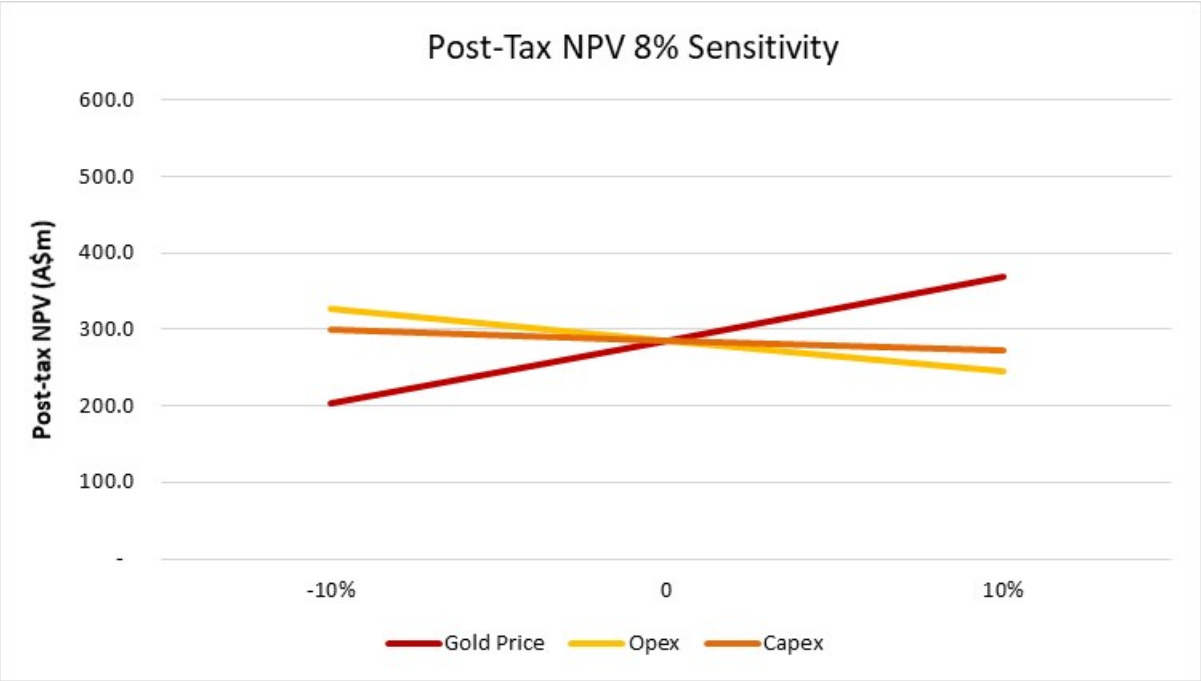

Figure 22: Sensitivity to Revenue, Operating Cost and Capital Cost

22. Opportunities

Management see numerous opportunities to enhance the Warrawoona Gold Project as it heads into development, these include:

- Combining the tails dam, bulk earthworks and airport upgrade in to one contract to maximise cost savings as these three items total $14m currently;
- Locating water closer to Klondyke to reduce the $5m budget for water supply pipelines that extend 45km from Klondyke;
- Increasing reserves and mine life via further conversion of the underground resource. Current drilling underway is targeting extensions to over 500m depth; and
- Inclusion of Blue Spec in future years through the sulphide circuit thereby potentially significantly enhancing the production profile and cashflows shown in this Feasibility Study.

23. Next Steps

Calidus is currently advancing financing discussions and finalising project approvals through the respective State and Federal agencies (Figure 23).

PERMITTING	TIMING	Q3 2020	Q4 2020	2021
EPA Recommendation	✓			
Ministerial Sign Off	✓			
Operating Permits	Q4 2020			
DEVELOPMENT STUDIES				
Updated PFS	✓			
Feasibility Study	✓			
FINANCING				
Appointment of Debt Advisor	✓			
Indicative Debt Term Sheets	✓			
Completion of Financing Facility	Q4 2020			
First Drawdown	Q1 2021			
DEVELOPMENT				
Tenders	✓			
Preferred Contactors	✓			
Early Works	✓			
Commence Construction	Q1 2021			
First Gold				2021/2022

Figure 23: High Level Project Timeline

Funding

As detailed in Section 19, funding in the order of $120M is required to achieve the outcomes indicated by this Feasibility.

Specialist natural resources investment house Argonaut has been appointed to act as the Company's exclusive debt advisor. There has been a substantial level of interest by potential financiers in the Project and Calidus expects that the appointment of Argonaut, combined with the experience of the Board and management in funding projects, will result in a tailored funding solution that appropriately manages shareholder dilution, cost and risk to the Company.

The Company's Board and Management have had a successful track record of developing and financing mineral resource development globally. The Project's positive technical and economic fundamentals provide a platform for the Company to advance discussions with traditional debt and equity financiers and forward sales counter parties.

Based on discussions with potential financiers to date, the Board is confident the Company will be able to finance the Project through a combination of debt and equity. In addition, the Company's aim will be to avoid dilution to existing shareholders, to the greatest extent possible.

Board and Management have been responsible for the study, financing and/or developmentof several large and diverse mining and exploration projects globally including Zimplats, Afplats, Adamus Resources, Millennium Minerals and Papillon Resources. Based on this experience the Board believes that a traditional debt:equity ratio of 70:30 is potentially achievable for the Project with a portion of the equity financed via mezzanine financing.

For the reasons outlined above, the Board believes that there is a reasonable basis to assume that future funding will be available as and when required. However, investors should note that there is no certainty that the Company will be able to raise the amount of funding required to develop the Project when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's shares, or that the Company may pursue other 'value realisation' strategies such as a sale, partial sale, or joint venture of the Project (which could reduce the Company's proportionate ownership of the Project.)

Project Permitting

The Warrawoona Gold Project recently received Environmental Protection Agency (EPA) approval from the Western Australian Minister for Environment (ASX release 24th August 2020 *EPA approval and funding update*).

The Commonwealth Department of Agriculture, Water and the Environment (AWE) has its own separate approvals process whereby it can undertake its own assessment under the EPBC Act. The Commonwealth elected to undertake an Accredited Assessment, where they will use the EPA Assessment to use as a base for their decisions thereby streamlining the approvals process. Final approval from the AWE is anticipated in the December Quarter of 2020.

With receipt of Ministerial Approval (EPA) Calidus is now able to submit the Mining Proposal (and Closure Plan) and Works Approval for the main Project Development. Both of these are well advanced and are expected to be submitted in a timely manner to enable the Project to be fully permitted by early 2021.

A Project Management Plan is also required to be approved by DMIRS, which predominantly deals with OHS Risk and mitigation and is also being prepared for submission.

In parallel to the above Calidus applied and subsequently received approval for "Minor and Preliminary Works" to complete the 7km Access Road and the installation of the 240 person accommodation village. Received approvals for this were a Native Vegetation Clearing Permit, Mining Proposal and Project Management Plan.

Major Contracts

Calidus announced its preferred tenderers for the mining contract and EPC Plant Construction on the 17th September 2020.

In addition to the Preferred Mining Tenderer Mining and EPC Contractor Calidus is well advanced in the tender process for the Build Own Operate (BOO) and LNG supply for the Power Station. It is anticipated that Preferred Tenderer status will be awarded early in the December Quarter.

Minor contracts such as the Catering Tender are currently in preparation and Calidus expects to have a preferred Catering Tender during the December Quarter for mobilisation early in 2021 to align with the main Project construction start.

INFORMATION PROVIDED WITH ACCORDANCE ASX LISTING RULE 5.9

In accordance with the ASX Listing Rule 5.9.1, the following summary information is provided to understanding the reported estimates of the updated Underground Ore Reserve. The assumptions used for the updated PFS have not materially changed from the most recent Ore Reserve announced to the market on 29th June 2020.

At the request of Calidus, Entech Pty Ltd ("Entech") carried out an Ore Reserve estimate for the Klondyke Underground (UG) mine as part of a feasibility study process. Klondyke UG Ore Reserve detailed here excludes the Klondyke open pit Ore Reserve (and all other Reserves) as detailed in the 29th June 2020 announcement.

Material Assumptions and Estimation Methodology

The Klondyke UG Ore Reserve estimate is based on mining methods, designs, schedules, cost estimates and modifying factors which have been determined to a feasibility study level of accuracy. Appropriate geotechnical analysis was provided by independent geotechnical consultants, Peter O'Bryan and Associates. The Ore Reserve mine plan was generated by running stope optimisation processes on the Mineral Resource followed by detailed development and capital infrastructure design.

All material was subjected to an economic evaluation in a detailed cost model underpinned by the feasibility study analysis. The mine plan is shown to be technically and financially feasible with a positive net present value assuming a discount rate of 8%. The assumed gold price for the Ore Reserve financial evaluation was AU$2,200/oz. The Competent Person has sufficient confidence that the Ore Reserve estimate will be financially viable within a reasonably expectable range of possible commodity prices.

Underground mining costs were sourced from reputable WA Based Underground Mining Contractors on a Request for Budget Pricing basis of estimate and truth checked against Entech's internal database of mining rates from other analogous WA Underground Projects.

All other costs in including Power, Diesel Price, Processing, General and Administration and Royalty calculations, as well as Metallurgical Recovery are as per the Feasibility Study inputs documented in this announcement.

Criteria for Classification

The Klondyke UG Mineral Resource Estimate (MRE) used as the basis for the Ore Reserve estimate was announced to market on 29th June 2020, and is unchanged from the previously announced MRE. Indicated Mineral Resources have been converted to Probable Ore Reserves subject to mine design physicals and an economic evaluation. No Measured material has been reported in the Klondyke Underground Mineral Resources. Any Inferred material contained within the mine plan has been treated as waste. All material has been assumed to be treated at the Warrawoona Processing Plant, planned to be constructed at the site.

Mining Method

The mining method selected was top-down longhole bench open stoping leaving in-situ pillars for support, based on orebody spatial characteristics and geotechnical recommendations.

An undiluted stope minimum mining width (MMW) of 2.0 m (true width) was applied to Klondyke. Unplanned dilution of 0.5 m true width on each hangingwall and footwall contact (1.0 m total) was applied in the stope optimisation process. The grade of this dilution material was determined based on the contained Resource. No unplanned dilution (i.e. overbreak) was assumed for development.

Mining recoveries of 95% were applied to stopes to allow for issues such as local orebody spatial variability and material left behind during remote loading. Rib pillars were allowed for every 30 m along strike, maintaining a maximum unsupported sidewall HR of 7.5 m as outlined in the geotechnical recommendations. Rib pillar strike lengths were based

on an aspect ratio of 1.0 (pillar strike length to pillar lode width) for stopes <5 m wide, with a minimum pillar strike length of 3 m. For stopes > 5 m in width, an aspect ratio of 0.8 was applied. 10 m thick sill pillars were allowed for every 3 sub-levels (~80-90 m vertically). All pillars were modelled in the schedule by applying an ore loss factor commensurate with the proportion of the stope shape left behind. These recovery assumptions represent a total ore tonnage modifying factor loss of 19%.

Processing Method

The Processing Method is a 2-2.5mtpa Conventional CIL Plant as documented in this Feasibility Study announcement.

Cut off Grade

Gold cut-off grade parameters for determining underground Ore Reserves were derived based on detailed financial analysis. A gold price of AU$2,200/oz was applied. The final derived cut-off grades used for design and analysis were:

- Stoping – 1.2 g/t Au; and
- Ore Development – 1.0 g/t Au.

Material Modifying Factors

Environmental Approvals, mining tenements and infrastructure are as documented in this Feasibility Study announcement.

Notes Specific-ASX Announcements

The following announcements were lodged with the ASX, and further details (including supporting JORC Reporting Tables) for each of the sections noted in this Announcement can be found in the following releases. Note that these announcements are not the only announcements released to the ASX but specific to resource reporting on the Warrawoona Gold Project. The Company confirms that it is not aware of any new information or data that materially affects the information on the Project and in the case of the Mineral Resource estimate, that all material assumptions and technical underpinning the estimates in the previous announcements continue to apply and have not materially changed..

- 74% increase in High Grade Warrawoona Resource to 712,000 Ounces at 2.11g/t Gold: 18 December 2017
- Pre-Feasibility Study and Maiden Reserve for Calidus' Warrawoona Project: 17 July 2019
- Updated PFS Delivers Increased Reserves and Robust Financials: 29 June 2020

Competent Persons Statements

The information in this report that relates to the Underground Ore Reserves is based on and fairly represents information compiled or reviewed by Mr. Matthew Keenan. Mr Keenan is a full time employee of Entech Pty Ltd. Mr Keenan has confirmed that he has read and understood the requirements of the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Keenan is a Competent Person as defined by the JORC Code 2012 Edition, having more than five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is accepting responsibility. Mr Keenan is a Member of the AusIMM and has provided his prior written consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Information

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on

forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code 2012 Edition and the ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors and production targets and financial forecasts based on all information disclosed in this announcement.

For further information please contact:

Dave Reeves
Managing Director

info@calidus.com.au

Appendix I: JORC Code, 2012 Edition – Table 1 Sections 1 – 4

JORC TABLE 1 DISCLOSURES
WARRAWOONA PROJECT
JORC Code, 2012 Edition – Table 1
Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	All drilling and sampling were undertaken in an industry standard manner. All recent samples collected by Calidus Resources have been with a diamond drill (DD) rig using HQ diameter core and with a 5 ½ inch reverse circulation (RC) rig. After logging and photographing, drill core was cut in half or quartered, with one half (or quarter) generally sent to the laboratory for assay and the other half retained. RC samples were collected every 1m, with 1/8 of each interval riffle split for sampling, and the remaining 7/8 of each material stored on site. Representative chips from the drilling are also retained in chip trays for reference. RC holes were sampled for their entire length on a nominal 1m basis. The historical RC samples were spilt at the rig and sampled on predominately 1m intervals, however some of the earlier samples from 1986, 1997, 2005 and 2007 were sampled at either 2m or 4m through the waste zone. Diamond core samples had a minimum sample of 0.5m, maximum of 1.5m and a 1m default sample length. Sample weights generally ranged from 2-6kg/m dependent on rock type. An independent laboratory pulverised the entire sample for analysis as described below.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	**KL/COP/FG** Recent RC samples were collected at one metre intervals by a cone splitter mounted to the drill rig cyclone. The cone is balanced vertically to ensure no bias. To ensure representative sampling, diamond cores were marked considering alteration intensity and veining orientations and selectively sampled for mineralisation or to geological contacts. The core was sampled nominally on 1m intervals or to geological contacts.
	Aspects of the determination of mineralisation that are Material to the Public Report.	**KL/COP/FG** RC drill holes were sampled at one metre intervals exclusively and split at the rig to achieve a target 2-5 kilogram sample weight. DDH holes were cut to ¼ or ½ NQ or HQ core and this was submitted at a variety of sample intervals. Samples were dried, crushed, split and pulverised by Nagrom Laboratories in Perth prior to analysis of gold using fire assay 50g charge. Historically most samples were assayed using Fire Assay or Aqua Regia digest, both using an AAS finish.

Criteria	JORC Code explanation	Commentary
		Gross sample weight for RC holes was 25kg, this was split to achieve a nominal 5kg final sample for analysis. The sample size, weight, analytical technique and laboratory are unknown for the historical Fieldings Gully historical holes. Core samples were routinely collected with interpreted mineralised zones of either half NQ or half HQ core selected by a geologist and submitted for Screen Fire Assay by Nagrom Laboratories in Perth, WA
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	**KL/COP/FG** RC Drilling was undertaken by Orlando Drilling Pty Ltd utilising an Atlas Copco (E235 Explorac) RC track-mounted drill rig utilising a 5 3/8 ''– 5 5/8" hammer. In August 2018 Egan Drilling mobilised to site utilising a Sandvik DE400 Series Heavy Duty RC track-mounted drill rig. Egan Drilling utilize an onboard 1470/500 compressor unit with an onboard booster rated at 900PSI to ensure samples are kept dry. Diamond drilling was also conducted by Orlando, using a Coretech (YDX-3L) track-mounted rig. Diamond drill core size was triple tube HQ and core was oriented with a Reflex ACT111 orientation tool. Top Drive drilling contractors mobilised to site on November 1st, 2018 to ensure a 22-hole deep diamond drilling program underneath an 800m section of the Klondyke orebody was completed by the end of the year. Top Drive also use a Coretech (YDX-3L) track-mounted rig.Core was oriented using a Reflex ACT111 orientation tool. The historical dataset drilling includes RC, RAB and DDH. RC drilling employed a diameter of 140mm (5.5"). Drilling was completed using face sampling hammer with hole depths ranging from 39m to 283m. Diamond core sizes drilled are not known, with holes ranging in depth from 128m to 331m. Core is assumed not to have been orientated as no structural information is available.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	**KL/COP/FG** RC and DDH sample recovery was generally very high, except on the rare occasion where water was struck down hole. DDH recoveries are measured during logging and RC are estimated at the drill rig and logged as a percent. Moisture is also recorded. Historically wet samples were captured in polyweave bags allowing the water to drain. This led to the loss of sample from these bags with the average gross sample reducing to approximately 15 kilograms. Gold losses due to the loss of fines were not quantified.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	**KL/COP/FG** RC holes were drilled using a Hurricane 6.7-276-41B Booster to ensure holes were kept dry and to maximise recoveries. CRA Exploration (CRAE) generated bulk samples from composites of drill chips representing both oxide and fresh rock to check for sample representivity. The deposit is high nugget and therefore representative sampling is difficult. Based on old reports, a booster running at 1000psi was also utilised

Criteria	JORC Code explanation	Commentary
		to keep historical holes dry.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	**KL/COP/FG** No recovery issues were identified with the RC drilling. Loss of fines at the cyclone was minimal and is not considered to have had a significant effect on sample recovery. No relationship has been noted between sample recovery and grade. Overall, sample recoveries were very high and did not present a problem.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies*	**KL/COP/ FG** All RC chips were geologically logged using predefined logging codes for colour, weathering, lithology, alteration, etc. RC logging was completed on one-metre intervals at the rig by the geologist. A subsample of washed and sieved RC chips from each metre was collected and stored sequentially in numbered plastic chip trays. Chip trays representing each RC drillhole are stored in the Company's Marble Bar field office. DDH was logged by geological intervals for geological (lithology, alteration, mineralogy, sulphide percentages) and structural information (including detailed geotechnical logging) and oxidation state. Most historical holes were geologically logged. This included structural and weathering information. A very small percent of holes (< 7%) had no logging.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	**KL/COP/ FG** Logging was predominately qualitative in nature, although vein and sulphide percentages were estimated visually. All diamond drill core was photographed after marking up and before cutting. Detailed geotechnical logging was undertaken on selected diamond core holes to provide open pit design parameters and preliminary underground design parameters.
	The total length and percentage of the relevant intersections logged.	**KL/COP/FG** 100% of all recovered intervals were geologically logged by a qualified geologist. Historically >93% of all recovered intervals were geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	**KL/COP/FG** All mineralized intervals of diamond drill core were cut and sampled as half core to provide a larger sample volume with intervals ranging from 0.2m to 1.5m. A minimum of three metres either side of

Criteria	JORC Code explanation	Commentary
		mineralized intervals was also sampled. Sampling intervals were controlled by geological boundaries and determined by a qualified geologist. The half core not submitted for assay was retained in the trays. Historic diamond core, based on available reports, was cut in half longitudinally with half submitted for analysis and the other half retained in core trays.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	**KL/COP/FG** RC samples were collected from the full recovered interval at the drill rig via an onboard cyclone and then split using an onboard rotating cone splitter. All samples were collected dry with a minor number being moist due to ground conditions or associated with rod changes when drilling below water table. The moisture content was logged and digitally captured by the supervising geologist at the time of drilling. Sample size presented for analysis was typically 1 to 3kg. Historically, RC samples were split at the drill rig. The type of splitter employed is unknown; however, it is stated that the split was generated in a single pass.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	**KL/COP/FG** The sample preparation technique employed by NAGROM laboratory includes oven drying at 105°C for 8 hours, fine crushing to a nominal topsize of 2mm, and pulverizing to achieve a grind size of 95% passing 75 micron. Samples in excess of 3 kg were split 50:50 using a riffle splitter so that samples can fit into a LMS pulverizing bowl. Historically, several laboratories were utilized for gold analysis. Most were all reputable, now ISO/IEC 17025 accredited laboratories such as ALS, Analabs and Genalysis, with a batch of samples in 1986 (equating to 3% of historical drilling) being sent to the unknown Minilab Laboratory for processing. The sample preparation for Genalysis was reported as follows: the whole sample was crushed and pulverized to 100% passing 75 micron and subsampled to yield 50 grams for a fire assay. The procedure utilised for the other historical laboratories was not located.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	**KL/COP/FG** Field QAQC procedures include the field insertion of blanks, standards and collection of field duplicates. These were inserted at a rate of 1 in 40 for each to ensure an appropriate rate of QAQC. Historical QAQC included the insertion of field duplicates and standards in addition to laboratory checks. Reports indicate the inclusion of blanks however no results are available for these samples. A database of 417 standards, 179 screen fire assay duplicates, 439 field duplicates and 1570 laboratory repeats make up the historical QAQC database. Most data were for the period 1995 – 2003. QAQC for other datasets could not be located.

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	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	**KL/COP/FG** Field duplicates from samples drilled to date generally showed a moderate correlation between original and field duplicates reflecting a nuggety component of gold mineralisation at Klondyke. Historical field duplicate data shows poor precision, not unexpected for this type of gold deposit (old reports suggest the occurrence of free gold may be up to as much as 74% occurring as both coarse and fine particles).
	Whether sample sizes are appropriate to the grain size of the material being sampled.	**KL/COP/FG** The sample sizes collected are in line with standard practice but the nuggety nature of the gold suggests that increased sample sizes for assay would be more appropriate. This sample uncertainty is reflected in the Mineral Resource classification assigned.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	**KL/COP/FG** Fire assay is a total digest and is completed using the lead collection method using a 50-gram charge. The prepared sample is fused in a flux to digest. The melt is cooled to collect the precious metals in a lead button. The lead is removed by cupellation and the precious metal bead is digested in aqua regia. The digest solution is analysed by ICP. The lower detection limit of 0.01ppm Au used is considered fit for purpose. **Historic Data Genalysis** - Two different digestion methods were utilized. The first was Aqua Regia. Elements were determined by AAS with the gold detection limit reported as 0.01pm. If gold assayed above 0.4ppm then the sample was re-assayed using fire assay with a 50g charge. Every fourth sample in the sequence was treated with a multi-acid digestion and analysed by OES. **ALS** - The prepared sample (either 25g or 50g charge) was fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6mg of gold-free silver and then cupelled to yield a precious metal bead. The bead was digested in 0.5mL dilute nitric acid in the microwave oven. Concentrated hydrochloric acid (0.5mL) was then added and the bead was further digested in the microwave at a lower power setting. The digested solution was cooled, diluted to a total volume of 10 mL with de-mineralized water, and analysed by atomic absorption spectroscopy against matrix matched standards. **Analabs** - Analabs has been acquired by SGS and as such detailed description of the analysis method recorded in the database (F650) is not readily definable. It is understood, however, that the analysis was a fire assay utilising a 50g charge, with an AAS finish. 65% of historical holes were assayed by fire assay, the remaining 35% were assayed by Aqua Regia. As Aqua Regia is considered a partial leach (it leaves an undigested silicate and alumina residue as well as

Criteria	JORC Code explanation	Commentary
		refractory minerals such as garnet and spinel), it can underestimate the gold content in the sample, particularly if fine gold is trapped in the silicates. A desktop study quantified the underestimation error caused by this analytical method as up to 26%. No laboratory analysis data was located for the Fieldings Gully historical dataset.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	**KL/COP/FG** Work by the CSIRO in the Yilgarn Craton indicated that a diagram of Ti, Cr and Zr effectively distinguished major mafic and ultramafic rock types (Walshe et al., 2014). A modification of this approach, using Cr/Ti ratios, was deemed more suitable for the Warrawoona Project area based on Minalyzer data collected by CSIRO at the Klondyke and Copenhagen gold deposits (Miller et al., 2018). A Vanta M-series pXRF unit was used to help in assigning lithologies during logging of both RC chips and drill core. Samples were analysed in soil mode with beam times set at 15s each. A calibration check on the Vanta pXRF was conducted at the start of each analytical session followed by analysis of a blank sample and a series of standards (NIST or OREAS). If assays for any standards failed to fall within an acceptable range (defined as three standard deviations of the baseline value), the standard was repeated until acceptable values were obtained before moving onto the next batch of unknown samples. Point data were plotted up for the Cr/Ti ratios using the subdivisions for high-Ti mafic, low-Cr mafic, high-Cr mafic, ultramafic and metasedimentary rock established by CSIRO.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	**KL/COP/FG** Certified reference material (standards and blanks) with a wide range of values are inserted into every drillhole at a rate of 5% for exploration and resource RC and DD programmes. These are not identifiable to the laboratory. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the inhouse procedures. These were inserted randomly at a rate of 1 in 40 with extra QC checks conducted after the initial analysis on specific samples deemed appropriate by the laboratory. Results of these checks show that sample and assay procedures are acceptable for resource reporting. No bias has been detected, precision was reasonable considering the deposit type and only a 2% failure of CRM's was reported (less for laboratory standards). 500g LeachWELL analysis were conducted on selected previously assayed samples at Klondyke to investigate the effect of utilizing a larger sample size and to assess the efficiency of potential cyanide leach extraction methods. Results of these checks show that sample and assay procedures are acceptable for resource reporting. LeachWELL analysis showed that the fire assay may underrepresent the grade up to approximately 5%, at grades between 0.7g/t -3g/t.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>For the 22-hole Klondyke Underground (KL UG) program the Screen Fire Assay technique was utilized primarily through the interpreted mineralized zones. QAQC samples were routinely inserted at a rate of 1 in 40 and no bias was detected upon inspection of results.

The QAQC data for some of the historical Klondyke holes showed that there was an underestimation bias caused by the aqua regia digest. Results are tabulated below. Precision was difficult to test for laboratory repeats as generally a different method of analysis was used for the repeat sample.

<table>
<tr><th rowspan="2">Standard</th><th>Standard</th><th>Aqua Regia (AR)</th><th>Fire Assay repeat (FA)</th><th>Variance</th><th>Variance</th></tr>
<tr><th>Value (SV)</th><th>Av. grade</th><th>Av. grade</th><th>1- (AR/SV)</th><th>1- (FA/SV)</th></tr>
<tr><td>7C</td><td>2.48</td><td>2.06</td><td>2.36</td><td>17%</td><td>5%</td></tr>
<tr><td>OREAS7Ca</td><td>2.54</td><td>1.89</td><td>2.45</td><td>26%</td><td>4%</td></tr>
<tr><td>OREAS2Ca</td><td>0.599</td><td>0.54</td><td>0.56</td><td>10%</td><td>7%</td></tr>
<tr><td>OREAS6Ca</td><td>1.48</td><td>1.1</td><td>1.46</td><td>26%</td><td>1%</td></tr>
<tr><td>6C</td><td>1.37</td><td>1.19</td><td>1.39</td><td>13%</td><td>-1%</td></tr>
</table>

No QAQC data was located for historical Fieldings Gully holes</td></tr>
<tr><td rowspan="2">Verification of sampling and assaying</td><td>The verification of significant intersections by either independent or alternative company personnel.</td><td>KL/COP/FG

Significant intercepts have been reviewed in the available data by senior geological staff and independent consultants.

Historic significant intercepts have been cross-referenced to earlier reporting. Many of the original assay results are not available for reference.</td></tr>
<tr><td>The use of twinned holes.</td><td>KL/COP/FG

Attempts were made to twin several historical holes during 2018 however due to significant lift and sway in the drilling they cannot be considered true twins.

Hole RC96KL59 was successfully twinned with hole 17KLRC066. Total (noncontiguous) intercepts are: RC96KL59 - 37m @2.10g/t and 17KLRC066 – 42m @ 2.04g/t.

At Fieldings Gully, hole 17FGRC008 was drilled within 3m of historic hole FG024. The significant intercept for the historic hole was 8m @ 3.36g/t from 19m in hole FG024. Hole 17FGRC008 reported 11m @ 1.74g/t from 28m. Hole FG024 also was quite a shallow hole compared to 17FGRC008 and finished in mineralisation.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	**KL/COP/FG** Geological data is logged into Excel spreadsheets on a Toughbook computer at the drill rig for transfer into the drill hole database. DataShed is used as the database storage and management software and incorporates numerous data validation and integrity checks using a series of predefined relationships. All original planned data is retained in DataShed for validation purposes.
	Discuss any adjustment to assay data.	**KL/COP/FG** Adjustments made to the assay data were limited to the replacement of below detection results with a negative value.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	**KL/COP/FG** Drill hole collar positions have been accurately surveyed by registered surveyors utilising DGPS survey equipment to an accuracy of +/- 0.01m. Down holes surveys were conducted by Direct Systems Australia using a north seeking gyroscope. Historically, where records are available drill collar locations were surveyed using a total station in AMG84 Zone 50 coordinates. Collar details were subsequently transformed to MGA94 using published transformation criteria relevant to Zone 50. Down hole surveys were completed using single shot cameras following completion of drilling. Where records are not available the method of collar and down hole surveys are not known. For those holes with survey details recorded, survey accuracy of both collars and down hole is considered acceptable.
	Specification of the grid system used.	**KL/COP/FG** The grid system used for locating the collar positions of drillholes is the Geocentric Datum of Australia (GDA94) Zone 50 (MGA94 projection). Elevations are recorded in Australian Height Datum (AHD). All reported coordinates are referenced to this grid. Topographic control is provided by topographic mapping undertaken by Geoimage Pty Ltd. Historical data has been transformed from AMG84 Zone 50 into MGA94 Zone 50.
	Quality and adequacy of topographic control.	**KL/COP/FG** Topographic control is provided by topographic mapping undertaken by Geoimage. Raw data was as follows: • Recent archive Ortho-Ready Standard Level 2A WorldView-2 (WV2) stereo imagery • 50cm resolution panchromatic, 2m resolution 4-band multispectral • 2 swaths acquired over 100 sqkm, both swaths captured on 12 October 2018

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	**KL/COP/FG** Drilling has been completed on a variable grid drilled orthogonal to the mineralisation. At **Klondyke** this approaches 25mX x 25mY. In 2019, close-spaced drilling over a limited area was completed at a 12.5mX x 12.5mY spacing. At **Copenhagen** the pattern is close to 10mX x 5mY in some near surface areas, moving out to 30m centres and wider in deeper parts of the orebody. At Fieldings Gully the pattern is close to 10mX x 5mY in some near surface areas, moving out to 50m centres and wider in deeper parts of the orebody. Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation procedures.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	**KL/COP/FG** Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation procedures. The Klondyke deposit shows reasonable continuity of the main mineralized zones allowing the drillhole intersections to be modelled into coherent, geologically robust wireframes. Reasonable consistency is evident in the thickness of the structure, and the distribution of grade appears to be reasonable along strike and down plunge.
	Whether sample compositing has been applied.	Samples have been composited to 1m. Greater than 97% of the samples had a length of 1m prior to compositing.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	**KL/COP/FG** The gold mineralisation identified to date at Warrawoona consists of a number of interpreted mineralised veins / structures striking approximately 100 to 115° and dipping steeply (70°-90°) to the south. Resource drilling is predominantly conducted at -60 degrees orthogonal to strike and as such drill holes intersect the mineralisation close to perpendicular. As such the orientation of drilling is not likely to introduce a sampling bias.

Criteria	JORC Code explanation	Commentary
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	**KL/COP/FG** The orientation of drilling with respect to mineralisation is not expected to introduce any sampling bias.
Sample security	*The measures taken to ensure sample security.*	**KL/COP/FG** The chain of custody is managed by Calidus employees and contractors. RC drilling samples are placed into pre-numbered calico bags directly from the splitter under the supervision of the rig geologist. Diamond core is transported from site by Company personnel to a secure facility in Marble Bar where it is logged and sampled then stored. The rig geologist places the calico bags containing the samples into large plastic sample bags and transports them to the Marble Bar field office where a sample submission form is completed. The details entered onto the sample submission form are the means by which the samples are tracked through the analytical laboratory. Samples await collection for transportation in a locked freight container and are then shipped by an external road freight company to the laboratory in Perth. The laboratory provides the Company with a reconciliation of samples submitted compared to samples received. The security measures for the historical data are unknown.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	**KL/COP/FG** A review of the data against historical reports and information has been undertaken concurrent with the drilling programs by both the Geological Database Manager and the Exploration Manager. Data from this review has been used to validate such things as positions of collars and assay data. Historical data for the Fieldings Gully deposit has not been reviewed.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The historical Warrawoona mining centre is situated in the East Pilbara District of the Pilbara Goldfield of Western Australia, approximately 150km SE of Port Hedland and approximately 25km SE of the town of Marble Bar. Calidus Resources Pty Ltd owns 100% of Keras (Pilbara) Gold Pty Ltd, the registered holder of the tenements.

Criteria	JORC Code explanation	Commentary

CALIDUS RESOURCES & SUBSIDAIRIES TENEMENT SCHEDULE

Tenement ID	Holder	Size (ha)	Renewal	Ownership/ Interest
GRANTED				
E45/3615	Keras (Pilbara) Gold Pty Ltd	3,513.73	22/11/2020	100%
E45/4236	Keras (Pilbara) Gold Pty Ltd	958.25	19/10/2024	100%
E45/4555	Keras (Pilbara) Gold Pty Ltd	1,917.75	1/03/2022	100%
E45/4843	Keras (Pilbara) Gold Pty Ltd	942.15	2/07/2022	100%
E45/4856	Keras (Pilbara) Gold Pty Ltd	2,554.05	20/05/2023	100%
E45/4857	Keras (Pilbara) Gold Pty Ltd	6,704.61	20/05/2023	100%
E45/4905	Keras (Pilbara) Gold Pty Ltd	638.86	29/11/2022	100%
E45/4906	Keras (Pilbara) Gold Pty Ltd	319.46	29/11/2022	100%
E45/5172	Keras (Pilbara) Gold Pty Ltd	4,307.32	30/05/2024	100%
M45/0240	Keras (Pilbara) Gold Pty Ltd	6.07	17/11/2028	100%
M45/0521	Keras (Pilbara) Gold Pty Ltd	18.11	10/03/2034	100%
M45/0547	Keras (Pilbara) Gold Pty Ltd	17.72	2/05/2035	100%
M45/0552	Keras (Pilbara) Gold Pty Ltd	9.71	18/01/2035	100%
M45/0668	Keras (Pilbara) Gold Pty Ltd	242.05	28/12/2037	100%
M45/0669	Keras (Pilbara) Gold Pty Ltd	101.95	28/12/2037	100%
M45/0670	Keras (Pilbara) Gold Pty Ltd	113.10	29/12/2037	100%
M45/0671	Keras (Pilbara) Gold Pty Ltd	118.65	29/11/2037	100%
M45/0672	Keras (Pilbara) Gold Pty Ltd	116.20	1/08/2037	100%
M45/0679	Keras (Pilbara) Gold Pty Ltd	121.30	8/04/2038	100%
M45/0682	Keras (Pilbara) Gold Pty Ltd	235.95	17/04/2038	100%
P45/3065	Keras (Pilbara) Gold Pty Ltd	29.45	29/03/2024	100%
Applications				
P46/1972	Keras (Pilbara) Gold Pty Ltd	194.57	APPLICATION	100%
Joint Venture				
E45/3381	Beatons Creek Gold Pty Ltd	7,965.63	16/03/2021	70%
E45/4666	Beatons Creek Gold Pty Ltd	3,163.98	23/11/2021	70%
E45/4622	Beatons Creek Gold Pty Ltd	4,222.07	4/05/2022	70%
E45/4934	Beatons Creek Gold Pty Ltd	1,596.99	22/01/2023	70%
P45/2781	Beatons Creek Gold Pty Ltd	2.42	10/06/2020	70%

Criteria	JORC Code explanation	Commentary
		All leases were granted before Native Title determination. A search of the Department of Aboriginal Affairs registered Aboriginal sites and heritage places (Western Australia Department of Aboriginal Affairs, 2013) did not identify any sites within or immediately adjacent to the Klondyke tenements.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing. Two bat species are known to exist in some of the old workings located in or adjacent to the current Klondyke resource area (M45/669). These bats are listed as "Vulnerable" under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC). As such, it is anticipated this will result in the submission of an EPBC referral that will likely require a management plan, which in-turn will require extensive studies and consultation to enable approval.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The Warrawoona area is thought to have been discovered as a result of the gold rushes to the Pilbara in the late 1880s. Modern exploration has been undertaken by the Geological Survey of Western Australia (GSWA) followed by a number of explorers in the mid-1980s and then from 1993 to the present day. During this period Aztec Mining, CRA, Lynas and Jupiter all conducted exploration in the Klondyke area. Drilling information from these explorers has been reviewed and included as part of these Mineral Resource estimates, with the respective confidence in the quality considered in assignment of the Mineral Resource classification applied.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Warrawoona Project leases lie within the Warrawoona Group, one of the oldest greenstone belts within the Pilbara Craton. Composed largely of high-Mg basaltic lavas with lesser tholeiite, andesite, sodic dacite, potassic rhyolite, chert and banded iron formation (BIF), all metamorphosed to greenschist facies, the Warrawoona Group is sandwiched between the Mount Edgar batholith to the north and the Corunna Downs batholith to the south. Gold occurs in quartz veins and stringers in the Klondyke, Copenhagen and Fieldings Gully Shears and mineralisation is associated with quartz-carbonate-sericite-pyrite alteration. Quartz veins and stringers are generally approximately parallel to the predominant shear direction. The bulk of the gold mineralisation is hosted in strongly sericitised and sheared mafic units with thin chert bands marking probable stratigraphic breaks. Over some abandoned workings gold mineralisation is associated with copper as indicated by the presence of malachite and other copper carbonates.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *easting and northing of the drill hole collar*	All drill holes within the mineralised zones were used to support the Mineral Resource estimate, and a summary of these holes is therefore not included in this report. The details of drill holes material to the exploration results reported in the announcement are included in this announcement, refer Table One.

Criteria	JORC Code explanation	Commentary
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar *dip and azimuth of the hole* *down hole length and interception depth* *hole length.*	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	All reported assays have been length weighted. No top-cuts have been applied in the compilation of length weighted grades for reporting of exploration results. For **Klondyke Underground** (KL UG) a nominal lower cut-off grade of 2.0g/t Au is applied, with up to two metres internal dilution. A minimum intercept width of 0.01m is required.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade gold intercepts within broader lower grade intercepts are reported as included intervals.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents values are used for reporting of exploration results.
Relationship between mineralisation widths and intercept lengths	*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	The gold mineralisation identified to date at the Klondyke, Fieldings Gully and St George prospects consists of a number of interpreted mineralised lodes striking approximately 135^0 and dipping steeply (80°-85°) to the north, Copenhagen has a similar strike but dips less steeply (at 70°) to the north. Resource drilling is predominantly conducted at -60 degrees orthogonal to strike and as such drill holes intersect the mineralisation close to perpendicular.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Included in announcement
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Reported Calidus RC drill results at all other locations have been calculated using a 0.3g/t Au lower cut-off grade with a minimum intercept width of 2m. A total of up to 2.0 metres of internal waste can be included in the reported intersection.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No other meaningful data to report
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Calidus Resources Limited will be focusing on the staged resource definition drilling at Klondyke, Copenhagen, Coronations and Fieldings Gully in addition to pit optimisation studies, metallurgical studies, development studies and exploration drilling at priority targets over the next 12 months.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Contained in report

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database Integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes* *Data validation procedures used.*	Data was provided as a validated Microsoft Access Database and was digitally imported into Surpac 2020, Datamine Studio RM (version 1.5.47.0) and Micromine 2020 software for resource estimation purposes. Validation routines were run to confirm validity of all data. Analytical results have all been electronically merged to avoid any transcription errors.
Site visits	*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 visited site during March of 2020 and inspected the deposit and formed an understanding of the geological and geographical setting of the deposit. Drill core and RC sample chips were inspected at the storage site in Marble Bar and compared with drill logs. Two previous site visits to the Warrawoona Gold Project have been undertaken by Optiro. First by Mr Paul Blackney during April 2018 who inspected the diamond drilling, sampling/logging and drill core and reviewed the project/deposit geology. A second visit by Mr Mark Drabble during August 2018, who reviewed geology, logging, sampling protocols, QAQC systems and drill core, provided assistance with planning infill drilling, and confirmed outcrop and surface exposures and historical mining. The outcome of the site visit was that data has been collected in a manner that supports reporting an MRE in accordance with the guidelines of the JORC Code, and controls on the mineralisation are well-understood. The project location, infrastructure and local environment were appraised as part of JORC's "reasonable prospects" test.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The confidence in the geological interpretation is good, with the latest infill drilling allowing a detailed understanding. Alternative interpretations would result in similar tonnage and grade estimation techniques. Comparison between successive, independently completed resource estimates show correlation across the defined mineralisation. Any differences are due to additional volume defined and treatment of high-grade samples within the mineralisation with the effect of increased tonnage and slightly decreased grades.

Criteria	JORC Code explanation	Commentary
		Geological boundaries are related to by the spatial distribution of grade within the mineralised structures. **KLON** - For the Klondyke Trend, a contact analysis was used to identify an area adjacent to the Kopcke's Leader, considered to display elevated gold grades by Calidus geological staff, to define a central high-grade core. Surrounding material, within the fuchsite and sericite schists, where used for the definition of a low-grade domain. These high- and low-grade domains were defined using a categorical indicator estimation process. Additional mineralisation domains on the St George Trend were defined using Leapfrog implicit modelling techniques. Low-grade domains are defined for material >=0.2 g/t gold with high-grade defined for material >=0.5 g/t gold. The categorical indicator and implicitly defined mineralisation domains were used to constrain the grade estimation. Dynamic anisotropy (DA) was employed to define local block search ellipsoids for the high-grade and low-grade categorical indicator estimates. A surface generated from the mid-point of the Kopckes Leader chert unit was used to define the search direction of the DA for each block.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	For Klondyke (KL) the lateral dimensions of the resources are shown in the diagrams in the body of this release. The mineralisation has a sub-vertical dip as shown in diagrams in the body of this release, and ranges from 2m to 20m thick. The resource extends over approximately 5.1 km of strike and extends to a vertical depth of over 500 metres. The St George Trend mineralisation has a sub-vertical dip and ranges from approximately 1 m to 10 m thick with an approximate strike of 1.6 km extending to a vertical depth of approximately 200 m. The resource is currently considered open along strike and down dip. The lateral dimensions of the Copenhagen resources are shown in the diagrams in the body of this release. The mineralisation has a moderate to steep dip as shown in diagrams in the body of this release, and ranges from 2m to 10m thick. The resource extends over approximately 210m of strike and extends to a vertical depth of 190m The lateral dimensions of the Fieldings Gully resources are shown in the diagrams in the body of this release. The mineralisation has a steep dip as

Criteria	JORC Code explanation	Commentary
		shown in diagrams in the body of this release, and ranges from 2m to 10m thick. The resource extends over approximately 440m of strike and extends to a vertical depth of 140m
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	**KL -** Grade estimation using an Ordinary Kriging methodology has been applied. High and low-grade wireframes have been generated using Categorical Indicator Modelling to subset and constrain the data points used in the interpolation and only individual grades from individual wireframes were used. Localised Uniform Conditioning (LUC) was then applied to the Ordinary Kriged model. **KL UG** – Grade estimation using Ordinary kriging has been applied within low and high-grade domains defined by Indicator modelling of mineralised intervals. These intervals are defined an automated algorithm with a minimum of 3m @ 0.3g/t Au. High grade domains had a minimum composite grade of 1g/t Au **COP -** Grade estimation using an Ordinary Kriging methodology has been applied to Copenhagen. A nominal 0.3 g/t wireframe was interpreted on section and used to subset and constrain the data points used in the interpolation and only individual grades from individual wireframes were used. Variography was carried out on the main mineralisation zone to define the variogram models for Ordinary Kriging interpolation. **FG -** Grade estimation using an Ordinary Kriging methodology has been applied to Fieldings Gully. A nominal 0.3 g/t wireframe was interpreted on section and used to subset and constrain the data points used in the interpolation and only individual grades from individual wireframes were used. Variography was carried out on the main mineralisation zone to define the variogram models for Ordinary Kriging interpolation. Estimations for Copenhagen and Fieldings Gully were carried out in Surpac 2020. Klondyke open pit estimations were carried out in Datamine Studio RM (version 1.5.47.0). Klondyke Underground estimations (below 100mRL) were carried out in Micromine 2020. **KL -** The block models were constructed using a 20m (E) by 10m (N) by 10m (Z) block size, constrained by high and low-grade wireframes, with no sub-celling. The LUC model uses 10m (E) by 2.5 (N) by 2.5 (Z) blocks. **KL UG** – The underground model was constructed with 2.5m (E) by 1.25m (N)

Criteria	JORC Code explanation	Commentary
		by 1.25m (Z) blocks using a unfolding planes generated from a updated interpretation's mineralised zones. No sub-celling of blocks. **COP -** The block models were constructed using a 5m (E) by 2.5m (N) by 2.5m (Z) block size, constrained by the mineralised wireframe, with sub-cells to 0.5m x 0.5m x 0.5m to accurately represent wireframe shapes. **FG -** The block models were constructed using a 20m (E) by 5m (N) by 10m (Z) block size, constrained by the mineralised wireframe, with sub-cells to 5m x 1.25m x 2.5m to accurately represent wireframe shapes. **KL/KL UG -** The model cells are rotated 25 degrees around the Z axis to align with the strike of the mineralisation. **COP -** The model cells are rotated 30 degrees around the Z axis to align with the strike of the mineralisation. **FG** - The model cells are unrotated. **KL -** Block size is generally equal to, or one half of the sample spacing or greater in areas of infill drilling, and typically one half in wider spaced drilling areas. **KL UG** – Due to the narrow nature of the mineralised zone, the block size was reduced to reflect this. **COP -** Block size is generally half to one-quarter the sample spacing or greater in areas of close spaced infill drilling, and typically greater at the extremities and at depth **FG** - Block size is generally half to one-quarter the sample spacing or greater in areas of close spaced infill drilling, and typically greater at the extremities and at depth No deleterious elements have been identified No assumptions regarding recovery of by-products have been made An unfolding (or vertical flattening) methodology has been used in the interpolation of the Klondyke deposit; this obviates the need for varying search ellipses with dip, with all searches being vertical, and oriented along the strike direction of the mineralisation. Copenhagen used different search orientations for each of the mineralised zones and Fielding Gully utilises 2 orientations dependent upon the strike/dip of the mineralisation wireframes.

Criteria	JORC Code explanation	Commentary
		Search ellipsoids use multiple passes to ensure blocks are filled in areas with sparser drilling. Sizes of searches are based on Kriging Neighbourhood Analysis and are covered in detail in the body of the accompanying report. Sample data was composited to 1m down-hole composites, while honouring breaks in mineralised zone interpretation. Top cut analysis was carried out on the high and low grade mineralised zones, using a combination of inflection points on log probability plots, outliers on log histograms and the effect of top cuts on cut mean and coefficient of variation. **KL -** Top cuts used are 25 g/t Au in the high-grade Zone, 10 g/t in the low-grade zones and 7.5 g/t at St George. **KL UG** - 30 g/t Au for the main high-grade domain, 25 g/t Au for the hangingwall and footwall domains and 15 g/t Au for St George. **COP -** A top cut value of 30, 20, 10 and 8 g/t Au is applied for the zones 1 to 4 respectively. **FG** – A top cut value of 20g/t Au has been applied. Validation was carried out in a number of ways, including o Visual inspection section, plan and 3D o Swathe plot validation o Model vs composite statistics o ID2 vs OK model checks All methods of validation produced acceptable results.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The resource has been reported at a 0.5 g/t Au cut-off. Final reporting will require an economic analysis of cut-off grades for a specific mining scenario. Klondyke underground (<100mRL) utilises a 2.0g/t Au cut-off. The cut-off grades are determined from technical and economic assessment of the mineralisation completed by Calidus and assume extraction by a combination of open pit and underground mining.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Simple optimisations between $1,800/oz and $3,000/oz show that pits have the ultimate potential to encompass material to the 100mRL at Klondyke. Similar optimisations at Copenhagen and Fieldings Gully also show that the Mineral Resource is amenable to extraction via open pit mining. Mining factors such as dilution and ore loss have been applied.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	No metallurgical assumptions have been built into the resource models. A number of preliminary metallurgical test work programs have been completed on a range of material types at Klondyke with results indicating that mineralisation is amenable to treatment using standard cyanide extraction. No metallurgical studies have been conducted on Fieldings Gully to date. The results from metallurgical test work have been considered for Mineral Resource classification.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	**KL** – Studies have identified some waste zones (approx. 10% of total) that have potential to leach nickel and arsenic. This has been considered in the prospects for eventual economic extraction. **COP/FG** - Acid rock drainage (ARD) analysis has been undertaken and shows to be non-acid generating for both ore and waste Inhouse desktop studies have been conducted to understand the potential footprint of infrastructure; waste dumps, final dump heights and shape, tailing dams, and their impact on regional drainage or environment. Proximal to Klondyke, the presence of the two vulnerable bat species on tenement M45/669 will likely result in the submission of an EPBC referral that will require a management plan, which in-turn will require extensive studies and consultation to enable approval. Additional Western Australian environmental approvals will include: Mining Proposal and Mine Closure Plan (DMIRS); Works Approval and Environmental Protection Act Part V Licencing (DWER); Environmental Protection Act Part V - Native Vegetation Clearing Permit (should the Project not be formally assessed under part IV)(DMIRS); and Water Licencing (DWER).
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If*	Bulk density is based on assigned values of average densities of similar

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.

The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.

Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>lithological units and alteration types. However, at Klondyke, Two hundred and seventy-three samples were selected from 13 diamond drill holes across the length of the Klondyke resource and ranging from oxide through transitional to fresh material for specific gravity measurements using the Archimedes method, to provide confidence in assumptions made.

The dry bulk density (i.e., SG) has been calculated as the mass of sample in air divided by the difference between the mass of the sample in air and the mass of the sample in water.

The application of bulk density values was based on a series of surfaces (created using drilling data) representing oxide, transitional and fresh boundaries. The following densities were applied to the resource model.
<table>
<tr><th>Oxidation Level</th><th>Klondyke</th><th>Copenhagen</th><th>Fieldings Gully</th></tr>
<tr><td>Oxide</td><td>2.4gm/cm^3</td><td>2.2gm/cm^3</td><td>2.2 gm/cm^3</td></tr>
<tr><td>Transition</td><td>2.7gm/cm^3</td><td>2.5 gm/cm^3</td><td>2.6 gm/cm^3</td></tr>
<tr><td>Fresh</td><td>2.86gm/cm^3</td><td>2.9 gm/cm^3</td><td>2.8 gm/cm^3</td></tr>
</table>
In addition, historical SG work was carried out by CRAE and SGS, using Archimedes principle, determined a specific gravity average of 2.82 for transition materials. The average SG value for primary material was 2.88.</td></tr>
<tr><td>Classification</td><td>The basis for the classification of the Mineral Resources into varying confidence categories.

Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).

Whether the result appropriately reflects the Competent Person’s view of the deposit.</td><td>The Mineral Resources have been classified as Measured, Indicated and Inferred based on the drill spacing and geological continuity.

The Resource models use a classification scheme based upon drill hole spacing plus block estimation parameters, including kriging variance, number of composites in search ellipsoid informing the block cell and average distance of data to block centroid.

The results of the Mineral Resource Estimation reflect the views of the Competent Person.

KL - Measured Resources have been defined only within the main Klondyke Trend where it has been tested with the 2019 infill drilling (to approximately 10 m sectional spacing) and has high confidence in the geological interpretation and higher estimation quality.</td></tr>
<tr><td>Audits or reviews</td><td>The results of any audits or reviews of Mineral Resource estimates.</td><td>KL - The resource estimate has been peer reviewed by Optiro staff.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		There have been no reviews or audits of the other resource models as yet.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that 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.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The relative accuracy of the Mineral Resources is reflected in the reporting of the Mineral Resource as being in line with the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade, with reference made to resources above a certain cut-off that are intended to assist mining studies. No production data is available for comparisons.

Section 4 – Estimation and Reporting of Underground Ore Reserves

Criteria	JORC Code 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.*	The Klondyke Underground Ore Reserve is based on the Mineral Resource estimated by Widenbar and Associates announced to the market on 29th June 2020.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Mineral Resources are inclusive of Reserves.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person has not visited the site.
	If no site visits have been undertaken indicate why this is the case.	The Competent Person is comfortable relying on survey data and information provided by other experts who have visited site.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	A Feasibility Study has been completed for the material being converted from Mineral Resource to Ore Reserve. Modifying factors accurate to the study level have been applied based on detailed expert design analysis.
	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 that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The study indicates that the Ore Reserve mine plan is technically achievable and economically viable.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	Gold cut-off grade parameters for determining underground Ore Reserves were derived based on detailed financial analysis. A gold price of AU$2,200/oz was applied. The final derived cut-off grades used for design and analysis were: • Stoping – 1.2 g/t Au; and • Ore Development – 1.0 g/t Au.
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*	Detailed stope optimisations and mine designs were carried out on the Mineral Resource, and these were used as the basis for the Ore Reserve estimate.

Criteria	JORC Code explanation	Commentary
	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 mining method applied is top down mechanised longhole bench open stoping on a 25 m level spacing with in-situ rock rib and sill pillars retained for stability. This mining method was selected based on a detailed analysis having regard for orebody geometry and geotechnical advice. Access will be via a newly developed boxcut and portal located to the south of the proposed open pit. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation, and diesel-electric longhole rigs used for production drilling. The mining methods chosen are well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Independent geotechnical consultants Peter O'Bryan and Associates contributed appropriate geotechnical analyses to a feasibility study level of detail based on geotechnical drilling and data analysis. These inputs have been incorporated into mining method selection, mine design, ground support design, and mining dilution assumptions for the Ore Reserve estimate.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	No Measured material was contained within the Klondyke Underground Mineral Resource. Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. Mineral Resources used for optimization were those detailed previously. A stope optimisation cut-off grade of 1.2 g/t Au was applied.
	The mining dilution factors used.	0.5 m dilution in each stope hangingwall and footwall contact was applied in the stope optimisation process. The grade of this material was derived from the contained Mineral Resource. No dilution was applied to ore development.
	The mining recovery factors used.	Mining recoveries of 95% were applied to stoping. Rib and sill pillars were designed in open stoping areas based on geotechnical advice (total 3% ore loss due to pillars).

Criteria	JORC Code explanation	Commentary
		A 100% recovery factor has been applied to development.
	Any minimum mining widths used.	Stope minimum mining widths of 2.0 m were applied, resulting in a final minimum stoping void width of 3.0 m including dilution.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	All Inferred material had grade set to zero for the purposes of evaluation. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material.
	The infrastructure requirements of the selected mining methods.	Mobilisation, establishment, and all site and mine infrastructure to support underground mining has been accounted for in the study.
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 specifications?*	All ore will be processed at a new plant established at the mine site. The plant process is milling ore via a conventional crush-grind-gravity-separation-carbon in leach (CIL) circuit. The processing technology is well established in many gold operations. Recent metallurgical test-work was completed by Nagrom, ALS, and BV to determine metallurgical recoveries and throughput rates to a feasibility study degree of accuracy. A maximum metallurgical recovery factor of 95% has been applied for economic calculations. No problematic levels of deleterious elements have been detected during test work.
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.*	The mining and associated site infrastructure areas affected by disturbance have been covered by baseline environmental and heritage studies with project permitting currently in process. The underground mine plan has been designed to minimise disturbance to the existing colony of protected bats. The waste rock storage area has been designed with suitable storage capacity and water shedding capabilities. The waste rock mass has been tested for acid forming potential. The lithotypes are not acid generating, however neutral draining of

Criteria	JORC Code explanation	Commentary
		NiAS-rich waste rock was identified as having the potential to be leached from the waste rock. A Metalliferous Drainage Procedure has been developed and the material will be segregated from the waste stream and stored in encapsulation cells on the waste dump. The tailings storage facility will be located to the west of the proposed waste rock storage facility. The permitting process is ongoing. The Competent Person is not aware of any reason why additional required permitting will not be granted within a reasonable time frame to allow mining to commence.
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 site is located 25 km south-east by established road to the township of Marble Bar with access to the all-weather road to Port Headland or Newman. All mine site infrastructure will need to be established. There is sufficient land within the lease area for the establishment and operation of the planned activities. The Marble Bar airport can service the mine with an upgrade. Labour would be sourced from Perth on a fly in-fly out basis. Water supply will be available from bore-fields located in proximity to the mine site and from pit dewatering A camp will be established near the operation. Power will be provided by on site natural gas and diesel generators
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* *The source of exchange rates used in the study.* *Derivation of transportation charges.*	Capital costs for establishment and construction of the processing plant and surface facilities have been provided by GR Engineering Services Pty Ltd (GRES). The Feasibility Study mining costs are mainly based on a recent request for quotation process involving reputable and experienced underground contractor firms. Calidus will supply diesel, power, high voltage reticulation, primary ventilation and pumping, technical and managerial support, site business services, accommodation and flights, surface dewatering and establishment

Criteria	JORC Code explanation	Commentary
	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.*	earthworks. The contractor rates include supply of all other consumables, equipment and labour required for the works. Costs for items not supplied by the contractor have been based on recent relevant supplier quotes. All costs and revenue are in AUD. Processing operating costs were determined to feasibility study level by independent engineers GRES. WA State Government royalties of 2.5% and an additional third-party royalty have been applied to gold revenue.
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.*	Forecasts for head grade delivered to the plant are based on detailed mine plans and mining factors. Gold has been assumed to be the only revenue generating element in the Ore Reserve plan. A flat gold price of AU$2,200/oz has been assumed for the financial analysis. The Competent Person considers this to be an appropriate commodity price assumption based on the current level of study and price environment at the time of the completion of the Ore Reserve work.
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.*	Gold doré from the mine will be further refined at an independent LBMA certified refiner, and then then sold to the company's various gold sale counterparties.
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*	The Ore Reserve has been assessed in a detailed financial model. The Ore Reserve plan is economically viable and has a positive NPV at an 8% discount rate and the stated commodity price.

Criteria	JORC Code explanation	Commentary
	assumptions and inputs.	No inflation has been applied to costs or revenues. Sensitivity analysis shows that the project NPV is most sensitive to commodity price/exchange rate movements.
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	Calidus are in liaison with the government and key stakeholders. The Competent Person is not aware of any reason why additional required permitting will not be granted within a reasonable time frame to allow mining to commence.
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 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.*	A formal process to assess and mitigate naturally occurring risks will be undertaken prior to execution. Currently, all naturally occurring risks are assumed to have adequate prospects for control and mitigation. It is expected that future agreements and Government approvals will be granted in the necessary timeframes for the successful implementation of the project. There are no known matters pertaining to any third parties to affect the development of the project.
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 Probable Ore Reserve is based on that portion of the Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss. The result appropriately reflects the Competent Persons' view of the deposit. The Ore Reserve is based on Indicated Mineral Resource material only. No Measured material was included in the Klondyke Underground Mineral Resource.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	The Ore Reserve estimate, along with the mine design and life of mine plan, has been peer-reviewed by Entech internally.

Criteria	JORC Code 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 mine design, schedule, and financial model on which the Ore Reserve is based has been completed to a feasibility study standard, with a corresponding level of confidence. Considerations that may result in a lower confidence in the Ore Reserves include: • There is a degree of uncertainty associated with geological estimates. The Ore Reserve classifications reflect the levels of geological confidence in the estimates • Commodity price and exchange rate assumptions are subject to market forces and present an area of uncertainty • There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical assumptions, hydrological assumptions, and the modifying mining factors, commensurate with the level of detail of the study Considerations in favour of a higher confidence in the Ore Reserves include: • The mine plan assumes a low complexity mechanised mining method that is widely used in the mining jurisdiction • Mining costs are based on detailed RFQ rates from a reputable mining contractor • Processing cost are based on a feasibility study standard of determination. The proposed CIL processing method is well known and widely used in the mining jurisdiction The Ore Reserve is based on a global estimate. Modifying factors have been applied at a local scale. The Competent Person considers that further, i.e. quantitative, analysis of risk is not warranted at the current level of technical and financial study.