



ASX Announcement  
11 December 2019

## POSITIVE SCOPING STUDY FOR CROWN PRINCE

***Ora Gold Limited (ASX: OAU)(Ora Gold) is pleased to announce that its Scoping Study of an open pit mine on its wholly-owned Crown Prince gold deposit near Meekatharra, Western Australia supports the project viability with a positive forecast financial outcome.***

### HIGHLIGHTS

- Crown Prince pit design to 75m contains Production Target of 177,500 tonnes at 4.1g/t Au
- Positive forecast financial result endorses Ora Gold's project development strategy
- Study based on mining of oxidised resources only and processing at an offsite plant
- Crown Prince total resource to only 270m depth of 479,000 tonnes at 3.6g/t Au (including Production Target) indicates potential for deeper operation below pit design

### SCOPING STUDY CAUTIONARY STATEMENTS

The Scoping Study referred to in this announcement has been undertaken to determine the viability, production estimate and forecast financial outcome for an open pit mine with offsite processing at the Crown Prince deposit. It is a preliminary technical and economic study of the potential viability of the Crown Prince Gold Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Negotiation of an offsite processing arrangement, evaluation work and appropriate studies are required before Ora Gold will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

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

The Crown Prince Mineral Resource estimate (21 October 2019) is used for the Scoping Study and there is a low level of geological confidence associated with the (3%) Inferred Mineral Resource gold content included in the Production Target. These Inferred Resources are near surface within the proposed pit outline and of a low grade that will have little significance in the forecast financial outcome. There is no certainty that further exploration work will result in their determination as Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on Ora Gold's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies required to establish sufficient confidence that this target will be met.

To achieve the range of outcomes indicated in the Scoping Study, an offsite processing arrangement, which may/may not require project equity or revenue sharing, and project funding of in the order of \$4.7 million and relevant corporate working capital will be required. Investors should note that there is no certainty that Ora Gold will be able to raise that amount of funding when needed, or finalise satisfactory offsite processing arrangements. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Ora Gold's existing shares.

Ora Gold is of the view that it has a reasonable basis for providing the forward-looking statements in this announcement and that it will be able to fund the development of the project through means which may materially reduce its proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

The study forecasts a pre-tax financial outcome of about \$21.1M (+/-30%), which is the 100% site surplus after direct costs of pre-development, mine establishment, operating, sustaining capital and mine closure and the payment of state and private royalties. The estimate basis is of a small mine and a large offsite processing plant and does not include any cost or revenue sharing arrangement.

Ora Gold has sufficient accrued tax losses to offset all income tax liabilities for the proposed project.

The Board has a reasonable expectation that the estimated project funding of ~\$4.7 million including project working capital, will be fully funded through a combination of equity, loan and project participation.

Note that Ora Gold’s share of the forecast financial outcome and Production Target estimates is likely to be reduced by funding and/or the offsite ore processing arrangements.

Subject to additional studies, the negotiation of offsite processing arrangements, Ora Gold Board approvals, financing, submission and approval of a Mining Proposal, the timing to achieve relevant permits and agreements and the pre-development requirements for the project, the mine is proposed to be established and mined over a 15-18 month timeframe. Mining may proceed to an underground operation, depending on deep drilling and further evaluation.

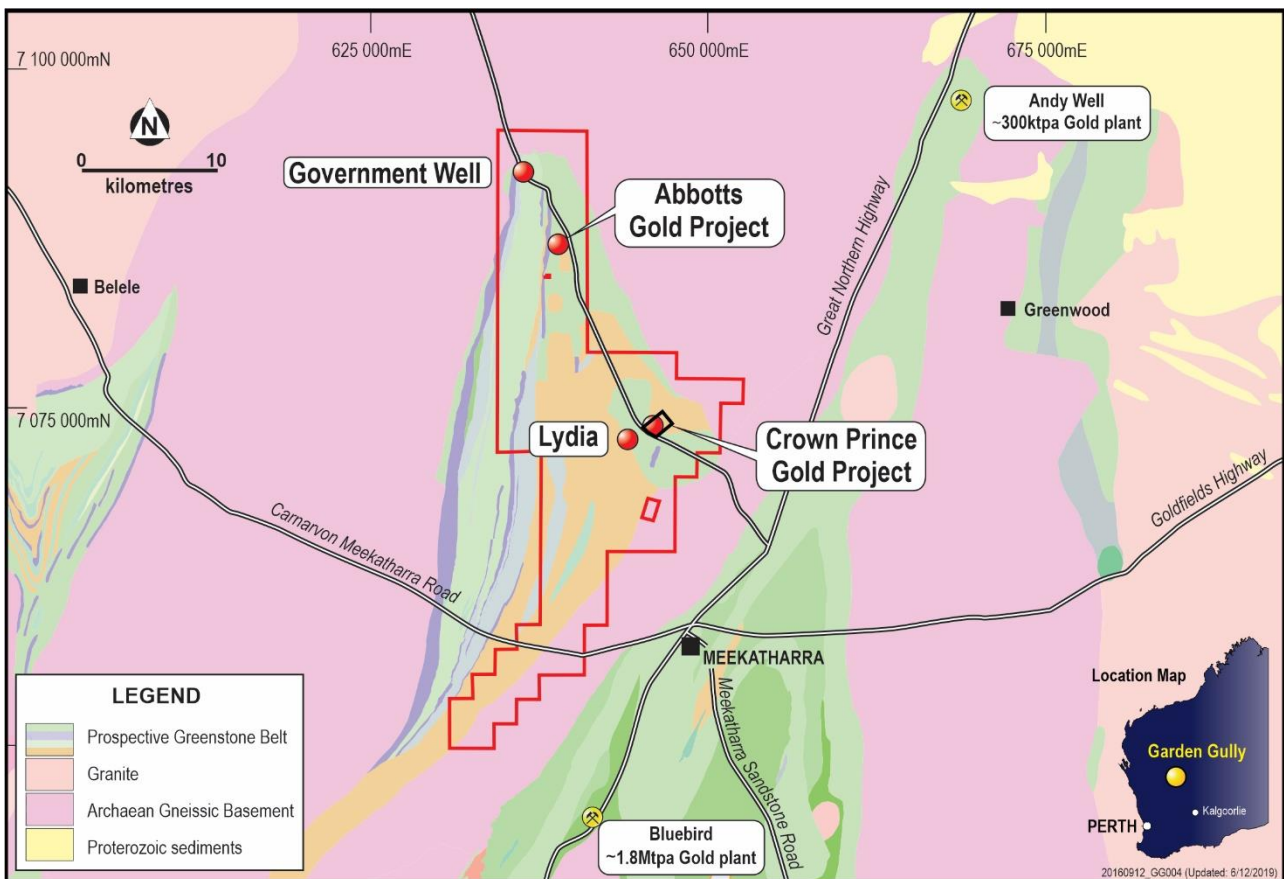


Figure 1. Crown Prince location with Ora Gold tenements, regional geology and main projects

**CROWN PRINCE SCOPING STUDY**

Ora Gold is an ASX-listed company exploring and conducting pre-production activities on its wholly-owned Abbotts and Garden Gully tenements of about 393 square kilometres covering the majority of the Abbotts Greenstone Belt near Meekatharra, Western Australia. The near-term focus is of low-cost development of its already identified shallow mineralisation, while investigating the potential for larger gold and base metals deposits.

The Crown Prince Gold Project location is in an ideal location for access, haulage and available infrastructure as a satellite ore source for a local processing plant (**Figure 1**). The brownfields site photo in **Figure 2** shows the proposed open pit mining area. A Mining Lease application (M51/886) (**Figure 3**) has been submitted and a Mining Proposal is to be prepared.

The summary of physical and economic outcomes - Production Target and forecast net surplus for the Crown Prince Gold Project open pit, as shown in Table 1, is supported by the material assumptions and information in this announcement.

**TABLE 1. Crown Prince Gold Project Scoping Study Estimates**

<b>Production Target</b>	<b>177,472 tonnes</b>
<b>Grade</b>	<b>4.14g/t Au</b>
<b>Stripping Ratio (tonnes)</b>	<b>10.1</b>
<b>Gold Recovery</b>	<b>95%</b>
<b>Gold Produced (97% Indicated Resource)</b>	<b>22,444 ounces</b>
<b>Pre-development (including mobilisation)</b>	<b>\$1.4M</b>
<b>Operating Cash Cost</b>	<b>\$891/ounce</b>
<b>All-In-Sustaining-Cost per ounce</b>	<b>\$1,006/ounce</b>
<b>Gold Price</b>	<b>\$2,000/ounce</b>
<b>Net distributable surplus before tax (+/-30%)</b>	<b>\$21.1M</b>

Table 2 shows an estimate of the sensitivities of the project forecast financial outcome to movements in the costs and revenue of an order of +/-15% and +/-20% respectively with preferred range in bold.

**TABLE 2. Estimated range of economic outcomes and sensitivity comparison**

Revenue less Royalties	Forecast Pre-Tax Financial Outcome (\$M)				
	-20%	-10%	0	+10%	+20%
<b>Total costs</b>					
<b>-15%</b>	15.8	<b>20.1</b>	<b>24.3</b>	<b>28.5</b>	32.8
<b>0</b>	12.7	<b>16.9</b>	<b>21.1</b>	<b>25.3</b>	29.6
<b>+15%</b>	9.5	<b>13.7</b>	<b>17.9</b>	<b>22.2</b>	26.4



**Figure 2.** Looking west towards the old open pit and proposed Crown Prince mining area

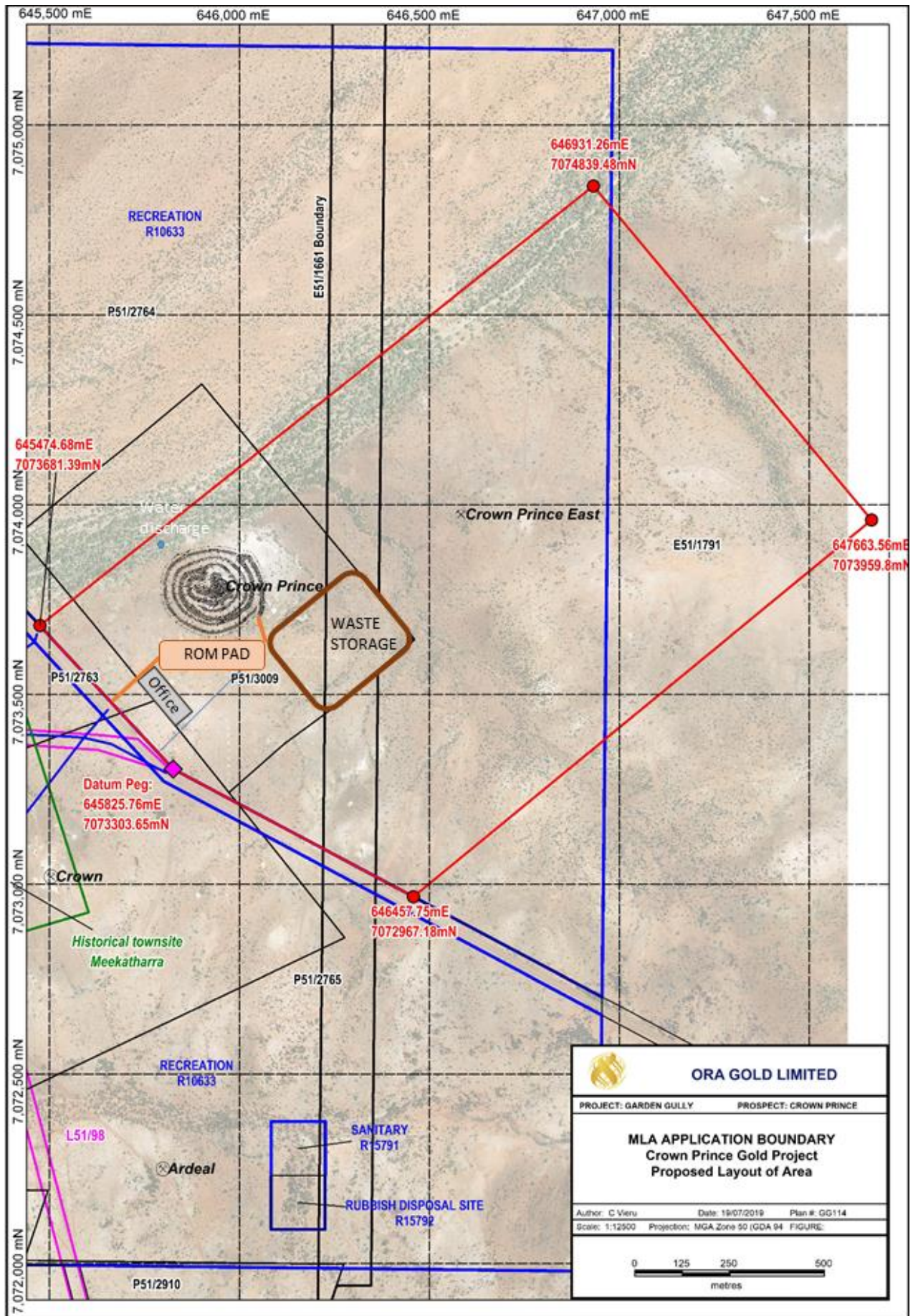


Figure 3. Mining Lease application (M51/886) boundary showing the proposed Crown Prince mine development, layout of the proposed project, local tenements and reserves

## MATERIAL ASSUMPTIONS

### Mineral Resource

The Crown Prince Mineral Resource Estimate (MRE) summarised in Table 3 was undertaken by Ora Gold, consultants and Cube Consulting Pty of Perth and full details are available in the Ora Gold ASX release dated 21 October 2019.

**TABLE 3. Crown Prince 2019 Mineral Resource Estimate**

Indicated Resource			Inferred Resource			Total Resource		
Tonnes	Grade g/t Au	Ounces Au	Tonnes	Grade g/t Au	Ounces Au	Tonnes	Grade g/t Au	Ounces Au
<b>218,000</b>	<b>4.3</b>	<b>30,000</b>	<b>261,000</b>	<b>3.1</b>	<b>26,000</b>	<b>479,000</b>	<b>3.6</b>	<b>56,000</b>

Figures are rounded to reflect relative uncertainty of the estimates

The MRE is estimated to a depth of 270m using block modelling with Ordinary Kriging interpolation, a block cut-off grade of 1.2g/t Au and top cut of 30g/t Au. The MRE is a combination of Indicated and Inferred Resources to 100m depth, which reflects the close-spaced drilling to that depth, and Inferred Resources for deeper mineralisation.

The deepest intersection to date (TGGRCDD110) of 8m at 22.3g/t Au from 259m will be followed up to outline the high grade mineralisation at depth as well as the newly identified sub-parallel zones that remain open along strike and at depth (**Figure 4 and 5**).

### Historical Mining and Exploration

Between 1908 and 1915, the Crown Prince mine was partially developed along two strongly mineralised quartz veins on four underground levels to a depth of 90m below surface. Mine production was 29,400 tonnes for 20,178oz at a recovered grade of 21.7g/t Au using gravity and cyanidation processing. This mining has been depleted from the MRE, though it did not extract the high grade mineralisation halo associated with the quartz veins of the Main and Northern Zones and adjacent parallel zones, and no mining has occurred since.

Drilling (Table 4) over the Crown Prince mine area was undertaken by various companies, such as Julia Gold Mines NL from 1985 and by Kyarra Gold Mine Limited in 2001-4. Drilling programs by previous explorers intersected oxide, supergene and primary high grade gold mineralisation in the Crown Prince mine area from surface to over 200m depth and drilling by Ora Gold Limited in 2017/18 confirmed the depth extension of high grade gold mineralisation to at least 270m below surface.

**TABLE 4. Crown Prince Gold Project M51/886 drilling record**

	Prior to Ora Gold		Ora Gold	
	Holes	Metres	Holes	Metres
Open hole percussion drilling	228	4,076	-	-
Diamond holes (DDH)	13	1,562	3	698
Air Core/Reverse Circulation holes (RC)	87	6,169	21	2,237
RC holes with diamond tails	9	955	11	3,335
<b>Totals</b>	<b>337</b>	<b>12,762</b>	<b>36</b>	<b>6,270</b>

## Regional Geology

The Crown Prince Gold Project is located within the 2.7Ga Late Archaean Abbots Greenstone Belt in the Murchison Goldfield of the northern part of the Yilgarn Craton of Western Australia.

The Abbots Greenstone Belt forms a major south-plunging synclinal structure to the northwest of Meekatharra. The belt is approximately 3km thick, of 30km lateral extent and 60km north-south strike length and it is mostly comprising the Greensleeves Formation. This formation is an interlayered succession of tholeiitic and high-Mg basalts, which is overlain by intermediate to felsic volcanic and volcanogenic sedimentary rocks consisting of schistose andesite, rhyolite tuff and fine-grained sediments, black shales and minor conglomerates. Gabbro and dolerite dykes have crosscut the belt and sills have intruded at the contact between the mafic and felsic sequences.

## Project Geology

The Crown Prince Gold Project area is covered by a veneer of tertiary and quaternary alluvial and colluvial clays, sands and gravels. Weathering is variable to about 80m depth with oxide and supergene gold mineralisation from surface to the fresh rock interface. In addition to the Crown Prince deposit, and its likely extensions, there is a less advanced deposit located approximately 700m to the east - Crown Prince East (previously Cloudkicker).

Outcrop is sparse and the gold mineralisation is interpreted to occur in second order splays associated with a northeast striking primary structure located about 500m north of the Crown Prince deposit. North striking high-Mg and tholeiitic basalts, chloritic schist, dolerite and carbonaceous shale sequences are highly sheared and a west-dipping, often mineralised, structural fabric overprints south-plunging folded zones of gold mineralisation.

## Mineralisation Geology

The Crown Prince deposit gold mineralisation is a structurally-controlled, orogenic type and is hosted by sheared doleritic rocks above a strongly deformed and ductile ultramafic package and as stockwork veins along the contacts of intercalated black shale units.

Oxidised gold mineralisation occurs in the near-surface indurated and saprolitic layers in the lateritic profile and as supergene mineralisation. In fresh rock, gold mineralisation occurs in quartz veins hosted by chloritized, carbonated and strongly sheared meta-basalt, mafic schists, dolerite, black shale units and quartz porphyry, showing strong sericite-clay-carbonate alteration in the vicinity of the quartz veins.

The Main Zone strikes WNW/SSE and dips to the SSW at 70° and adjacent sub-parallel zones striking and dipping at about similar angles. (**Figures 4 and 5**)

Gold mineralisation is associated with pyrite, rare arsenopyrite and chalcopyrite and at or near the contacts with black shales, quartz porphyry and mafic schists. Visible gold is present and the gold is free-milling with historical processing achieving a metallurgical recovery of about 96-98%.

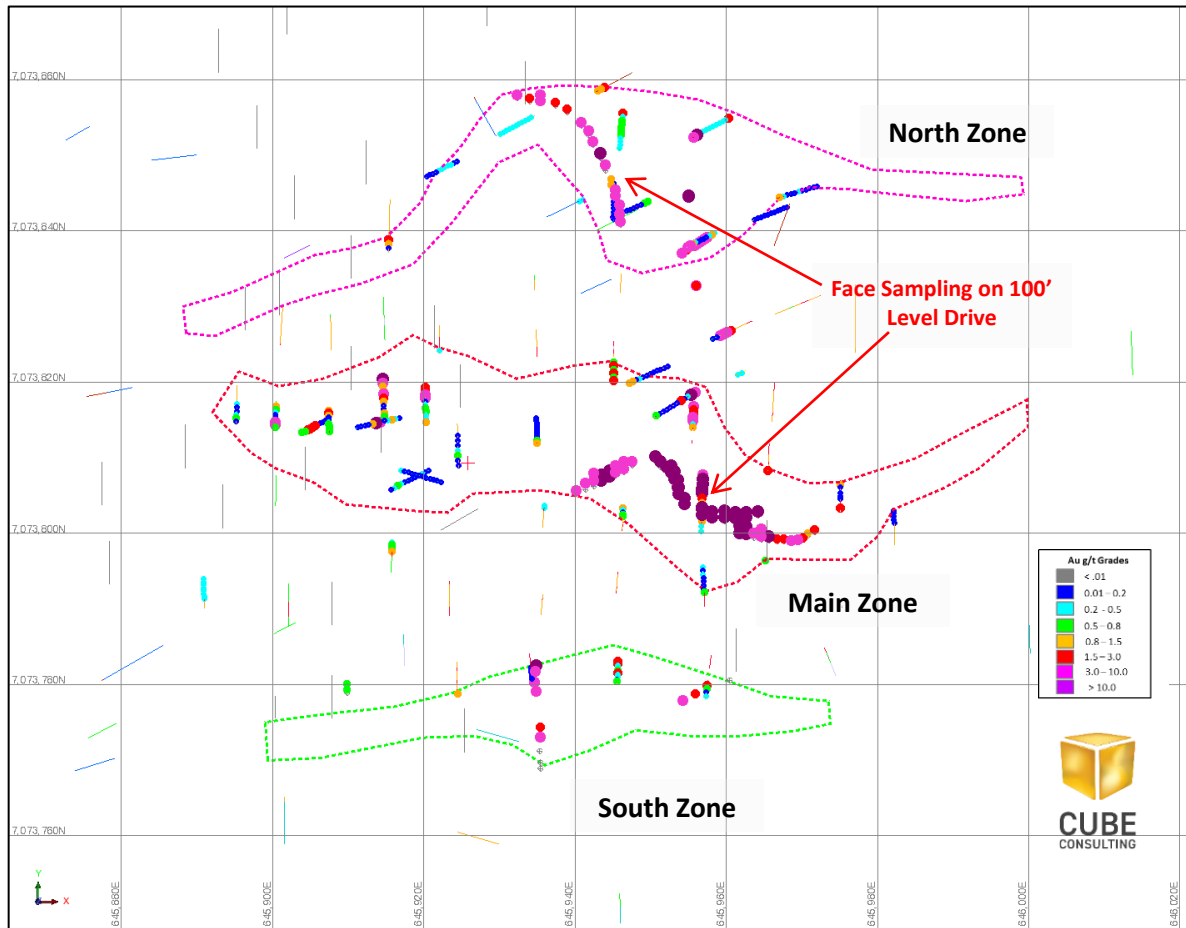


Figure 4. Crown Prince Gold Project 2019 MRE 450m RL plan view of 0.3g/t wireframes of gold mineralisation

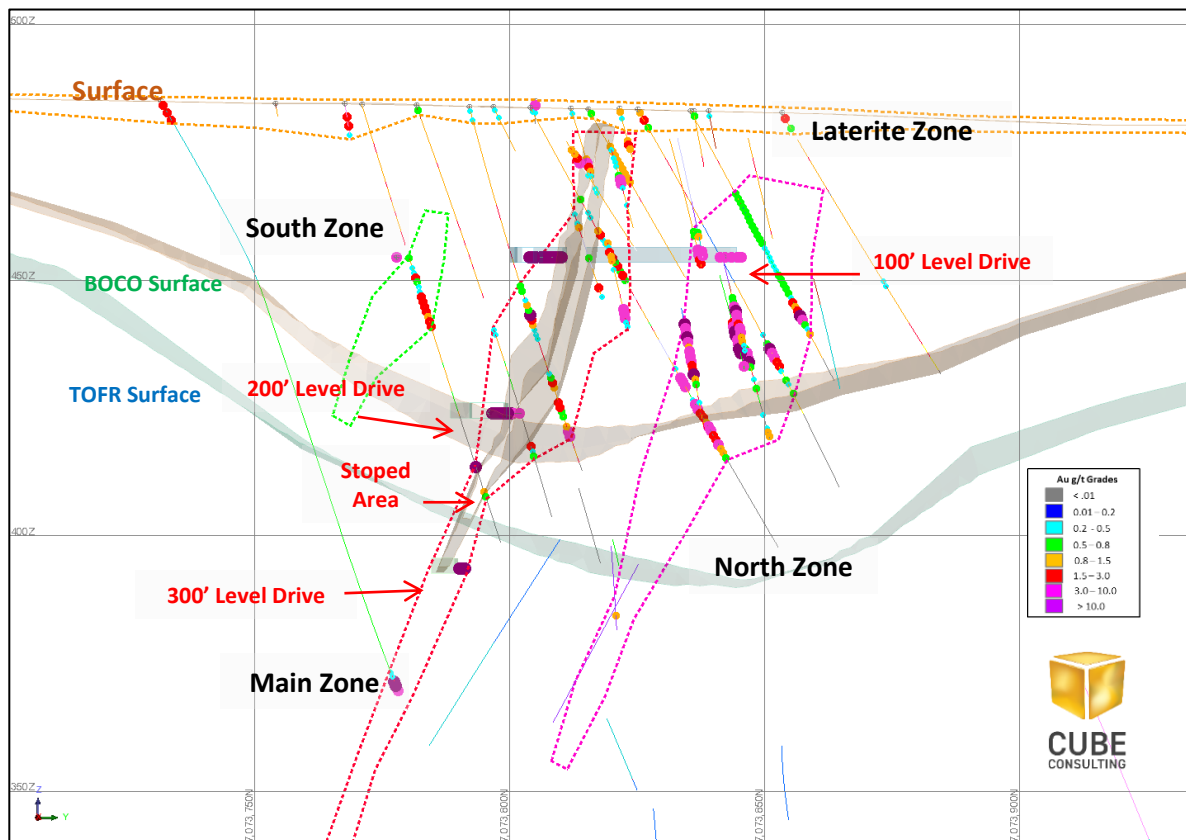


Figure 5. Crown Prince Gold Project cross section showing 2019 MRE 645950E section view of 0.3g/t wireframes of gold mineralisation.

## Project Site

The proposed location of the main elements of the proposed mining operation at Crown Prince are shown in **Figure 3**, and include the proposed open pit, waste storage, ROM area, offices/workshop, roads, bunding and dewatering discharge point.

The topography of the lease area is generally north-sloping towards the Garden Gully Creek with about 20 metres of relief over a distance of 1,100 metres from the south-west corner (RL 500m). Minor ephemeral watercourses on the Mining Lease application area flow north into Garden Gully Creek, which is dry for most of the year, and flows about 36 kilometres west to Muggabullin Swamp. The project site is gently undulating with sparse trees and low scrub of Open Acacia Woodland and Mulga Creekline vegetation. Clearing of land for mining and agricultural purposes has left the soil degraded with poor prospects for crop or animal husbandry. The proposed mining area includes small pits and broken ground over previous mine workings.

### ➤ Access

The Crown Prince Gold Project site is situated in the Murchison Mineral Field, in the Meekatharra District, approximately 780 kilometres north-east of Perth, Western Australia. The project Mining Lease application area is located approximately 18 kilometres to the north-west of Meekatharra and it abuts the Mt Clere Road, a well-maintained gravel road that connects to Great Northern Highway.

### ➤ Climate

The local climate is classified as arid, with high summer temperatures, mild winters and low average rainfall. The mean maximum temperatures for Meekatharra range from 38.1°C in January to 19.6°C in July and mean minimum temperatures are 23°C for January to 8.1°C in June. Highest maximum and lowest minimum temperatures recorded are 45.6°C (12 February 1933) and -3.1°C (28 June 1946). Median annual rainfall is 207mm, most of which falls in the period January to July, with 3-4 rainy days per month, for an mean total of 34 rainy days per year. The wind blows predominantly from east/south-east and west/north-west directions at up to ~30km/h.

### ➤ Infrastructure

Being close to a regional centre, only those items for a small mining operation, supervision and maintenance are required.

It is proposed to generate power for the project with a contractor-operated diesel power station.

Water for the project will be sourced from the pit dewatering, pumping from the existing shaft in the pit floor to maintain a damp floor to mitigate dust while mining.

### ➤ Pit dewatering

Pumps for dewatering the pit will be installed in the Kyarra shaft, which is within the outline of the pit design. The licence held by the previous owner to dewater the underground mine to a depth of ~100m was for 68Mlpa or ~250 litres per minute at 50% pumping time. This is expected to be adequate for the pit dewatering, which will be progressive to a depth of ~75m.

### ➤ Dust abatement

Sufficient water for dust abatement is immediately available since the water table is at ~10m below surface, then it is proposed to maintain the water table just below the floor so the pit floor will be kept damp. This will reduce dust generation during in-pit equipment movement, material handling and blasting.



➤ **Water discharge from site**

Based on reported groundwater assays, the site discharge water is expected to be of a quality that is suitable for discharge into the local waterways.

➤ **Roads**

The Mining Lease abuts the Mt Clere Road along a 1.3km frontage and existing side roads to the Crown Prince site will be used for haulage and general road access point into the project site.

➤ **Site Preparation and Sterilisation**

Site preparation requirements prior to mining and construction are for topsoil removal and landforming of the areas encompassed by the office area, ROM area, hardstand areas and roads. Sterilisation drilling will be done over the area of the waste storage area.

## **Project Description**

Ora Gold proposes to develop an open pit mine on the Crown Prince deposit to recover 177,000 tonnes with an average grade of 4.1g/t Au at a waste to ore stripping ratio of 10:1 (tonnes), based on open pit optimisation at a gold price of \$2,000/ounce. Project design and cost estimates have indicated that the project may generate ~\$21.1M net operating surplus, including royalty payments.

Approximately 90% of the Hargraves Gold Project Production Target is based on Indicated Resources. The included Inferred Resources have a low level of geological confidence associated with them. There is no certainty that further work will result in the Inferred Resources being converted to Indicated Resources or that the production target itself will be realised.

The mining rate is expected to be ~100,000BCM waste per month and an average of 14,000 tonnes of ore over a ~12 month period with an overall stripping ratio of waste to ore of 10:1. The pit depth is 75m and is oxide to ~40m and then transition material to the base of the pit. There is not expected to be any fresh rock within the planned pit.

The high grade mineralisation extends below the proposed pit depth and it is likely that an underground project will continue below the open pit. Drilling has delineated the mineralisation at a close spacing of ~10m x 10m in the pit area to about 100m depth and wider at depth, so further drilling will be undertaken at depth, along strike and in the sub-parallel mineralised zones.

Wide-spaced drilling at depth has already confirmed the deposit to have ore grade intersections at 270m depth and additional drilling at depth and near-surface may extend the mine life and increase the known resource. Additional ore may also come from a number of sources within a few kilometres radius of Crown Prince, such as Crown Prince East and Lydia.

## **Open Pit Optimisation**

Open pit optimisation modelling by CUBE Consulting was done using Whittle pit optimisation software to define the shape and depth of the pit value cones at a gold price of \$2,000/ounce.

Resource block included dilution by grade and tonnage estimation to a hard wireframed cut-off grade boundary of 0.3g/t Au and nominally up to 2m of internal waste, with broader zones in bulked-out supergene mineralisation.

Assumptions used for optimised pit design:

- Base case gold price \$2,000
- Total operating cost of \$116/tonne ore, including royalties of 5.25%
- Processing recovery of 95%
- Overall pit slope of 40 degrees

- All resources included

**TABLE 5. Crown Prince Gold Project Two Stage Open Pit Optimised Design Results**

	Ore			Waste tonnes	Total tonnes	% Indicated Resource Cf. Au oz
	tonnes	Au g/t	Au oz			
Stage One	45,903	5.8	8,537	379,578	425,481	97.5
Stage Two	131,569	3.6	15,088	1,410,114	1,541,683	96.7
<b>Total</b>	<b>177,472</b>	<b>4.14</b>	<b>23,625</b>	<b>1,789,692</b>	<b>1,967,164</b>	<b>97.0</b>

## Mining

The proposed mining fleet will use conventional backhoe-configured excavators loading dump trucks with ore and waste to an adjacent ROM pad and waste dump respectively. Ore will be hauled 35km to an off-site processing plant on existing good quality roads. Owing to the proximity of Meekatharra, it is expected that minimal contractor establishment costs will be incurred.

The initial mine plan is based on a two-stage pit design with a small Stage 1 pit design to provide approximately 46,000t at 5.8g/t Au at a stripping ratio of 8:1, which will access high grade ore a few months earlier than mining the pit in a single pass. The Stage 1 and 2 total material movement for the proposed pit design is shown in Table 5.

While most of the excavating will be free-digging with the pit in mostly oxide to a depth of 40m and then transition material to 75m depth, it is expected that 25% blasting of oxide material and 56% of transition material will be needed. Blasting and waste mining will be at a nominal bench height of 5 metres and ore mining in 2.5 metre flitches for greater selectivity and grade control.

Grade control drilling (7.5m x 5m) will be completed to a depth of 35 metres (RL485m to RL450m) prior to the commencement of mining and a second and third campaign of 40 metres depth will be done at RL450m to the base of the pit design at RL410m. The grade control drilling will provide detailed spatial information about the location of voids as well as the delineation of mineralisation.

In addition to selective mining control using the grade control drilling results, good visual definition of the ore zones is expected, since the structure-controlled mineralisation shows correlation between gold mineralisation and quartz.

Mine operations, including drilling and blasting, will be carried out on a 5.5 day / 20 hour / 2 shift basis, using a mining and haulage contractor and local personnel where possible. Scheduled maintenance will be carried out on the weekends.

## Geotechnical

Geotechnical assumptions are for an average pit slope of 40°, including single lane haul road, which is typical of shallow oxide open pit wall slopes in the area. The near surface indurated material is of the order of 2 – 4 metres thick which will provide stability for the lip of the pit excavation. Stability below the base of oxidation (around 40-80m depth) will be controlled by structural issues and there is potential to create a steeper wall below these depths.

The steeply west-dipping structural fabric (dip 75-80 degrees west) intersecting with the steeply south-plunging folds of the mineralised package has potential to cause a block toppling mechanism below the base of complete oxidation. This issue may impact on final pit design parameters, particularly for deeper pit extensions and stability of access to an underground operation.

## Waste rock

The waste rock lithology is similar to the host rocks of the Crown Prince deposit, being strongly sheared metabasalt, with ultramafic and black shale horizons. Quartz veining is a prominent feature of the ore body and less so in the waste rocks. Waste rock is generally strongly weathered to at least 40m depth, though the near surface indurated material is quite competent. Top of fresh rock varies from about 40 – 80m. The fresh rock is blocky and estimated to be moderately strong to strong.

The waste material will be used for construction of bunding, hardstand areas and run-of-mine stockpile areas. The balance of the waste material will be stockpiled approximately 250m from the southern side of the proposed open pit. The waste rock may contain trace pyrite (up to 1%) and more rarely arsenopyrite. Since the rock contains a component of carbonate mineralisation, it is expected that the sulphides in the waste rock will not be acid producing, however any material that is problematic will be encapsulated.

## Metallurgy

The ore material is of same deposit mined as the Kyarra Gold Mine, which produced 29,400 tonnes at a recovered grade of 21.7g/t Au in a mix of oxide, transition and fresh ore. The processing plant at the historical mine included a stamp battery, amalgamation, gravity recovery and cyanide leaching, which are likely to give a similar recovery to the modern processing plants in the area. The tailings dam for the Kyarra Gold Mine assays an average grade of 0.5-0.8 g/t Au. While no modern metallurgical test work has been undertaken on the Crown Prince ore material, a recovery of 95-97% is expected to be achieved for the oxide/transition material.

## Processing Options

There are six processing plants within a radius of 200km by road in the region surrounding the Crown Prince Gold Project. Discussions have been held with a local plant operator regarding the processing of the Crown Prince ore. No agreement has been reached, however a toll treatment arrangement or an 'open book' style of agreement may eventuate.

## FORECAST ESTIMATES OF PHYSICAL AND FINANCIAL OUTCOMES

The Production Target and economic modelling for the two stage base case Crown Prince Gold Project open pit is outlined in Table 8 and is summarised in Table 6.

**TABLE 6. Crown Prince Gold Project Base Case Estimates**

<b>Production Target</b>	<b>177,472 tonnes</b>
<b>Grade</b>	<b>4.14g/t Au</b>
<b>Stripping Ratio</b>	<b>10.1</b>
<b>Gold Recovery</b>	<b>95%</b>
<b>Gold Produced</b>	<b>22,444 ounces</b>
<b>Pre-development (including mobilisation)</b>	<b>\$1.4M</b>
<b>Operating cash cost</b>	<b>\$891/ounce</b>
<b>All-In-Sustaining-Cost per ounce</b>	<b>\$1,006/ounce</b>
<b>Gold price</b>	<b>\$2,000/ounce</b>
<b>Net profit (+/-30%) after total cost recovery and royalty payments</b>	<b>\$21.1M</b>

## **PRODUCTION SCHEDULE / MINE LIFE**

Over a total mine life of 15-18 months including establishment and closure, the project proposal is to strip waste at 100,000 BCM per month and to mine ore at an average of about 14,000 tonnes per month. Two mining fleets are envisaged with a 100 tonne excavator working the waste movement with three articulated dump trucks and a 60 tonne excavator mining ore with three articulated dump trucks. Waste will be mined in a 20 hour operation for five days and half day Saturday, with an average of 346 waste digging hours per month for 289 BCM per hour. Ore digging will be done on day shift only with a smaller excavator for 160 ore digging hours per month at a rate of 88TPH.

## **COSTS**

### **Pre-development Costs**

Pre-development activities include approvals, site preparation and establishment are estimated to cost \$1.4M including 30% contingency and mobilisation.

### **Operating Costs**

Operating costs are estimated from various sources, being consultant estimates, Ora Gold estimates and experience from similar projects.

### **Administration**

Site administration costs include management and technical personnel, rates, licences and utilities and are estimated to be \$75,000 per month, with salaries being approximately 80% of this amount. Pumping and power costs are \$40,000 per month and the provision for sustaining capital and mine closure is \$520,000.

### **Mining**

Direct ore mining costs are estimated to be of the order of \$10/tonne average cost on a wet hire basis for the mining equipment, operators, consumables and maintenance. Larger equipment will markedly reduce the mining cost, though with a lower mined grade and recovery, and added dilution. Drill and blast is to be another \$1/t with the proportion of blasting 100% in laterite, 25% in oxide and 50% in transition material, plus \$4/t ore for grade control in three campaigns.

Mining equipment costs are based on the wet hire of the major equipment using a five year life / lease charge for capital recovery of all new equipment and a 15% margin to the principal. Costs include operating and maintenance labour, fuel, lube, tyres and wear parts.

### **Ore Haulage**

The base case for off-site processing is to haul the ore to an offsite plant located 35km by road at a cost of \$0.15c/t.km, with the haulage cost estimated to be \$8.75/t ore.

### **Processing**

The direct processing cost for off-site processing by blending minor amounts of Crown Prince oxidised ore with fresh rock ore is not expected to add any significant cost in crushing and milling, though taking up some volume in the wet end of the process. Depending on an arrangement yet to be negotiated, the processing cost may be \$20-35/t and an estimated cost of ~\$28/t.

## WORKING CAPITAL

Total pre-development costs, site preparation and project working capital costs are anticipated to have a maximum drawdown of ~\$4.7M.

## REVENUE AND CASH FLOW

The Australian gold price long term trend is to be above \$2,000 as shown by the 20 year Australian dollar gold price graph in Figure 6. At the gold price of \$2,000 per ounce, the forecast financial outcome of distributable surplus before tax is \$21.1M (+/-30%) including start up and closure costs.



*Figure 6. Australian dollar 20 year gold price (goldprice.org)*

## BASIS OF ECONOMIC MODELLING

The economic modelling estimates are of a small mine and a large offsite processing plant with all costs and revenue shared openly between the operators (open book arrangement).

The forecast pre-tax financial outcome of \$21.1M (+/-30%) is the estimated site surplus from the project on a 100% basis. No other costs, such as corporate, external or indirect costs nor the revenue distribution arrangement between operators are included.

Total project unit costs/ounce gold are estimated as All-In-Sustaining-Costs for the project, including all pre-development activities such as studies, approvals and testwork, as well as the project establishment, start-up working capital, ongoing capital and mine closure costs. A likely toll treatment or cost and revenue sharing arrangement with an off-site processing plant is yet to be included, which will reduce Ora Gold's share, and all other economic parameters may change.

Ora Gold has of the order of \$75M in tax losses, which will offset income tax liabilities.

## SENSITIVITIES

The estimated forecast financial outcome will be subject to fluctuations in the gold price and the achieved grade, the mining and metallurgical recovery and costs. For example, the 2019 MRE modelling limited the extent of high grade intersections, though historical mining of the +20g/t Au quartz veins was of ~60m strike length and dip length of ~100m. Similar, though unmined high grade zones are interpreted in the deposit and a positive reconciliation against the MRE is expected.

The mining costs are based on a small mine basis, however may be conservative if a larger mining scope can be achieved by joining the project with others nearby.

The cost and revenue estimates are expected to be of an order of +/-15% and +/-20% respectively.

Table 7 shows an estimate of the sensitivities of the project forecast financial outcome to movements financial outcome of site surplus, including start up, sustaining capital and closure costs as \$21.1M (+/-30%)

**TABLE 7. Estimated range of economic outcomes and sensitivity comparison**

Revenue less Royalties	Forecast Pre-Tax Financial Outcome (\$M)				
	-20%	-10%	0	+10%	+20%
<b>Total costs</b>					
<b>-15%</b>	15.8	<b>20.1</b>	<b>24.3</b>	<b>28.5</b>	32.8
<b>0</b>	12.7	<b>16.9</b>	<b>21.1</b>	<b>25.3</b>	29.6
<b>+15%</b>	9.5	<b>13.7</b>	<b>17.9</b>	<b>22.2</b>	26.4

Table 8 shows the total estimated physical and financial estimates with the estimated forecast in the costs and revenue of an order of +/-15% and +/-20% respectively with preferred range in bold.

**TABLE 8. Estimated Base Case Forecast Physical and Financial Outcomes**

			<b>TOTALS</b>
<b>Total Pre-development Cost</b>	\$		1,201,525
<b>Mining:</b>			
Waste mined	tonnes		1,788,000
Ore mined	tonnes		177,472
Ore grade	g/t Au		4.14
<b>Processing:</b>			
Ore processed	tonnes		177,472
Grade	g/t Au		4.14
Gold produced	oz	95%	22,444
<b>Total Operating Cost:</b>	\$		19,999,532
<b>Gold Sales:</b>	\$		44,663,190
<b>Total Site Costs:</b>	\$		21,201,057
<b>Royalties:</b>	\$	5.25%	2,344,817
<b>Distributable surplus BTDA:</b>	\$		21,117,316
<b>Cash Operating Cost/t proc:</b>	\$/t process		113
<b>Cash Operating Cost /oz:</b>	\$/oz		891
<b>AISC/oz:</b>	\$/oz		1,006

## RISKS AND OPPORTUNITIES

Risks identified during the Scoping Study include, but not limited to:

- Offsite processing arrangement not completed within assumed terms;
- Adverse movement in the gold price;
- Mined grade significantly less than estimated;
- Costs significantly more than estimated.

Opportunities identified during the Scoping Study include, but not limited to:

- Improved gold price with ongoing global tensions;
- Better grade than estimated;
- Lower costs than estimated;
- Viable underground extension of open pit;
- Increased life of mine with additional ore in area.

**COMPETENT PERSONS STATEMENT**

The details contained in this report that pertain to Exploration Results, Mineral Resources or Ore Reserves, are based upon, and fairly represent, information and supporting documentation compiled by Mr Philip Mattinson, Mr Costica Vieru, Mr Philip Bruce and Mr Brian Fitzpatrick. Mr Mattinson and Mr Vieru are Members of the Australian Institute of Geoscientists. Mr Mattinson is a consultant to the Company, Mr Vieru is a full-time employee of the Company and Mr Bruce is a Fellow of the Australasian Institute of Mining and Metallurgy and a Director of the Company. Mr Fitzpatrick is a Principal Geologist with Cube Consulting Pty Ltd and a Member of the Australasian Institute of Mining and Metallurgy, who has undertaken check validation and geo/statistical assessment of the data, then block modelled and estimated the tonnage and grade of the mineralisation, which was assessed by Mr Vieru and Mr Bruce for appropriate cutoff grade and to confirm resource categorisation. The Competent Persons have sufficient experience which is relevant to the style(s) of mineralisation and type(s) of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). All consent to the inclusion in this report of the matters based upon their input into the information in the form and context in which it appears.

**DISCLAIMER**

This announcement about the Crown Prince Gold Project Scoping Study contains statements, opinions, projections and forecasts prepared by Ora Gold Limited (Ora Gold) on the basis of information developed by its employees and consultants. The Scoping Study and results have been prepared with due care and responsibility, but may be subject to change. Ora Gold gives no representation or warranty and takes no responsibility as to the accuracy or completeness of the information contained in this announcement or the Scoping Study.

Every reasonable effort has been made to ensure the completeness and accuracy of the information contained in this announcement and the Scoping Study to various ranges of reliability and the forecast pre-tax financial outcome of the site surplus to +/-30%, but do not purport to contain all of the information that a party may require in making any decision regarding any investment decision in respect of an investment in the project or Ora Gold. Accordingly, a party must not rely on the completeness or accuracy of the information contained in this announcement or the Scoping Study, but should make its own enquiries and assessments in regard to these matters. Neither Ora Gold nor any of its subsidiaries, directors, officers, employees, consultants or advisors will be liable for any loss that any party may incur arising from decisions it makes in respect of making any investment in the project or Ora Gold.

This announcement and the Scoping Study include forward-looking statements which are based on assumptions and judgements of its directors, officers, employees, consultants and/or advisors regarding future events and results. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Ora Gold that could cause actual results to differ materially from such statements. Ora Gold makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement to reflect events or circumstances after the date of this announcement.

Ora Gold has a 100% interest in the Crown Prince tenements, which are subject to State and other royalties as noted herein.

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**ORA GOLD LIMITED**  
**Quoted Shares: 646.1M ASX Code OAU**



## APPENDIX 1

## Modifying factors for Production Target

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<p>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</p> <p>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</p>	<p>No Ore Reserves are estimated in the Crown Prince Scoping Study.</p> <p>The Mineral Resource Estimate prepared in accordance with the JORC Code, 2012 Edition, as announced on 21 October 2019 is inclusive of the Production Target of 177,242 tonnes at 4.1g/t.</p>
Site visits	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>If no site visits have been undertaken indicate why this is the case.</p>	<p>The Competent Persons for Ora Gold Limited Mineral Resources, Mr Costica Vieru, has regular visits to site and has conducted RC and DD programs on the deposit, and Mr Philip Bruce has visited site during 2019.</p> <p>Mr Philip Mattinson, a Competent Person for KGML 2005 MRE and for the 2019 MRE visited site regularly during the KGML drilling programs to check on drilling performance, sample recovery, and sampling and logging procedures.</p> <p>Cube Consulting has not conducted a site visit during the period when the current MRE work was carried out in October 2019. The UG workings are inaccessible, and no drilling activities were occurring during the time Cube Consulting was commissioned to undertake the MRE work.</p>
Study status	<p>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</p> <p>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.</p>	<p>The status of the study is a scoping study as defined in Section 38 of the JORC Code, 2012 Edition.</p> <p>The study has not been undertaken to convert Mineral Resources to Ore Reserves.</p>
Cut-off parameters	<p>The basis of the cut-off grade(s) or quality parameters applied.</p>	<p>The mineralisation cut-off grade of 0.3g/t was a geological determination of the envelope to encompass the zones of mineralisation around the high grade lodes.</p> <p>The mining cut-off grade of 1.2g/t is a marginal cut-off using the direct ex-mine costs per tonne of ore on a toll treatment basis.</p> <p>The top-cut for the mineral resource estimation of 30g/t was determined using a combination of top-cut analysis tools (grade histograms, log probability ("LN") plots and effects on the coefficient of variation ("CV") and metal at risk analysis.</p>

<p><b>Mining factors or assumptions</b></p>	<p>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 optimization or by preliminary or detailed design).</p> <p>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.</p> <p>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</p> <p>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</p> <p>The mining dilution factors used.</p> <p>The mining recovery factors used.</p> <p>Any minimum mining widths used.</p> <p>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</p> <p>The infrastructure requirements of the selected mining methods.</p>	<p>The Mineral Resource was not converted to Ore Reserves in this study.</p> <p>It is assumed for this study that only the oxidised material is mined, and by conventional open pit mining methods.</p> <p>The topography is quite flat and there is ore grade mineralisation from surface, so no pre-strip is required to access ore. A two-stage pit is proposed to provide an earlier positive cash flow from deeper high grade material.</p> <p>Average pit slopes of 40° were used for the optimisation and are typical for pits in oxidised material and includes a single lane haulage road.</p> <p>The Crown Prince 2019 MRE was used as the ore block model for the optimisation.</p> <p>Dilution was included in the MRE ore block model.</p> <p>Minimum block widths were 2m.</p> <p>Inferred Resource blocks amount to 10% of the inpit ore tonnes and 3% of gold content.</p> <p>Minimal infrastructure is required for mining at the project site since it is located only 18km from Meekatharra. Infrastructure will include offices, workshop, hardstand areas, power, pumping and roads.</p>
<p><b>Metallurgical factors or assumptions</b></p>	<p>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</p> <p>Whether the metallurgical process is well-tested technology or novel in nature.</p> <p>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</p> <p>Any assumptions or allowances made for deleterious elements.</p> <p>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.</p> <p>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</p>	<p>Offsite processing is proposed at one of the six processing plants within 200km. The preferred plant is located 35km from the site by well-maintained gravel and asphalt roads.</p> <p>Tonnages were estimated on a dry basis. Moisture content was not considered.</p> <p>Ora Gold has not conducted any metallurgical test-work. The inpit production target will be oxidised free milling gold ore from the same deposit as the old Kyarra Gold Mine underground workings, which historically achieved very high levels of recovery. The historical project is an indicative bulk sampling exercise for the mineralisation: the Kyarra mine process plant had a stamp battery and amalgamation, followed by cyanidation and filtration. Historical records stated a recovered grade of the ore was 21.7g/t. Previous sampling programs of the existing tailings from the mine indicate an estimated average grade of 0.5-0.8g/t, so historical metallurgical recovery was ~96-98%.</p> <p>A modern CIP processing plant gold recovery will be similar and a 95% recovery is assumed.</p> <p>No allowance is made for deleterious elements.</p>
<p><b>Environmental</b></p>	<p>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock</p>	<p>The Crown Prince Gold Project site is a brownfields area with extensive prior mining disturbance.</p>

	<p>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.</p>	<p>Environmental factors considered when completing the Scoping Study include water abstraction and discharge, dust abatement, flora and fauna impact, topsoil collection and dispersal and mine closure.</p> <p>The Crown Prince area has been historically been extensively mined at surface and underground with widespread ground disturbance. Rubbish, abandoned equipment and infrastructure remains.</p> <p>Approximately 1.2MLCM of oxidised waste is proposed to be mined and stored adjacent to the pit, in bunding, ROM and workshop hardstand areas and road building or the waste storage area with footprint estimated to be 250m x 320m for a 15m high mound.</p> <p>The waste rock is predominantly oxidised mafic rock and the presence of ~170ppm CO<sub>3</sub><sup>-</sup> ions in the groundwater indicates the likely low NAG of the waste.</p> <p>In 2004/5 a Notice of Intent, Project Management Plan and vegetation Clearance approval were obtained for a 65m deep open pit mine over the Crown Prince deposit. The environmental and social impact assessment on the area was completed as part of the submissions for these approvals. No endangered species were noted in the project area and no potential archaeological or ethnographic sites were identified within the project area.</p> <p>Approval for the waste dump has not been submitted.</p>
<p>Infrastructure</p>	<p>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.</p>	<p>The project area is situated 18km north-east of Meekatharra, which is a well-serviced major regional centre.</p> <p>The Crown Prince deposit is about 300m from the well-maintained gravel Mt Clere Road and 12km from the Great Northern Highway.</p> <p>Contract power will be provided.</p> <p>Water for the mine is available.</p>
<p>Costs</p>	<p>The derivation of, or assumptions made, regarding projected capital costs in the study.</p> <p>The methodology used to estimate operating costs.</p> <p>Allowances made for the content of deleterious elements.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</p> <p>The source of exchange rates used in the study.</p> <p>Derivation of transportation charges.</p>	<p>Capital cost items (Pre-development costs) are approximate estimates for used office and ablution block installation, pump and power installation, road formation, topsoil removal and sterilisation drilling charges.</p> <p>Operating costs are derived from first principles (mining equipment operation) or similar applications – grade control, and consultants – D&amp;B, L&amp;H or operating entities – processing.</p> <p>No allowance made for deleterious elements.</p> <p>Gold price and exchange rate applied from recent trends.</p>

	<p>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</p> <p>The allowances made for royalties payable, both Government and private.</p>	<p>Transportation and gold refining charge of \$10/oz gold is nominal amount from consultant estimate.</p> <p>Royalties allowed for are a total of 5.25% of which 2.5% is WA state royalty.</p>
Revenue factors	<p>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.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</p>	<p>The head grade is as estimated according to the 2019 MRE, pit optimisation and two stage pit reporting by Cube Consulting.</p> <p>The gold from the project will be produced at a local processing plant gold room. The revenue is on a 100% basis net of estimated transport and refining charges as if the gold bullion is transported to, and refined by, the Perth Mint, then credited to a metal account for sale at spot.</p> <p>A gold price of \$2,000 per ounce is used for the revenue estimate, which is the 20 year long term trend. Silver is likely to be present, but not accounted for.</p>
Market assessment	<p>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</p> <p>A customer and competitor analysis along with the identification of likely market windows for the product.</p> <p>Price and volume forecasts and the basis for these forecasts.</p> <p>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</p>	<p>The gold market is dependent on various global issues and the AUD/USD exchange rate.</p>
Economic	<p>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.</p> <p>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</p>	<p>The project is of a short life so an NPV estimate is not appropriate.</p>
Social	<p>The status of agreements with key stakeholders and matters leading to social licence to operate.</p>	<p>No agreements are in place with key stakeholders.</p>
Other	<p>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</p> <p>Any identified material naturally occurring risks.</p> <p>The status of material legal agreements and marketing arrangements.</p> <p>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</p>	<p>Flooding due to anomalous rainfall is a natural risk.</p> <p>The offsite processing arrangement is yet to be negotiated.</p> <p>The Mining Proposal has not been submitted.</p> <p>Native Title negotiations have not commenced.</p> <p>The Mining Lease application based on a Mineralisation Report and Accompanying Statement was submitted on 8 August 2019 and no issues have arisen to hinder it being granted.</p>

	<p>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.</p>	<p>There are reasonable grounds to expect that these and other approvals to permit mining to proceed, such as DMP Project Management Plan, DER Works Approval, Mine Dewatering/Water Discharge permit, Groundwater Licence, will be obtained.</p>
<p><b>Classification</b></p>	<p>The basis for the classification of the Ore Reserves into varying confidence categories.</p> <p>Whether the result appropriately reflects the Competent Person’s view of the deposit.</p> <p>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</p>	<p>The Mineral resources have not been converted to Ore Reserves by the Scoping Study.</p>
<p><b>Audits or reviews</b></p>	<p>The results of any audits or reviews of Ore Reserve estimates.</p>	<p>Not applicable.</p>
<p><b>Discussion of relative accuracy/ confidence</b></p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>No Ore Reserve estimate has resulted from the Scoping Study.</p> <p>Cost and revenue estimates are considered to be +/- 15% and 20% respectively. The forecast pre-tax financial outcome of site surplus is of a +/-30% reliability.</p>