

11 JULY 2019

Gurupi province potential strengthened on CentroGold Pre-Feasibility Study

- CentroGold Pre-Feasibility Study¹ demonstrates minimum 10-year operation for low capital investment and bottom half operating costs:
 - Average annual gold production (life of mine) of 100koz 120koz with 190koz – 210koz in first two years of production²
 - All-In Sustaining costs of ~US\$ 640/ oz
 - Pre-production capital cost of ~US\$ 155 million
 - Project Net Present Value of ~US\$ 200 million³
- Significant potential upside with Jiboia tenement purchase consolidating Gurupi greenstone belt, bringing province to 2,300 km² along 85 km of strike length
- CentroGold expected to become Gurupi processing hub as part of low risk, modest capital, provincial hub strategy
- Current work focused on permitting and relocation activities; Feasibility Study and regional exploration to commence following injunction removal

OZ Minerals today announced results of the Pre-Feasibility Study for the CentroGold project, located in the highly prospective Gurupi greenstone belt.

"The potential of the Gurupi province has strengthened on completion of the CentroGold Pre-Feasibility Study, demonstrating a minimum 10-year, low cost, open pit operation with robust financial metrics," said OZ Minerals Chief Executive Officer, Andrew Cole.

"The study showed that for a relatively modest capital outlay of around US\$ 155 million, we can construct an open pit mining operation producing a life of mine average of 100koz – 120koz of gold per annum and an impressive 190koz – 210koz in each of the first two years of operation⁴.

"All-In Sustaining costs of approximately US\$ 640/ oz sit in the bottom half of the global cost curve, and with an NPV of approximately US\$ 200 million, the value of the project has improved from the original Scoping Study.

¹ Pre-Feasibility Study accuracy +/- 25%

 $^{^{2}}$ These production targets must be read in conjunction with the production targets cautionary statement on page 3

³ Based on LOM gold price of US\$ 1305/ oz and excludes sunk costs

⁴ See footnote 2 above

"We have also identified a number of further opportunities. An updated Mineral Resource statement will be released later in the year to include recent drilling activity, and further drilling is planned to increase our confidence in the Mineral Resource. The current study includes only the Blanket and Contact deposits and the potential future addition of the nearby Chega Tudo deposit, following further studies, may also add to the project production profile.

"In addition to the Pre-Feasibility Study completion, we have also recently acquired the Jiboia tenements to the north, expanding our presence in the Gurupi province. Our total land package has extended to ~2,300 km² along 85 km of strike length and we now have an extensive footprint in a highly prospective region, with CentroGold comprising less than 3% of the total.

"In line with our broader staged, low risk and capital conservative hub strategy, CentroGold has the potential to become a processing hub for the wider Gurupi province, extending mine life by providing processing facilities to nearby deposits, such as Chega Tudo, eight kilometres to the west.

"With current activities focused on permitting and village relocation planning, the Feasibility Study and further regional exploration will begin following removal of the injunction. It is important to note that the injunction applies only to the CentroGold tenements within the province. Upon removal of the injunction, we currently expect a timeframe of approximately 2 ½ years to start-up, incorporating infill drilling and study completion, resettlement activities, procurement, mine preparation and plant construction.

"Our confidence has grown in the CentroGold project and we will continue to advance our province strategy to further increase value for a moderate capital outlay," Mr Cole said.

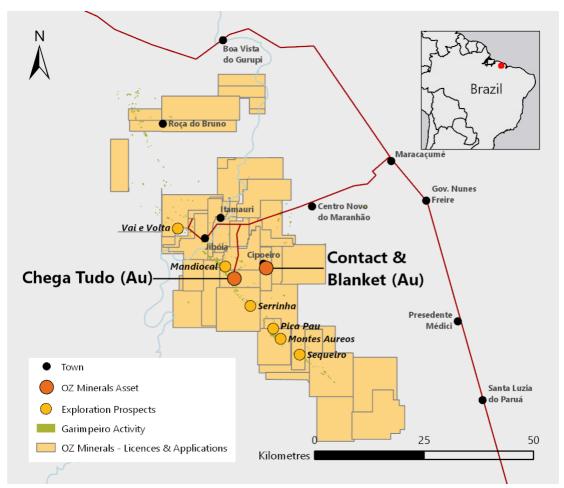


Figure 1: Gurupi Province: CentroGold Project and Tenements

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Production Targets Cautionary Statement

The Production Targets referred to in this ASX release for the CentroGold asset are based on 85% Probable Ore Reserves and 15% Inferred Mineral Resources.

The modifying factors used in the estimation of the Ore Reserve were also applied to the Mineral Resources in the generation of the production target.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets will be realised.

The Ore Reserve and Mineral Resource estimates underpinning the production targets were prepared by a Competent Person in accordance with the JORC Code 2012.

The material assumptions used in the estimation of the production targets and associated financial information can be found in the attached CentroGold Project Pre-Feasibility Study, Executive Summary, July 2019 and OZ Minerals announcement titled "CentroGold Project Combined 'Blanket' and 'Contact' Mineral Resource as at 06 May 2019 and Ore Reserve as at 24 June 2019 Statement and Explanatory Notes", released on 11 July 2019 and available at: www.ozminerals.com/media/asx/





CENTROGOLD PROJECT Pre-Feasibility Study

July 2019

EXECUTIVE SUMMARY



DISCLAIMER

The **CentroGold Project** is at Pre-Feasibility Study (PFS) stage and by its nature contains preliminary information only. The information in this document and the conclusions presented should be viewed in this light. The PFS has been prepared with the objective that its findings are subject to an accuracy range of +/- 25%. The findings of the PFS, including the estimates of costs, payback, NPV and annual throughput should, be viewed with this in mind and are subject to the completion of the Feasibility Study.

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1.1 Overview

In 2018, OZ Minerals acquired Avanco Resources Ltd. (Avanco), an Australian mining company with all of its mining assets in Brazil.

At the time of the acquisition, Avanco's assets consisted of:

- An operating copper mine known as the "Antas Mine" located in the Brazilian state of Pará;
- Two copper development assets known as the "Pedra Branca Project" and "Pantera Project" also located in Pará state;
- A gold development project known as the "CentroGold Project" in the Gurupi Province in Maranhão state.

The CentroGold Project is located approximately 380 km southeast of Belém, capital of the State of Pará, and 500 km northwest of São Luis, capital of the State of Maranhão; Brazil (see Figure 1.1). The nearest significant town is that of Maracaçumé, within the western portion of the State of Maranhão. The CentroGold Project is an open pit gold mining operation which comprises two deposits; Blanket, and Contact, and is situated 55 km from the national highway BR316, which connects São Luis to Belém and passes through Maracaçumé. A total of ~390 employees are likely to be required for the operation which would run 24 hours per day.

The CentroGold Project comprises approximately 1,370 km² of tenements situated along a highly prospective and underexplored 75 km greenstone trend. With the 2019 purchase of the Jiboia land package, OZ Minerals now holds the whole Gurupi Province, measuring approximately 2,300 km² with 85 km of strike length.

With an extensive footprint in this highly prospective region, OZ Minerals believes the CentroGold Project has the potential to become a processing hub servicing multiple nearby deposits. The final project design will ensure a scalable solution that considers future remote satellite mining operations.



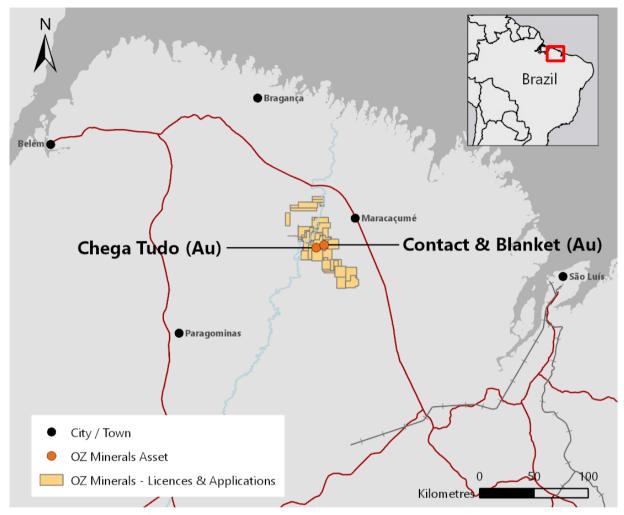


Figure 1.1: Location of CentroGold Project

1.2 Project Background

In 1985, Sierra Mineração Ltda. (SML) applied for mineral rights around artisanal mine workings at Chega Tudo, one of the areas located on the Gurupi trend adjacent the CentroGold Project. The region had attracted the interest of several mining companies due to the observed potential associated with the presence of artisanal mining and the geological characteristics similar to those found in important West African gold-producing areas.

The mining rights changed hands through acquisitions and mergers prior to Avanco, with the former owners of the mineral rights conducting several studies targeting the exploitation of the Gurupi deposits.

In November 2017, MIPTEC Engenharia & Consultoria Ltda. (MIPTEC) was engaged by Avanco to develop a set of conceptual studies to support a Pre-Feasibilty Study (PFS) for the CentroGold Project. These initial studies were executed from November 2017 to June 2018, covering the design at a PFS level, of the required facilities and infrastructure to process the ores from the Contact, Blanket and Chega Tudo deposits (in parallel to an associated Scoping Study).



In the third quarter of 2018, post Avanco's acquisition by OZ Minerals, the former MIPTEC scope was extended, embracing areas not covered in the previous studies to improve project value and reduce risk. The adjusted scope included optimisation studies associated with project scale, mining equipment and schedule, in addition to process facilities and associated infrastructure. This also resulted in the exclusion of the Chega Tudo deposit from the PFS scope.

Variations in key estimated project metrics in this PFS compared to the Avanco Scoping Study presented in April 2018 are summarised in Table 1.1.

Table 1.1: Estimated Project Metrics Compared to Avanco Scoping Study

Project Metric	Scoping Study (Avanco) *	PFS (OZ Minerals) **
Life of the Mine (LOM)	11 years	7 years
Life of the Plant	11 years	10 years
Mineral Resources (koz)	2,217	1,700
Gold Price (US\$/oz)	1,250	1,305
Capital Expenditures (US\$ M)	108.0	~155
Operating Costs (US\$/tonne)	39.0	25.5
All In Sustaining Cost (US\$/oz)	862.0	~640
Net Present Value – post tax (US\$ M)	Not published	~200

^(*) Scoping Study accuracy +/-35%

1.3 Key Findings

The key findings from this PFS are summarised in Table 1.2.

Table 1.2: Principal Outcomes from this PFS

Estimated Project Metrics	Results		
Project Highlights			
Life-of-Mine (LOM)	7 years		
Production Life	10 years		
Annual Throughput	2.5 Mtpa		
Inventory	23.6 Mt (85% Probable, 15% Inferred)		
Average Annual Gold Production (Life of Mine)	100,000 – 120,000 oz/ year		
Average Annual Gold Production (First 6 Years)	145,000 – 165,000 oz/ year		
Average Annual Gold Production (First 2 Years)	190,000 – 210,000 oz/ year		
Life of Mine Gold Production	~1.1 Moz		
All-In Sustaining Cost	~US\$ 640/ oz		

^(**) Excludes Chega Tudo, PFS accuracy +/-25%, NPV excludes sunk costs



Estimated Project Metrics	Results	
Net Present Value	~US\$ 200 M	
Capital Cost	~US\$ 155 M	
Development Period	18 months	
Ore Reserves		
Ore Reserves	20 Mt	
Proved / Probable	0%/100%	
Average Grade	1.7 g/t Au	
Gold Content	1.1 Moz Au	
Mine and Processing Plant Production		
Life of Mine Material Movement	116 Mt	
LOM Waste to Ore Strip Ratio	~3.9:1	
Average Plant Feed Grade	~1.7 g/t Au	
Plant Operating Hours	7,884 h/ year	
Metallurgical Recovery	~86 %	
Capital Expenditures		
Capital Cost	~US\$ 155 M	
Sustaining Costs (closure costs)	~US\$ 19 M	
Sustaining Capital Expenditure	~US\$ 0.5/ t	
Operating Costs		
Mining	US\$ 15.3/ t	
Processing	US\$ 7.8/ t	
General and Administrative Cost (G&A)	US\$ 2.4/ t	
Total Operating Cost	US\$ 25.5/ t	
Exchange rate (implementation)	R\$ 3.60 = US\$	
Exchange rate (operation)	R\$ 3.65 = US\$	
LOM Gold Price	US\$ 1,305/ oz	
Post Tax Economics		
Net Present Value (NPV)	NPV ¹⁰ ~US\$ 200 M	



1.4 Legal and Permitting

The Previous Licence (LP) and Installation Licence (LI) over the CentroGold Project area were suspended in 2013 by an injunction granted by a Federal Court Judge against the State of Maranhão and Avanco's subsidiary MCT Mineração Ltda. (MCT), now part of the OZ Minerals' consolidated group of companies. The injunction cited irregularities in the environmental licence granted by SEMA, the Maranhão State Environmental Agency.

Granting of the licences appeared to ignore some of the licensing process requirements, amongst which was the authorisation of INCRA (Colonization and Rural Reform Institute), the body responsible for land reform in Brazil. Almost the entire area of the CentroGold Project is covered by INCRA settlement projects.

In February 2018, INCRA completed a socio-economic study covering the Cipoeiro Village and associated settlement located within the CentroGold Project. The report concluded that the area was no longer used for agricultural means, and that most of the people in possession of the land were not part of INCRA's settlement projects for the area. The report recommended that the area is transferred for the use of OZ Minerals' subsidiary MCT for mining as the land has no further use for agriculture, and the mining activity can bring benefits to the local community such as job opportunities and tax revenue. OZ Minerals is awaiting associated actions for the report to be submitted to the Federal Court.

OZ Minerals is also providing support for the environmental and social studies that are necessary to inform a resettlement plan, which INCRA must also approve. All these actions facilitate the necessary authorisation from INCRA required for obtaining the proper environmental licences and full mine approvals by SEMA and ANM (former Departamento Nacional de Produção Mineral - DNPM).

Once INCRA authorisation is received, a positive decision is expected from the Federal Courts in regard to lifting the injunction. Existing environmental licences will then be updated and the Previous Licence and Installation Licence can be re-established.

INCRA has given authorisation for OZ Minerals' subsidaries to conduct ongoing exploration works in the area.

1.5 Project Development Approach

Post the finalisation of the Avanco Scoping Study, studies were developed to target the optimal combination of key variables for the project. Some of these were measurable by economic parameters (shareholder value), and others (employee value, community value, government value, supplier value, etc.) were evaluated under a more subjective approach. This served to explore and mitigate threats while identifying and realising opportunities.

The strategic approach utilised a combination of:

- Different mining cut-offs, mining rates and execution equipment
- Different processing throughputs (scale) and processing flow sheets



• Differing combinations of mining and processing scenarios were developed to maximise the value of the project using a 'Hill of Value' approach.

This preliminary study facilitated several key project decisions, including:

- Exclusion of Chega Tudo (less mature and requires additional work)
- Optimal plant scale (2.5 Mt per annum)
- Optimal cut-off grade (0.9 g/t)
- Optimal truck fleet selection (777 trucks)
- Selection of crushing circuit

1.6 Risk Management

Opportunities and threats associated with the CentroGold Project at this stage of the study have been investigated, with identification of those which require further evaluation in the next study stage.

Noted opportunities to pursue include:

- The potential inclusion of Chega Tudo (outside scope of PFS);
- Extension of the life of mine (LOM) through regional exploration success including the recently acquired Jiboia tenements (outside scope of PFS);
- Optimised truck selection across the LOM to improve project economics;
- Undertaking additional drilling to increase confidence in the Mineral Resource;
- Undertaking mining dilution studies and further metallurgical test work to improve Ore Reserve modifying factors.

Noted threats to mitigate include:

- The existing Court-imposed injunction against the project licences;
- The relocation of residents and artisanal miners;
- The current Brazilian mining legislative environment may impose additional restrictions for licensing of the Tailings Storage Facility (TSF). Options for alternatives will be considered as part of the FS;
- Commercial production declared past expiry of current tax benefit legislation granted by the Superintendence for the Development of the Northeast (SUDENE) and renewal of the legislation is not undertaken, resulting in a reduced project value.

The CentroGold Project is subject to risk factors that are specific to the project and, like most other mining and development projects, those of a more general nature. Any, or a combination of these risk factors, may have a material adverse impact on the project's operating and financial performance.



This section described some of the potential key risks associated with the project. It does not purport to list every risk that may be associated with the project in the future, and the occurrence of consequences of some of the risks described in this section are partially or completely outside the control of OZ Minerals. There is no guarantee or assurance that the importance of different risks will not change or other risks will not emerge.

1.7 Mineral Resources

The CentroGold May 2019 Mineral Resources for the combined Blanket and Contact deposits have been estimated at 28 million tonnes of gold mineralisation grading 1.9 grams per tonne gold. This Mineral Resource estimate does not include the Chega Tudo deposit, which remains as previously reported by Avanco in November 2017.

The updated CentroGold Mineral Resource estimate for the combined Blanket and Contact deposits is a re-statement of the existing Mineral Resource estimations at a lower cut-off grade of 0.4 grams per tonne gold. The decrease in reporting cut-off is driven by the results of the mining studies conducted as part of this PFS.

The May 2019 Mineral Resource estimate is 30% higher in mineralisation tonnes, 21% lower in gold grade and 3% higher in contained gold ounces than the previous combined total of estimated Mineral Resources for the CentroGold Project's Blanket and Contact deposits.

A summary of the current CentroGold combined Blanket and Contact Mineral Resource estimate underpinning the PFS is presented in Table 1.3.

Table 1.3: Gold Mineral Resource 1 Estimate as at 06 May 2019²

Project	Category	Tonnes (Mt)	Au (g/t)	Au (koz)
CentroGold Project	Indicated	21	1.9	1,300
Combined 'Blanket' & 'Contact'	Inferred	7.3	1.8	410
0.4 g/t Au cut-off	Total	28	1.9	1,700

The Mineral Resources for Blanket and Contact were classified as a combination of Indicated and Inferred. This classification was based upon the assessment and understanding of the deposit style, geological and grade continuity, drill hole spacing, input data quality, interpolation parameters, estimation quality statistics and an assessment of the available density data by the Competent Person.

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¹ See OZ Minerals announcement titled "CentroGold Project Combined 'Blanket' and 'Contact' Mineral Resource as at 06 May 2019 and Ore Reserve as at 24 June 2019 Statement and Explanatory Notes", released on 11 July 2019 and available at: www.ozminerals.com/media/asx/

² Table subject to rounding errors.



1.8 Ore Reserve

Independent consultant's, AMBA Consulting were engaged by OZ Minerals to estimate the Ore Reserve for the CentroGold Project according to JORC Code 2012 guidelines. As the Mineral Resource is based on Indicated and Inferred material only, the Ore Reserve is reported using only the Indicated Resource.

The cut-off grade for the higher-grade portion of the Ore Reserve is greater than 0.9 grams per tonne of gold for Blanket and Contact. The low-grade stockpile tonnage and grade are based on the economic cut-off grade calculated using the software NPV Scheduler 4 (NPVS) and is variable according to lithology.

A summary of the CentroGold Ore Reserve estimate underpinning the PFS is presented in Table 1.4.

Table 1.4: Gold Ore Reserve³ Estimate as at 06 May 2019⁴

Classification	Tonnes (Mt)	Au (g/t)	Au (koz)	Cut-off grade (g/t)
Proved	0.0	0.0	0.0	0.0
Probable				
Blanket	8.3	1.9	500	0.9
Contact	4.5	3.0	420	0.9
Low-grade ore	7.0	0.7	150	Cut-off ⁵
Total	20	1.7	1,100	

1.9 Mining

The underlying estimates for the open pit Mineral Resource were originally generated by CSA Global Pty Ltd for the 2018 Mineral Resource releases in two separate block models. These were subsequently merged by Xstract Mining Consultants Pty Ltd to remove a spatial overlap and to enable combined deposit pit optimisation to proceed. Validation was undertaken to confirm the merged model had inappreciable differences relative to the restated May 2019 Mineral Resource.

The pit optimisation was performed using NPVS. Before the block model was uploaded into NPVS, new attributes were created to apply costs and recoveries. A traditional drill and blast, excavator and truck operation was modelled.

³ See OZ Minerals announcement titled "CentroGold Project Combined 'Blanket' and 'Contact' Mineral Resource as at 06 May 2019 and Ore Reserve as at 24 June 2019 Statement and Explanatory Notes", released on 11 July 2019 and available at: www.ozminerals.com/media/asx/

⁴ Table subject to rounding errors.

⁵ Cut-off grades for low grade ore vary by lithology: Colluvium 0.5 (g/t); Oxide 0.7 (g/t); Transitional 0.5 (g/t) and fresh rock (0.45 (g/t).



A NPVS pit shell (revenue factor 1) was chosen as the basis of the design from the optimisation. The cutoff grade used was selected in the preceding Hill of Value study. This cut-off was higher than the economic breakeven cut-off determined by NPVS. Thus, all material with a grade above the economic breakeven cut-off and below the Hill of Value cut-off (0.9 g/t), was treated as low-grade ore, stockpiled and later reclaimed for processing at the end of the LOM.

The two orebodies, Blanket and Contact, are proposed to be mined simultaneously in a 24 hour per day operation. The optimisation indicated a preference to mine the higher-grade Contact deposit first, as well as the need to undertake a moderate pre-strip to enable reasonable volumes to be mined in the following two years.

To accommodate the volume of waste, three different waste dumps were designed, based on material type and previous licensing locations. A small dump was strategically positioned in front of the tailings dam, with all dumps a minimum of 200 m from the pit crest.

A decision was made to use a contract mining scenario – responsible for drilling, loading, hauling, waste dump and stockpile construction, reclaiming of ore to the crusher, drainage and road maintenance. Another contractor was modelled for blasting, explosive supply and explosives transport to site.

The Ore Reserve estimate is based on Indicated Mineral Resources only. Inferred Resources were included in the pit optimisation and in the project mining plan, with the percentage of Inferred included at ~15%. A pit optimisation and mining plan was carried out treating the Inferred material as waste and a sensitivity analysis was included in the PFS. The sensitivity analysis identified that removing the Inferred material did not have a material economic effect on the project or Ore Reserve. Furthermore, the sensitivity analysis identified the inclusion of Inferred material in the optimisation led to ~800 kt of Indicated mineralisation being included in the Ore Reserve. If the Inferred material does not eventuate, then the additional Indicated mineralisation may not add value to the project, though any potential negative impact on the project will not be material.

1.10 Metallurgy and Metallurgical Test Work

Metallurgical test work has been conducted on the CentroGold Project's ores in four major phases:

- Santa Fe Pacific Gold conducted the first program over a period from 1995 to 1997
- Kinross completed the second phase in 2004
- Jaguar undertook process developments between 2010 and 2016
- A test work campaign was performed by MCT (Avanco/OZ Minerals) between September 2017 and February 2018.

Following this historical test work, the 2017 campaign led by Avanco focused on improving flotation. The objectives included minimising mass pull to concentrates while maintaining gold recovery. Cleaning flotation stages were tested to produce high-grade concentrates for treatment by intensive cyanidation



or for direct sales to market to blend with copper concentrates in order to raise their gold content above payable limits. Another objective of this campaign was to check the viability of floating blends of saprolite and hard rock ores with low or nil impact on gold recoveries.

There are some test work elements associated with the flow sheet, such as the gravity concentrate stage, that will require further test work in future study stages, which may have a positive impact on recovery assumptions.

The geometallurgical campaign started by Avanco/OZ Minerals in 2018 is ongoing. It highlighted two ore characteristics that affect metallurgy: one is the clay content of some saprolite ores that highly impact mass pulls/concentrate grades, the other is grinding sizes that have different impacts in gold concentrate grades and recoveries, some ores requiring coarser grinds, others finer grinds.

As a result, saprolite ores containing higher clay contents are not intended to be mixed with hard rock ores before flotation – they must be de-slimed or treated separately.

Gold Recovery

The mathematical model for the Overall Recovery (OR) used in the financial study was:

Gold recovery = $5.361 \times \ln (\text{ore grade in g/t Au}) + 82.872$, for ores below 15.3 g/t Au.

1.11 Process Plant and Auxiliary Supporting Facilities

Based on the test work carried-out by Avanco/OZ Minerals and on the extensive test work performed by previous owners, an optimised flowsheet was developed. The process considers primary, secondary and tertiary crushing, a ball mill, gravity concentration in the ball milling circuit, gravity concentrate intensive leaching, froth flotation, flotation concentrate carbon-in-leach, elution, electrowinning and smelting to doré bullion.

The plant was designed for an annual throughput of 2.5 million tonnes per year, being the run of mine (ROM) unloaded directly from trucks to the primary crusher or being stored on an intermediate stockpile on the ROM pad and reclaimed by front-end loaders to the crusher. The crushing operation would be at 4,380 hours per year and a nominal rate of 571 tonnes/ hour. The plant was modelled having an effective utilisation of 90% considering the material being reclaimed from an intermediate stockpile at a nominal rate of 317 tonnes/ hour, with ~1.7 g/t Au average head grade.

The plant layout (see Figure 1.2) was developed to minimise the footprint, thereby reducing distances for pumping and materials handling operations.



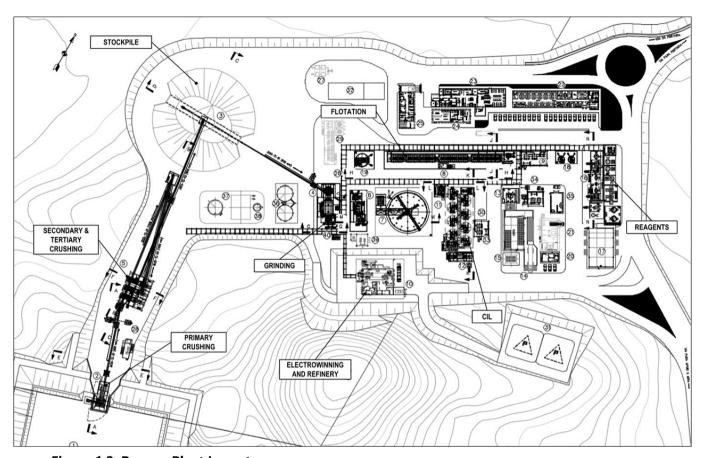


Figure 1.2: Process Plant Layout

Administrative and Support Facilities

The main administrative and support facilities required by the operation are:

- Main gate and bus terminal
- Administrative office
- Change house
- Cafeteria
- Multiple use building
- Laboratory
- Maintenance shop and warehouse
- Residues disposal centre (CMD)
- Explosives and accessories magazine



Mine Support Facilities

The buildings and installations have been designed to be conveniently located to offer easy access for the mobile mining equipment. Heavy mobile equipment would be segregated from the light vehicles in the workshop/car park areas. The facilities would consist of a general maintenance shop, a heavy equipment maintenance shop, fuelling and washing stations, diesel storage, welding and tool machining shop, warehouse, and a small office with work stations to accommodate the mining management personnel.

The main administrative and support facilities considered in the study and its associated locations are shown in Figure 1.3.

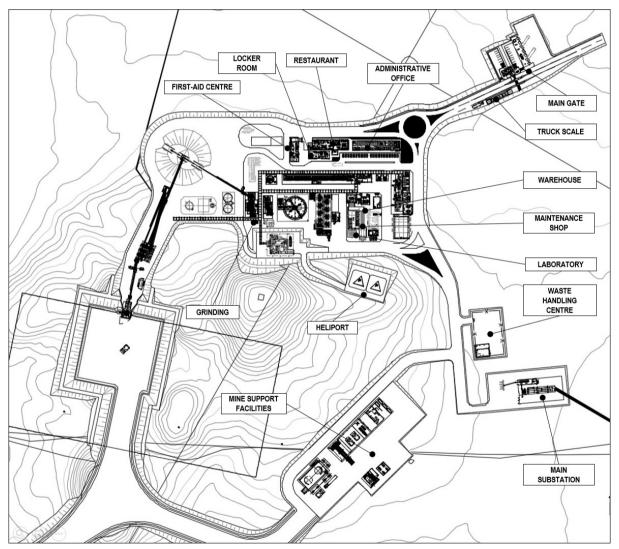


Figure 1.3: Main Administrative, Workshop and Maintenance Facilities



1.12 Tailings and Water Management Systems

It is predicted that over the life of mine with a mine production of an estimated 2.5 Mtpa, approximately 24 Mt of process tailings would be produced, as well as approximately 150,000 m³/year of sediments, generated by the haulage operations and carried from the waste stockpiles.

The search for tailings disposal areas was limited to the boundaries defined by the former environmental licence. The drainage basin of the Cachoeira River, a tributary of the Gurupi River, was selected to house the main dam structure, the Cipoeiro Dam. The catchment basin associated with the dam is 2.54 km².

The selected scenario to manage both the tailings and water management systems is structured on a combined solution involving the Cipoeiro Dam (fed by significant seasonal rainfall and dewatering of the Blanket and Contact Pits) and Dike C, as shown in Figure 1.4. Water to feed the plant is sourced from a combination of tailings and the water retention dam (Dike C).

The Cipoeiro Dam would be built by the downstream method with compacted homogenous soil in two stages, with a starter dam and a second 5 m lift stage. All the materials required to build the dam and the initial dikes embankments will come from the reservoir area. Spillways were designed for a recurrence period of 10,000 years.

Dike C has also been designed to be built of homogeneous compacted soil by the downstream method, but in a single stage.

Dewatering of the Blanket and Contact Pits would also contribute significantly to the Cipoeiro Dam reservoir, with spillway overflows diverted to Dike C.

Dike C's water accumulation capacity and favourable location to plant operations make it the preferred option to be the operation's water source, while tailings would be sent to the Cipoeiro Dam. During the last year of operation, when the Cipoeiro Dam reservoir may be unable to accommodate tailings, water liberated from the tailings would be directed to Dike C, which would also preserve a safe flood buffer.



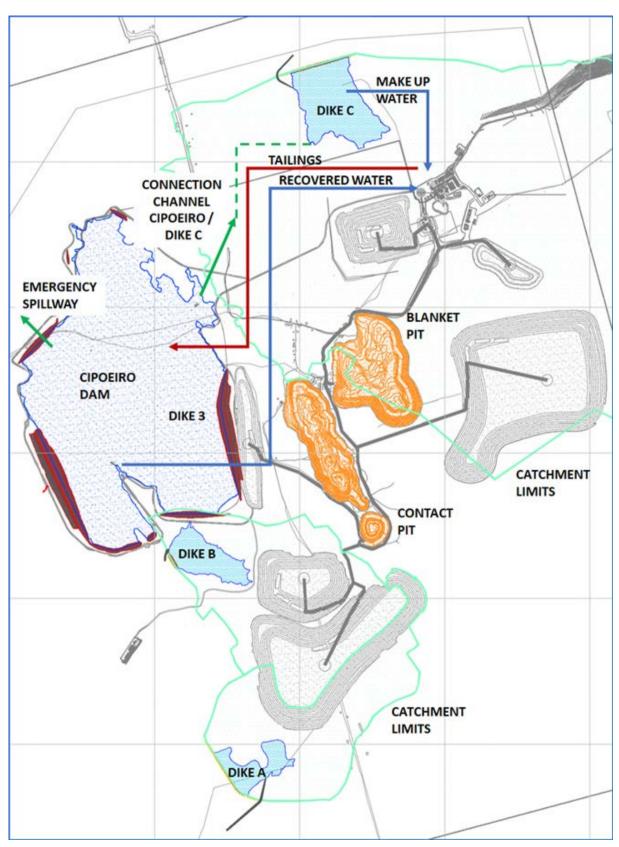


Figure 1.4: Tailings and Dikes Master Plan



1.13 Power Supply

From the studies performed by Senior Engenharia in 2017 and through preliminary consultations with the Maranhão State Power Company (CEMAR), the possibilities for alternatives and routes that could best meet the project power demand of approximately 15 MW were evaluated.

CEMAR was engaged to evaluate supply scenarios from the existing distribution system. Their Feasibility Study recommended the option of connecting via the 69 kV Governador Nunes Freire substation as technically and financially preferable.

According to CEMAR guidelines, the transmission line between the 69 kV Governador Nunes Freire substation and the main substation at CentroGold should be a 69 kV simple express circuit with a 58 km extension. As the transmission line is considered to be of public interest to the development of the region, formal land acquisition is not required.

1.14 Health and Safety

Project conventions for health and safety policies will be based on the excellent performance achieved to date at the Avanco/OZ Minerals' Antas Mine.

The operation would use OZ Minerals Standards for all activities related to health and safety and comply with Brazilian regulations. All employees and contractors would undertake safety and environmental awareness and training programs before commencing work.

Site facilities would include a suitably equipped first aid room, which would be staffed 24 hours per day by a fully qualified nurse and equipped with an ambulance conforming to the requirements of Brazilian legislation.

1.15 Human Resources and Planning

The study has modelled the implementation of the project based on using the personnel and companies that successfully designed and constructed Avanco's Antas plant, on time and under budget.

As was done at Antas, a strong owner's team of selected freelance specialists with Brazilian and international experience would be created, to rapidly identify and resolve problems that may arise during all steps of project implementation.

A total of ~390 employees are likely to be required for the operation. This number considers both Avanco/OZ Minerals employees and sub-contracted workers.

OZ Minerals proposes to recruit mostly in the vicinity of the mine, in the Centro Novo do Maranhão and Maracaçumé communities, as well as in the Belem, São Luiz and Parauapebas regions, where necessary resources are most likely available due to the existence of similar operations.



OZ Minerals has started a technical trainee program at its Antas operation for Centro Novo residents as well as offering part-time positions at Centro Novo for young apprentices.

Recruitment of the operational and technical teams would be scheduled to begin six months in advance of the mine and plant start-up.

1.16 Communities and Environment

According to state government agencies, Centro Novo do Maranhão is characterised by a high index of social vulnerability. The absence of relevant economic activities capable of boosting regional development is strongly influenced by its complex territorial configuration. Around 67% of the area is under Federal domain and management, either through the Gurupi Biological Reserve or through indigenous lands, which spatially fragment the municipality and leave few areas for occupation and other uses.

Mining is one of the most important sectors of the country's economy, and there are no reasons for this to be different at Centro Novo do Maranhão. The company is aware of the impact that the project would have on neighbouring communities and is committed to boosting the positive consequences and minimising any negative consequences.

Labour demands during construction and operational stages would create a considerable number of direct and indirect jobs in the region, with a preference for residents to fill such positions.

1.17 Rehabilitation and Mine Closure Plans

Project closure strategies consider all applicable Brazilian national and state regulations applied to mine installations, which include the depleted pits, waste dump areas, tailings management facilities, water pipeline, and the process plant, among others. Such regulations would be considered during the operational life of the mine to facilitate suitable post-mining land use.

Pits and waste disposal areas would have their slopes and drainages stabilised, and the associated operational roads are proposed to be closed to avoid public access. Water quality in such areas would be assessed during operations and controlled during closure by implementing actions identified and detailed during the mine operation. Topsoil would be progressively placed over completed sections of the waste dump areas to allow re-vegetation to take place progressively.

Tailings management facilities and the associated perimeter roads would receive treatment to prevent erosion or stability damage and are proposed to be closed to prevent public access. Post-closure spillways would be designed to adequately support maximum expected floods in all the dams and dikes.

The process plant, auxiliary facilities and the associated buildings would be dismantled, removed from the site and sold.



Before closure, a post-closure monitoring plan in compliance with any post-closure permit requirements would be prepared, offering all elements required to demonstrate successful closure of the site.

Return of the mining concessions to the Government of Brazil would occur once the mine reclamation and closure actions were complete.

1.18 Capital Costs Estimate

The total initial capital cost is estimated at \sim US\$ 155 million, with an average contingency amount of \sim 15% included in this value.

Sustaining capital expenditures during the operations period include closure costs totalling \sim US\$19 million, as well as an allowance of \sim US\$ 0.5/ tonne for other capital requirements during the project LOM. A \sim 15% contingency rate has been considered for mine closure costs.

1.19 Operating Costs Estimate

Project operating costs have been estimated by MIPTEC under three functional headings: Mining Cost, Plant Processing Costs and the General and Administrative Costs.

These costs were estimated for the two different operational phases considered. The estimate is based upon current prices at a dollar base rate of R\$3.65.

Average operating costs over the life of the project (from Year 2 to 11) are estimated as follows:

Mining Costs: US\$ 15.3/ tonne
 Plant Processing: US\$ 7.8/ tonne
 General & Administrative Costs: US\$ 2.4/ tonne
 Total Operating Cost: US\$ 25.5/ tonne

First operational phase, **FULL OPEX COSTS**, is applied when the higher-grade ore is mined and fed to the plant, and the low-grade ore is stockpiled for treatment at the end of the pit LOM. Waste would be dumped in appropriate areas. This would occur from Year 2 to Year 7, with Year 1 being dedicated to pre-stripping.

FULL OPEX COSTS (from Year 2 to 7) are estimated as follows:

Mining Costs: US\$ 15.3/ ore tonne mined
 Plant Processing: US\$ 7.7/ ore tonne processed
 General & Administrative Costs: US\$ 2.8/ ore tonne processed

Total Operating Cost: US\$ 25.8/ tonne



The second operational phase, **LIMITED OPEX COSTS**, is applied when the mine is depleted, and the previously stockpiled low-grade ore would be reclaimed and treated. At this phase, there are no associated mining costs with activity limited to rehandle operations of low-grade ore feed to the plant. This would occur from Year 8 to Year 11.

LIMITED OPEX COSTS (from Year 8 to 11) are estimated as follows:

Plant Processing: US\$ 8.6/ ore tonne processed
 General & Administrative Costs: US\$ 1.8/ ore tonne processed

Total Operating Cost: US\$ 10.4/ tonne

1.20 Market Analysis

The project will produce gold doré which will be shipped to a precious metals refinery in Brazil for refining into bullion. The market for gold is transparent, and it is expected that the refined gold will be sold on the open market at spot prices.

The doré has been assumed to have a gold content of approximately 80% by weight based on preliminary process calculations. This assumption for the mass of doré produced was used to estimate transportation and treatment and refining charges (TC/RCs).

Based on the annual doré production, two shipments per month have been considered in early years, reducing to one shipment per month in later years when doré production decreases.

1.21 Economic Modelling

Gold and Silver price projections, exchange rates, applied royalties, refining charges and discount rates used in the analysis of this project were as per the OZ Minerals internal economic assumptions.

AMBA Consultoria prepared the open pit design, mine plan and production schedules.

MIPTEC prepared the Capital and Operating cost estimates for the mine, industrial facilities, support infrastructure, economic modelling and compilling the PFS report.

Gross revenue was estimated based on production schedule yearly quantities, grades and metallurgical recoveries, at a constant long-term gold price of US\$1,305/ oz.

Applied royalties are a percentage of the gross revenue less refining and transportation costs and vary from 4.25% to 5.25% depending on the production level.

Third-party services of treatment, refining, insurance and inspection were fixed at US\$0.50/ oz, while the transportation of the doré from site to the refinery is estimated at US\$42,000/ shipment.



For the after-tax financial analysis, the study considers that the project is entitled to a special Brazilian tax incentive granted by the Superintendence for the Development of the Northeast (SUDENE) that provides a 75% reduction to the corporate income tax payable of 25% on eligible yearly profits. A 9% social contribution tax was also considered on the same base for a total rate of 15.25%.

After-tax analysis, considering income tax rates and a 10-year average depreciation period, resulted in an NPV of ~US\$200 M (at a 10% real discount rate).

Results of sensitivity analysis considering a range of +/- 25% on key project variables such as plant feed grade, gold price, exchange rate, operating costs and capital costs were generated. The extreme NPV values of the project are summarised in Table 1.5.

Table 1.5: Results of Sensitivity Analysis

Base Case NPV: ~US\$200 M				
	- 25%	+ 25%		
Plant feed grade	~45 M	~365 M		
Gold Price	~50 M	~355 M		
Exchange Rate	~100 M	~265 M		
OPEX	~275 M	~130 M		
CAPEX	~230 M	~175 M		

1.22 Funding

The PFS is based on the material assumptions outlined above. These include assumptions about the availability of funding to support the capital required, which is expected to be sourced from a mix of the group operating cash flow and supported debt. While OZ Minerals considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PFS will be achieved. It is also possible that funding may only be available on terms that may be dilutive to or otherwise affect the value of OZ Minerals' existing shares.

It is also possible that OZ Minerals could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce OZ Minerals' proportionate ownership of the project.



1.23 Reliance on Other Consultants

The PFS utilised the substantial information developed by former project owners, in conjunction with new information generated.

Inputs from the following consultants involved in the former studies were considered as part of the present PFS:

- AMEC Americas
- TechnoMine LLC co
- Pincock Allen & Holt Inc.
- SRK Consulting
- Golder Associates Inc.
- Lyon Engenharia
- MWM Americas

The following consultants, in addition to MIPTEC, were hired to perform updated studies on specific areas of the project:

- AMBA Consultoria em Geologia e Mineração Pit Optimization, Mining Plan, Waste Dump and Stockpile designs and Ore Reserve
- MB Soluções em Geologia e Mineração Ltda
- CSA Global Mining Pty
- Senior Engenharia Ltda.
- GeoHydroTech Engenharia Ltda.
- Terracota Consultoria e Projetos
- MLF Geotecnia e Mecânica de Rochas Ltda Belo Horizonte
- Rezende Consultoria em Tratamento de Minérios Ltda
- Geominas Geologia e Construtora Ltda
- Antonio Landi Borges EPP
- Domingos Lanna Soluções para Mineração e Engenharia LTDA
- Xstract Mining Consultants Pty Ltd

