

9 April 2018

# **CentroGold – Scoping Study**

**ASX: AVB ('AVANCO' OR 'THE COMPANY')** is pleased to report highly encouraging results from the evaluation of the Company's 100% owned CentroGold Project <sup>1</sup> situated within the Gurupi Greenstone Gold Belt in Northern Brazil.

The results of the Scoping Study<sup>2</sup> indicates strong potential for a high-grade-low-CapEx gold mining operation. This outcome underscores confidence in the pending Pre-Feasibility Study (PFS) which is well advanced. Key results from the base case development, pre-tax financial modelling, are:

- 2.5 Mt/pa production for 129,900 Oz/pa Gold per annum <sup>4</sup>
- 170,300 Oz per year for first three years
- \$445.5 Million Life of Mine (LOM) net cash flow
- Pre-production CapEx circa \$108 Million
- Pre-Tax NPV<sub>10</sub> \$231.6 Million <sup>6,7</sup>
- Pre-Tax IRR 73% <sup>6,8</sup>
- Capital Payback < 24 months</li>
- AISC cost First 3 Years \$587/Oz gold
- AISC cost LOM \$862/Oz gold
- Initial Life of mine (LOM) of 11 years

The Scoping Study is completed to an overall ±35% level of accuracy and examined all facets of geology, mining, processing and supporting infrastructure at a \$1,250 gold price with a long-term foreign exchange rate of USD1.00:BRL3.50. All amounts are USD unless otherwise stated.

#### ASX Chapter 5 Compliance and Scoping Study Cautionary Statement

The information and production target presented herein is based on a Scoping Study. A scoping study is a low-level technical and economic assessment and is insufficient for the estimation of an Ore Reserve, assurance of economic development, and for the findings of this study to be realised.

The production target referred to is based on Mineral Resources which are classified 83% Indicated and 17% Inferred. There is a low level of geological confidence associated with Inferred Resources, and there is no certainty that further exploration work will result in the determination of Indicated Resources, or that the production target itself will be realised.

All JORC modifying factors have been sufficiently considered, including: mining studies, processing studies, laboratory scale metallurgical testwork, conceptual engineering and infrastructure assessments. Capital and operating costs, where applicable, are based on actual costs from the Company's nearby Antas Mine, with appropriate scaling and contingencies added. Third party accredited consultants have been used to complete or have contributed to the majority of technical aspects of the study and independent peer reviews, with the remainder of the work completed by Company technical staff. These studies support the assumptions that have been made in the Scoping Study. The Contact, Blanket, and Chega Tudo deposits are all contained in mining lease applications that are in good standing with the Departamento Nacional de Produção Mineral (DNPM).

The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this ASX Release. The Company also believes it has a reasonable basis to expect to be able to fund further and more advanced study phases from existing cash reserves. Subject to additional financing it is also reasonable to expect that the full scale CentroGold Project will be developed in the future.

All material assumptions on which the forecast financial information is based, are set out in this announcement. Please refer to Annexures A to E for further information.

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#### **CENTROGOLD - SCOPING STUDY HIGHLIGHTS**

The CentroGold Project fits well into Avanco's business model of developing low-risk-low-capex mines that capitalise on the Company's Brazilian expertise. Avanco acquired a 100% interest in CentroGold in September 2017.

- The Study demonstrates viability of a traditional open pit gold mining operation
- Early high-grade resources in the inventory indicate very strong cashflow during first 3 years
- Study confidence leveraged from substantial historical information and previous studies, with no technical or environmental flaws identified
- Contract Mining is envisaged, significantly reducing CapEx and risk
- Projects benefits from expected access to a reliable high voltage transmission grid
- 5,590 metres of diamond drilling completed by Avanco for the Scoping Study
- Approximately 10,000 metres of drilling underway to support Reserve definition for the Definitive Feasibility Study
- The Study contemplates ore extraction from three neighbouring deposits Contact, Blanket and Chega Tudo
- The period under study was 11 years but does not include any potential upside from future exploration which is considered substantial
- Avanco continues to work towards the lifting of the licensing injunction. The Study assumes the existing injunction over the project will be lifted and construction will be able to commence as planned.

The key operating assumptions and financial outcomes are set out below and in Section 5 of the Scoping Study. All costs are in USD.

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Development period	24 months
Mine life (years)	11
LOM mill throughput (Mt)	27.2 Mt
Average LOM gold production (Oz/pa post ramp-up)	129,900 Oz
Average gold production in the first 3 years (Oz/pa post ramp-up)	170,300 Oz
Indicated Resources used in study	83%
Inferred Resources used in study	17%
Annual throughput (Mt/pa)	2.5 Mt/pa
Average LOM plant feed grade (g/t gold)	1.9 g/t
Average LOM plant gold feed grade – First 3 years (g/t gold)	2.5 g/t
Plant Recovery – LOM Average	85%
Gold Price – LOM Average (\$/Oz)	\$1,250
Gold royalties – LOM average	5.6 %
Transport and Insurance costs (\$/Oz)	\$20/Oz
Refining charge – gold (\$/Oz)	\$5/Oz
Exchange rate – LOM Average (USD:BRL)	3.50
Mining Dilution assumption	5%
Mining recovery assumption	95%
Mining Cost (Ore + Waste) – LOM Average (\$/t) (excluding contingency)	\$3.72/t
Processing cost – LOM Average (\$/t)	\$11
General and administration – LOM Average (\$/t)	\$3
Pre-production CAPEX estimate (\$)	\$108 Million 10
AISC – First 3 Years Average (\$/Oz)	\$587 <sup>10</sup>
AISC – LOM Average (\$/Oz)	\$862 <sup>10</sup>

TONY POLGLASE
MANAGING DIRECTOR



### **CARAJAS COPPER – Mineral Resources** 9,10,11,12,13,14

DEPOSIT	Category	Million Tonnes	Cu (%)	Au (ppm)	Copper Metal (T)	Gold Metal (Oz)
Pantera 15	Inferred	20.80	1.7	0.2	350,000	140,000
Total Pantera		20.80	1.7	0.2	350,000	140,000
	Measured	1.98	2.7	0.7	53,000	43,000
DD Foot 16	Indicated	5.72	2.8	0.7	161,000	123,000
PB East <sup>16</sup>	Inferred	2.78	2.7	0.6	75,000	55,000
	Total	10.48	2.8	0.7	289,000	221,000
	Indicated	4.46	2.04	0.61	91,000	87,000
PB West <sup>16</sup>	Inferred	2.74	1.72	0.56	47,000	49,000
	Total	7.19	1.92	0.59	138,000	136,000
Total Pedra Branca		17.67	2.44	0.65	427,000	357,000
	Measured	2.84	2.2	0.5	62,200	48,400
Anton North 17	Indicated	2.93	1.5	0.3	44,000	31,500
Antas North 17	Inferred	3.99	1.1	0.2	43,200	24,200
	Total	9.76	1.5	0.3	149,400	104,100
	Measured	0.59	1.34	0.18	8,000	3,000
Anton Courth 18	Indicated	7.50	0.7	0.2	53,000	49,000
Antas South 18	Inferred	1.99	1.18	0.2	24,000	13,000
	Total	10.08	0.83	0.2	85,000	65,000
Total Antas		19.84	1.1	0.2	234,400	169,100
TOTAL		58.31	1.7	0.3	1,011,400	666,100

### ANTAS COPPER MINE – Ore Reserves 19,20

LOCATION	JORC Category	Economic Cut-Off Cu%	Million Tonnes	Copper (%)	Gold (g/t)	Copper Metal (T)	Gold Metal (Oz)
A 4 BA:	Proved	0.5	0.90	3.58	0.73	32,300	21,200
Antas Mine	Probable	0.5	1.83	1.83	0.43	33,600	25,600
Mine Stockpiles	Proved	0.5	0.04	0.93	0.28	400	400
TOTAL PROVE	N + PROBABL	.E	2.78	2.38	0.53	66,300	47,200

### **CENTROGOLD – Mineral Resources** 21,22,23

DEPOSIT	Category	Million Tonnes	Au (g/t)	Gold Metal (Oz)
	Indicated	4.4	3.6	509,000
Contact Zone 24	Inferred	3.8	2.5	301,000
	Total	8.2	3.1	811,000
	Indicated	11.4	1.9	711,000
Blanket Zone 24	Inferred	1.9	2.0	118,000
	Total	13.3	1.9	829,000
	Indicated	8.2	1.6	432,000
Chega Tudo <sup>24</sup>	Inferred	3.1	1.5	145,000
	Total	11.3	1.6	577,000
COMBINED TOTAL		32.8	2.1	2,217,000



#### **FOOTNOTES:**

- Gold mineralisation within the CentroGold project is considered to be typical of mesothermal vein-style, or orogenic-style gold mineralisation
- 2. See Scoping Study summary of economic results and material assumptions below. The Scoping Study is based on a low-level techno-financial assessment, and in not sufficient for the estimation of an Ore Reserve Estimate, assurance of full economic development, or that the findings of this study will be realised
- 3. EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation)
- 4. The production targets referred to, are based on Mineral Resources which are classified 83% Indicated, and 17% Inferred. There is a low level of geological confidence associated with Inferred Resources, and there is no certainty that further exploration work will result in the determination of Indicated Resources, or that the production target itself will be realised
- 5. These values are subject to the variance normally associated with Scoping Studies
- 6. Based on Scoping Study findings for the development of the full CentroGold operation (Contact, Blanket and Chega Tudo), with standalone plant
- 7. Net Present Value (NPV) Based on a discount rate of 10% and discounted to the commencement of construction.
- 8. Internal Rate of Return (IRR)
- Refer ASX Announcement "Maiden Pantera MRE pushes Avanco's Carajás Resource Base Beyond 1 Mt of Contained Copper",
   March 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pantera MRE
- 10. Refer ASX Announcement "Pedra Branca Resource Upgrade, Advances Development Strategy", 26 May 2016, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca East MRE
- 11. See ASX Announcement "Pedra Branca Resource Upgrade Delivers Substantial Increase in Both Contained Copper and Confidence", 13 July 2015, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca West MRE
- 12. See ASX Announcement "Stage 1 set to excel on new high-grade Copper Resource", 7 May 2014, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas North MRE
- 13. See ASX announcement "Major Resource Upgrade for Rio Verde", 8 February 2012, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas South MRE
- 14. The Antas South JORC MRE was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012, on the basis that the information has not materially changed since it was last reported
- 15. Grade Tonnage Reported above a Cut-off Grade of 0.6% Copper for Sulphide Resources
- 16. Grade Tonnage Reported above a Cut-off Grade of 0.9% Copper for Sulphide Resources
- 17. Grade Tonnage Reported above a Cut-off Grade of 0.4% Copper for Sulphide Resources
- 18. Grade Tonnage Reported above a Cut-off Grade of 0.3% Copper for Oxide Resources
- 19. See ASX Announcement "Maiden Reserves Exceed Expectations for Antas Copper", 17 September 2014, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas North JORC (2012) Reported Reserve estimate
- 20. Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves
- 21. See ASX Announcement "CentroGold Approaches 2 Million Ounces", 21 March 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Contact MRE
- 22. See ASX Announcement "CentroGold Updated Contact Deposit Resource Grade Now Exceeds 3 g/t Gold", 7 February 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Blanket MRE
- 23. See ASX Announcement "CentroGold Resources Increase 45% and Exceeds 1.8 Million Ounces", 13 November 2017, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Chega Tudo MRE
- 24. Grade Tonnage Reported above a Cut-off Grade of 1.0 g/t Gold

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# **CENTROGOLD SCOPING STUDY**

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#### 1. Introduction

Avanco Resources Limited ("AVB", "Avanco" or "the Company") is developing the CentroGold gold deposit in the Gurupi greenstone belt region of Maranhão State, Brazil. Avanco engaged consultants, independent contractors and used its in-house expertise to prepare the various inputs for this Scoping Study.

#### 2. Project Location and Access

The CentroGold Project is located 500 kilometres northwest by paved highway from São Luis, the capital of Maranhão State, and 350 kilometres southeast from Belém, the capital of the Pará State (Figure 1). The Project comprises of three deposits, favourably situated 600 kilometres northeast of the Company's Carajas assets. The neighbouring Contact and Blanket deposits are located 8 kilometres from the Chega Tudo deposit. The nearest substantial town is Centro Novo, some 20 kilometres away with a population of approximately 15,000.

CentroGold is one of several large gold projects in the region including: Tucano, Aurizona, Volta Grande and Tocantinzinho. Gold was discovered in the Project area in the 17th century by colonial settlers. During the early 1900s and again in the mid-1980s, intermittent small-scale artisanal mining occurred. Gold was exploited from oxidized and weathered material, including alluvium, saprolite, and saprolite-hosted quartz veins, mostly from small pits.

Throughout 1994 to 2000, various modern exploration programmes were completed, including geological mapping, geochemical sampling, ground/airborne geophysics, diamond core drilling, RC drilling, core relogging, metallurgical testwork, geological modelling and resource estimation.

In 2003, Kinross acquired CentroGold, completing infill and definition drilling at the Contact, Blanket and Chega Tudo, metallurgical testwork, bulk/solids density determinations. Kinross went on to produce a feasibility study.

Jaguar acquired the property in 2009 and subsequently released another feasibility study by TechnoMine Services (available from Jaguar's public fillings on the SEDAR website).

#### 3. Mineral Rights, Licenses and Land

The mineral rights and exploration licences for the three deposits are confirmed to be in good standing with the DNPM. The Company has access agreements in place with stakeholders for drilling and exploration activities.

#### 4. Environmental and Social Permitting

CentroGold was previously granted environmental and construction licenses, these approvals were subsequently suspended by court injunction due to administrative oversights in the licencing process. Avanco is working alongside the regulatory authorities and the local community, seeking the earliest possible resolution.

Community relations in Centro Novo and around the CentroGold district are excellent, with strong support for the implementation of the Project and the prosperity that it will bring to the region.



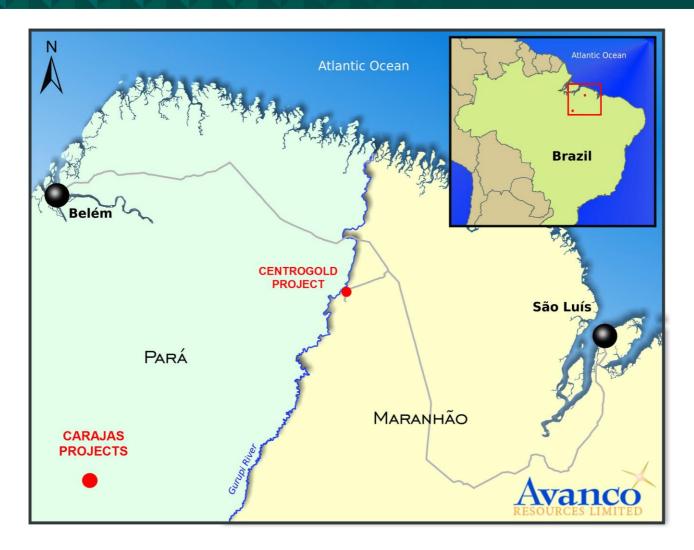


Figure 1. Regional Location and Access for the CentroGold Project

#### 5. Scoping Study Parameters and Material Assumptions

The CentroGold Scoping Study was completed to an overall ±35% level of accuracy using the parameters and assumptions set out in Table 1.

The key considerations in the Scoping Study were: preferred mining and processing route, throughput rate, project life, community and environmental impacts. The period under study is 11 years, however the LOM has significant potential to be increased as all three orebodies are open at depth and along strike. The Scoping Study is therefore considered to be a base case scenario.

**Table 1: Key Assumptions and Outcomes** 

Development period	24 months
Mine life (years)	11
LOM mill throughput (Mt)	27.2 Mt
Average LOM gold production (Oz/pa post ramp-up)	129,900 Oz
Average gold production in the first 3 years (Oz/pa post ramp-up)	170,300 Oz



Indicated Resources used in study	83%
Inferred Resources used in study	17%
Annual throughput (Mt/pa)	2.5 Mt/pa
Average LOM plant feed grade (g/t gold)	1.9 g/t
Average LOM plant gold feed grade – First 3 years (g/t gold)	2.5 g/t
Plant Recovery – LOM Average	85%
Gold Price – LOM Average (\$/Oz)	\$1,250
Gold royalties – LOM average	5.6 %
Transport and Insurance costs (\$/Oz)	\$20/Oz
Refining charge – gold (\$/Oz)	\$5/Oz
Exchange rate – LOM Average (USD:BRL)	3.50
Mining Dilution assumption	5%
Mining recovery assumption	95%
Mining Cost (Ore + Waste) – LOM Average (\$/t) (excluding contingency)	\$3.72/t
Processing cost – LOM Average (\$/t)	\$11
General and administration – LOM Average (\$/t)	\$3
Pre-production CAPEX estimate (\$)	\$108 Million 10
AISC – First 3 Years (\$/Oz)	\$587 <sup>10</sup>
AISC – LOM Average (\$/Oz)	\$862 10

All amounts are USD unless otherwise stated.

#### 6. Study Team

Avanco engaged accredited consultants to undertake the majority of technical aspects of the Study, and/or independent peer reviews. The balance of the work was completed by Avanco's technical staff.

Table 2 summarises the principal study activities and the responsible entities.

#### **Table 2. Principal Study Team and Activities**

Study Discipline	Industry Expert
Project Manager	Avanco
Financial Modelling	MIPTEC. Belo Horizonte, Brazil
Site Infrastructure/Basic Engineering	MIPTEC. Belo Horizonte, Brazil
Geology	Avanco
Resource Estimation	CSA Global Pty Ltd, Perth, Australia
Pit Optimisation/Production Targets	CSA Global Pty Ltd, Perth, Australia
Process Engineering	MIPTEC. Belo Horizonte, Brazil
Metallurgical Testwork	Frank Rezende, of AU@BR
Tailings Dam Design	Antonio Landi Borges and GHT Consultoria of Sao Paulo, Brazil
Brazilian Legal	FFA Legal, Rio de Janeiro, Brazil

#### **Independent/Peer Review**

Metallurgical Testwork	MIPTEC. Belo Horizonte, Brazil
Comminution and Process Engineering	MIPTEC. Belo Horizonte, Brazil
Geotechnical Engineering	Mauri Ferreira, of Geotécnica e Mecânica de Rochas Ltda.
Field data and QA/QC procedures	CSA Global Pty Ltd, Perth, Australia



#### 7. Local Geology and Mineralisation

Gold mineralisation within the Project is considered to be typical of mesothermal vein-style, or orogenic-style gold mineralisation.

At both the Contact and Blanket deposits, two main litho-types are recognised; a tonalite and arkosic, fine-grained arenite. The host of the primary mineralisation at the Contact deposit is a coarse, equigranular intrusive of tonalitic composition. Rocks have been significantly affected by hydrothermal alteration. Gold mineralisation is closely associated with sulphide content within zones of quartz-sericite-pyrite alteration.

Chega Tudo is hosted in a dacite metavolcanic unit. Intrusive gabbro, extrusive andesite, and arkosic arenite rocks are in structural contact with the dacite. Rocks in the deposit area have been widely affected by hydrothermal alteration. Mineralisation occurs mainly in the dacite and found solely within zones of quartz—sericite—pyrite alteration and is closely related to the pyrite content.

Mineralisation at the Contact deposit is typically sub-vertical, with flatter lying high-grade zones hosted in rafts of sediment within the tonalite intrusion host rock.

The Blanket deposit is a shallow dipping (approximately 20-30 degrees), tabular body of medium grade gold mineralisation.

Mineralisation at Chega Tudo, typically forms en-echelon pods elongated with the shear foliation and persisting for tens to hundreds of meters of strike and a similar distance down dip. These northwest-trending, steeply southwest-dipping mineralized zones range from a few meters to as much as 30 metres in width and can form multiple pods that can be as much as 100–200 metres wide.

#### 8. Mineral Resources and Estimation

CSA Global has completed a number of Mineral Resource Estimates ("MRE") on behalf of Avanco, for CentroGold, since its acquisition in 2016.

In March 2018, CSA Global updated the Mineral Resource estimate for the Contact deposit (refer to ASX Announcement "CentroGold – Updated Contact Deposit Resource Grade Now Exceeds 3 g/t Gold", 21 March 2018, for Competent Person's Consent, material assumptions and technical parameters underpinning the Blanket MRE, including JORC Table 1, Sections 1, 2, and 3).

In February 2018, CSA Global updated the Mineral Resource estimate for PBE (refer to ASX Announcement "CentroGold Approaches 2 Million Ounces", 7 February 2018, for Competent Person's Consent, material assumptions and technical parameters underpinning the Blanket MRE, including JORC Table 1, Sections 1, 2, and 3).

In February 2018, CSA Global updated the Mineral Resource estimate for Chega Tudo (refer to ASX Announcement "CentroGold Resources Increase 45% and Exceeds 1.8 Million Ounces", 13 November 2017, for Competent Person's Consent, material assumptions and technical parameters underpinning the Chega Tudo MRE, including JORC Table 1, Sections 1, 2, and 3).

At Contact the Mineral Resource has been completed using two individual grade domains with a nominal 0.4 g/t Au cut-off grade for wireframing. At Blanket the Mineral Resource has been completed using five individual grade domains constructed using a nominal 0.5 g/t Au cut-off grade for wireframing. At Chega Tudo the Mineral Resource has been completed using three grade domains (in thirteen separate wireframes) using a nominal 0.5 g/t Au cut-off grade for wireframing.



For all three deposits Quantitative Kriging Neighbourhood Analysis was undertaken using Supervisor <sup>™</sup> software, to assess the effect of changing key Kriging neighbourhood parameters on block grade estimates on estimation quality statistics of the grouped domain. Kriging Efficiency and Slope of Regression were analysed for a range of block sizes, minimum and maximum samples, search dimensions and discretisation grids.

At Contact and Blanket, a Surpac 'proportional' block model with parent cells of 10 mE by 10 mN by 10 mRL was constructed without sub-celling. Instead of using sub-celling, a proportion figure was calculated for each block representing the proportion of mineralisation below the topographic surface wireframe. Gold grades for the main mineralised zones were interpolated using ordinary kriging, while 'colluvium' mineralisation was interpolated using inverse distance cubed (ID3). Samples were composited to one metre intervals based on assessment of the raw drill hole sample intervals. At Contact high-grade cuts of 15 g/t Au (colluvial overburden) and 40 g/t Au (main deposit) were applied to the mineralisation domains, while at Blanket high-grade cuts ranging from 5 g/t Au to 26 g/t Au were applied to the mineralisation domains, both following statistical analysis completed using Supervisor<sup>TM</sup> software.

For Chega Tudo, Ordinary kriging (OK) was adopted to interpolate grades into cells for the main mineralised zones. ID2 was used to interpolate the grades in a low-grade halo around the mineralisation corridors, inside which the composites for the high-grade domain were removed, then the remainder top-cut at 30 g/t Au. The block size appropriately reflects the drill hole spacing, which varies from 25-50 metre pierce points along strike on sections averaging 40 metres in the southeast zone and 60 metres pierce points along strike on sections averaging 60 metres in the northwest zone. Pierce points on section are evenly spaced, averaging 1-10 metres across strike and 10-25 metres down dip. The estimate employed a first pass search equal to the maximum range of the Au semi-variogram model for the domain, honouring the anisotropic ratios in the orthogonally, which was expanded to twice the size for a second pass.

The following densities were used for Contact and Blanket:

Colluvium and oxide: 1.53t/m³
 Transitional material: 2.3t/m³
 Fresh arkose waste: 2.7t/m³
 Fresh tonalite waste: 2.8t/m³
 Fresh sulphide mineralisation: 2.72t/m³

At Chega Tudo the following densities were used:

Mineralisation: 1.59 t/m3, 2.19 t/m3 and 2.69 t/m3 for oxide, transitional and fresh respectively
Metavolcanics: 1.89 t/m3, 2.29 t/m3 and 2.69 t/m3 for oxide, transitional and fresh respectively
Gabbro: 2.03 t/m3, 2.53 t/m3 and 3.03 t/m3 for oxide, transitional and fresh respectively
Arkose: 1.59 t/m3, 1.9 t/m3 and 2.25 t/m3 for oxide, transitional and fresh respectively

The level of geological understanding of the deposit, quality of samples, density data, drill hole spacing, drill hole surveying, nature and quality of historical drilling and assaying, sampling and assaying processes, and estimation quality were all considered for determining the resource classification.

The drill spacings are sufficient to allow the geology and mineralisation zones to be modelled into coherent wireframes. Consistency is evident in the orientations, thickness and grades of the mineralised zones. For areas with more limited data density and limited along-strike or down-dip continuity, there is sufficient evidence to imply but not verify geological and grade continuity, these areas are classified as Inferred.

The MRE's have been appropriately validated and classified prior to final reporting, considering all relevant factors as described above.



All MRE's are reported above a cut-off grade of 1 g/t Au, which has been considered by the Competent Person as conservative cut-off, which is based on the break-even costs with a robust margin.

The CentroGold MRE's are summarised in Table 3.

Table 3. MRE's for CentroGold, March 2018

#### CentroGold Mineral Resources 19,20,21

DEPOSIT	Category	Million Tonnes	Au (g/t)	Gold Metal (Oz)
	Indicated	4.4	3.6	510,000
Contact 22	Inferred	3.8	2.5	301,000
	Total	8.2	3.1	811,000
	Indicated	11.4	1.9	711,000
Blanket 22	Inferred	1.9	2.0	118,000
	Total	13.3	1.9	829,000
	Indicated	8.2	1.6	432,000
Chega Tudo <sup>22</sup>	Inferred	3.1	1.5	145,000
	Total	11.3	1.6	577,000
TOTAL		32.8	2.1	2,217,000

#### 9. Mining

#### Pit optimisations

The pit optimisations were completed by CSA Global and were based on costs and physical inputs supplied by Avanco. Within these assumptions is was determined that for the type, style and geometry of mineralisation it is appropriate to apply a 5% mining dilution and 95% mining recovery factor for all deposits.

#### Mining

The study considers conventional drill and blast, load and haul from Contact and Blanket to the ROM stockpile adjacent to the plant.

Ore from the more remote Chega Tudo pit will hauled the 8 kilometres to the ROM using off-road trucks incurring a additional haulage cost of BRL \$7/t. The study assumes that mining activities will be undertaken by a mining contractor, Avanco providing management and technical services. This approach introduces an added level of comfort since this strategy has proven to be very successful at Avanco's Antas Copper Mine.

The mobile fleet required for CentroGold is expected to include the following:

- Two Liebherr R9150 hydraulic excavators
- 10 x CAT 777 dump trucks
- 3 x CAT D9T Dozers,
- 2 x 16M graders
- 2 x Off-road water trucks
- 3 x Sandvik DP1500i Pantera drill rigs



Mining costs were based on existing Antas operational expenditures and modified pro-rata for the increase in scale and production profile. A \$0.08/t increment to OpEx was applied for every 10 metres in pit depth.

Total royalties of 5.6% average over the LOM have been applied to the financial model, which considers the sliding scale of the Jaguar gold royalty.

#### Geotechnical

Pit slope designs varied from 35–48º in Saprolite and oxidized material, to 46º in transitional material, to 46–53º in fresh rock. The final bench heights varied from 10 metres in saprolite to 20 metres in fresh rock. Haul roads were designed with a width of 22 metres and a maximum ramp grade of 10%. Safety berm widths vary from 6 to 12 metres and the minimum mining width was assumed to be 20 metres. This work was based on extensive historical work completed in the previous feasibility studies, and peer reviewed by independent geotechnical expert Mauri Ferreira, of Geotécnica e Mecânica de Rochas Ltda.

#### **Production**

The production schedules have been optimised for 2.5 Mt/pa plant throughput, with ore originating from all three deposits. Mining and processing covers an 11-year period with multiple stages of mining achieving a stable plant feed grade (see Figure 2). Plant grade in the first three years averages, 2.5 g/t Au and 1.9 g/t Au over LOM. The optimised mining sequence commences with higher grade ore from the Contact and Blanket pits. Ore extraction from Chega Tudo commences in Year 5 (Figure 3).

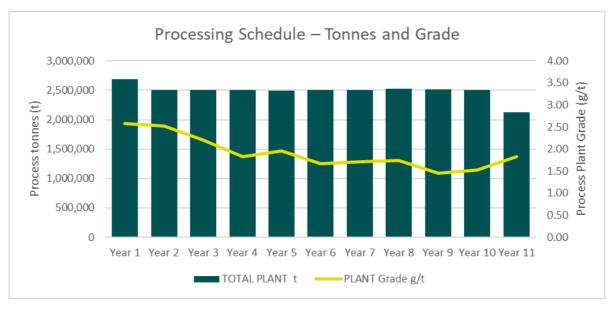


Figure 2. Scoping Study Production Schedule – Tonnes and Grade



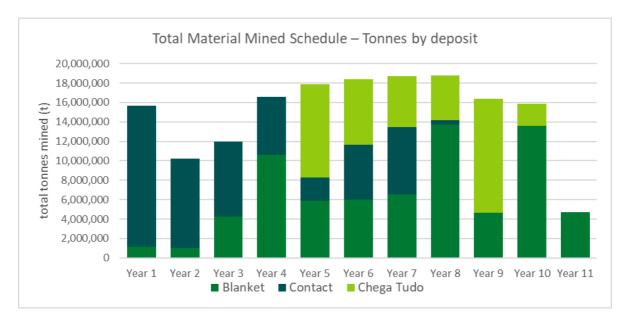


Figure 3. Scoping Study Production Schedule – Tonnes by deposit

#### Waste

Waste rock will be placed on the Rock Dump near the plant as per the site layout diagram below.

#### 10. Production Schedule

Table 4 below, presents the scoping study production schedule by year, showing the percentage of material used in the schedule which was derived from Inferred Resources.

Year	Total Tonnes (kt)	Waste Tonnes (kt)	Strip Ratio	Plant Feed Tonnes (kt)	Plant Grade g/t	Inferred Resources utilised (% of total)
1	14,561	12,005	4.8	2,510	2.6	29%
2	10,224	7,719	3.1	2,505	2.5	14%
3	11,980	9,479	3.8	2,501	2.2	25%
4	16,454	14,065	5.6	2,499	1.8	20%
5	17,871	15,378	6.2	2,493	2.0	9%
6	18,406	15,901	6.3	2,504	1.7	12%
7	18,685	16,182	6.5	2,502	1.7	33%
8	18,768	16,247	6.4	2,520	1.7	16%
9	16,412	13,901	5.5	2,511	1.5	10%
10	15,836	13,328	5.3	2,508	1.5	9%
11	4,742	2,617	1.2	2,124	1.8	14%
Total	164,048	136,866	5.0	27,183	1.9	17%

Table 4. Scoping Study Production Schedule – Year by Year



#### 11. Metallurgy

Metallurgical testwork has been conducted on CentroGold ores by a number of companies as part of previous feasibility studies over the years. Extensive evaluations were undertaken using recognised international laboratories, who investigated traditional gold extraction methods including, gravity concentration, flotation and leaching. In each case, the ores responded very well. Consequently, the ores at CentroGold can be classified as "free milling" and respond to beneficiation by traditional gold extraction methods.

#### **Recent Testwork**

Avanco's own metallurgical testing campaign is ongoing, under the supervision of the independent specialist Frank Rezende. Current thinking is that the application of pre-flotation concentration, followed by leaching of the resulting high-grade flotation concentrate is probably the best process route. Whilst this circuit is thought to represent an optimum case (lower capex, lower OpEx, acceptable gold recovery and good environmental performance), this decision will we be examined in detail in the PFS. An alternative to this circuit would be whole ore leaching which is also a viable option.

In all of the process designs studied it is necessary to include a gravity recovery unit within the comminution circuit to assist in the recovery of free gold. Test work indicates that around 15% of the gold might be expected to report to the gravity recovery unit.

The concept of employing flotation after the above and ahead of leaching aims to achieve a mass reduction of around 10:1 so concentrating the gold prior to leaching in a conventional carbon-in leach circuit. The overall gold recovery is expected to be 85%

To address the requirement for treating saprolitic ores, the idea is to co-treat them as a 10% blend with hard rock ores. This blend has been demonstrated to respond well to the (above mentioned) preferred process design and is coincidently also the approximate ratio of saprolite to fresh rock in the existing Contact and Blanket MRE's.

#### 12. Process Plant

The process considers primary crushing, semi-autogenous grinding (SAG) milling, secondary ball milling, gravity concentration in the ball milling circuit, gravity concentrate intensive leach, froth flotation, flotation concentrate CIL (Carbon-In-Leach), elution, and electrowinning to refine to doré. Figure 4 show a simple flow sheet for this process.

The Plant is designed for 2.5 million tons per year ROM, dumped directly from trucks to the primary crusher, or via front end loaded drawing from stockpiles.

#### Crushing

Material discharged on the surge hopper will be directed across a grizzly to the primary crusher, after which the crushed ore will be conveyed to a buffer stockpile and then reclaimed and conveyed to the SAG mill.

#### Comminution

The comminution circuit comprises a SAG mill followed by two, parallel, secondary balls discharging into a storage tank. Since Avanco will be examining the use of second-hand equipment the option of substituting the SAG mill configuration with an alternate grinding design will be dictated closer to the time of purchase.



#### Flotation, Concentrate Regrinding and Gravity Concentration

From the storage tank the material is pumped to the rougher flotation circuit composed by two float cells in series. Rougher concentrate is pumped to one cleaner cell with the tailings directed to the scavenger float circuit. The scavenger concentrate is pumped to the regrind mill, and the final tailings pumped to the tailings dam. The regrind comprises a blend of cleaner flotation concentrates, scavenger flotation concentrates and gravity concentrates from the mills. Concentrates are collected and pumped to a dewatering thickener, where the underflow is pumped to the CIL circuit.

#### **Intensive Leaching**

Gravity concentrate from the regrinding mill circuit is fed into a leach reactor to perform batch leaches in NaCN solution, in order to treat ~16 t/d of concentrate. The residue is pumped to the first stage of the CIL circuit, and the pregnant solution fed to an electrowinning cell.

#### Hydrometallurgy – Carbon-In Leach (CIL)

Eight tanks, with agitators are the basic elements for the CIL circuit. Thickener underflow is pumped to the first pre-aeration tank and in sequence flows from one tank to other as carbon is counter-currently transferred from the last to the second or third tank, from where it is transferred to screen washing, and the overflow removed and stored to be fed to the elution circuit

#### **Acid Washing and Elution**

Loaded carbon is transferred on a batch basis from the storage tank to a column for acid washing. The loaded carbon is transferred into the elution column, where under controlled chemical, pressure and temperature conditions, the gold is stripped into a pregnant solution.

#### **Electrowinning and Refinery**

The gold in the pregnant strip solution is recovered by electrowinning onto wire wool cathodes. The sludge is recovered from the cell, washed, dried and then smelted in a furnace to produce gold doré. Spent carbon is transported to a rotating kiln for regeneration and return to the CIL circuit.



ROM BLOCK DIAGRAM CYCLONE PRIMARY SAG BALL STOCKPILE CLUSTER MILLING CRUSHING MILLING UF OS OF GRAVITY PEBBLES CONCENTRATION CRUSHING CONCENTRATE CONCENTRATE CONCENTRATE INTENSIVE GRAVITY CLEANER ROUGHER LEACHING CONCENTRATION FLOTATION **FLOTATION** TAILING TAILING CONCENTRATE SCAVENGER **FLOTATION** TAILING TAILING UF CYCLONE OF CONCENTRATE TAILING REGRINDING CLUSTER THICKENING DAM UF OF ACID WATER ELECTROWINNING ELUTION CIL BARREN CARBON REGENERATION CYANIDE REFINERY KILN DESTRUCTION REGENERETED CARBON DORÉ GOLD

**Figure 4 Basic Process Flow Sheet** 

#### 13. Infrastructure

#### **Access Road to Centro Novo**

The CentroGold Project is located 20 kilometres from Centro Novo village, population of approximately 15,000, close to the boundaries of Maranhão and Pará states. The Project is located some 55 kilometres from Maracaçumé, which is on BR 316, the paved highway that connects Belém to São Luis to the east. The distance from Maracaçumé to Belem is 338 kilometres, and to São Luis is 454 kilometres.

The 55 kilometre road from Maracaçumé to Centro Novo is a single-lane paved municipal road.

A conceptual site layout plan is shown in Figure 5.

Existing access to the CentroGold Project is from the Centro Novo village via a non-paved public road. This also connects with Chega Tudo Village.



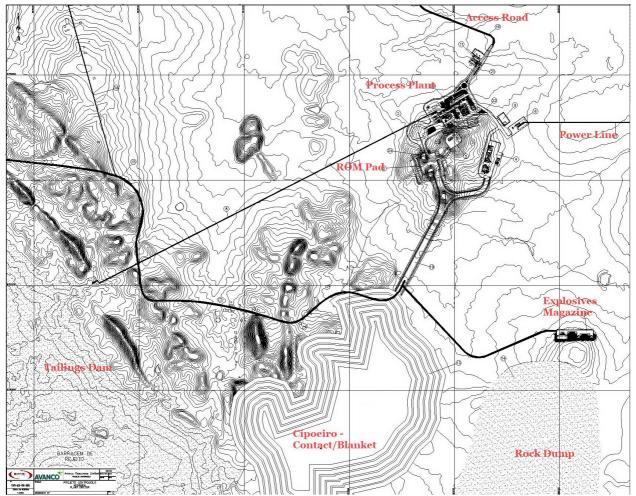


Figure 5. Conceptual Site Layout

#### **Power**

An initial approach was made to CEMAR (Energy Supplier Company), who indicated that connection with the Governador Nunes Freire (69 kV) substation is the best option for the supply of electrical power. This routing comprises the following elements:

- Commence from the Governador Nunes Freire 69 kV installation
- Construction of a 69 kV transmission line over 52 kilometres between the Governador Nunes Substation and the mine
- Installation of a 20 MVA transformer at the mine

This indicative routing is illustrated (using Google images) following existing roads, as per Figure 6.





Figure 6: 69 kV Transmission Line Route

#### **Raw Water Supply**

Water will be extracted from rivers and or from boreholes located nearby, and will be more than adequate to supply the projects process and potable water needs.

#### 14. Capital Cost Estimate

The capital budget was estimated by MIPTEC and Avanco based on actual costs from the recent construction and commissioning of the Antas Copper Mine. The estimate includes all surface infrastructure and preproduction mine development. Costs amounting to \$8.2M associated with pre-implementation activities are not included. Sustaining CapEx has been estimated at \$4M/pa. The table below summarises the preproduction capital cost.

	(\$M)
Mine/General/Infrastructure	\$3
Plant	\$50
Tailings Management Facility	\$5
Utilities	\$18
Management and Supervision	\$6
Indirect Costs	\$7
Contingency	\$19
TOTAL	\$108

#### 15. Operating Cost Estimate

Operating costs were based on actual costs at the Company's producing Antas mine, supplemented by an estimate of mining costs using the Antas mining contractor costs adjusted accordingly for differences in scale.

	LOM Average Cost Per Tonne (\$)
Mining	\$25
Processing	\$11
G&A	\$3
Total	\$39



#### 16. Sensitivity Analysis

Overall the Project is sensitive to movements in the gold price. The Study assumed a gold price of \$ 1,250 per ounce with no annual escalation. A \$ 100 increase or a \$ 100 decrease in the assumed gold price has the following effects on the net cash flow based on the current 11-year mining life.

	NPV <sub>10</sub> <sup>3</sup>
\$ 1,150	\$ 162 Million
\$ 1,250	\$ 232 Million
\$ 1,350	\$ 301 Million

#### 17. Financing Options

Avanco holds the rights to 100% ownership of the CentroGold Project, with no covenants over the project. \$5m remains payable to Jaguar (in 10 equal monthly payments) on lifting of the injunction. The Company anticipates paying these monthly commitments commencing in H2-2018 and has adequate funds on hand to service this obligation. This clean ownership structure enhances opportunities and provides maximum flexibility for potential funding structures for the Project's development.

The Company is in a strong position with greater than \$20 million in the bank, with no covenants over its cash or assets, enabling the funding of continued feasibility studies and initial development work.

The Company's Board has extensive experience in financing and in developing projects internationally. Two current board members have been involved with Avanco since the IPO in 2007. Current management has recently developed and constructed the capital cost efficient Antas Copper Mine (Antas) that has been in commercial production for 21 months and for the year ended 31 December 2017 reported sales revenue of \$96.35 million, cash inflows from operations of greater than \$22 million, Gross Profit of \$17.24 million, EBITDA of \$23.61 million and a maiden Net Profit After Tax of \$2.50 million. These audited numbers were achieved on rising copper and gold prices, competitive offtake contracts and the approval of a tax incentive (SUDAM) which aims to promote development in the north of Brazil. This tax incentive reduces Brazilian corporate income tax payable and is effective for a period of 10 years from 1 January 2017.

The Study has provided positive economic metrics and the planned timetable of activities to deliver key development milestones that is conducive to the staged funding of the Project. The positive technical and economic fundamentals provide a platform for discussions on traditional commercial/senior bank debt, equity financing and forward gold sales arrangements.

In summary, the Board and management of Avanco have a demonstrated track record of success in Brazil, achieved through technical and financial capability to identify, acquire, define, develop and operate quality mineral assets. The CentroGold Project is an open cut mine, employing the same mining method as the Antas Copper Project, with the Company completing construction on time and under budget in the first quarter of 2016.

All the material assumptions on which the forecast financial information is based has been included in this approuncement

For the reasons outlined above, the Board believes that there is a 'reasonable basis' to assume that future funding will be available.



#### Annexure A: Forward Looking Statement

The announcement may contain certain forward-looking statements. Words 'anticipate', 'believe', 'expect', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan', 'potential' and other similar expressions are intended to identify forward-looking statements. Indication of, and guidance on, future costings, earnings and financial position and performance are also forward-looking statements.

Such forward looking statements are not guarantees of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Avanco Resources Ltd, its officers, employees, agents and associates, which may cause actual results to differ materially from those expressed or implied in such forward-looking statements.

Actual results, performance, or outcomes may differ materially from any projections or forward-looking statements or the assumptions on which those statements are based.

You should not place any undue reliance on forward-looking statements and neither Avanco nor its directors, officers, employees, servants or agents assume any responsibility to update such information.

The stated production target is based on the Company's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

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

#### Annexure B: Reasonable Basis

Avanco believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to the production target and forecast financial information.

The following information is specifically provided in support of the Board's belief:

- (a) The Scoping Study has been prepared to what the Company considered equal or better than a Scoping Study level of accuracy of ±35%. Furthermore, the Company believes that the level of detail of work carried out for this Study exceeds what is required/expected at a Scoping Study level;
- (b) The production targets referred to, are based on Mineral Resources which are classified 83% Indicated, and 17% Inferred;
- (c) The MRE's for CentroGold were recently updated and published:
  - See ASX Announcement "CentroGold Approaches 2 Million Ounces", 21 March 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Contact MRE
  - See ASX Announcement "CentroGold Updated Contact Deposit Resource Grade Now Exceeds 3 g/t Gold", 7 February 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Blanket MRE
  - See ASX Announcement "CentroGold Resources Increase 45% and Exceeds 1.8 Million Ounces",
     13 November 2017, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Chega Tudo MRE

The material assumptions and technical parameters used in these MRE's continue to apply, and have not changed;

(d) All the mineral rights and exploration licences for CentroGold are confirmed to be in good standing with



- the DNPM. The Company has access agreements in place with all stakeholders, authorizing drilling and exploration activities;
- (e) CentroGold was previously granted environmental and construction licenses, these approvals were subsequently suspended by court injunction due to administrative oversights in the licencing process. Avanco is working alongside the regulatory authorities and the local community, seeking the earliest possible resolution, and the board believes this will be resolved in due course;
- (f) Community relations in Centro Novo and around the CentroGold are excellent, with widespread strong support for the implementation of the Project, and the subsequent prosperity that it will bring to the region.
- (g) As declared in this document, the Company is advancing a more detailed PFS. The results of the PFS will be released to the market on completion.;
- (h) Operating costs where applicable were based on actual costs at the Company's producing Antas Copper Mine. These costs are considered both representative, reliable and better than accepted Scoping Study accuracy:
- (i) Pit geotechnical studies were completed in two previously published historic Feasibility Studies, and this work was reviewed by independent consultant Mauri Ferreira of Geotécnica e Mecânica de Rochas Ltda. Mr. Ferreira was in fact responsible for the geotechnical engineering in one of the previous Feasibility Studies, and thus has intimate knowledge of the project. Mr. Ferreira is considered to be one of Brazil's leading experts in the field of geotechnical engineering;
- (j) Capital costs for the 2.5 Mt/pa plant were based on actual costs for the construction of the recently commissioned Antas Copper Mine's flotation plant. Refer ASX Announcement "Commencement of Commercial Production", 04 July 2016;
- (k) The Scoping Study was completed with a mix of external consultant, and internally by the Company, using both employees and directors, none of which have less than 20 years' experience, and most of which also qualify as a Competent Person (CP) as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Independent consultants were used for key areas of the Study, in particular site Infrastructure and basic engineering, resource estimation, geotechnical engineering, and mining engineering. Independent consultants, MIPTEC of Belo Horizonte, Brazil, were used for Peer Review of the technical works and creation of the Financial Model used. All material assumptions on which the forecast financial information is based have been included in the announcement;
- (I) As a group, the Avanco Board and management has a long and successful track record in identifying, discovering, developing, implementing, commissioning and operating both open pit and underground resource industry projects internationally and in Brazil;
- (m) The sale of Gold doré bars is a relatively simple transaction with a gold refinery (mint), thus management anticipates few complications in this regard.



#### **Annexure C: Competent Person's Statements**

The information in this report that relates to Exploration Results or Mineral Resources is an accurate representation of the available data and is based on information compiled by Mr. Simon Mottram who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Mottram is an Executive Director of Avanco Resources Limited; in which he is also a shareholder. Mr. Mottram has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Mottram consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this ASX Release that relates to metallurgy, metallurgical testwork, froth flotation and mineral processing in the Scoping Study was undertaken or reviewed by Mr Wayne Phillips. Mr Phillips is the General Manager – Technical Services for Avanco Resources Limited; in which he is also a shareholder. Mr Phillips is a Chemical Engineer with over 35 years' experience, with a focus on metallurgy, froth flotation and hydrometallurgy. Mr Phillips consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Annexure D: Project Risks**

Key risks identified during the Scoping Study work include, but are not limited to:

- Adverse movements in the \$ gold prices;
- Adverse movements in the USD:BRL exchange rate;
- Conversion of existing Mineral Resources to Ore Reserves;
- Access to project funding;
- > Timely approval by Government Authorities of the removal of the injunction, and the approval of various licenses and permits required;
- Sovereign and legal risks of Brazil;
- The Company depends on key management personnel and may not be able to attract and retain qualified personnel;
- General global economic conditions that may adversely affect the Company's growth and future prospects; and
- Results of future Pre-Feasibility and Definitive Feasibility Studies.



Annexure E: Material Assumptions used in the Scoping Study

	Comn	nentary			
Status of Study	A th	The information and production target presented herein is based on a Scoping Study. A scoping study is a low-level techno-financial assessment, and is not sufficient for the estimation of a Mineral Reserve Estimate, assurance of economic development, or that the findings of this study will be realised			or
	• A	All Project costs are in US Dollars (\$) or Brazilian Reais (BRL)			
MRE supporting Production Targets	<ul> <li>For the Competent Person's Consents, material assumptions, and technical parameters underpinning the CentroGold MRE's, including JORC Table 1, Sections 1, 2, and 3, refer to ASX Announcements:         <ul> <li>See ASX Announcement "CentroGold Approaches 2 Million Ounces", 21 March 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Contact MRE</li> <li>See ASX Announcement "CentroGold – Updated Contact Deposit Resource Grade Now Exceeds 3 g/t Gold", 7 February 2018, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Blanket MRE</li> <li>See ASX Announcement "CentroGold Resources Increase 45% and Exceeds 1.8 Million Ounces", 13 November 2017, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Chega Tudo MRE</li> </ul> </li> <li>These MRE's have not been updated since, nor is Avanco aware of new data/information that could materially affect information contained within those announcements. All material assumptions and technical parameters relating to the MRE's continue to apply. The form and context in which the Competent Person's findings have been presented have not been materially modified since that those announcements.</li> </ul>				
Capital Costs		illiodifications.			
	Δ	Il costs have been estimated to a Sc	oning Study level	of accuracy	
Capital Costs		Il costs have been estimated to a Sc ne pre-production CAPEX estimates			
Capital Costs				ing Study are as follows:	
Capital Costs					
Capital Costs		ne pre-production CAPEX estimates		ing Study are as follows:  (\$M)	
Capital Costs		ne pre-production CAPEX estimates  Mine/General/Infrastructure  Plant		(\$M) \$3 \$50	
Capital Costs		ne pre-production CAPEX estimates  Mine/General/Infrastructure		(\$M) \$3 \$50 \$5	
Capital Costs		Mine/General/Infrastructure Plant Tailings Management Facility Utilities	used in the Scopi	(\$M) \$3 \$50 \$5 \$18	
Capital Costs		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su	used in the Scopi	(\$M) \$3 \$50 \$5 \$18	
Capital Costs		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs	used in the Scopi	(\$M) \$3 \$50 \$5 \$18 \$6 \$7	
Capital Costs		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency	used in the Scopi	(\$M) \$3 \$50 \$5 \$18 \$6 \$7	
		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs	used in the Scopi	(\$M) \$3 \$50 \$5 \$18 \$6 \$7	
Revenue Inputs		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency	pervision	(\$M) \$3 \$50 \$5 \$18 \$6 \$7 \$19	
		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency TOTAL	pervision  Units	(\$M) \$3 \$50 \$5 \$18 \$6 \$7 \$19 \$108	
		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency TOTAL Gold Price	pervision  Units \$/Oz	(\$M) \$3 \$50 \$5 \$18 \$6 \$7 \$19 \$108	
		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency TOTAL  Gold Price Transport and Insurance	pervision  Units \$/Oz \$/Oz	(\$M) \$3 \$50 \$5 \$18 \$6 \$7 \$19 \$108 US Dollars (\$M) \$1,250 \$20	
		Mine/General/Infrastructure Plant Tailings Management Facility Utilities Engineering, Management and Su Indirect Costs Contingency TOTAL Gold Price	pervision  Units \$/Oz	(\$M) \$3 \$50 \$5 \$18 \$6 \$7 \$19 \$108	



Criteria	Comr	nentary				
Mining Assumptions		-	t is based on conventional load and haul open pit mining, using et, at a production/processing rate of 2.5 Mt/pa ore			
		<ul> <li>Geotechnical assumptions were drawn from work carried out in two previo publish Feasibility Studies, reviewed by independent geotechnical consultant</li> </ul>				
	• N	laterial mining assur	mptions			
		Mining Dilution	5%			
		Mining Recovery	95%			
Metallurgical	Metallurgical assumptions are shown below:					
Assumptions		Metal	Plant Recovery %			
		Gold	85%			
Infrastructure	or in Cr	Infrastructure costs were estimated to a Scoping Study level of accuracy, and based on the installation of a 2.5 Mt/pa froth flotation/cyanidation plant and all associated infrastructure at CentroGold  Costs were factored form actual costs from the recently built and operating Antas Copper Mine, owned and operated by Avanco  General information regarding the Company's CentroGold Project can be found on the Company's website				
Classification	cl ge re	The production targets referred to, are based on Mineral Resources which are classified 83% Indicated, and 17% Inferred. Inferred resources have a low level of geological confidence and there is no guarantee that further exploration work will result in their conversion to higher levels of confidence, or the realisation of these production targets				
Economic Cut-off	<ul><li>A an</li><li>Tl</li></ul>	All costs have been estimated to a Scoping Study level of accuracy A design production/processing rate of 2.5 Mt/pa was used, while conventional load and haul open pit mining is the chosen mining method The cut-off grade used in the reporting of the MRE's was 1g/t gold, which with comfortable margin for contingency was chosen based on the break-even cost.				
			LOM Average Cost Per Tonne (\$)			
		Mining	\$25.00			
		Processing	\$11.00			
		G & A	\$3.00			
		Total	\$39.00			
Independent Audit	<ul> <li>Key parts of the scoping study have been independently reviewed. Specifically:         <ul> <li>Metallurgical Testwork, Comminution and Process Engineering, by MIPTEC of Belo Horizonte, Brazil</li> <li>Field data collection and QA/QC procedures for the drilling data used to generate the MRE's, by CSA Global Pty Ltd, Perth, Australia</li> </ul> </li> </ul>					