


Avanco Resources (ASX: AVB)

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CENTROGOLD PROJECT'S RESOURCE BASE GROWS TO OVER 1.2M OUNCES

Further to Avanco Resources Limited's ("Avanco" or the "Company") announcement of 20 December 2016, the Company is pleased to announce a significant Mineral Resource upgrade at the CentroGold Project[1] ("Project") in northern Brazil.

HIGHLIGHTS

- **Inferred Resource for the Contact Zone reported in accordance with the JORC Code (2012) of:**

8.0 million tonnes at 2.3g/t gold, containing 592,300oz of gold

- **The Contact Zone is the second of two zones within the Cipoeiro Deposit, that together with the Chega Tudo Deposit make up the previously reported Foreign Estimate of 88.5Mt at 1.14g/t gold at the Project[2]**
- **The addition of the Contact Zone Inferred Resource to the previously reported Blanket Zone Inferred Resource for Cipoeiro increases the total Project Mineral Resource to:**

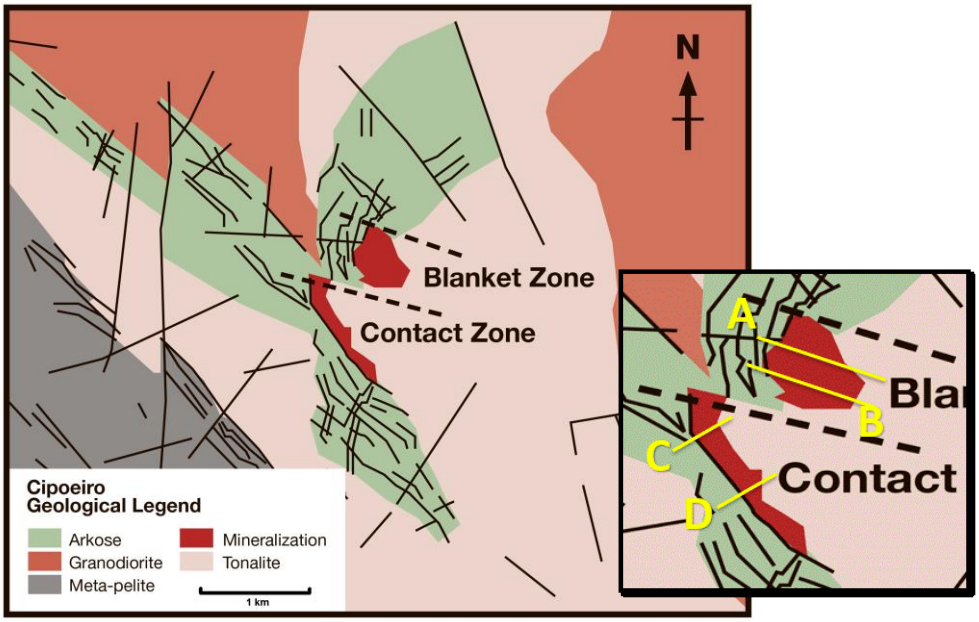
20.2 million tonnes at 2.0g/t gold, containing 1,286,300oz of gold

- **Scoping Study to commence, determining the potential of the Contact and Blanket Zones to support a scalable, low-capex mining operation**
- **The positive outcome from the review of the previously reported resource estimates further supports Avanco's decision to acquire the rights to earn up to a 100% interest in the Project**
- **Good progress continues to be made on resolving past licensing issues at the Project**

CONTACT ZONE RESOURCE ESTIMATE

The Cipoeira Deposit within the CentroGold Project ("Project") consists of two separate zones; the Blanket Zone for which a maiden Mineral Resource was reported in December 2016[3], and the adjacent Contact Zone, which is the subject of the current release. Given the Company's desire to re-evaluate the higher-grade portions of these deposits, Mineral Resource estimates were carried out separately.

Figure 1: Blanket and Contact zones – representative cross section locations



Sections "A" and "B" relate to the Blanket Zone MRE, see ASX Release – 20 December 2016[3]

The maiden Mineral Resource for the Contact Zone is:

Contact Zone Mineral Resource Estimate - January 2017 (above a cut-off grade of 1.0g/t Au)				
	Category	**Million Tonnes**	**Au (g/t)**	**Gold Metal (Oz)**
Contact Zone	Inferred	8.04	2.3	592,300
	TOTAL	**8.04**	**2.3**	**592,300**

The Contact Zone adds significantly to the Blanket Zone Inferred Resource and enhances the potential of the Project for a near-term open pit development opportunity. where the combined Mineral Resource now stands at 20 million tonnes at 2.0g/t gold for more than 1.2M ounces.

CentroGold Total JORC Reported Mineral Resources - January 2017 (above a cut-off grade of 1.0g/t Au)				
Cipoeira Deposit	**Category**	**Million Tonnes**	**Au (g/t)**	**Gold Metal (Oz)**
Contact Zone	Inferred	8.04	2.3	592,300
Blanket Zone	Inferred	12.20	1.8	694,000
	TOTAL	**20.24**	**2.0**	**1,286,300**

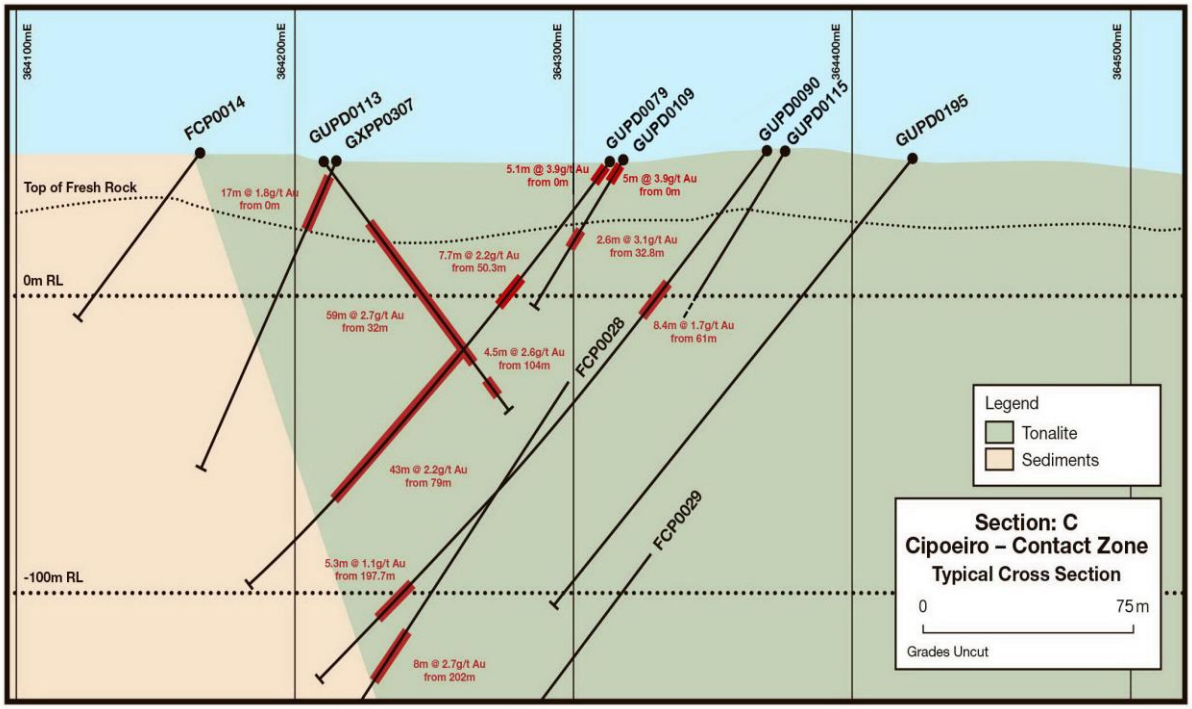
The size and tenor of this resource underscores the Company's belief that the Project has the potential to support a scalable, low-capex open pit mining operation. Further significant growth potential exists, with the nearby Chega Tudo Deposit, in addition to the exploration potential associated with the large contiguous tenement package.

Significant drill hole results from previous drilling at the Contact Zone are summarised below with a complete listing of results from the following representative sections provided in the appendix to this report:

- **59.0m at 2.7g/t gold from 32.0m*** **[GUPD0113]**
- **43.0m at 2.2g/t gold from 79.0m*** **[GUPD0109]**
- **17.0m at 5.6g/t gold from 74.0m*** **[GUPD0101]**
- **18.0m at 5.4g/t gold from 107.0m*** **[GUPD0070]**
- **18.0m at 10.9g/t gold from 142.0m*** **[GUPD0089]**
  Including 4.0m at 29.8g/t gold from 153.0m*

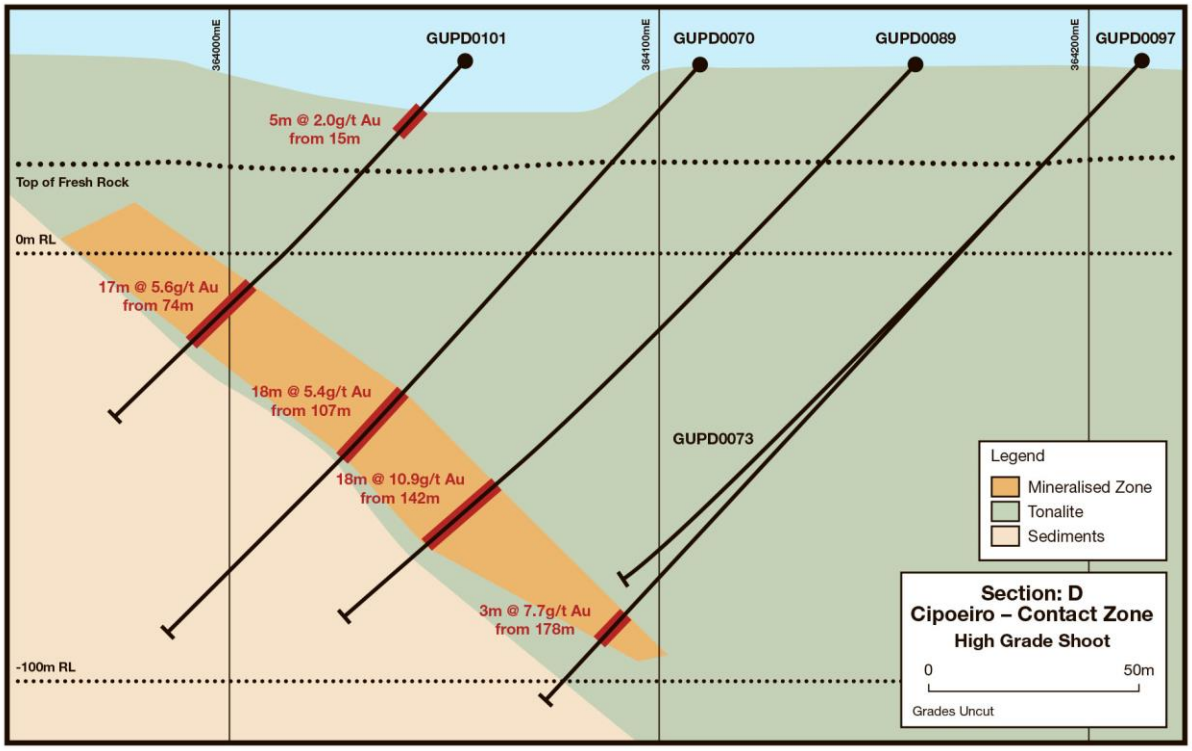
**All drilling is historic. Grades are uncut. Widths and depths reported are downhole.*

Figure 2: Section "C" Contact Zone.



See appended table for a complete listing of historic drill results for Section "C"

Figure 3: Section "D" Contact Zone.



See appended table for a complete listing of historic drill results for Section "D"

FORWARD PROGRAM

With the more attractive grade returned from the Contact Zone Mineral Resource estimate, Avanco's immediate plan is to evaluate the entire Cipoeiro Deposit with a Scoping Study to be completed during the March 2017 quarter.

Infill drilling is required to improve confidence in the estimate, with the timing of commencement dependent on licensing activities.

LICENSING UPDATE

The Cipoeiro and Chega Tudo deposits are at an advanced regulatory licensing stage, with unimpeded DNPM title on the Mining Lease Applications. Both applications are pending the prerequisite reissue of a valid Environmental License, which was previously issued and subsequently suspended by another regulatory authority.

Good progress continues to be made on resolving past licensing issues at the Project. The Company remains optimistic of a positive outcome during the first half of 2017.

Tony Polglase
Managing Director

ASX Listing Rule 5.8.1 Compliance

Geology and Geological Interpretation

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

Two main litho-types are recognised at the Cipoeiro Deposit, a tonalite and arkosic, fine-grained arenite. The host of the primary mineralisation at the Contact Zone 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.

Mineralisation at the Contact Zone is typically sub-vertical, with flatter lying high-grade zones hosted in rafts of sediment within the tonalite intrusion host rock. The Mineral Resource estimate has been completed using 3 individual grade domains with a nominal 0.4g/t Au cut-off grade for wireframing.

Drilling Techniques

Drilling supporting the Mineral Resource estimate was predominantly diamond core drilling (DD) with minor reverse circulation (RC). The Cipoeiro Deposit database (covering the Blanket and Contact Zones) includes 324 drill holes for 50,377m of drilling, made up of 68 RC holes (7,143m) and 256 DD holes (43,234m). The Contact Zone Mineral Resource estimate is based on assay data from 113 DD holes and 26 RC holes. All drilling within the resource area was included in the estimate.

Drilling at the Contact Zone has been angled to achieve the most representative intersections through mineralisation.

Sampling Techniques

DD core was typically continuously sampled at 1m intervals from the collar to the end of hole. Where required by changes in lithology, mineralisation or alteration, core samples may be shorter or longer than the nominal 1m interval. Samples in the database have a minimum core length of 20cm and a maximum core length of 2m. Core was cut into half with one half sent for analysis and the other half stored in the core library at the project site.

RC cuttings were continuously sampled at 1m intervals from the collar to the end of each drill hole. The sample material was transported to the field sample preparation facility where it was dried and then split by cone-and-quartering methods.

Sample Analysis Method

Drill samples were crushed to minus 10 mesh; then a 2kg split was pulverised to a nominal 90% passing 150 mesh, using a ring pulveriser. An assay split of 250g was collected from the pulp for a 50g fire assay digestion, and atomic absorption (AA) determination for gold. Results greater than 10.0g/t Au were re-assayed with a gravity finish. The analysis is considered total and appropriate.

Assay results (with focus on high grade intersections) have been re-assayed and validated in several phases of independent reviews (2004 and 2009, unpublished) on historic work carried out when the property changed hands.

Estimation Methodology

A Surpac block model with parent cells of 10m E by 20m N by 10m RL was created within wireframes of the mineralisation. No sub-celling was employed, instead a proportion figure was assigned to each block based on its proportional inclusion within mineralised wireframes. Gold grades for the main mineralised zones were interpolated using ordinary kriging. Samples were composited to 1m

intervals based on assessment of the raw drill hole sample intervals. High grade cuts ranging from 15.0g/t to 40g/t Au were applied to the mineralisation domains following statistical analysis.

The project database contained results for 230 bulk density measurements from the Cipoeiro Deposit (Blanket and Contact Zones). Measurements were taken on drill core using the water immersion method. Fixed density values were assigned into the block model for each regolith and lithological unit, setting colluvium and oxide to 1.53t/m^3, transitional material to 2.3t/m^3, fresh arkose waste to 2.7t/m^3, fresh tonalite waste to 2.8t/m^3 and fresh sulphide mineralisation to 2.72t/m^3.

The resource model was validated prior to final reporting.

Cut-off Grades

Wireframes were generated using a nominal 0.4g/t cut-off grade and a minimum down hole width of 2m. The Mineral Resource is reported using a 1g/t cut-off, which approximates a conservative cut-off grade used for potential open pit mining.

Mineral Resource Classification

The Mineral Resource was classified as Inferred, taking into account the level of geological understanding, quality of samples, density data, drill hole spacing, historical nature of the drilling, and sampling and assaying processes.

Eventual Economic Extraction

Previous mining studies have shown that the Contact Zone could be economically exploited by open cut mining methods at the reported average model grade. Open pit mining is considered as the appropriate method for future studies.

Metallurgical amenability was based on comprehensive metallurgical test work, completed on the CentroGold Project as part of the 2011 TechnoMine Feasibility Study. Extensive metallurgical testwork was also completed in older studies. Testwork included preliminary, detailed and final metallurgical testwork, and covers several alternative approaches, including bulk cyanidation, froth flotation and heap leaching.

ABOUT AVANCO

- Avanco (ASX: AVB) is an emerging mid-tier copper and gold company situated in the mining friendly world class Carajas Mineral Province in northern Brazil
- Avanco either owns, or holds the rights to 100% of the second largest area of mineral tenure in the Carajas region behind Vale SA
- The Company is well positioned to potentially operate a number of high grade, low cost copper-gold mines in the region establishing Avanco as a profitable long life producer
- Management has been successful in financing the development of the Antas Copper Mine via an equity capital raising placing Avanco in a strong position, i.e. fully funded into production whilst remaining debt and covenant free
- The Antas Mine was built on time, under budget with an exceptional commissioning and ramp up performance
- Commercial production was declared in July 2016 for 12,000tpa of copper in concentrate and 7,000ozpa of gold by-product credits.
- Management believe the Antas plant output can possibly be increased to 17,000tpa of copper by 2018 as a result of additional ore supply from Pedra Branca and/or new near mine discoveries
- Avanco has engaged MACA, an Australian mining contractor group for the Antas open pit
- Antas is producing a desirable, clean copper concentrate and the Company has executed a three-year offtake contract
- Development of the nearby Pedra Branca East and Pedra Branca West projects have the potential to increase Avanco's production to ~50,000tpa of copper with gold credits
- Study of an initial, smaller scale operation at Pedra Branca East is at an advanced stage as a pre-cursor to full scale development with construction of access commenced
- The Company is supported by institutional shareholders: Blackrock World Mining Trust, Appian Natural Resources Fund, Greenstone Resources and Glencore
- Avanco is managed by highly experienced international and Brazilian mining professionals, most of whom are Portuguese speaking and reside in Brazil
- Whilst near term priorities are focused on life-of-mine growth, Brazil offers significant opportunities to enhance shareholder value through new discoveries, acquisitions or partnerships with neighbouring majors and other companies to increase exposure to copper and gold assets

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CARAJAS COPPER – Mineral Resources[4,5,6,7,8]						
DEPOSIT	**Category**	**Million Tonnes**	**Cu (%)**	**Au (ppm)**	**Copper Metal (T)**	**Gold Metal (Oz)**
PB East[9]	Measured	1.98	2.7	0.7	53,000	43,000
	Indicated	5.72	2.8	0.7	161,000	123,000
	Inferred	2.78	2.7	0.6	75,000	55,000
	Total	**10.48**	**2.8**	**0.7**	**289,000**	**221,000**
PB West[9]	Indicated	4.46	2.04	0.61	91,000	87,000
	Inferred	2.74	1.72	0.56	47,000	49,000
	Total	**7.19**	**1.92**	**0.59**	**138,000**	**136,000**
PEDRA BRANCA	**Total**	**17.67**	**2.44**	**0.65**	**427,000**	**357,000**
ANTAS NORTH[9]	Measured	2.83	3.01	0.72	85,000	66,000
	Indicated	1.65	2.20	0.42	36,000	22,000
	Inferred	1.9	1.59	0.23	30,000	14,000
	Total	**6.38**	**2.38**	**0.50**	**152,000**	**102,000**
ANTAS SOUTH[10]	Measured	0.59	1.34	0.18	8,000	3,000
	Indicated	7.50	0.7	0.2	53,000	49,000
	Inferred	1.99	1.18	0.2	24,000	13,000
	Total	**10.08**	**0.83**	**0.2**	**85,000**	**65,000**
TOTAL		**34.13**	**1.95**	**0.49**	**664,000**	**524,000**

ANTAS COPPER MINE – Ore Reserves[11,12]							
Classification	**Type**	**Economic Cut-Off Cu%**	**Tonnes (Mt)**	**Copper (%)**	**Gold (g/t)**	**Copper Metal (T)**	**Gold (Oz)**
Proved	ROM Ore	0.90	1.385	3.62	0.74	50,137	33,046
Probable	ROM Ore	0.90	1.264	2.72	0.57	34,381	23,231
PROVEN + PROBABLE ROM ORE			**2.649**	**3.19**	**0.66**	**84,518**	**56,277**
Proved	Low Grade	0.65	0.342	0.74	0.30	2,531	3,308
Probable	Low Grade	0.65	0.635	0.72	0.23	4,572	4,709
TOTAL PROVEN + PROBABLE			**3.63**	**2.53**	**0.55**	**91,621**	**64,294**

CENTROGOLD – Mineral Resources				
DEPOSIT	**Category**	**Million Tonnes**	**Au (g/t)**	**Gold Metal (Oz)**
CONTACT ZONE[13]	Inferred	8.0	2.3	592,300
BLANKET ZONE[13]	Inferred	12.2	1.8	694,000
TOTAL		**20.2**	**2.0**	**1,286,300**

Competent Persons Statement

The information in this report that relates to the Mineral Resources has been compiled by Mr Aaron Green, who is a full-time employee of CSA Global Pty Ltd. Mr Green is a Member of the Australian Institute of Geoscientists and has sufficient experience 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 as defined in the JORC Code (2012). Mr Green consents to the disclosure of this information in this report in the form and context in which it appears.

The information in this report that relates to Exploration Results, Foreign Estimates, or listing rule 5.8. 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.

1. Gold mineralisation within the CentroGold project is considered to be typical of mesothermal vein-style, or orogenic-style gold mineralisation
2. Refer ASX Announcement "Avanco to Acquire Advanced Gold Project", 07 October 2016, for Competent Person's Consent, material assumptions, and technical parameters for the original CentroGold Foreign Resource estimate
3. Refer ASX Announcement "Maiden Resource Estimate at the CentroGold Project", 20 December 2016, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Blanket Zone resource estimate
4. 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 resource estimates
5. 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 resource estimate
6. 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 resource estimate
7. 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 resource estimate
8. The Antas South JORC compliant resource 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
9. Grade Tonnage Reported above a Cut-off Grade of 0.9% Copper
10. Grade Tonnage Reported above a Cut-off Grade of 0.3% Cu for Oxide Resources
11. 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
12. Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves
13. Grade Tonnage Reported above a Cut-off Grade of 1.0g/t Gold

CENTROGOLD – CONTACT ZONE. HISTORIC RESULTS – SECTION 'C'

Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m) Downhole Depth	To (m) Downhole Depth	Width (m) Downhole Depth	Au g/t
FCP0014	364162.115	9749883.490	46.790	-52.3	263.0	70.40	Historic	No Significant Result			
GUPD0113	364204.404	9749901.760	46.984	-50.0	110.0	214.00	Historic	**32.0**	**91.0**	**59.0**	**2.7**
GXPP0307	364205.824	9749902.110	46.936	-65.0	260.0	120.00	Historic	**0.0**	**17.0**	**17.0**	**1.8**
And								104.0	108.5	4.5	2.2
GUPD0109	364315.544	9749910.770	45.864	-50.0	215.0	173.20	Historic	**0.0**	**5.0**	**5.0**	**3.9**
And								50.3	58.0	7.7	2.2
And								**79.0**	**122.0**	**43.0**	**2.2**
GUPD0079	364316.804	9749912.370	45.864	-50.0	260.0	200.55	Historic	**0.0**	**5.1**	**5.1**	**3.9**
And								32.8	35.4	2.6	3.1
GUPD0090	364370.044	9749921.430	46.295	-50.0	260.0	244.00	Historic	61.0	69.4	8.4	1.7
And								197.7	203.0	5.3	1.1
GUPD0115	364371.534	9749921.260	46.405	-50.0	215.0	228.23	Historic	No Significant Result			
GUPD0195	364420.724	9749930.970	45.509	-50.0	260.0	200.05	Historic	No Significant Result			
FCP0028	364354.765	9749883.208	45.354	-55.9	263	237.90	Historic	202.0	210.0	8.0	2.7
FCP0029	364434.126	9749890.057	45.521	-53.0	265.3	291.15	Historic	No Significant Result			

CENTROGOLD – CONTACT ZONE. HISTORIC RESULTS – SECTION 'D'

Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m) Downhole Depth	To (m) Downhole Depth	Width (m) Downhole Depth	Au g/t
GUPD0101	364054.274	9750296.690	45.167	-50.0	260.0	117.25	Historic	15.0	20.0	5.0	2.0
And							Historic	**74.0**	**91.0**	**17.0**	**5.6**
GUPD0070	364109.584	9750311.310	45.865	-50.0	260.0	185.00	Historic	**107.0**	**125.0**	**18.0**	**5.4**
GUPD0089	364159.154	9750320.320	44.700	-50.0	260.0	187.80	Historic	**142.0**	**160.0**	**18.0**	**10.9**
Incl.								**153.0**	**157.0**	**4.0**	**29.8**
GUPD0097	364207.804	9750332.440	44.159	-50.0	260.0	203.13	Historic	178.0	181.0	3.0	7.7
GUPD0073	364209.034	9750328.420	44.000	-50.0	260.0	170.73	Historic	No Significant Result			

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 Edition)

TABLE 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Drilling consists of ~80% diamond drilling, and ~20% reverse circulation ("RC"), for a total 324 holes for 50,377m of drilling in the Cipoeiro project database (covering the Blanket and Contact deposits), 68 RC holes (7,143m) and 256 DD holes (43,234m). The Contact Zone Mineral Resource is based on assay data from 113 DD holes and 26 RC holes. Diamond drill core is typically continuously sampled at one-meter intervals from the collar to the end of hole. Where required by changes in lithology, mineralization, or alteration, core samples may be shorter or longer than the typical 1 m; samples in the database have a minimum core length of 20 cm, and a maximum core length of 2 m. RC cuttings were continuously sampled at one-meter intervals from the collar to the end of each drill hole. It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Drill collars surveys were performed using digital GPS and Total Station instruments. Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Half diamond core was collected and placed in marked plastic sacks, and shipped to the assay laboratory RC cuttings were transported back to the field sample preparation facility where they were dried and split by cone-and-quartering methods. RC samples were collected and placed in marked plastic bags which were placed in sacks and then shipped to the assay laboratory. It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.

Criteria	JORC Code explanation	Commentary
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Drill samples were crushed to minus 10 mesh; then a 2-kg split was pulverized to a nominal 90% passing 150 mesh using a ring pulveriser. An assay split of 250 g was collected from the pulp for a 50g fire assay digestion, and atomic absorption (AA) determination for gold. Results greater than 10.0 g/t Au were re-assayed with a gravity finish. Samples from 1996–2000 were dispatched to Nomos Análises Minerais Ltda in Belo Horizonte, Brazil. Samples generated between 2003 and 2008 were prepared and analysed by Lakefield–Geosol Laboratories (an independent ISO-certified laboratory) in Belo Horizonte. Check sampling has been undertaken by ALS Chemex, Bondar Clegg and Cone Laboratories. Bondar Clegg was an independent, ISO-certified laboratory group that was acquired by ALS Chemex in 2001. Cone Laboratories certification at the time of analysis is unknown. It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond core diameters were consistently HQ (63.5 mm) diameter core from surface through the saprolite to bedrock. At depths of about 1 to 3m into bedrock the holes were reduced to NQ (47.6 mm) diameter to the final hole depth. RC was drilled using 3.5-inch (88.9 mm) rods with a nominal 4.5-inch (114.3 mm) diameter hole.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Fresh rock (tonalite and dacite) recoveries generally exceeded 95%. In near-surface, saprolitic material recovery is more variable although the overall recovery consistently exceeded 85% to 90%.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Detailed measurements of core recovery have been routinely recorded on geological logs for diamond drilling.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• There is no documented sample bias or potential for sample bias.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Drill samples were logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Logging and sampling has been carried out to "industry norms" to a level sufficient to support historic feasibility studies and the Foreign Resource Estimate.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Diamond core was photographed wet for fresh rock, and dry for oxidised core.
	• *The total length and percentage of the relevant intersections logged.*	• All drill holes are logged in full from start to finish of the hole.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Where sampled, core is cut in half onsite using an industry standard core saw, to produce two identical halves.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• RC cuttings were transported back to the field sample preparation facility where they were dried and split by cone-and-quartering methods.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Sample preparation is according to industry standard, including oven drying, coarse crush, and pulverisation too nominal 90% passing 150 mesh or better.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• To support previous feasibility-level studies in 2004, all existing QA/QC data to that point in time was examined. An independent review was performed on analysis of blank sample results and the reproducibility of individual sample assays (AMEC 2005, see Jaguar's public filings on the SEDAR website). Results of this work indicated that repeatability and correlation was good, and that the sample preparation process was free of contamination. QA/QC check programmes in this pre-2004 work also included: ○ Assay of ¼ -split core versus original ½-split core ○ Metallic screen assays after original 50-g fire-AA assays

Criteria	JORC Code explanation	Commentary
		○ Duplicate pulps from single sample with multiple assays ○ Metallurgical drill sample composite assays compared against weighted average original assays ○ Second laboratory check assays (ALS Chemex, Bondar Clegg and Cone) ○ Sieve examination of pulp size distribution. ○ Results from the check programs indicated no appreciable coarse gold component to the deposits ○ Later work, post 2004 included four (4) to six (6) gold standards in each assay batch (70-180 samples per batch), in addition to the programme of blanks ○ A later technical review compared the historical results of 800 standards and blanks submitted to date. Of these only 36 returned values outside the acceptable limit, but all were within the acceptable limits of the assaying techniques (Pincock, Allen and Holt 2009, see Jaguar's public filings on the SEDAR website) It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• Duplicates samples of both RC samples and ¼ core duplicates against ½ core original samples have been used throughout historical work.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample sizes are considered to be appropriate and correctly represent the style and type of mineralisation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Drill samples were crushed to minus 10 mesh; then a 2kg split was pulverized to a nominal 90% passing 150 mesh using a ring pulveriser. An assay split of 250 g was collected from the pulp for a 50g fire assay digestion, and atomic absorption (AA) determination for gold. Results greater than 10.0 g/t Au were re-assayed with a gravity finish. The analysis

Criteria	JORC Code explanation	Commentary
		is considered total and appropriate.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• None were used.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• As noted above under: "Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples." Future work by Avanco will use an industry standard QAQC programme involving Certified Reference Au Materials "standards" (with Au grades ranging from low too high), blank samples, duplicates and umpire Laboratory check sampling.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Results greater than 10.0g/t Au were re-assayed with a gravity finish. • Assay results (with focus on high grade intersections) have been re-assayed and validated in several phases of independent reviews (2004 and 2009, unpublished) on historic work, carried out when the property has changed hands.
	• *The use of twinned holes.*	• Twin holes have been used in all phases of historical resource work and ensuing foreign studies. Further twin hole drilling has also been used in several phases of independent reviews (2004 and 2009, unpublished) on historic work carried out when the property has changed hands over the years.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Entry of information into databases utilized a variety of techniques and procedures over the years, and included checking of the integrity of the data entered. Geological data from early drill programs were entered into spreadsheets in a single pass. Assays were received electronically or by disc from the laboratories and imported directly into the database. Drill hole collar and down-hole survey data were manually entered into the database and checked manually. Data has been verified prior to Geological Modelling and Mineral Resource estimation by means of in-built program triggers

Criteria	JORC Code explanation	Commentary
		within software. Documentation is generally available for all historic work. Furthermore, databases and raw data have been checked and successively tested/validated in several phases of independent reviews (2004 and 2009, unpublished) on historic work carried out when the property has changed hands over the years. It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.
	• *Discuss any adjustment to assay data.*	• Avanco's CP is not aware of any adjustments or calibrations to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Drill collars surveys were performed using digital GPS and Total Station instruments. • Down hole surveys of core holes have been performed using Ezy-shot and Tropari instruments.
	• *Specification of the grid system used.*	• SIRGAS2000 Zone 23 South.
	• *Quality and adequacy of topographic control.*	• Regional Topographic control, Digital Terrain Models using Total Station survey, and LIDAR surveys have been used.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drilling at the Contact deposit is based on sections which vary between 50m to 80m apart, with drill holes on a typically 40-50m spacing.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• In the opinion of Avanco's CP sufficient continuity in both geology and mineralisation has been established in historic work to support the previous Foreign Resource Estimate, and subsequently classification under JORC (2012).
	• *Whether sample compositing has been applied.*	• Avanco's CP is not aware of any historical compositing for assay sampling.
Orientation of data in relation to geological	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Drilling has been angled to the to achieve the most representative intersections through mineralisation.

Criteria	JORC Code explanation	Commentary
structure	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• There is no indication that any sample bias has been introduced.
Sample security	• *The measures taken to ensure sample security.*	• Available documentation indicates that samples were kept at the drill rig until the end of each shift, then delivered to the logging facility where they are accessible only by project staff. During shipment of samples to laboratories in Belo Horizonte the sample sacks were taped and typically accessible only to a limited number of transportation personnel. Chain of custody procedures consisted of filling out sample submittal forms that were sent to the laboratory with sample shipments, to ensure that all samples were received by the laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All historic reports have been made available to Avanco, including unpublished independent reviews as noted above in previous. It is the view of Avanco's CP that this work and the subsequent results are of adequate quality to assure the reliability of historical work.

TABLE 1 – Section 2: Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• MCT Mineraçao Ltda is wholly owned Brazilian subsidiary of Jaguar Mining Inc. (TSX listed), who own the rights to 100% of the CentroGold JV package. Exiting royalties over the tenements consist of a 0.7% NSR royalty (Rio Tinto - Kinross) over 6 licenses, of which one covers the Contact Zone, and a 1% NSR royalty to Franco Nevada (Ex-Newmont royalty). Additionally, a 1% and 0.5% NSR Royalty to the government and landowner become payable (the latter 0.5% can be negotiated by the Company). There are a small number of illegal artisanal miners working localised pockets of oxide material. They will be relocated at the appropriate time, and are not considered a significant impediment.

Criteria	JORC Code explanation	Commentary
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The CentroGold project currently contains ~30 licenses covering an area of ~137,000Ha. Of this area, approximately 80,000Ha (or 58%) is covered by granted tenure. MCT Mineraçao Ltda is wholly owned Brazilian subsidiary of Jaguar Mining Inc. (TSX listed), who own the rights to 100% of the tenements in CentroGold JV package. Both the Cipoeiro and Chega Tudo deposits are on Mining Lease Applications. Both applications are currently pending the prerequisite issue of an Environmental License. An Environmental License has been issued previously, and subsequently suspended by another regulatory body due to an oversight in the legal provisions of certain surface rights. Avanco aims to correct the regulatory/legal exceptions and the Company supports this claim by reference to its proven track record of resolving permitting issues in northern Brazil.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Company's CP has determined that the quality and integrity of historical work is adequate for inclusion, consideration and interpretation with any new work completed by Avanco.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mesothermal vein-style, or orogenic-style gold mineralisation.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *a. easting and northing of the drill hole collar* *b. elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *c. dip and azimuth of the hole* *d. down hole length and interception depth* *e. hole length.*	• The scope of this document covers the reporting of a MRE, which is part of a process of converting parts of an existing (and previously reported) Foreign Mineral Resource[4], to a JORC reported MRE. Information relating to historic results shown on sections or tabulated in this report, for the purposes of visualising mineralisation modelled in the MRE, is tabulated in full, in the tables "CentroGold – Contact Zone. Historic Results – Section C" and "CentroGold – Contact Zone. Historic Results – Section D". Points "A" though to "E" inclusive, are all covered by this table.
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Information relating to historic results shown on sections or tabulated in this report, for the purposes of visualising mineralisation modelled in the MRE, is tabulated in full, in the tables "CentroGold – Contact Zone. Historic Results – Section C" and "CentroGold – Contact Zone. Historic Results – Section D". No information listed in points "A" though to "E" inclusive, has

Criteria	JORC Code explanation	Commentary
		been excluded.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Where results are reported, averaging of mineralised intervals have been calculated based on the following parameters: 1. Weighted averaging of grade/thickness 2. A minimum Cut-off grade of 0.3g/t Au 3. A maximum of 3 continuous metres of internal dilution (<0.1g/t Au) 4. Top-Cuts have not been used on results 5. Reported depths and widths, are "downhole"
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Where results are reported and intercepts incorporate lengths of "high grade" (in the context of surrounding results), these "high grade" results have been detailed transparently and separately in the tables "CentroGold – Contact Zone. Historic Results – Section C" and "CentroGold – Contact Zone. Historic Results – Section D". A single instance exists of such a result (hole GUPD0089) in "CentroGold – Contact Zone. Historic Results – Section D"
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No assumptions have been made, as Metal Equivalents have not been used in this report.
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.*	• Mineralisation at the Contact Zone is typically sub-vertical, with flatter lying high-grade zones hosted in rafts of sediment within the tonalite intrusion host rock
	• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Only downhole widths/depths have been used in reporting results shown on the sections, provided for the purposes of visualising mineralisation modelled in the MRE.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of*	• This scope of this document covers the reporting a MRE. A plan showing the extent of mineralisation is shown in the text, together with sections, for the purposes of visualising mineralisation modelled in the MRE.

Criteria	JORC Code explanation	Commentary
	drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• This scope of this document covers the reporting a MRE. Historic results tabulated in this report, include results for every hole shown on the sections, whether high or low grade. If a hole contains "No Significant Result" this is also clearly stated in the table.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported) including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All material relevant to the reporting of the Contact Zone MRE has been included in this report.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Having converted the Contact deposit to a JORC compliant Mineral Resource, Avanco will examine the potential at the Contact deposit via a Scoping Study. Positive results will lead to infill drilling, to improve the resource confidence, as a prelude to a Pre-Feasibility study.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• This document covers the reporting a MRE. A plan showing the extent of mineralisation is shown in the text, together with sections, for the purposes of visualising mineralisation modelled in the MRE. In terms of potential extensions, mineralisation has in general been closed off along strike.

TABLE 1 – Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The drillhole database was prepared and validated by CSA Global based on historical information provided by Avanco. The data was loaded into an Access database and imported into Surpac software for modelling purposes.

Criteria	JORC Code explanation	Commentary
	• *Data validation procedures used.*	• CSA Global undertook validation of the data using original reports supplied.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visit has been undertaken by CSA Global. Avanco's Exploration Director and CP (Simon Mottram) has performed a site visit to the project over a number of days. The field facilities, core yard and core storage facilities were inspected as well as the sampling and data recording procedures on site. • Not applicable
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Geological interpretation was completed by Avanco and CSA Global geologists. The CP is satisfied that the geological model is robust and appropriate for this style of mineralisation, and correlates with the observations in the field visit, and in historical core viewed on site. • Detailed geological/alteration/structural logging in conjunction with chemical assays has been used during the interpretation process. No assumptions have been made. • The CP considers the mineralised boundaries to be robust, and that alternative interpretations do not have the potential to impact significantly on the MRE. • Geology, alteration and structure have been used to guide the model. Wireframes have been constructed for the main mineralised horizons as determined by the geological logging and chemical assays. • Continuity along strike and at depth of grade (mineralisation) and geology is controlled by alteration and structure which can be traced between drill holes by visual and geochemical characteristics.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Contact Mineral Resource is contained within an area defined by a strike length of 1,450 m and 375 m across-strike, along an azimuth of 300°. The deposit is bounded by the extents 363,800 m E to 364,940 m E and 9,749,325 m N to 9,750,596mN. The reported Mineral Resource lies within 250 m of surface (65 m RL to -185 m RL), where it is still open at depth.
Estimation and	• *The nature and appropriateness of the estimation technique(s)*	• The Mineral Resource has been completed using 3 individual grade domains

Criteria	JORC Code explanation	Commentary
modelling techniques	*applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	using a nominal 0.4 g/t Au cut-off grade. Samples were composited to 1 m intervals based on assessment of the raw drill hole sample intervals. High grade cuts ranging from 15.0 g/t to 40.0 g/t Au were applied to the mineralisation domains following statistical analysis. Statistical analysis was completed using GeoAccess software. Quantitative Kriging Neighbourhood Analysis was undertaken using Supervisor software, to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging Efficiency and Slope of Regression were determined for a range of block sizes, minimum and maximum samples, search dimensions and discretisation grids. A two-pass search ellipse strategy was adopted whereby the search ellipses were doubled for the second pass. If the blocks were not filled in the first two passes, the mean block grade for the domain was assigned. Ordinary kriging (OK) was adopted to interpolate grades into cells for the main mineralised zones. All geological modelling and grade estimation was undertaken using Surpac V6.6 software.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• A number of previous historical Foreign Resource estimates have been completed by various previous owners since discovery. These reports were available to the authors of the current estimate and were also made available to the CP.
	• *The assumptions made regarding recovery of by-products.*	• There are no by products
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• No known deleterious elements
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• A 10mE by 20mN by 10m RL parent cell size was used. No sub-celling was employed, instead a proportion figure was assigned to each block based on its proportional inclusion within mineralised wireframes. The drill hole spacing is variable but approximates 40-50m pierce points on 80m sections.
	• *Any assumptions behind modelling of selective mining units.*	• No assumptions were made regarding selective mining units.

Criteria	JORC Code explanation	Commentary
	• *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• No assumptions were made regarding correlation between variables. • Logged geology, alteration and structural controls were used in the interpretation of lodes within the resource model. Hard boundaries for estimation were used between mineralised domains. • High grade cuts were used to constrain outliers in the dataset as described above. • Standard model validation has been completed using numerical methods (histogram and swath plots), and validated visually against the input raw drill hole data, composites and blocks.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages have been estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The MRE has been reported above a cut-off grade of 1.0g/t Au. The CP considers this reasonable when considering a medium to large scale open pit style operation. Top-cuts were defined following probability curves and the spatial locations of outliers.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Previous mining studies have shown that the Contact Zone could be economically exploited by open cut mining methods at the reported average model grades. Open pit mining is considered as the appropriate method for future studies, and the CP believes that there is a likely prospect of economic extraction. A minimum mining width of 2m was applied (downhole composite width). No other mining assumptions were made. Detailed mining assumptions such as dilution and minimum mining widths will be included in any optimisation, detailed mine planning and Life of Mine plan completed in any future JORC compliant Ore Reserve estimation by Avanco.
Metallurgical factors or	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction*	• Metallurgical amenability was based on comprehensive metallurgical test work, completed on the CentroGold project as part of the 2011 TechnoMine Feasibility Study, which has been reviewed by Avanco's CP.

Criteria	JORC Code explanation	Commentary
assumptions	*to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Extensive metallurgical testwork has also been completed in older studies completed previously, which have also been made available to Avanco's CP. Historical test work included preliminary, detailed and final metallurgical test work, and covers several alternative approaches, including bulk cyanidation, froth flotation, and heap leaching.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No assumptions regarding possible waste and process residue disposal options have been made. The 2011 TechnoMine Feasibility Study for the CentroGold project noted the following: ○ 'Both the Chega Tudo and the Cipoeiro deposit areas have been extensively disturbed by garimpeiro (artisanal miners) activities, particularly since the early 1980's. There is an expectation of environmental contamination associated with the garimpeiros pits.' ○ 'Geochemical characterization of the waste rock dumps and tailings produced from metallurgical testwork was carried out. Acid-base accounting indicated the overall potential for acid rock drainage (ARD) generation is very low'.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*	• CSA Global used fixed density values assigned into the block model for each regolith and lithological unit, setting colluvium and oxide to 1.53t/m^3, transitional material to 2.3t/m^3, fresh arkose waste to 2.7t/m^3, fresh tonalite waste to 2.8t/m^3 and fresh sulphide mineralisation to 2.72t/m^3. The project database contained results for 230 bulk density measurements from the Cipoeiro project (Blanket and Contact Zones). • Density measurements were calculated using the water immersion method from drill core across the Contact Zone, and from the various rock types. The entire sample sent for geochemical analysis (i.e. half core) was measured for bulk density. Measurements were performed by Newmont and Santa Fe personnel, Zonge Engineering, and Lakefield Laboratory (Canada).

Criteria	JORC Code explanation	Commentary
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Water immersion density data was used to assign a single value for the mineralised material. Average densities were applied to overburden material as well as the various lithological domains based on measured densities. More detailed bulk density testwork across the mineralised zones is recommended.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• The MRE was classified as Inferred taking into account the level of geological understanding of the mineralisation, quality of samples, density data, drill hole spacing, historical nature of the drilling, and sampling and assaying processes.
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	• The MRE is classified as Inferred despite the reasonable geological and grade continuity defined by the current drill spacing. This is due to the lack of validation of the historical drill holes, particularly in relation to the collar locations, assay results, and the detailed QA/QC information.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The MRE estimate appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The MRE accuracy is communicated through the classification assigned to the Contact Zone MRE. The MRE has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation*	• The MRE statement relates to a global estimate of in-situ tonnes and grade.

Criteria	JORC Code explanation	Commentary
	should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Contact Zone has not, and is not currently being mined.