MAIDEN RESERVES EXCEED EXPECTATIONS FOR ANTAS COPPER

The Company is especially pleased to report Maiden JORC Reported Ore Reserves for the (Stage1) Antas Copper Deposit[1]. **Results confirm a robust and high-grade copper deposit amenable to open pit mining and benefitting from simple metallurgy.** Stage 1 JORC Reported Proved and Probable Ore Reserves stand at:

2.649 million tonnes at 3.19% copper and 0.66gpt Gold for 84,518 tonnes of contained copper and 56,277 ounces of Gold[2]

- **In less than 3 years from discovery Avanco has defined its Maiden JORC Reported Ore Reserves at the Antas Copper Deposit located within the boundaries of the newly granted Mining License**
- **Avanco aims to become the Carajas region's second Copper miner by constructing Stage 1 with a Mine Life exceeding 9 years, as supported by the JORC Reported Ore Reserves reported below**
- **Success at Antas is underpinned by high grades, using a ROM cut-off grade of 0.9% Copper with the JORC Reported Ore Reserves standing at:**

ANTAS NORTH – JORC Reported Ore Reserves. August 2014							
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	50137	33046
Probable	ROM Ore	0.90	1.264	2.72	0.57	34381	23231
PROVEN + PROBABLE ROM ORE			**2.649**	**3.19**	**0.66**	**84518**	**56277**
Proved	Low Grade	0.65	0.342	0.74	0.30	2531	3308
Probable	Low Grade	0.65	0.635	0.72	0.23	4572	4709
TOTAL PROVEN + PROBABLE			**3.63**	**2.53**	**0.55**	**91621**	**64294**

- **A high Resource–Reserve conversion has been achieved with 72% of contained Copper in the Measured + Indicated Mineral Resources[3] converting to Ore Reserves**
- **60% of Ore Reserves are classified as Proved averaging 3.62% Copper grade**
- **No technical or environmental impediments have been identified for Antas which is situated in an established mining district and close to infrastructure**
- **Significant (Inferred) resources excluded from the above exist below the pit floor and offer potential to extend Mine Life significantly**
- **These Reserves represent another key development milestone, trigger the US$12 million BlackRock financing agreement and satisfy senior debt CP's**

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Luis Azevedo
Matthew Wood
Jailson Araujo
Antonio Madalosso

ASX Symbol: AVB

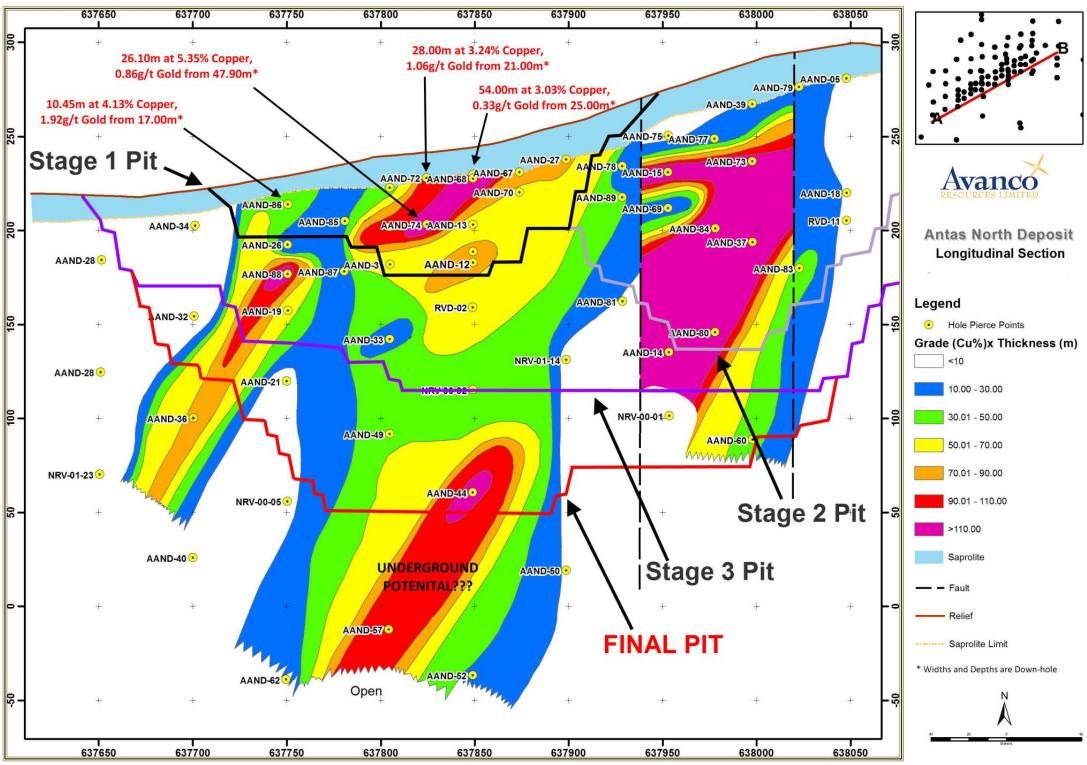
ANTAS COPPER DEPOSIT – STAGE 1

AAND-068. Close-up Breccia Matrix Mineralisation

Antas Copper Deposit *(Stage1)* **is Avanco's first mine development in the mining friendly world class Carajas Mineral Province, Brazil**

Following discovery late in 2011 Avanco has defined a Maiden JORC Reported Ore Reserve for the Antas Copper Deposit, located inside the newly granted Mining License (PL470/2014). The longitudinal section below illustrates the shallow and high-grade nature of the project.

AAND-072. Pictured from True Depth: ~31.90m



Full Size Figure repeated below

Ore Reserves include projected mining dilution and losses and considers solely sulphide ore, which is amenable to beneficiation by the chosen traditional Froth Flotation process.

The table below illustrates annual production rates in the current Life of Mine (LOM) plan.

AAND-074. Close-up massive sulphide mineralisation

AAND-074. Pictured from True Depth: ~37.20m

AAND-086. Pictured from True Depth: ~15.30m

YEAR	PLANT PROCESSING			OPEN PIT MINING		
	kt	% Cu	g/t Au	Waste Total kt	Mining Total kt	Strip Ratio Avg.
Pre-Strip				2433	2499	
1	400	3.09	0.62	4443	5101	
2	400	3.57	0.78	4505	5101	
3	400	2.90	0.63	4618	5300	
4	400	2.88	0.73	4567	5000	
5	400	3.02	0.52	4643	5000	
6	400	2.57	0.63	1925	2251	
7	400	2.04	0.47	243	441	
8	400	2.19	0.40	150	446	
9	400	0.94	0.26	42	97	
10	67	0.73	0.23	0	0	
Total	**3,667**	**2.54**	**0.55**	**27,569**	**31,236**	**7.5**

Below shows a tabulated comparison between Antas Mineral Resources and Ore Reserves. **Approximately 60% of Ore Reserves classify in the Proved category with the remainder in the Probable category.**

72% by contained Copper or 65% by tonnes of Mineral Resources reporting to the Measured + Indicated categories successfully converted to JORC Reported Ore Reserves.

ANTAS NORTH – JORC Reported Ore Reserves. August 2014							
Classification	Type	Economic Cut-Off Cu%	Tonnes (Mt)	Copper (%)	Gold (g/t)	Copper Metal (T)	Gold (Oz)
Proven	ROM Ore	0.90	1.385	3.62	0.74	50137	33046
Probable	ROM Ore	0.90	1.264	2.72	0.57	34381	23231
PROVEN + PROBABLE ROM ORE			**2.649**	**3.19**	**0.66**	**84518**	**56277**
ANTAS NORTH – SULPHIDE JORC Reported Mineral Resources. April 2014[3]							
Classification	Type	Economic Cut-Off Cu%	Tonnes (Mt)	Copper (%)	Gold (g/t)	Copper Metal (T)	Gold (Oz)
Measured	PRIMARY	0.90	2.48	3.26	0.71	80,724	56,751
Indicated	PRIMARY	0.90	1.62	2.22	0.42	36,002	21,884
MEASURED + INDICATED			**4.10**	**2.85**	**0.60**	**117,000**	**79,000**

Having compared results above with the ore inventory basis used in the 2013 Antas North Study[4] **management's expectations have been surpassed.** The high ROM grades continue to be a feature, strip ratio has been reduced slightly, and additional tonnes of copper added to the production inventory. Moreover, **no technical or environmental impediments have been identified** for Antas, which is situated in an established mining district, close to excellent infrastructure.

The reserves derived from the period under study, provides for an initial LOM of approximately 9 years, however this exercise does not include Mineral Resources falling outside of the Ore Reserves such as the large volume of Inferred Mineral Resources hosted below the current pit floor. Nor does it consider resources hosted at the neighbouring Antas South Deposit some ~300m away. **These will all be the targets of future exploration, with a view to either open pit or underground exploitation to extend the mine life of the proposed Antas Copper Mine.** The newly granted Mining License **is also host to a number of exciting exploration targets, yet to be thoroughly investigated.**

STAGE 1 – FINANCING & CONSTRUCTION TIME LINES

Securing the US$70m project financing represents the next significant milestone for development of the Antas Copper Mine.

Banco Votorantim are the lead banker to raise US$58 million in senior debt, with Votorantim having already committed to providing US$30 million and syndicating the remaining US$28 million. The US$12 million balance will come from the BlackRock World Mining Trust by way of the BlackRock Royalty Agreement.

Another important outcome of the new Ore Reserve relates to the condition precedent associated with the Votorantim debt, wherein a definitive economic model based on JORC Reported Ore Reserves must be submitted. Handover of the Stage 1 Ore Reserves and financial model to Banco Votorantim and prospective syndication partners will complete these key deliverables for the banks due diligence process.

The banks are expected to take renewed comfort from provision of the US$12 million BlackRock agreement, which upon receipt of this publication, is fixed, firm and ready to be drawn (pro-rata) alongside debt funding.

While progress towards execution of the senior debt is ongoing, other time critical construction activities, such as engineering design and the Ball Mill importation are also being aggressively pursued.

With debt funds potentially available in October and construction work commencing in the fourth quarter management envisage commissioning of Stage 1 to be late second quarter, 2015.

In the interim Avanco continues to draw on strong cash reserves to accelerate the development programme and facilitate a number of important financing / development updates in the coming weeks.

STAGE 1 – ANTAS DEPOSIT – ORE RESERVE ESTIMATION PROCESS

The following summarises the process undertaken to estimate the Ore Reserves for the Antas North Project, as reported in the "CSA Global Pty Ltd (CSA) internal report, R227.2014 Antas North JORC 2012 Ore Reserve Report".

Antas North Ore Reserve Estimation Process
Material assumptions and outcomes from the PFS or FS, including economic assumptions:

An Independent Feasibility Study will be published in the near future.

Copper / gold pricing and market data have been derived from publicly available World Bank literature, broker analysis reports and other reliable sources.

Major study parameters include:

- Overall pit slopes of 32 degrees in oxide/saprolite material
- Pit slopes of 55 degrees in fresh rock
- A ROM processing rate of 400,000/tpa
- Variable mining costs of US$2.50/t
- Rehabilitation costs of US$0.10/t
- Variable Processing costs of US$15.73/t
- Annual fixed costs of US$6.92 million/pa
- Commodity prices of US$3.20/lb Copper and US$1200/Oz Gold
- Concentrate to market transport cost US$150/t (wet)
- Royalties (NSR basis) 5.7% and 27.7% for Copper and Gold respectively inclusive of the BlackRock commitments
- Copper concentrate Treatment (TC) Charges of US$80/t, and Refining Charges (RC) of US$0.08/lb
- Total capital expenditure excluding working capital estimated at ~US$60M, including contingency of approximately US$10m

Criteria used for classification, including classification of the mineral resource on which ore reserves are based and confidence in modifying factors:

- The Ore Reserves have been classified according to the underlying classification of the Mineral Resource and the status of the Modifying Factors. The status of the modifying factors is considered sufficient to support the classification of Proved Reserves. Sensitivity analysis on the main economic assumptions indicate that the project is robust in terms of all operating costs, is most sensitive to copper recovery/price and has a low sensitivity to gold recovery/price. Capital cost estimates for the project include an overall weighted contingency of 16%. In terms of the confidence on Capex, ~60% of capital items/works have either been paid already, or are based on existing contracts, firm quotations, or known prices. The ~$10m contingency is an additional capital provision equivalent to 47% of the value of those capital items for which pricing has not yet been confirmed.

- Fifty six percent (56%) of the Measured Mineral Resource has been converted to the Proved Ore Reserve category on the basis of ore body geometry, mine dilution and recovery factors. A polygon was placed around the core Measured material deemed to have a high probability of conversion to the Proved category. Measured material outside the polygon has been converted to the Probable category.

Mining method selected and other mining assumptions, including mine recovery factors and mining dilution factors:

- Open cut mining using truck and excavator is appropriate for the Antas copper deposit because sulphide mineralisation occurs close to surface with minimal oxide overburden and is near sub vertical, dipping slightly to the north.

- Geotechnical parameters used, are as recommended by MLF Geotechna e Mecánica de Rochas Ltda, a highly respected Brazilian consulting group following completion of geotechnical drilling, rock mass characterisation and stability assessments.

- 5% mining dilution and 95% mining recovery factors have been applied. Ore zones are greater than 5 metres wide, and the use of relatively small equipment facilitates selective mining. The minimum mining width has been set at 20 metres.

Processing method selected and other processing assumptions, including recovery factors applied and allowances made for deleterious elements:

- Froth flotation is the selected beneficiation process. It is a well proven technology and the metallurgical circuit will be similar to that in use at the proximal Sossego Mine copper and many other copper operations globally.

- Laboratory test work has been carried out on samples representing the four most common mineralisation types. The mineralogy at Antas is similar to that occurring at the Sossego mine, which has been producing ~120,000tpa of copper for many years.

- Test work indicates that the main copper mineral is chalcopyrite, which is very amenable to selective recovery by froth flotation. The associated gold content in the ore is also co-recovered in the same copper flotation process.

- The results of flotation test work indicate that recovery rates of greater than 94% for Copper and approximately 90% for Gold are to be expected in the industrial plant. The flotation concentration ratio is approximately 10:1.

- The Antas ore contains very low levels of deleterious elements, resulting in the production of very marketable copper concentrates.

- Analysis of flotation tailings show that the process by products are classified as non-hazardous and safe for long term storage.

Basis of the cut-off grade applied:

- Whittle pit optimisation software has been used to generate optimal pit shells on which the pit design has been based. This software calculates the cut-off grade based on the cost and revenue inputs. The equivalent cut-off grade is 0.65% Cu. No account has been taken of the gold content when estimating the cut-off grade.

Estimation methodology:

- Whittle pit optimisation software has been used to identify the preferred pit shell and stage pit shells for cut-backs for the recovery of the primary / sulphide Measured and Indicated mineral resources. Oxide and transitional ores were excluded from the optimisation exercise.

- Inputs used for the optimisation have been based on the results of the Prefeasibility and Feasibility level studies and using the resource block model relating to the May 2014 Mineral Resources.

- Detail pit designs have been based on the results of pit optimisation. The nominated pit shell, on which the pit model has been based, provides a conservative design approach.

- The final pit design and chosen optimised shell compare favourably, being within less than 5% on process feed tonnes and grade, while also achieving a ~10% reduction in waste by the application of a modified haul road design.

- The metal inventory within the pit has been estimated by intersecting the pit design with the resource block model and applying appropriate mining recovery and dilution factors.

Material modifying factors, including status of environmental approvals, mining tenements and approvals, other government factors and infrastructure requirements for selected mining method and for transportation to market:

- The Antas North project lies within the boundaries of Mining License PL470/2014 held by AVB Mineração Ltda (a wholly owned Brazilian subsidiary of Avanco Resources Limited). The Antas Deposit Reserves have been approved by the DNPM (Brazilian Mining Department) to Brazilian norms. An Environmental Impact Assessment (RCA) was prepared to Brazilian norms, and subsequently a Licence to Operate, LO 8796/2014 was granted by the Para State environmental authorities.

- Other minor permits required for construction (for example: Access roads, bridges and power lines) are in preparation or have been applied for.

- The project is situated within poor quality agricultural pasture. During the exploration campaign, Avanco maintained a good relationship with the surface rights owner, who is supportive of the project. Discussions with the landowner in respect of Avanco achieving the rights required to exploit the deposit are ongoing.

- Characterisation studies for the main wall rock types and low-grade mineralisation indicate that there are no environmental or physical issues which need to be recognised in the design of wall rock / low grade stockpiles.

- Flotation tailings storage facilities have been designed by GeoHydraTech Engenharia a well-respected Brazilian group experienced in the design of mine tailing impoundments. Civil & geotechnical site investigations were completed by GeoMinas.

- Whilst marketing arrangements are yet to be confirmed, the Antas copper concentrate is a clean product, thus finding customers is not expected to be difficult. Potential smelter customers have been identified in Brazil and internationally. Glencore is a major shareholder of Avanco and has expressed interest in acquiring the Antas concentrates.

Tony Polglase
Managing Director

ABOUT AVANCO

- Avanco (ASX-AVB) is an emerging mid-tier copper company focussed in the mining friendly world class Carajas Mineral Province, Brazil. The Company owns the rights to 100% of the second largest area of mineral tenure in the region (behind Vale SA)

- The Company is well positioned to ultimately operate a number of high grade, low cost copper / gold mines in the region which will establish Avanco as a profitable long life copper company in Brazil

- The Antas Copper Mine (Stage 1) is Avanco's first mine development. It was granted a full Mining License in September 2014 and has JORC Reported Ore Reserves (Proved + Probable) of 2.649 million tonnes at 3.19% copper and 0.66gpt Gold for 84,518 tonnes of contained copper and 56,277 ounces of Gold

- US$70m of project funding is aligned to the start of Stage 1 construction in 2014, with first production targeted for 2015. Timely implementation of Stage 1 is being pursued to help finance the Company's second copper project

- Pedra Branca, known as Stage 2 is located in the same district as Stage 1. Pedra Branca is the Company's next project and is considerably larger. Infill drilling, aimed at improving Resources classification will facilitate "a decision to mine" in 2015

- The Company has ~1.661m shares on issue and is well supported by: Glencore ~12.2%, Blackrock World Mining Trust ~11.5%, and the Appian Natural Resources Fund ~11.5 %

- Avanco is managed by highly experienced international and Brazilian mining professionals who are predominantly Portuguese speaking

- Whilst near term priorities are focussed on transition to copper producer status the Carajas offers significant other opportunities to enhance shareholder value over time

- The Company has substantial cash reserves to support its activities

CARAJAS - TOTAL JORC Reported Mineral Resources[3,5,6,7]						
DEPOSIT	**Category**	**Million Tonnes**	**Cu (%)**	**Au (ppm)**	**Copper Metal (T)**	**Gold Metal (Oz)**
PEDRA BRANCA[8]	Inferred	46.82	1.20	0.33	560,000	500,000
	Total	**46.82**	**1.20**	**0.33**	**560,000**	**500,000**
ANTAS NORTH[9]	Measured	2.83	3.01	0.72	85,079	65,578
	Indicated	1.65	2.20	0.42	36,365	22,058
	Inferred	1.9	1.59	0.23	30,242	14,122
	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	7.5	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		**63.28**	**1.26**	**0.33**	**797,000**	**667,000**

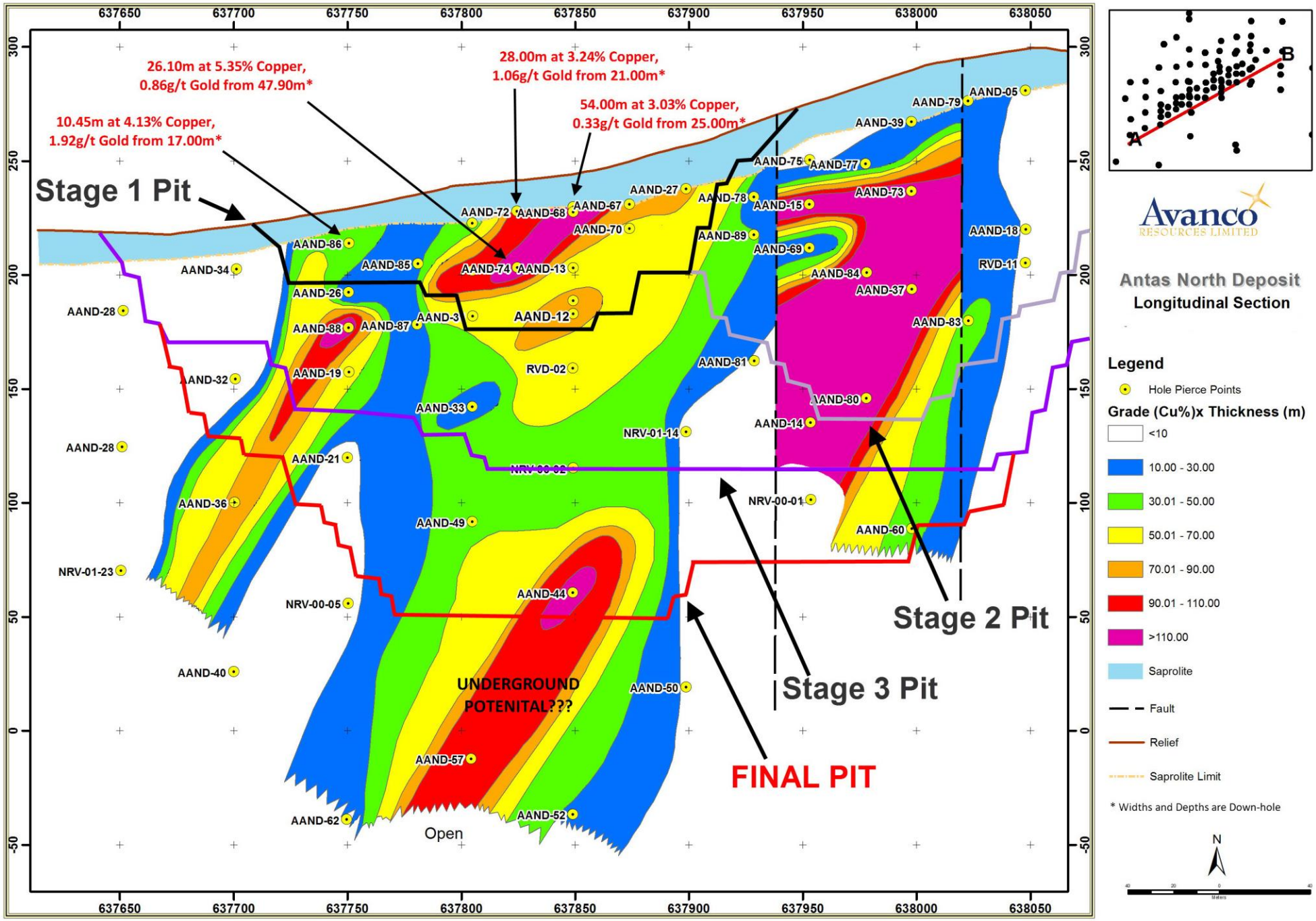
Competent Persons Statement

The information in this report that relates to Exploration Results 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 report that relates to Ore Reserves is based on information compiled by Mr Paul O'Callaghan, who is a member of the Australasian Institute of Mining and Metallurgy. Mr O'Callaghan is an employee of CSA Global Pty Ltd. Mr O'Callaghan 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 O'Callaghan 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 report that relates to Mineral Resources is based on information compiled by Dr. Bielin Shi, who is a member of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. Dr. Shi is an employee of CSA Global Pty Ltd. Dr. Shi 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". Dr. Shi consents to the inclusion in the report of the matters based on his information in the form and context in which it appears*.

1. The deposit is defined as an Iron Oxide Copper Gold (IOCG) deposit, typical of that found in the Carajas Province of Brazil, and well documented in respected geological texts
2. JORC Reported Proved + Probable Reserves using the LOM 0.9% Cu cut-off grade
3. 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
4. See ASX announcement "Stage 1 Assessment support Fast Track Development", 4 March
5. See ASX announcement "Stage II – Pedra Branca Resource Upgrade", 24 June 2013, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca resource estimate
6. 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
7. The Pedra Branca and Antas South JORC compliant resources were prepared and first disclosed under the JORC Code 2004. They have 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
8. Grade Tonnage Reported above a Cut-off Grade of 0.4% Cu for Primary Resources only
9. Grade Tonnage Reported above a Cut-off Grade of 0.9% Cu for Primary Resources only
10. Grade Tonnage Reported above a Cut-off Grade of 0.3% Cu for Oxide Resources


637650
637700
637750
637800
637850
637900
637950
638000
638050
300
250
200
150
100
50
0
-50
26.10m at 5.35% Copper,
0.86g/t Gold from 47.90m*
28.00m at 3.24% Copper,
1.06g/t Gold from 21.00m*
10.45m at 4.13% Copper,
1.92g/t Gold from 17.00m*
54.00m at 3.03% Copper,
0.33g/t Gold from 25.00m*
Stage 1 Pit
AAND-86
AAND-34
AAND-85
AAND-72
AAND-68
AAND-67
AAND-27
AAND-78
AAND-15
AAND-79
AAND-05
AAND-39
AAND-75
AAND-77
AAND-73
AAND-70
AAND-89
AAND-69
AAND-18
RVD-11
AAND-74
AAND-13
AAND-84
AAND-37
AAND-26
AAND-28
AAND-3
AAND-12
AAND-88
AAND-87
AAND-83
AAND-81
AAND-32
AAND-19
RVD-02
AAND-80
AAND-33
AAND-14
NRV-01-14
AAND-28
AAND-21
NRV-00-02
NRV-00-01
AAND-36
AAND-49
AAND-60
NRV-01-23
AAND-44
NRV-00-05
Stage 2 Pit
AAND-40
UNDERGROUND
POTENITAL???
AAND-50
Stage 3 Pit
AAND-57
FINAL PIT
AAND-62
AAND-52
Open
A
B
Avanco
RESOURCES LIMITED
Antas North Deposit
Longitudinal Section
Legend
Hole Pierce Points
Grade (Cu%)x Thickness (m)
<10
10.00 - 30.00
30.01 - 50.00
50.01 - 70.00
70.01 - 90.00
90.01 - 110.00
>110.00
Saprolite
Fault
Relief
Saprolite Limit
* Widths and Depths are Down-hole
N
Meters

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.*	• At Antas North resource and exploration diamond drilling is used on a nominal spacing of 25m by 25m. Core is cut in half onsite using an industry standard core saw, perpendicular to mineralisation or geology to produce two identical (mirrored) halves. Samples are collected consistently from the same side of cut core, sent to an internationally accredited independent assay laboratory, and analysed for a suite of elements by appropriate analytical techniques for the style and type of Iron Oxide Copper Gold (IOCG) mineralisation. This does not include purpose metallurgical or geotechnical drilling, which are not assayed commercially, but are for the purpose of technical programmes.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• The drillhole collar locations are surveyed by Differential GPS by qualified local survey contractors. Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Logging and sampling is carried out according to Avanco protocols and QAQC procedures as per industry standard, and overseen by its Geological Managers and Competent Person (CP).
	• *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.*	• Diamond core is HQ and NQ in size, sampled on mineralised intervals or regular 1.0m intervals in wide mineralised zones. Core is cut in half to produce sample weights of 3-5kg. Samples are crushed, dried and pulverised (total prep) to produce a sub-sample for analysis. Using a four digest drill core samples are analysed for Cu (ICP) and Au (Fire Assay, 50g). Mineralised zones and samples with >2,000ppm Cu are further analysed for "Ore Grade" Cu by Atomic Absorption, and commonly for Ag also. Additional elements may be assayed based on geological observations. This does not include purpose metallurgical or geotechnical drilling, which are not assayed commercially, but are for the purpose of technical programmes.
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).*	• Not including the current drill programme, drilling to date has been a combination of HQ and NQ Diamond drilling (66 holes), plus 12 historic diamond holes.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Diamond core recoveries are logged and recorded in the database. Overall recoveries are consistently >95% in oxide and >98% in fresh rock. Drill sample recoveries are recorded as an average for each metre and recorded in the database. Recoveries are excellent and there are no known sample recovery problems, with the exception of the soil profile.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Diamond core is reconstructed into continuous runs on an angle iron cradle for recovery measurement and core orientation. Depths are checked against those marked on the core blocks, and against the drilling company's records.
	• *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.*	• With an excellent history of sample recoveries there is no known sample bias or potential for sample bias.
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 are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Logging and sampling is carried out according to Avanco protocols and procedures as per industry standard, and overseen by the Company's Geological Managers and CP. The Company believes that the level of detail and quality of the work is appropriate to support current and future studies.
	• *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. Core is photographed both wet and dry.
	• *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, perpendicular to mineralisation or geology to produce two identical (mirrored) halves. Samples are collected consistently from the same side of cut core.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• All drilling to date has been by diamond core.
	• *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 to at least 85% passing 100µm or better.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Avanco uses an industry standard QAQC programme involving Certified Reference Materials (CRM) "standards" (with Cu grades ranging from low to very high) and blank samples, which are introduced in the assay batches at an approximate rate of one control sample per 20 normal samples. These QAQC results are reported along with the sample values in the preliminary and final analysis reports. Umpire checking of the Primary laboratory is then carried out by a Secondary laboratory, where both are internationally accredited independent assay laboratories.
	• *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 are inserted at an approximate rate of 1 duplicate per 40 normal samples. Umpire checking of the Primary laboratory is then carried out at by a Secondary laboratory, at an approximate rate of 1 control sample per 20 normal samples, or a minimum of 3 umpire samples per hole. Both are internationally accredited independent laboratories.
	• *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.*	• Assaying uses a four acid digest, which is a standard industry method for Base and Precious metals analysis. The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples. The method approaches total dissolution of most minerals. "Ore grade" Cu is further analysed by an accredited AAS "Ore Grade" analysis method. The analysis 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.*	• It is the Company's policy not to use in-house tools to determine reportable results for anything other than regional soil sampling. XRF's are used internally by Company geologists to assist in geological and mineralogical interpretation.
	• *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.*	• Avanco uses an industry standard QAQC programme involving Certified Reference Materials "standards" (with Cu grades ranging from low to very high), blank samples, duplicates and Umpire Laboratory check sampling. Data is analysed and reported internally on a monthly basis for accuracy, precision, repeatability and various biases. This data is also handed over and independently scrutinised by the Company's independent Resource Consultants (CSA Global Pty Ltd), as part of any resource modelling work.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Avanco's Exploration Manager (~30 years' experience) and Chief Geoscientist (~40 years' experience) visually verify significant intersections and results, with further verification by the Company's CP.

Criteria	JORC Code explanation	Commentary
	• *The use of twinned holes.*	• The Company uses twin holes routinely in the more advanced stages of resource definition drilling, and for metallurgical drilling.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Primary data is collected on Excel templates with detailed geological and structural logging recorded on paper. Information is transferred, validated, complied, and managed by the Company's in-house database manager in a relational database. All Company Intellectual Property is stored on a central server, kept in a secure and environmentally controlled room. Automated tape back-up occurs on a nightly basis and duplicate back-ups are regularly rotated "off-site" as a secondary precaution in case of loss of the Server site.
	• *Discuss any adjustment to assay data.*	• No adjustments or calibrations are made 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.*	• Collar locations are surveyed by a qualified survey contractor in Parauapebas, Para using Differential GPS tied into the State Survey Datum using true Sea Level RL's. Downhole surveys are done using a Maxbor digital down-hole tool with readings every 3m.
	• *Specification of the grid system used.*	• Universal Transverse Mercator, SAD69 Zone 22 South.
	• *Quality and adequacy of topographic control.*	• Detailed Topographic control (1m contours) and Digital Terrain Models were generated with the use of a Drone Survey Aircraft by a qualified local survey contractor. The contractor maintains a network of local survey marks onsite at topographic highs, tied to the State Survey Datum.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• The current drill spacing at Antas North is nominally 50m by 50m. The current drill programme aims to infill this data to a nominal spacing of 25m by 25m in the top half of the deposit, for the later generation of reserves sufficient to warrant the start of mining.
	• *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.*	• Sufficient continuity in both geology and mineralisation has been established to support the classification of Company's existing JORC Reported Mineral Resources where reported and classified under JORC 2012, or where reported and classified under JORC 2004. As the Company progresses resources to higher levels of confidence it will collect appropriate data to ensure compliance with any new classification.
	• *Whether sample compositing has been applied.*	• In the JORC Code reported Mineral Resource estimate, the majority of samples are 1m in length with only a small number of (mostly end of hole) samples being larger than 1m long, or less than 1m where core samples are cut to the limit of mineralisation. In these cases samples are composited to 1m. Statistical analysis shows that this has no effect

Criteria	JORC Code explanation	Commentary
		due to their locations.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Geology and mineralisation at Antas North is approximately sub-vertical, dipping slightly to the North. Thus the majority of drilling is angled to the south, dipping as low as possible (typically -50º) in order to achieve intersections at the most optimal angle possible.
	• *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.*	• The company does not believe that any sample bias has been introduced which could have a material effect on the resource model, particularly given the strong correlation of mineralisation between holes.
Sample security	• *The measures taken to ensure sample security.*	• "Chain of custody" is managed by Avanco. All core samples are received intact and in their entirety in their core trays at the Company's secure Core Yard in Parauapebas, Para, Brazil. All sampling and work on the samples is carried out within the confines of this secure facility. Samples are delivered by Avanco personnel directly to the laboratory in Parauapebas and thus at no point do the samples leave the possession of Avanco staff prior to arriving at the laboratory. Avanco has protocols and procedures for tracking the progress of the samples through the laboratory, ensuring accurate validation and authentication of results issued by the laboratory in relation to the samples that were submitted.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• CSA Global Pty Ltd (CSA) competed a full onsite (in Brazil) review of all Company drilling, sampling, data and exploration management procedures from start to finish, including a visit to the independent laboratory facilities, as part of their own "Competent Person's" due diligence, prior to commencing the Mineral Resource estimation work for Avanco on the Company's projects in Brazil. Avanco received a favourable review, without any concern with the quality and integrity of data received by CSA from Avanco's CP.

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.*	• AVB MINERAÇÃO Ltda, a wholly owned Brazilian subsidiary of Avanco Resources Ltd owns the rights to 100% Mining Lease PL470/2014 - outstanding payment equal to 0.3% of the value of JORC Code reported Ore Reserves. Existing NSR third party Royalties amount to 1.7%. Additional Royalty of 2% NSR on Cu and 25% NSR on Au proposed to potential investor. State royalties amount to 2% NSR on Cu and 1% NSR on Au. Unless negotiated otherwise (by the owner of the mineral rights) royalty to owner of surface rights equal to 50% of the State royalty.
	• *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.*	• PL470/2014 is a granted Mining License (Portaria de Lavra), granted on 9/9/2014 in perpetuity until all Reserves are exhausted.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• AVB's CP has determined that the quality and integrity of historical work is adequate, as has the Company's independent resource consultants (CSA) and their CP, for inclusion of historical drilling in resource modelling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Iron Oxide Copper Gold (IOCG) breccia pipe, hosted predominantly by mafic metavolcanic rocks of the Parauapebas Formation.
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.*	• Tabulation of information relating to drilling can be found in this report listed in the table "Antas North Deposit – Diamond Drilling Results 2014". Information relating to Points "A" though to "E" inclusive, are all included in 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.*	• No information listed in Points "A" through to "E" has been excluded. All information is complete and is presented in the table in the table "Antas North Deposit – Diamond Drilling Results 2014" found within this report.

Criteria	JORC Code explanation	Commentary
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.*	• Averaging of mineralised intervals are calculated by the following parameters 1. Weighted averaging of grade/thickness 2. A minimum Cut-off grade of 0.1% Cu 3. A maximum of 3 continuous metres of internal dilution (<0.1% Cu) 4. Top-Cuts of 20% Cu, 10g/t Au
	• *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 intercepts incorporate lengths of "high grade" (in the context of surrounding results), these "high grade" results have been detailed transparently and separately in any reported results, both in the text of the report and in the table "Antas North Deposit – Diamond Drilling Results 2014". Detailed examples are present in this report and the table above.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No assumptions are included in this report, because Metal Equivalents have not been used.
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.*	• Geology and mineralisation at Antas North is approximately sub-vertical, dipping slightly to the North. Thus the majority of drilling is angled to the south, dipping as low as possible (typically -50º) in order to achieve intersections at the most optimal angle possible.
	• *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').*	• True widths and true depths of all assay intersections are known, have been calculated, and are shown tabulated in this report in the table "Antas North Deposit – Diamond Drilling Results 2014".
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• The report covers the conversation of Resources to Reserves and not a discovery. For more information on the JORC Reported Resource see "Stage 1 set to Excel on New High Grade Copper Resource", 7 May 2014.
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.*	• The table "Antas North Deposit – Diamond Drilling Results 2014" included in this report includes intersections and results for every hole drilled including high and low grade intersections. Even if secondary elements (credits) are below detection limit, they are still shown as such.
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 and meaningful exploration data, relevant to the scope of work in this report, has been included in this report. There is no other information which available or in the opinion of the Company's CP is lacking in this report.

Criteria	JORC Code explanation	Commentary
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).*	• Potential extension exists at depth below the new design pit and will be explored in the future for underground potential
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Potential extension exists at depth below the new design pit generated as part of the Antas Ore Reserves. This potential in highlighted in the full-page diagram on page 10.

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.* • *Data validation procedures used.*	• The database is maintained by a database professional on site. • The exploration database used for the Mineral Resource estimation has been validated and is considered accurate.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person for this Mineral Resource estimation is a full time employee of CSA Global Ltd. and has undertaken a site visit, ensuring industry standards in the Mineral Resource estimation process from sampling through to the final block model.
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.*	• Wireframe interpretations were completed by CSA based on the section and plan interpretations of mineralisation and geology made by Avanco geologists, which are considered robust. • The wireframes were generated based on 25m spaced cross sections. This was based on exploration and grade control drilling patterns. • The geological interpretation of mineralised boundaries is considered robust, and alternative interpretations do not have the potential to impact significantly on the Mineral Resource. • Mineralisation cut-off grades (0.2% Cu combined with Au grade > 0.1 g/t Au), geological logging and interpretation were used to define the mineralised envelopes. • Continuity along strike and at depth of grade (mineralisation) and geology is well defined by alteration and structure (the breccia pipe).
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.*	• Mineralisation at the Antas North deposit extends from 637600mE to 638250mE, 9309900mN to 9310650mN, and from about 10m below surface to beyond the depth of current drilling. Within the deposit there are multiple lodes generally striking NE and dipping towards the northwest at 70° to 80°.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• 1m composites were created and used for statistical analysis, variography analysis, and estimation. • Thorough univariate statistical analysis of weighted by length 1m downhole composites, flagged for mineralogy has been completed, for copper and gold, and in each mineralogical domain. Top-cuts were used where applicable. • Statistical analysis indicated that outlier management was crucial to prevent severe high grade smearing that could result in potential overestimation for some elements. The approach used has been

Criteria	JORC Code explanation	Commentary
	• *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	capping (Top-cuts were defined by domain, following thorough examinations of histograms, probability curves and the spatial locations of the outliers). Top cuts ranged from 2% Cu to 25% Cu and 2g/t Au to 30g/t Au, based on analysis of individual domain statistics. • Variogram modelling was completed within Isatis™ software and used to define the characterisation of the spatial continuity of copper and gold within all lodes, and parameters used in the interpolation process. Variogram models are cross-validated to ensure parameters are accurate. • Quantitative Kriging Neighbourhood analysis (QKNA) using "goodness" of fit statistics to optimize estimation parameters, has been undertaken. Parameters optimised include block size, search parameters, number of samples (minimum and maximum) and block discretisation. • Directional ranges have been determined from variogram modelling and are used to constrain the search distances used in block interpolation, incorporating geologists' interpretations of ore geometry and continuity. Estimation search strategies implemented have sought to ensure robust estimates while minimising conditional bias. Three search estimation runs are used with initial short-search runs extending the sample influence in later runs. • Block estimation has been completed within Datamine™ Studio 3 Resource Modelling software. Three dimensional mineralisation wireframes were completed within Micromine™ software and imported into Datamine™. These wireframes are used as hard boundaries for the interpolation. • Ordinary Kriging using a local dynamic anisotropy search is used for block grade estimates using uniquely coded 1m composite data for respective lodes. • All block estimates are based on interpolation into parent blocks. Parent block estimates are then assigned to sub-blocks. Mineral Resource estimation does not include any form of dilution. • Block model extends from local grid 637,000mE to 639,000mE, 9,309,200mN to 9,311,200mN and vertical from -400mRL to 400mRL. • Three variables copper, gold and density were estimated. • No selective mining units were assumed in this estimate. • Standard model validation has been completed using visual and numerical methods and formal peer review sessions by key geology staff. • The Mineral Resource Model has been validated visually against the input composite/raw drillhole data with sufficient spot checks carried out on a number of block estimates on sections and plans.

Criteria	JORC Code explanation	Commentary
		• Easting, northing and elevation swath plots have been generated to check input composited assay means for block estimates within swath windows. • A comparison of block volume weighted mean versus the drillhole cell de-clustered mean grade of the composited data was undertaken. • Efficiency models using block Kriging Efficiencies (KE) and Slope of Regression (ZZ) were used to quantitatively measure estimation quality to ensure the desired level of quality of estimation.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource is constrained by economic cut off grades. Top-cuts were defined by domain, following thorough examinations of histograms, probability curves and the spatial locations of outliers. Top cuts ranged from 2% Cu to 25% Cu and 2g/t Au to 30g/t Au, based on analysis of individual domain statistics. • Grade tonnage is reported above a nominal cut-off of 0.9% Cu, which is the Economic Mining Cut-off grade determined by Optimisation studies in Strategic Mine Planning completed by CSA Global Ltd. in September 2012.
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.*	• The Antas North deposit will be mined by open pit. The approximate dimensions of the open pit at completion will be 650m length, 500m wide and 200m deep. Mining comprises conventional loader/excavator load and haul methods, with ore being mined in 5m benches on 2.5m flitches. • Detailed mining assumptions such as dilution and minimum mining widths will be included in the optimisation, detailed mine planning and Life of Mine plan that will be completed in the Ore Reserve estimations that are in progress.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical assumptions are based on comprehensive metallurgical test work that has been completed for the Antas North deposit and proposed flotation plant. • This work includes preliminary, detailed and final metallurgical test work. Bench scale flotation test work has been completed, including production and detailed analysis of concentrate and tailings produced by this work. Finally detailed analysis of design concentrates has been completed, including analysis of concentrate grades and deleterious elements.

Criteria	JORC Code explanation	Commentary
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.*	• Bench scale flotation test work has been completed. This includes production of tailings and tailings analysis. This data has been fed into the tailing dam engineering design, which is in progress. • Sulphide material mined from the operation will be processed in the concentrator, while waste rock characterisation is in progress.
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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The Antas North drill database includes 2,134 density measurements. • Data has been selected to cover in detail all possible mineralisation types and rocks types and over the full range of depth and width of the deposit. • Data has been collected from diamond drill core, and all work performed by the same accredited independent assay laboratory that completed the sample assays.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Antas North Mineral Resource have been classified and reported in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Version). Resource classification is based on confidence in the geological domaining, drill spacing and geostatistical measures. • The initial classification process was based on the interpolation distance and minimum samples within the search ellipse as defined by macros in Micromine mining software. The main components of the macro are summarised as follows: • Initial classification: 1. The Mineral Resource was classed as Inferred if the average weighted sample distance was greater than 50 m. 2. The Mineral Resource was classed as Indicated if the average weighted sample distance was between 25 m and 50 m. 3. The Mineral Resource was classed as Measured if the average weighted sample distance was less than 25 m. 4. Numbers of drill holes -< 2, Measured and Indicated Mineral Resources downgraded one class. • The initial classification was reviewed visually. Based on the initial

Criteria	JORC Code explanation	Commentary
		classification, and three solids created (Rescat_Meas, Rescat_Ind and Rescat_Inf) to define Measured, Indicated and Inferred resources. These defined resource categories were based on a combination of data density and geological confidence. • Resource classification is defined in the model by the following codes: 1. Measured Resource (class = 1) 2. Indicated Resource (class = 2) 3. Inferred Resource (class = 3) 4. Unclassified Resource (class = 4)
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• This Mineral Resource and estimation procedures have been reviewed internally within CSA Global Pty Ltd. This Mineral Resource has not been audited externally. • The processes for geological modelling, estimation and reporting of Mineral Resources is industry standard, and the process has been subject to an independent external review. • CSA Global Pty Ltd undertook a peer review during 24th – 25th April 2014, and found the Mineral Resource to be a robust global 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 statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Mineral Resources has been reported in accordance with the guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resources estimates. • The current Mineral Resource model represents a robust global estimate of the in-situ mineralisation at the Antas North deposit. • It is recommended to use optimised pit shells as a guide to create drilling programmes that maximise the conversion from lower category resources (Inferred to Indicated) and reduce mining risk attributed to data density and quality. Careful consideration of mining dilution is warranted, as some internal waste between lodes will be difficult to exclude from mining.

TABLE 1 – Section 4: Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mineral Resource estimate on which this Ore Reserve estimate has been based has been prepared by Dr Bielin Shi. Dr. Shi 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 by JORC 2012. The mineral Resource estimate has been released to the ASX on 7 May 2014. • Mineral Resources are reported inclusive of Ore Reserves.
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.*	• Mr Paul O'Callaghan, CP, has not visited the site at this time. • Senior CSA personnel, Mr Gerry Fahey and Dr Bielin Shi inspected the project in late January / early February 2012. Mr O'Callaghan has relied on their observations for this Ore Reserve estimate.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• A Feasibility Study is being prepared by CSA Global Pty Ltd, and is expected to be released in Quarter 3/4, 2014.
Cut-off Parámeters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Whittle optimization software has been used to identify the preferred optimal pit shell. This software determines the appropriate cut-off grade based on the input parameters provided. The marginal cut-off grade determined by the Whittle software was 0.65%Cu, with no contribution from the gold content of the ore.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	• Whittle pit optimization software has been used to identify the preferred optimal pit shell and stage pit shells for cut-backs for the recovery of the primary/ sulphide Measured and Indicated mineral resources. Detail pit designs have been based on the optimisation results. • Open cut mining using truck and excavator is appropriate for the Antas North copper gold deposit as it occurs close to the surface with minimal oxide overburden (approximately 10 m) and is approximately sub vertical, dipping slightly to the north. The use of smaller equipment is appropriate to the proposed scale of operation and selective mining.

Criteria	JORC Code explanation	Commentary
	• *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc.), grade control and pre-production drilling.*	• Geotechnical investigations have been undertaken by MLF Geotechnia Mecánica de Rochas Ltda. The recommendations of this study have been used for both the pit optimization and pit design.
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	• Mineral Resource modelling has been based on 25 m x 25m drill spacing and is based on exploration and grade control drilling patterns. Grade control is planned to utilise campaign Reverse Circulation drilling ahead of mining. The pit size and mining rate are suitable for this method of grade control.
	• *The mining dilution factors used.*	• A mining dilution factor of 5% has been applied for the deposit. In general the ore zones are 5m or more wide, and the use of small equipment will allow selective mining.
	• *The mining recovery factors used.*	• A mining recovery factor of 95% has been applied in estimating the Ore Reserves. Similarly to mine dilution, the configuration of the deposit and the selected mining equipment will allow good mining recoveries to be achieved.
	• *Any minimum mining widths used.*	• A 20m minimum mining width has been used for design of final and stage pits. This is a safe mining width for the size of equipment proposed for the operation.
	• *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*	• Inferred Mineral Resources have not been utilized in the pit optimisation and pit design. All reported mine scheduling and associated economic analysis has been based solely on Measured and Indicated Mineral Resources.
	• *The infrastructure requirements of the selected mining methods.*	• Infrastructure requirements for the selected mining method will include surface haul roads; offices, amenities and workshops; and fuel, lubricant and consumables storage. Adequate allowance has been made for these in the capital cost estimates. It is expected that explosives will be supplied on a down-the-hole basis, thus site explosive storage and mixing facilities will not be required.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*	• Crushing and milling of the low hardness ores followed by froth flotation is proposed for the 50tph plant. This process is suitable for production of gold bearing copper concentrates from the chalcopyrite ore. Similar processing is used at the nearby Sossego operation.
	• *Whether the metallurgical process is well-tested technology or novel in nature.*	• Froth flotation is a well-tested technology and is in use worldwide. No novel technologies will be required for the production of copper and gold concentrates.
	• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*	• Metallurgical test work has been conducted on samples representing the four most common mineralisation types. The samples were collected from 13 diamond drill holes distributed across the entire deposit. Metallurgical recoveries of 94% globally have been calculated using testwork results in the Bilco software from Metso Corporation and confirmed by locked cycle flotation tests. Bond work indices were

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	• *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	also established for each ore type and for mineralised waste. • Mineralogy of the deposit is almost exclusively chalcopyrite, including low levels of pyrrhotite. Gangue minerals are mainly quartz, amphibole, and albite, plus lesser apatite, biotite, chlorite, scapolite and minor magnetite. There are no deleterious elements which will impact the sale of flotation concentrates or affect tailings storage. Testwork indicates that contaminant levels in the concentrates are very low. • All samples have been drawn from diamond drill core. It is not considered that bulk sampling and pilot scale test-work are required, due to the relatively simple processing route and the similarity of the deposit to other nearby operating plants. Further work is planned to produce a larger concentrate sample suitable for testing by potential off-take partners. • Not required
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Waste rock characterisation studies are being undertaken for all major waste rock types and mineralised waste. The waste dump has been located to the east of the designed pit and will be designed to suit the results of the characterisation results. • Tailings storage facilities have been designed by GeoHydraTech Engenharia, with civil geotechnical drilling completed by Geominas. It is located in a valley to the north of the plant site, with a fully engineered containment embankment on the downstream side • The Antas North Project requires environmental licensing by the state Pará EPA. A full Environmental Impact Study has been completed by Terra Ambiente (RCA) and the Operating Licence for the Project has been granted, LO 8796/2014. A copy of this Licence has been sighted to support the Ore Reserve estimate.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Design of improvements for the site access road has been completed and licensing of the required work is in progress with the relevant state environmental authorities. • The project is situated within poor quality agricultural pasture. During the exploration campaign, Avanco maintained a good relationship with the surface rights owner, who is supportive of the project. Discussions with the landowner in respect of Avanco achieving the rights required to exploit the deposit are on-going. • Power will be sourced from the local power company, who has confirmed availability of supply. A 9 km line from the main highway to

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		site is in the design engineering stage. A copy of correspondence with the local power company has been sighted to support this Ore Reserve estimate. • Process water will be sourced from tailings dam return and from the Itaboca Creek, a small fresh water river bordering the property. Applications are in progress for drawing water from the creek. Potable water will be drawn from an artesian well, the licence for which is also in progress. • The project is located in a well-established mining region, and is approximately 25 km from the city of Parauapebas, which services both the mining and agricultural regions. Labour is expected to be sourced from Paráuapebas, with no minesite accommodation required.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Mine operating costs have been estimated by Brazilian consultants, Minere Engenharia and bench marked against a budget cost estimate from local mining contractor, Cesenge. • Process operating costs were based on costs achieved similar operations in the region, quotations and local labour costs. • Salaries and wages, including on-costs were sourced from a specialist Brazilian human resources consultancy and were benchmarked against actual salaries in the region. • Capital costs have been estimated by consultants, and all major equipment for the process plant has either been purchased, initial payments made and/or contractual payment plans entered into. Concentrate analysis and potential customer feedback indicates that deleterious elements will not present any issues for sale of concentrate. Copper/gold pricing and market data used in the Feasibility Study have been derived from publicly available World Bank literature, broker analysis reports and other reliable sources. • The Feasibility Study has used US$ throughout for both costs and revenue estimation • A transport charge of $150/t concentrate has been included to allow for transport to either local or overseas smelters. • As concentrate sales are yet to be negotiated, the refining charges used in the optimisation were indicative charges supplied from the Paranapanema refinery. • Royalty payments for both copper and gold have been included in both the pit optimisation and financial analysis.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s)*	• With the inclusion of lower grade feed (0.65% Cu to 0.9% Cu) at the end of the mine life, head grade to the process plant is expected to

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	exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	average 2.5% Cu and 0.5 g/t gold over the whole LOM, including mine dilution and recovery, and derived wholly from the pit inventory within the design pit. The production schedule has been developed to treat higher grade material at the start of the project, with material grading less than 0.9% Cu being stockpiled for treatment later in the mine life. • Copper/gold pricing and market data have been derived from publicly available World Bank literature, broker analysis reports and other reliable sources, forecasting metal prices cover the whole LOM. As commodity price forecasts and the project economic analysis are in $US, no exchange rates have been required.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Brook Hunt and CRU forecast that global refined copper consumption will increase by approximately 3.4%pa between 2010 and 2025, accompanied by a tightening on the supply side due to falling head grades in existing mines. • Zimtu Capital forecasts support the outlook. They indicate that new copper projects should focus on 'grade, manageable capital costs and tonnage, infrastructure adequacy, environmental impact minimisation'. The Antas North project fits well with these comments. • A shortage of concentrates is also predicted, which will create a window of opportunity for the relatively small production from Antas North Project. • Smelters identified for the marketing focus are located in Brazil, Quebec and Hamburg. As a large shareholder in Avanco, Glencore is also considered a potential customer.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• All economic analysis has been done in 2014 dollars, with no allowance for inflation. A discount rate of 7% has been applied for the cash flows calculated in the optimisation. This is based on the cost of capital. • Sensitivity analysis has been undertaken as part of the optimisation, examining the effects of changes in process recovery, operating costs and commodity prices. The NPV is most sensitive to copper recovery/price and has a low sensitivity to gold recovery/price. A +/- 10% change in copper price can cause up to a +/- 30% change in NPV.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• Agreement in principle has been reached with the Fazenda Nova Vida, which contains the entire access road and the agreement is being drafted. The farm owner, on whose property the project is located, is working in partnership with Avanco regarding the site access road and future maintenance and Avanco is in advanced negotiation with

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		Fazenda Itaboca to purchase the land containing the proposed mining project.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• Flooding can occur in the region, however the project is located on a regional topographic high and the access road bridges have been designed to accommodate heavy rainfall. The area has no recorded history of earthquakes or other natural disasters. • No marketing arrangements are yet in place. • The Antas North project lies within the boundaries of Mining License PL470/2014 held by AVB Mineração Ltda and granted on 9/9/2014 in perpetuity until such time as all reserves are exhausted, as in the norm under Brazilian law. The Mining License to Operate (LO 8796/2014) has been granted, which covers all environmental conditions. Other licences and permits associated with power, water supply and site access are in progress, and all are expected to be available within the project development timeframe. • No explosives permits are required as explosives will be supplied on a 'down-the-hole' basis from an explosives company based in Paráuapebas.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The Ore Reserves have been classified according to the underlying classification of the Mineral Resource and the status of the Modifying Factors as discussed in this report and Table. Fifty six percent (56%) of the Measured Mineral Resources have been converted to Proved Ore Reserves on the basis of the ore body geometry. A polygon was placed around the core Measured material deemed to have a high probability of conversion to Proved. • These results appropriately reflect Mr Paul O'Callaghan's Competent Person view of the deposit after consideration of all Modifying Factors. • 59% of Probable Reserves have been derived from Measured Mineral Resources, representing all the Measured Mineral Resources within the extent of the design pit.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• CSA has reviewed the information and data provided by Avanco to support this Ore Reserve estimate, however CSA has relied on other experts being Rezende Eng.Minas S/S, Minere Engenharia Ltda, MLF Geotechnia Mecánica de Rochas Ltda, and GeoHydraTech Engenharia regarding Metallurgy, Process Design, Geotechnical and Cost estimation. CSA has also conducted internal peer review of the pit optimisation and pit design work on which this Ore Reserve estimate is based.

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Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.*	Capital cost estimates for the project include an overall contingency of 16%. Approximately 67% of the total capital has been paid or is based on firm quotations, known prices, contracts and agreed price structures. The ~$10m contingency is an additional capital provision equivalent to 47% of the value of those capital items for which pricing has not yet been confirmed.
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*	• The statement relates to global estimates.
	• *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.*	• Sensitivity studies indicated that the main project drivers were copper revenue related.
	• *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The project is not yet operational and as such, no production data exists at this time.