

# DECEMBER 2014 QUARTERLY ACTIVITIES REPORT

#### HIGHLIGHTS

- > Stage 1 debt and development activities aggressively pursued with good progress made
- > Banco Votorantim successfully finished technical due-diligence over the project
- > Avanco has completed the evaluation of a number of term sheets resulting in the shortlisting of two Brazilian groups. The syndication process is likely to proceed with one, or both of these parties
- ➤ The imported Ball Mill and Flotation plant have landed and are located in secure storage close to the Antas¹ Minesite
- > First Consignment of the METSO Filter has been delivered
- > Local manufacture of the crushing plant is complete and ready for delivery to site
- > Construction Capex forecast remains within budget. Existing savings are achievable from favourable Foreign Exchange (FX) movements against the US Dollar
- ➤ Engineering now very advanced with Basic completed and Detailed Engineering 85% complete
- ➤ With cautious optimism regarding the debt financing progress, the Board approved the resumption of Pedra Branca¹ (Stage 2) drilling
- > Two rigs are operational at Pedra Branca with a planned 4,000 metre programme aimed at delivering an upgrade to the classification of JORC Reported Resources
- ➤ The 2014 regional exploration programme concluded with an exciting discovery at the Nova Esperança prospect located west of Pedra Branca. Wide zones of Copper sulphide mineralisation (Chalcopyrite) were intersected over a strike of ~300m. Hosted in IOCG¹ hydrothermally altered breccias, very similar to geology seen at Pedra Branca. Encouraging results included:
  - 15.00m<sup>2</sup> at 1.06% Cu, 0.21g/t Gold from 88.00m<sup>2</sup>
  - 17.15m<sup>2</sup> at 1.02% Cu, 0.33g/t Gold from 150.00m<sup>2</sup> ANED-02
- **2015** promises to be an exciting year with Avanco planning for transition from Carajas copper explorer to the regions second copper producer behind Vale (SA)
- Confident of the high grade/low cost nature of Antas underscoring future success, management continues to draw on the Company's strong (\$19.8M) cash position to accelerate implementation where practicable

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ASX Symbol: AVB



ANED-01



#### STAGE 1 – ANTAS

Stage 1 construction is estimated at ~US\$60m (Pre-production capex + contingency) with funding activities well advanced. The structured finance is expected to comprise of a ~US\$50m senior debt facility from a syndicate of Brazilian Banks and US\$12m from BlackRock<sup>3</sup>. In addition, there is commitment from Brazilian Banks for ~US\$10m in the form of a revolving loan providing for working capital. Banco Votorantim is the debt syndication leader and remains committed to delivering the financing necessary for Antas.

Third Party Engineering companies engaged by the banks have completed due-diligence on the Antas Reserves, Capex and construction schedule to the satisfaction of Votorantim.

The banks review of the Stage 1 Feasibility Study is on-going with the bank willing to adjust Capex and Opex values to recognise favourable shifts in the FX rates between the Brazilian Real and the US Dollar. Devaluation of the local currency by ~14% in recent months helps offset the softness in copper prices. Almost all the remaining construction budget (~US\$52m) is in Brazilian Reais having already purchased the US\$ denominated items such as the Ball Mill and Filter.

Votorantim's interrogation of term sheets has concluded with two blue-chip Brazilian groups being shortlisted. Syndication will likely proceed with one, or both of these parties, with Avanco targeting completion in the current quarter.

#### **Equipment**

The principle plant and equipment have been successfully shipped, landed and received into Avanco's secure project storage yard in Parauapebas proximal to the Antas Mine Site.









Denver 21 Flotation Cells delivered to the Project

Loading and transportation of the equipment was overseen by a very capable and experienced Avanco engineer. All of the equipment is now safely in secured storage having arrived without damage or incident.

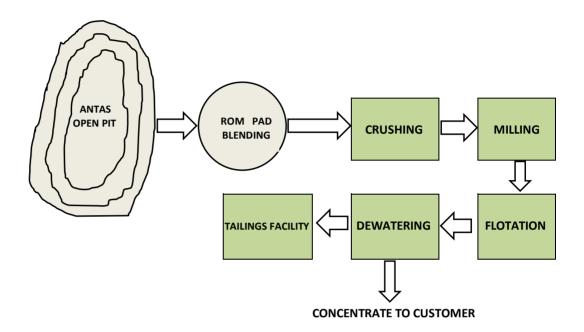
Fabrication and assembly of entire crushing circuit has been completed and is in storage at the manufacturer's warehouse in Belo Horizonte. The equipment is ready for dispatch to site.



First Consignment of METSO Filter Parts delivered to Avanco



A simplified ROM material flow sheet is illustrated below. Comminution by crushing and grinding followed by flotation is the selected beneficiation process for Antas. Construction and supply of the individual key equipment items making up the process circuit always have lengthy delivery times and are referred to as "Long Lead" items which normally define the critical path for the construction schedule and start-up date. All principal equipment has been acquired and delivered eliminating logistical delays.



For implementation of the Antas Copper Mine, the Long Lead equipment either delivered or ready for delivery includes:-

- Simplex Jaw Crusher/Cone crusher/screen
- Metso Ball Mill
- OK38 Rougher/Scavenger cells x 4
- Denver 21 Cleaner x 18
- Metso Filter

#### Crushing Circuit

ROM (Run of Mine) ore from the open pit will be stockpiled on the ROM Pad some 500m from the pit. Due to the high grade nature of mineralisation, blending will be undertaken before feeding the ore to the crushing plant. This new facility comprises a primary jaw and secondary cone crusher. The 25 tonne, 1000mm x 800mm jaw crusher comes trailer mounted, for ease of start-up and commissioning.

The 1200mm diameter by 18 tonne cone crusher is closed-circuited with a double deck screen and is rated to produce up to 260 tonnes per hour of 19mm product. The crushed ore will be stockpiled before being fed to the Ball Mill.





**Complete Crushing Circuit is ready for dispatch** 

#### Grinding Circuit - Primary Ball Mill

The Metso Ball Mill was manufactured in 2007, and is unused and in excellent condition. It is configured as a traditional overflow type mill and comes with a 4000 volt 60Hz motor, and an air clutch system for assisted starting.

Equipped with a 1350Kw drive, the grinding capacity of the ball mill, when treating Antas ore (Average Bond Work Index 16KW/t), is significantly oversized, offering potential to increase throughput or co-treat lower grade ores.

The 19mm crushed ore will be fed into the ball mill and ground with water to produce a slurry with 80% of the particles ground to a size smaller than 150 $\mu$ m. The mill discharge will be pumped to the flotation process using slurry pumps.



### Flotation Beneficiation Plant

Antas ore is mineralogically simple with copper present in the form of chalcopyrite (CuFeS<sub>2</sub>). This has been demonstrated to respond very well to the application of traditional flotation concentration. The flotation process consists of Rougher-Scavenger & Cleaner flotation components. The former is made up of four OK38 cells, while the Cleaning and re-cleaning will be done by eighteen Denver 21 cells. These units have all been refurbished and are in the Avanco warehouse in Parauapebas along with the Ball Mill, awaiting implementation on site.

The float circuit has been very generously sized, and configured to replicate the neighbouring very successful Sossego Copper plant design. Between the conservative sizing, high-grade ore and simple metallurgy, management anticipate that high copper recoveries will be achieved. Testwork on various ore types has demonstrated this.

The function of flotation is to separate the slurry discharged from the ball mill into two streams. One stream representing only 10% by weight of the flotation feed but recovering/containing around 97% of the copper and 90% gold (into an enriched slurry assaying around 28% Cu, this stream is referred to as the "final concentrate"). The remaining 90% of the slurry reports to the second stream and, being devoid of copper and sulphides, this "final tailings" product is directed to the tailings management facility.



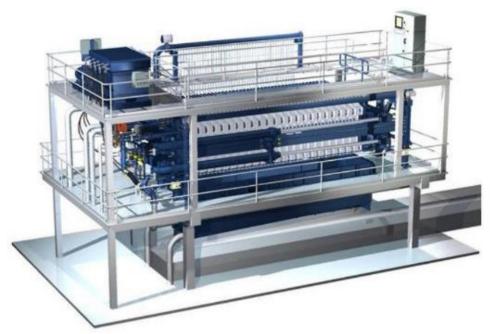
OK 38 Trough Type Flotation Cells for Rougher-Scavenger Duty

#### **Dewatering Filter**

The final concentrate slurry produced by flotation is delivered to customers after the removal of excess water, typically to at moisture content of ~8%.

At Antas a new METSO plate and frame filter press, supplied from Europe, will carry out the required dewatering operation. METSO filters are arguably the best and most reliable of their kind in the industry, and the \$2.3m (PAID) price tag reflects its premium status.

The unit is conservatively sized and comes fully automated. The nearby Sossego Mine (Vale SA) has two of the same METSO units, which have been working successfully for many years, providing management with further confidence in this selection. Moreover METSO have an existing office/facility in Carajas, complete with parts/consumables and accredited specialist service staff. The first consignment of components has been delivered with the balance already landed in Brazil, awaiting customs clearance and dispatch to site.



**METSO Plate and Frame Filter** 

#### Design Engineering

ONIX Engenharia of Belo Horizonte, Brazil was engaged to develop the Basic and Detailed Engineering associated with the Plant and Infrastructure are in the final stages of plant design. Basic design engineering is 100% complete and detailed engineering 85% complete.

Project management, engineering and planning exercises have confirmed that the preproduction Capex is ~US\$60 million including contingency (this does not account for likely reductions attributed to favourable movements in FX).

Construction is envisaged to extend from six to nine months from drawdown of debt funds. The variance in site works duration is attributed to the potential impact of local holidays and weather. February to April is typically the wettest period.

Planning of individual construction disciplines has largely been completed and critical path activities identified. Cash deposits have been placed on supply of Motor Control Centres and the concentrate thickener to remove these items from the critical path. Tenders for earthworks, civils and structural works are being assessed.

Management is examining alternative options for undertaking the METSO Filter installation. The filter represents the most sophisticated unit process. It is now thought prudent to carve the filter out of the regular construction programme and allocate it into a "Lump-Sum-Turn-Key" package (offer by METSO). This approach aims to achieve a reduction in both construction and commissioning risk.



One benefit of the financing delay is that opportunity now exists for Avanco to revisit plant designs seeking out cost savings and improvements i.e. "Value Engineering". This exercise coupled with upside from adjustments to FX is likely to provide opportunity for significant Capex savings.

Detailed engineering design for the Tailings Dam has been completed by local group ALB and GeoHydroTech Engenharia who are highly experienced in the design and construction of tailings impoundments in Brazil. The cost of the starter dam facility is estimated at ~US\$3m.

#### Marketability of Copper Concentrates

Samples of Antas flotation concentrate have been sent to prospective off-take parties for their analysis. Results have re-confirmed the concentrate to be very clean. The concentrate is being considered as "blending quality" and therefore highly desirable to traders. Discounts to Bench-Mark Treatment and Refining Costs (TC's and RC's) are being discussed. The Company has since engaged a consultant with significant expertise in concentrate marketing to help vend the rights to the Antas copper off-take.

#### **Implementation**

Since the release of the Ore Reserve Estimate in September 2014, an agreement inclusive of surface rights and provision of benefits to existing access, has been executed for the Antas Project. Negotiation on other transactions such as easements for utilities, infrastructures and dedicated mine traffic are expected to close within the current quarter.



#### STAGE 2 – PEDRA BRANCA

Pedra Branca<sup>1</sup> is the Company's second copper project located 50km southwest of Stage 1. Stage 2 is a much bigger project and following encouraging progress on the Antas debt financing the Board has approved the resumption of Stage 2 drilling. This drill programme<sup>4</sup> consists of approximately 4,000m of diamond drilling and aims to upgrade approximately 50% of the current Inferred JORC Reported Resource to the Indicated category. This level of confidence will support the timely completion of a Scoping Study and, if greater than 50% of the Inferred category is upgraded to Indicated, this could serve to underpin a higher level Pre-feasibility Study. A minimum of two rigs will be operational and are expected to complete the programme within two to three months.



Drill Rig at Pedra Branca - APBD-15-40

Avanco remains committed to an aggressive target of attempting to reach a "decision to mine" before end 2015. On reaching a positive "Decision to Mine" the Company anticipates (during the first half of 2016) opening the Box Cut, establishing the portal, and commencing the ramp into the Pedra Branca East Orebody. A phased approach to Pedra Branca is likely to deliver an attractive mining opportunity with minimal risk and capital drain. Commencing Stage 2 in the East provides fastest access to the high-grade, followed by subsequent development and expansion into the Western Orebody.

Regulatory and environmental permitting are being pursued in parallel with technical deliverables. The DNPM<sup>5</sup> has approved the Pedra Branca Mineral Resources<sup>6</sup>, representing an important milestone paving the way for further regulatory submissions pursuant to a full Mining License. Access agreements have been executed and the mandatory (PEA) Economic Mining Study<sup>7</sup> has been submitted to the authorities.



ANED-01. Close-up of Copper



ANED-02. Close-up of Copper Mineralisation



ANED-05. Close-up of Copper mineralisation with classic Pedra Branca IOCG<sup>1</sup> alteration



ANED-06 Close-up of alteration and mineralisation

#### REGIONAL EXPLORATION

The Company resumed its exploration programme during Q4 2014, testing three (Nova Esperança, East Pedra Branca and Rio Branco) of five targets proximal to the Company's Stage 2 – Pedra Branca Project. Drill testing of priority targets at São Pedro and Água Azul will be completed in the next phase of exploration drilling

#### Nova Esperança Target:

Located 32km west of the Stage 2 – Pedra Branca Copper/Gold Deposit, Nova Esperança comprises of a highly anomalous magnetic trend striking for over 2.7km. Coincident with this trend is very strong IOCG<sup>1</sup> hydrothermal alteration (appearing almost identical to that seen at Pedra Branca), anomalous soil geochemistry, and coincident VTEM conductors generated from previous historical work.

Wide zones of Copper sulphide mineralisation (Chalcopyrite) were intersected over a strike of approximately 300m. Hosted in IOCG<sup>1</sup> hydrothermally altered breccias similar to those seen at Pedra Branca, results include:

15.00m<sup>2</sup> at 1.06% Cu, 0.21g/t Gold from 88.00m<sup>2</sup>

ANED-01

• 17.15m<sup>2</sup> at 1.02% Cu, 0.33g/t Gold from 150.00m<sup>2</sup>

ANED-02

Results at Nova Esperança are highly encouraging, both warranting infill drilling and auguring well for the potential for a modest satellite deposit proximal to the Stage 2 Pedra Branca project, which could therefore benefit from utilisation of a plant at Pedra Branca, profoundly improving economics.

ANED-05, 06 completed over additional targets to the south, also returned intersections of low grade Copper mineralisation in both cases, and very strong IOCG<sup>1</sup> alteration (See inset photo ANED-05), showing the extent of widespread mineralisation throughout the Nova Esperança project. Follow up work is under evaluation.

#### East Pedra Branca:

Is located immediately to the east of Pedra Branca, on the eastern extension of the same structural trend, and ~20km to the southeast of the Sossego Copper/Gold Mine.

Geology consists of sheared and hydrothermally altered granites, gneisses, and diorites with abundant pegmatite veins. IOCG¹ hydrothermal alteration of the same kind seen in the Pedra Branca Deposit has also been identified, including the proximal alteration, which is associated with chalcopyrite mineralisation at Pedra Branca.

Four holes were also completed. Drilling showed an increase in Chalcopyrite (plus Pyrrhotite) and decrease in pyrite with depth, typical of the zonation seen in the Pedra Branca deposits. The work support the model that mineralised bodies will increase in depth to the East. Future drilling will focus on this deeper potential.

#### Rio Branco:

Is located 11km northwest of the Pedra Branca Copper/Gold Deposit and 10km south-southwest of the Sossego Copper/Gold Mine, close to the new asphalt road connecting to the giant S11D (Serra Sul) iron ore mine development.





ANED-06 Close-up of Copper mineralisation



APED-04 Close-up of Copper mineralisation



APED-04 Close-up of Copper mineralisation

Two scout diamond holes were completed. Geological observations of a low tenor IOCG event supported the results generated in surface geochemistry, while downgrading the project. No further is work is planned.

#### São Pedro:

Is located ~28km to the west of Pedra Branca. Geology comprises of sheared granites with two distinct hydrothermal alteration assemblages – regional IOCG¹ style alteration, and proximal alteration associated with chalcopyrite mineralisation similar to that seen Pedra Branca and Sossego.

Three scout diamond holes are planned, while further exploration drilling has been postponed as rigs move to the Pedra Branca Resource Upgrade Program on schedule. São Pedro remains a high priority exploration target.

#### Água Azul:

Is comprised of a 5km long by 1km wide strongly magnetic target, located 60km west-southwest of the Pedra Branca Copper/Gold Deposit, near the Água Azul do Norte Township, which has good infrastructure and is accessible via paved road PA-278.

Geology is typical of the Sapucaia Greenstone Belt sequence to the south and the Água Azul Granodiorite. Strong east - west shear zones cross the region with related biotite and magnetite hydrothermal alteration, associated in places with fine grained chalcopyrite and pyrite.

Numerous copper in soil anomalies are present along the 5km of strike. Confirmed by mechanical auger drilling by Avanco, and coincident with hydrothermal magnetite (an important feature to most IOCG¹ deposits in the Carajás). Three zones will be tested by scout drilling during the next phase of exploration drilling, as rigs have moved to the Pedra Branca Resource Upgrade Program as scheduled.



Drilling at the Nova Esperança Project



#### **CORPORATE**

Corporate focus for 2015 is transition to copper producer with the building of the company's first mine in the Carajas.

Currently Vale SA is the only copper producer in the region and provides the opportunity for Avanco to be second only to Vale in world class Carajas.

Confident that the high grade/low cost characteristic of Antas will underscore success, management continues to draw on a strong cash position to mitigate delay and technical risk.

On completion of debt financing (anticipated during the current quarter) Construction will commence and extend from six to nine months targeting commissioning during Q3 2015.

The Company has changed its financial year from 30 June to 31 December and will hold an Annual General Meeting by the end of May 2015. The subsequent financial years for Avanco and its subsidiaries will run from 1 January to 31 December.

Tony Polglase Managing Director



#### **ABOUT AVANCO**

- Avanco (ASX-AVB) is an emerging mid-tier copper company situated in the mining friendly world class Carajas Mineral Province, Brazil
- The Carajas hosts the world's greatest concentration of large tonnage IOCG¹ copper gold deposits and Avanco either owns, or holds the rights to 100% of the second largest area of mineral tenure in the region (behind Vale SA)
- The Company is ultimately well positioned to potentially operate a number of high grade, low cost copper/gold mines in the region which will establish Avanco as a profitable long life producer throughout a period of expected increasing copper pricing
- 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 at a 0.9% Cu cut-off
- US\$70m of project funding is being aligned to the start of Stage 1 construction in early 2015, with commissioning targeted for Q4 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. This represents the Company's next project and is considerably larger. Infill drilling, aimed at improving Resources classification and facilitating "a decision to mine" is being progressed
- 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 and resource growth, the Carajas offers significant opportunities to enhance shareholder value over time

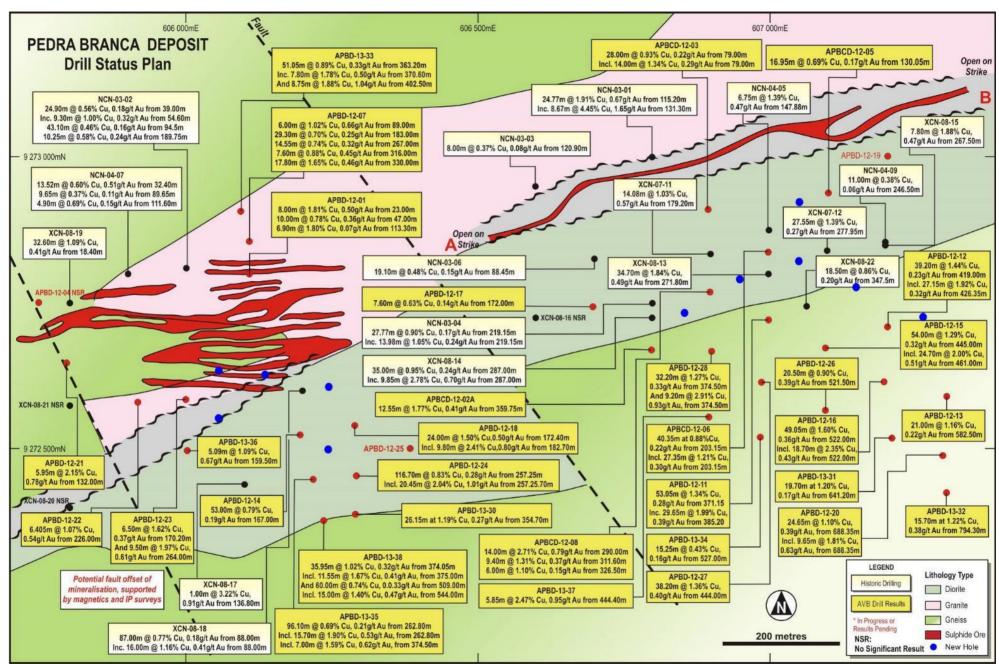


CAR	RAJAS - TO	TAL JORG	Report	ed Mine	eral Resource	es,8,9,10,11	
DEPOSIT	Category	Million Tonnes	Cu (%)	Au (ppm)	Copper Metal (T)	Go Metal	
PEDRA	Inferred	46.82	1.20	0.33	560,000	500,	000
BRANCA <sup>12</sup>	Total	46.82	1.20	0.33	560,000	500,	000
	Measured	2.83	3.01	0.72	85,079	65,5	78
ANTAS	Indicated	1.65	2.20	0.42	36,365	22,0	58
NORTH <sup>13</sup>	Inferred	1.9	1.59	0.23	30,242	14,1	22
	Total	6.38	2.38	0.50	152,000	102,	000
	Measured	0.59	1.34	0.18	8,000	3,0	00
ANTAS	Indicated	7.5	0.7	0.2	53,000	49,0	000
SOUTH <sup>14</sup>	Inferred	1.99	1.18	0.2	24,000	13,0	000
	Total	10.08	0.83	0.2	85,000	65,0	000
TOTA	AL	63.28	1.26	0.33	797,000	667,	000
ANTA	S NORTH	– JORC Re	ported (	)re Rese	erves. Augus	t 2014 <sup>15</sup>	
Classification	Туре	Economic Cut-Off Cu%	Tonnes (Mt)	S Copp		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 + I	PROBABLE	ROM ORE	2.649	3.19	0.66	84,518	56,277
INOVERVI						1	
Proved	Low Grade	0.65	0.342	0.74	0.30	2,531	3,308
	Low Grade	0.65 0.65	0.342 0.635	0.74		2,531 4,572	3,308 4,709

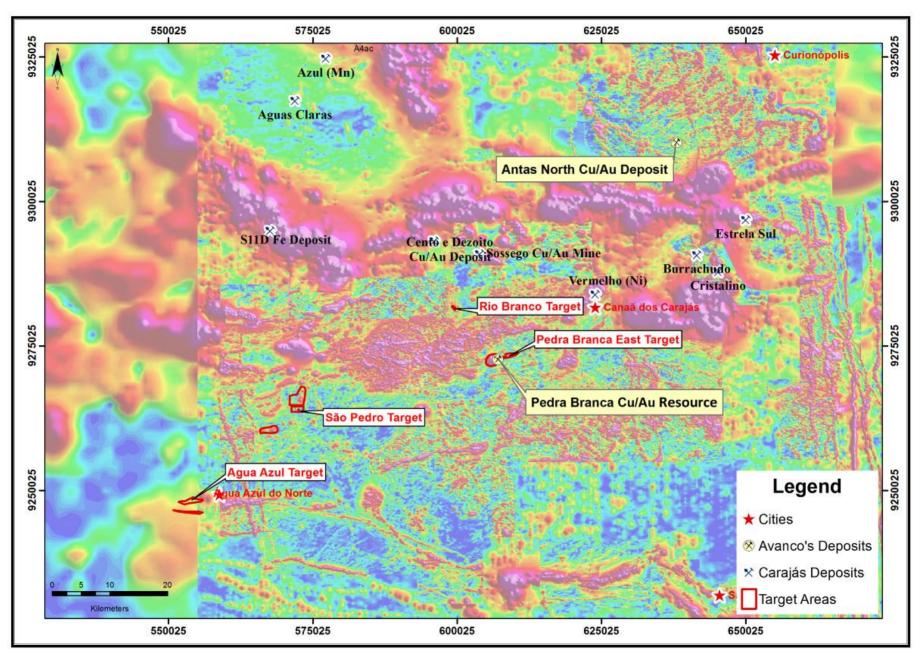
#### Competent Persons Statement

The information in this report that relates to Mineral Resources and 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.

- 1. The orebody 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. Downhole widths/depths. True widths/depths shown in tables at the end of this document
- 3. See ASX announcement "US\$12,000,000 Agreement reached with Blackrock World Mining Trust", 8 October
- 4. See ASX Announcement "Funding Progress Triggers Return to Pedra Branca", 27 January 2015, for details of the drilling programme, Competent Person's consent, and material assumptions, technical parameters contained in JORC Table 1 Sections 1 and 2
- 5. Brazilian National Department of Mineral Production
- 6. The mineral resources for license 850.318/00 hosting Stage 2 (Pedra Branca) have been evaluated by the DNPM and the Final Exploration (Mineral Resources) Report is considered satisfactory and thus has been approved
- 7. The Mining Study (or PAE) represents an economic evaluation of the exploitation of the "Mineral Resources"
- 8. 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
- 9. 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
- 10. 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
- 11. 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
- 12. Grade Tonnage Reported above a Cut-off Grade of 0.4% Cu for Primary Resources only
- 13. Grade Tonnage Reported above a Cut-off Grade of 0.9% Cu for Primary Resources only
- 14. Grade Tonnage Reported above a Cut-off Grade of 0.3% Cu for Oxide Resources
- 15. Measured and Indicated Resources are inclusive of Mineral Resources used to produce the Ore Reserves



PEDRA BRANCA DRILL STATUS PLAN



REGIONAL EXPLORATION TARGETS

PE	PEDRA BRANCA RESOURCE INFILL PROGRAMME- DIAMOND DRILLING RESULTS 2015														
Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m)	From (m) True Depth	To (m)	Width (m) Downhole	Width (m) True	Cu %	Au g/t	Ag g/t
APBD-15-39	607250	9272735	240.500	-60	360		In Progress								
APBD-15-40	607150	9272800	236.010	-60	360		In Progress								

		NO	VA E	SPEF	RAN(	CA - I	DIAMON	D DRI	LLING R	ESUL	TS 2014				
Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m)	From (m) True Depth	To (m)	Width (m) Downhole	Width (m) True	Cu %	Au g/t	Ni %
ANED-01	573600	9274300	350	-50	0	157.00	Completed	25.00	~19	63.00	38.00	~19	0.53	0.15	0.1
And								81.00	~62	114.40	32.40	~16	0.77	0.14	0.08
Incl.								88.00	~67	103.00	15.00	~8	1.06	0.21	0.09
ANED-02	573700	9274310	365	-50	0	180.50	Completed	14.00	~11	24.00	10.00	~5	0.78	0.19	0.10
And								74.00	~57	96.00	22.00	~11	0.60	0.05	0.14
And								150.00	~115	167.15	17.15	~9	1.02	0.33	0.11
ANED-03	573700	9274360	360	-50	0	120.20	Completed	66.00	~51	82.00	16.00	~8	0.52	0.12	BDL
ANED-04	573800	9274330	360	-50	360	100.55	Completed			Ва	rren – Not sam	pled			
ANED-05	573400	9273900	335	-50	360	120.85	Completed	22.00	~17	30.50	8.50	~4	0.31	0.17	BDL
ANED-06	573500	9274175	332	-50	360	150.00	Completed	37.15	~28	51.50	14.35	~7	0.26	BDL	0.16
ANED-07	573500	9274325	333	-50	360	171.75	Completed	19.00	~15	52.60	33.60	~17	0.47	0.06	BDL
Incl.								31.00	~24	34.50	3.50	~2	1.07	0.15	0.08
ANED-08	573400	9274320	327	-50	360	122.65	Completed	15.00	~11	36.00	21.00	~11	0.38	0.03	0.06
Incl.								20.00	~15	22.00	2.00	~1	1.08	0.07	0.05

	RIO BRANCA - DIAMOND DRILLING RESULTS 2014														
Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m)	From (m) True Depth	To (m)	Width (m) Downhole	Width (m) True	Cu %	Au g/t	
ARBD-01	599500	9281330	230	-50	0	93.55	Completed			No	Significant Re	sults			
ARBD-02	599450	9281350	232	-50	90	177.75	Completed			No	Significant Re	sults			

	EAST PEDRA BRANCA - DIAMOND DRILLING RESULTS 2014														
Hole ID	UTM-E	UTM-N	RL (m)	Dip	Az	Depth (m)	Status	From (m) To Width (m) Width Cu (m) True Depth (m) Downhole (m) True %					Au g/t	Ag g/t	
APED-01	608800	9273250	240	-50	360	142.00	Completed			No	Significant Re	sults			
APED-02	608400	9273420	244	-50	360	150.00	Completed			No	Significant Re	sults			
APED-03	608800	9273200	237	-50	360	115.00	Completed	No Significant Results							
APED-04	608100	9273900	257	-50	360	220.00	Completed	87.20	~67	87.80	0.60	~0.3	1.09	0.70	1.30

### REGIONAL EXPLORATION DRILLING PROGRAMME – JORC TABLE 1

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	<ul> <li>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.</li> </ul>	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
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	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.	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, Ni (ICP) and Au (Fire Assay, 50g). Mineralised zones and samples with >2,000ppm Cu are further analysed for "Ore Grade" Cu by Atomic Absorption. Additional
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).	reconstructed into continuous runs on an angle iron cradle orientation.
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

Criteria	J	ORC Code explanation	Commentary
	•	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Diamond core is reconstructed into continuous runs on an angle iror cradle for recovery measurement and core orientation. Depths are checked against those marked on the core blocks, and against the drilling company's records.</li> </ul>
	•	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 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.	<ul> <li>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.</li> </ul>
	•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	<ul> <li>Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Core is photographed both wet and dry.</li> </ul>
	•	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.	<ul> <li>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.</li> </ul>
	•	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.	<ul> <li>Sample preparation is according to industry standard, including over drying, coarse crush, and pulverisation to at least 85% passing 100µm or better.</li> </ul>
	•	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>Avanco uses an industry standard QAQC programme involving Certified Reference Materials "standards" for Cu (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.</li> </ul>

Criteria	J	ORC Code explanation	Commentary
	•	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.	<ul> <li>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.</li> </ul>
	•	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.	<ul> <li>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.</li> </ul>
	•	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.	<ul> <li>Avanco uses an industry standard QAQC programme involving Certified Reference Cu 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.</li> </ul>
Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>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.</li> </ul>
	•	The use of twinned holes.	The Company uses twin holes routinely in the more advanced stages of resource definition drilling, and for metallurgical drilling. The current drilling programme however, is exploratory in nature.
	•	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.

Criteria	JORC Code explanation	Commentary
	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 GPS on the State Survey Datum using true Mean 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.	Regional Topographic control (1m contours) and Digital Terrain Models are used.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The current drilling is exploratory in nature, targeting individual anomalies and prospects. Drill will close into regular spaced patterns if and when warranted.
	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.	The current drilling is exploratory in nature, and not for the purposes of Resources or Reserves.
	Whether sample compositing has been applied.	No sample compositing has been applied.
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.	The current drilling is exploratory in nature, but is targeting to intersect potential mineralisation or structures based on regional geological interpretation and historical work.
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.	The company does not believe that any sample bias has been introduced.
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.	<ul> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
		diligence in 2012, prior to commencing Resource Estimation work for Avanco on the Company's projects in Brazil. Avanco received a very favourable review, with no area needing any significant change or improvement, or 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.	<ul> <li>AVB MINERAÇÃO Ltda and VALE DURADO Ltda are wholly owned Brazilian subsidiaries of Avanco Resources Ltd, who own the rights to 100% of the tenements in the current exploration drill program. Existing third party Royalties amount to 3% NSR on Cu and 3% NSR on Au. State royalties amount to 2% NSR on Cu and 1% NSR on Au. Unless negotiated otherwise with the owner surface rights (farmer), these equal to 50% of the State royalty.</li> </ul>
	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.	All tenements are granted exploration licenses
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 for inclusion, consideration and interpretation in the current work programme.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Iron Oxide Copper Gold (IOCG) breccia pipe, hosted predominantly by mafic metavolcanic and granitic rocks.</li> </ul>

Criteria	JORC Code explanation	Commentary
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.	Where results are reported, tabulation of information relating to drilling can be found in this report listed in the tables "PROJECT – 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.	Where results are reported, 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 "PROJECT – Diamond Drilling Results 2014" found within this report.
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.	<ul> <li>Where results are reported, averaging of mineralised intervals are calculated by the following parameters</li> <li>1. Weighted averaging of grade/thickness</li> <li>2. A minimum Cut-off grade of 0.1% Cu</li> <li>3. A maximum of 3 continuous metres of internal dilution (&lt;0.1% Cu)</li> <li>4. Top-Cuts of 20% Cu, 10g/t Au</li> </ul>
	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.	<ul> <li>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 any reported results, both in the text of the report and in the table "PROJECT – Diamond Drilling Results 2014". Detailed examples are present in this report and the table above.</li> </ul>
	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	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	The current drilling is exploratory in nature and thus this information is presently unknown, however drillhole angles are chosen based on a comprehensive understanding of the regional geological setting.
intercept lengths	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').	Where results are reported, True Depths of all assay intersections are known, have been calculated, and are shown tabulated in this report in the table "PROJECT – Diamond Drilling Results 2014". True depths where shown in this table are calculated based on core observations, where mineralisation appears to be intersected at 60 degrees to the axis of the core.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being	The current drilling is exploratory in nature. A plan showing the location of prospects to be tested is included in this report. All intercepts are

Criteria	JORC Code	explanation	Co	ommentary
	•	These should include, but not be limited to a plan view le collar locations and appropriate sectional views.		tabulated in "PROJECT – Diamond Drilling Results 2014".
Balanced reporting	practicab grades a	omprehensive reporting of all Exploration Results is not le, representative reporting of both low and high nd/or widths should be practiced to avoid misleading of Exploration Results.		Where results are reported, they include intersections and results for every hole drilled including high and low grade intersections. Even if secondary elements (credits) are below detection limit (BDL), they are still shown
Other substantive exploration data	reported) geophysi samples results;	ploration data, if meaningful and material, should be including (but not limited to): geological observations; cal survey results; geochemical survey results; bulk — size and method of treatment; metallurgical test bulk density, groundwater, geotechnical and rock ristics; potential deleterious or contaminating es.		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 is available and/or in the opinion of the Company's CP is lacking in this report.
Further work		re and scale of planned further work (e.g. tests for tensions or depth extensions or large-scale step-out		The current drilling is exploratory in nature. Favourable results will be followed up by further exploratory drilling.
	including	s clearly highlighting the areas of possible extensions, the main geological interpretations and future drilling ovided this information is not commercially sensitive.		The current drilling is exploratory in nature, testing new prospects/targets. No further information is known at the time of this report.

# **Appendix 1 – Interests in Mining Tenements Held**

Project	Property Name	Tenure Title Holder	Interest %	AREA (ha)	DNPM No of Area	Status of Tenure
STAGE 1	RIO VERDE	AVB	100	7,290.69	PL 470	Mining Concession
	SERRA VERDE	AVB	100	2,391	850.622/07	#
	AGUA BOA	VDM	100	1,327	850.016/13	#
	AGUA BOA	ARM	100	8,907	850.823/05	***
	AGUA BOA	ARM	100	6,552	850.121/09	Granted to 2016
	AGUA BOA	VDM	100	8,957	850.826/12	***
STAGE 2	PEDRA BRANCA	VDM	100	3,195	850.318/00	Final Report Approved
	PEDRA BRANCA	VDM**	100	722	850.218/00	Granted to 2015
	PEDRA BRANCA	VDM**	100	9,997	850.015/08	Granted to 2016
	PEDRA BRANCA	VDM	100	8,881	850.570/03	Granted to 2016
	PEDRA BRANCA	AVB	100	4,106	850.202/13	Granted to 2016
	PEDRA BRANCA	VDM	100	9,391	850.707/09	Granted to 2017
	PEDRA BRANCA	VDM	100	9,879	850.526/04	Granted to 2017
	PEDRA BRANCA	VDM	100	1,040	850.278/05	Granted to 2017
	PEDRA BRANCA	VDM**	100	240	850.217/00	***
	PEDRA BRANCA	VDM	100	9,988	850.226/09	۸
	PEDRA BRANCA	EST	#	4,999	850.700/13	#
	PEDRA BRANCA	AVB	#	598	300.420/11	#
	PEDRA BRANCA	VDM**	#	4,980	850.146/95	#
	PEDRA BRANCA	VDM**	#	9,993	850.173/02	#
	PEDRA BRANCA	VDM**	#	9,755	850.181/01	#
	PEDRA BRANCA	VDM**	#	10,000	850.300/93	#
	PEDRA BRANCA	VDM**	#	9,859	851.067/07	#
	PEDRA BRANCA	AVB	#	5,000	851.674/11	#
	PEDRA BRANCA	VDM	#	7,770	850.780/12	#
	PEDRA BRANCA	EST	#	1,904	851.037/13	#
	PEDRA BRANCA	VDM	#	7,770	851.195/12	#
Touro Nickel Project	TRINDADE SOUTH	AVB	100	48	850.568/11	۸
<b>y</b>	TRINDADE SOUTH	AVB	100	49	850.567/11	Granted to 2015
	TRINDADE SOUTH	AVB	#	9,797	850.781/13	#
	TRINDADE SOUTH	AVB	#	9,797	850.569/11	#***
Regional Exploration	CARAJAS NORTH	VDM	#	4,347	850.015/13	#

AVB = AVB Mineracao ARM = Avanco Resources Mineracao VDM = Vale Dourado Mineracao EST = Estela do Brazil Mineracao

<sup>\*</sup> Renewable on approval of the Final Exploration Report by the National Department of Mineral Production. Awaiting final decision.

<sup>\*\*</sup> Expected to be, or awaiting or in the process of being transferred into respective subsidiary

<sup>\*\*\*</sup> Subject to pending legal process

<sup>\*\*\*\*</sup> Option Agreement

<sup>^</sup> Application for an extension of term, awaiting decision

<sup>#</sup> New application for exploration permit (size of tenement may be reduced/reshaped, if approved and before approval)

# Summary of Exploration and Evaluation Expenditure Incurred per Project

Project	Current Quarter Payments
	\$A'000
Stage 1	<mark>1,500</mark>
Stage 2	2,223
Regional Exploration	-
<b>Total</b>	3,723