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# ASX ANNOUNCEMENT 31 October 2016

### **SEPTEMBER 2016 QUARTERLY ACTIVITIES REPORT**

Avanco Resources Limited ("Avanco" or "Company") is pleased to present its Quarterly Activities Report for the period ending 30 September 2016.

During the September quarter, the Company continued its strategy of enhancing shareholder value through copper and gold production at its Antas Operation, acquisition of the advanced-stage CentroGold Project and the commencement of development works at the Pedra Branca Copper-Gold Project following the release of a positive Scoping Study.

	September	June
	Quarter 2016	Quarter 2016
Copper in concentrate produced (tonnes)	3,330	3,246
Gold in concentrate produced (ounces)	2,246	2,343
Copper in concentrate sold ('000lbs)	7,178	6,426
Gold in concentrate sold (ounces)	2,292	1,951
C1 Cash Cost (US\$/lb)	1.25	1.03

#### **HIGHLIGHTS**

- Commercial production declared at Antas
- Copper and gold production exceeding guidance 3,330t copper versus
   3,000t guidance and 2,246oz gold versus 1,750oz guidance
- ➢ Quarterly concentrate sales of 11,750 tonnes with provisional sales revenue (before costs) of US\$19 million
- ➤ Acquisition of advanced-stage CentroGold Project, representing a near-term gold development opportunity with a Foreign Resource Estimate totalling 88.5Mt at 1.14g/t gold for 3.14million contained ounces\*
- Pedra Branca Scoping Study released demonstrating viability of a large scale underground mine at the East Zone
- Commencement of initial underground development works and construction of key infrastructure at Pedra Branca, underpinning Avanco's strategy of becoming a mid-tier copper and gold mining company
- > 1,381,000 man-hours worked without a lost time accident
- > Cash on hand and on deposit at quarter end of US\$19.34 million (Q2 2016: US\$21.03 million)

<sup>\*</sup>Refer Foreign Resource Estimate on pages 11 and 12



#### 1. ANTAS OPERATION

#### MINING AND PROCESSING

The September 2016 quarter saw the completion of twelve months of mining at the Antas Operation, with a total movement of 5.5 million tonnes during that period.

Highlights for the quarter included:

- Metal production exceeding guidance
- No safety incidents reported
- Copper recovery increases to over 96%

	Units	September Quarter 2016	June Quarter 2016	Year to date 2016
Mining				
Total Material Mined	t	1,645,365	1,633,066	4,816,726
Ore Mined	t	158,006	173,286	335,269
Copper Grade	%	2.24	1.84	2.05
Gold Grade	g/t	0.59	0.68	0.63
Processing				
Tonnes Processed	t	161,247	143,405	338,510
Copper Grade	%	2.15	2.38	2.24
Gold Grade	g/t	0.51	0.59	0.53
Copper Recovery	%	96.36	94.48	93.69
Gold Recovery	%	85.81	85.66	85.43
Production				
Concentrate	DMT	11,563	11,832	25,551
Contained Copper	t	3,330	3,246	7,177
Contained Gold	OZ	2,246	2,343	4,940
Concentrate Copper Grade	%	29	27	28
Concentrate Gold Grade	g/t	6.04	6.16	6.01

Ore continued to be extracted largely from Stage 1 of the Antas open pit, while development focused on Stage 2 as part of the strategy to access areas prone to wet season rains. Ore mining was slightly below forecast as a result of mining outside the planned sequence, however the small deficit is expected to be mined at the start of the December quarter. Challenges from the previous quarter with the primary excavator were resolved, with no loss to production experienced.

Production guidance for the fourth quarter remains in line with previous quarter guidance of 3,000 tonnes of copper and 1,750 ounces of gold.





Antas-Stage 1 mine production

Grade control drilling was completed for the remainder of the Stage 1 pit design, providing for the next quarter of ore production. An extended programme of grade control drilling has been initiated targeting ore at greater depths within the final pit design (drill holes ranging from 50 metres to 100 metres in depth) to provide greater insight and confidence in long term mine planning.



Antas - Stage 2 mine development



Antas Mine – Stage 1 in the foreground.



Year to date reconciliation of metal production versus the Ore Reserve continues to track closely, and positively.

Mine Reconciliation - Year to Date 2016	Production	Reserve	Variance (%)
Copper Metal Tonnes	7,177	6,963	+3.1 %
Gold Metal Ounces	4,940	4,760	+3.8 %

In the September quarter, the most significant variance was associated with higher gold grades encountered around the periphery of high grade copper zones. Copper grades continued to show excellent reconciliation, while the loss in tonnes was associated with variations in low grade ore at the top of the Stage 2 cut back at the saprolite-fresh rock interface.

Production in the next quarter is expected to see a significant upswing in grade as more extensive high grade ore is accessed from deeper in the Stage 1 pit.

Antas Mine Production – – September Quarter 2016					
	Tonnes	Grade Cu%	Grade Au g/t		
Actual Mined	335,269	2.05	0.63		
Ore Reserve	381,848	1.94	0.44		
Variance (%)	-13.9%	+5.4%	+30.2%		

#### **OPERATING COSTS**

	Units	September Quarter 2016	June Quarter 2016	% change favourable/ (unfavourable)	Year to date 2016
Payable Copper Production	'000lbs	7,086	6,895	3	15,260
<b>Production Costs</b>					
Mining Cost	US\$/lb	0.85	0.76	(12)	0.80
Processing Cost	US\$/lb	0.40	0.32	(25)	0.36
Administration Cost	US\$/lb	0.09	0.08	(13)	0.08
Subtotal	US\$/lb	1.34	1.16	(16)	1.24
Selling Costs					
Freight	US\$/lb	0.23	0.21	(10)	0.22
Gold Credits	US\$/lb	(0.43)	(0.36)	19	(0.39)
Smelter Charges	US\$/lb	0.21	0.19	(11)	0.21
Subtotal	US\$/lb	0.01	0.04	75	0.04
Cash Operating Cost	US\$/lb	1.35	1.20	(13)	1.28
Movement in ROM and Broken Ore Stockpiles	US\$/lb	(0.10)	(0.17)	(41)	(0.14)
C1 Unit Cash Costs	US\$/lb	1.25	1.03	21	1.14
Average USD/BRL Exchange Rate	USD/BRL	3.2461	3.5099	(8)	3.5553

C1 unit cash costs are calculated per payable pound of copper produced and adjusted for inventory movements during the period. Mining costs include the full cost of all waste mined during the period.

Antas recorded a C1 unit cash cost for the third quarter of US\$1.25/lb and a C1 cash cost year-to-date 2016 of US\$1.14/lb. Unit cash costs for the September quarter were higher than the June quarter predominately due to the strengthening of the Brazilian Real (BRL) to the United States



Dollar (USD) and a lower processing grade, offset to some degree by an increase in gold credits due to a stronger gold price and the higher than forecast gold ounces sold.

Unit mining costs per payable pound increased in the third quarter primarily due to higher explosives consumption and a higher usage of fuel from the greater average haulage distance associated with access to the Stage 3 pit.

Unit processing costs per payable pound were higher than the previous quarter due to the ore processed grade being lower and the increased consumption of mill balls associated with the higher processed tonnes.

Cost per payable pound may increase slightly in the fourth quarter due to consumables expenses for drilling and excavation, increasing as a consequence of the BRL strengthening against the USD.

#### **SALES**

	Units	September Quarter 2016	June Quarter 2016	% change favourable/ (unfavourable)	Year to date 2016
Concentrate Sales					
Copper in Concentrate Sold	'000lb	7,178	6,426	12	13,604
Gold in Concentrate Sold	OZ	2,292	1,951	17	4,243
Provisional Sales (excluding costs)	US\$'000	19,041	16,195	18	35,236

Shipped sales of concentrate were within expectations, with the delivery of 471 containers during the September quarter.

Only provisional sales have been reported, as final settlement is pending completion. Concentrate for 16 shipments have landed at the discharge port. Assay samples from the discharge port have been received for ten shipments with final assays agreed with the offtake partner on one shipment. Quotation period adjustments will be made during the December quarter and will be ongoing for the remainder of the offtake agreement. The Government royalty (CFEM) as well as the BlackRock royalty were paid during the quarter and are included as a C3 cost.

#### **SAFETY AND ENVIRONMENT**

Over 1,381,000 man-hours in construction, commissioning and production have been achieved without a lost time accident.

In August, a new management inspection programme was implemented with a focus on "good housekeeping", safety and the environment.

#### 2. PEDRA BRANCA

#### PEDRA BRANCA EAST DEVELOPMENT

Highlights for the quarter included:

- Engagement of an underground mining contractor
- Commencement of the box-cut for the underground portal/decline
- Progress on infrastructure construction remains on schedule



Development activities at Pedra Branca<sup>1</sup> commenced on the 9th September 2016, with leading Brazilian underground mining contractor Toniolo Busnello engaged and mobilising a sub-contractor to develop the box-cut ahead of establishing the portal/decline entrance. The underground mining equipment is expected to mobilise during November.

The box-cut will be developed to access fresh rock ahead of the establishment of the decline portal. To date ground conditions have conformed to expectations and continue to be favourable for the establishment of the portal.

The blasting license has been received and drill & blast work commenced in fresh rock during the quarter.



Drilling in progress within the Pedra Branca box-cut

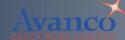
Significant infrastructure works completed or in progress for the forthcoming wet season include, construction of a new concrete bridge alongside the existing wooden bridge on the main Pedra Branca access road. Bridge construction is progressing well and will secure year around access for heavy traffic, even during peak river flow in the wet season. Permanent communications have been established via a microwave link to the nearby town of Canaã. An agreement with local energy supplier CELPA has been signed for the development of a 12km long 34.5MW power line.

#### PEDRA BRANCA EAST EVALUATION STUDY

The Pre-feasibility Study evaluating the option of the Pedra Branca East<sup>1</sup> ("PBE") low capex development continues to make good progress with release currently due in the December quarter.



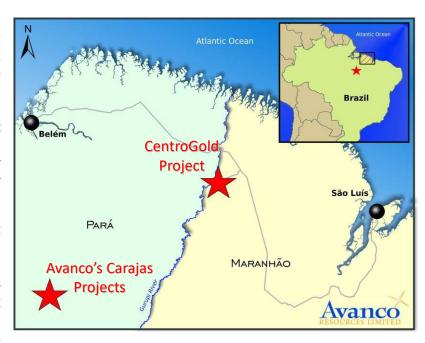
Pedra Branca bridge construction progress



#### 3. CENTROGOLD PROJECT

During the quarter Avanco entered into an agreement with TSX-listed Jaguar Mining Inc. (Jaguar) to earn up to 100% of the CentroGold Project<sup>2</sup> located in northern Brazil. The acquisition will not materially impact on the Company's cash reserves or current development plans for Pedra Branca.

The earn-in agreement provides for a low entry cost, through staged expenditure and complements Avanco's strategy of enhancing shareholder value through new discoveries, acquisitions and partnerships.



The CentroGold project is an advanced stage gold project covering approximately 137,000ha and contains a Foreign Resource Estimate totalling 88.5Mt at 1.14g/t gold for 3.14 million contained ounces<sup>3,4</sup> in two shallow gold deposits – Cipoeiro and Chega Tudo.

The Cipoeiro deposit consists of two distinct zones (Blanket and Contact) hosted in and around a large tonalite intrusion, while Chega Tudo is hosted within the 120km long Tentugal shear zone.

The Blanket Zone presents immediate potential for a low capex, fast start-up open pit development, while the Contact Zone has clear potential for providing expansion options to any project start-up focused on the Blanket Zone.

Gold mineralisation is associated with pyrite concentration and quartz—sericite alteration. Metallurgical testwork on Cipoeiro and Chega Tudo ores indicate both are "free-milling" and non-refractory, with leach recoveries reported at between 89% and 97%.

Avanco believes a more economically attractive outcome is achievable (compared to previous studies) starting on higher grade material at the Blanket Zone using the Antas model (size & capex).

Both the Cipoeiro and Chega Tudo deposits are on

0000845

Cipoeiro
Chega Tudo
75km

75km

380000
380000

Mining Lease Applications, pending the prerequisite issue of an Environmental License. An Environmental License has previously been issued and subsequently suspended by another regulatory body due to an oversight in the legal process regarding surface rights. Avanco believes the licensing issues are resolvable and Luis Azevedo and his highly experienced team at FFA Legal are



the right people for the task. FFA Legal estimates that this process will take between 4 to 6 months, which fits with Avanco's planned technical programme to be in field by late Q1 2017.

The proposed programme of work at the CentroGold project is as follows:

#### LICENCE MANAGEMENT PROGRAMME

Q4 2016 - Q1 2017

#### **2016 TECHNICAL PROGRAMME:**

Cipoeiro – Blanket Zone

Data review, QAQC and geological model

November 2016 JORC Resource estimate December 2016

Scoping Study – fast start-up/low-capex option for Blanket Zone

Cipoeiro – Contact Zone

Data review, QAQC and geological model

JORC Resource estimate December 2016

Scoping Study – Blanket Zone start-up, Contact Zone expansion January 2017

**BUDGET:** ~US\$500,000

#### **2017 TECHNICAL PROGRAMME:**

Chega Tudo Resource modelling. Maiden drill programme Q1 2017 Commence Pre-Feasibility Study Q2 2017

The key terms for the CentroGold earn-in transaction can be found in Avanco's ASX Announcement "Avanco to Acquire Advanced Gold Project" of 7 October 2016.

#### 4. REGIONAL EXPLORATION

Exploration work during the quarter focused on a detailed review of exploration potential in the new CentroGold project. Previous work in the CentroGold project identified 12 additional targets associated with aeromagnetic lineaments and geochemical anomalies within the Cipoeiro and Chega Tudo structural corridors. Avanco's review is concentrated on examining all targets and identifying additional targets and refining them into a top five priority list for follow-up exploration work.

Detailed geological mapping continued over the greater Pedra Branca area and surrounding licenses, whilst a small programme of regional soil sampling in license 850.228/16 located southwest of Pedra Branca deposit was initiated.

Given the strong association between magnetite alteration and IOCG mineralisation in the Carajás, the Company believes that electromagnetic (EM) surveying is an ideal exploration tool. This is also conclusively supported by extensive EM baseline studies over known deposits in the Carajás. Ground EM surveying is set to commence in the December quarter over the Company's priority early stage copper sulphide targets.

#### 5. CORPORATE

Concurrent with the successful conclusion of Avanco's maiden commercial production guarter, the Company has elected to streamline the Board of Directors. The Company strongly supports adherence to good corporate governance practice that is expected from the ASX corporate



governance guidelines. In line with this, it has been resolved that executive directors Mr Scott Funston and Mr Wayne Phillips will step down from the Board effective 31 October 2016.

Mr Funston and Mr Phillips will continue as executives of the Company as Chief Financial Officer and Head of Projects respectively. Additionally, Mr Funston will continue as Company Secretary. The Board thanks Mr Funston and Mr Phillips for their tireless efforts and dedication as Directors, with both playing key roles in Avanco's development and transition to producer status.

Mr Luiz Ferraz was appointed during the quarter as an Independent Non-Executive Director. Well known to Brazilian mining majors, Mr Ferraz brings a wealth of business experience that will bolster the Company's standing in the corporate and financial sectors within Brazil.

The Company will continue the transition of the board, with a short list currently being compiled to identify an additional Independent Non-Executive Director.

The Company's cash position as at the end of the September quarter was USD\$19.34 million (June quarter: US\$21.03 million). The decrease in cash mainly reflects capital expenditure on Pedra Branca. This is offset by positive cash inflow from operations.

**Tony Polglase**Managing Director



#### **ABOUT AVANCO**

- Avanco (ASX: AVB) is an emerging mid-tier copper and gold company situated in the mining friendly world class Carajas Mineral Province in northern Brazil
- Avanco either owns, or holds the rights to 100% of the second largest area of mineral tenure in the Carajas region behind Vale SA
- The Company is well positioned to potentially operate a number of high grade, low cost copper-gold mines in the region establishing Avanco as a profitable long life producer
- Management has been successful in financing the development of the Antas Copper Mine via an equity capital raising placing Avanco in a strong position, i.e. fully funded into production whilst remaining debt and covenant free
- The Antas Mine was built on time, under budget with an exceptional commissioning and ramp performance during Q2 2016
- Commercial production was declared in July 2016 for 12,000tpa of copper in concentrate and 7,000ozpa of gold by-product credits.
- Management believe the Antas plant output can possibly be increased to 17,000tpa of copper by 2018 as a result of additional ore supply from Pedra Branca and/or new near mine discoveries
- Avanco has engaged MACA, an Australian mining contractor group for the Antas open pit
- Antas is producing a desirable, clean copper concentrate and the Company has executed a three-year offtake contract
- Development of the nearby Pedra Branca East and Pedra Branca West projects have the potential to increase Avanco's production to ~50,000tpa of copper with gold credits
- Study of an initial, smaller scale operation at Pedra Branca East is at an advanced stage as a pre-cursor to full scale development with construction of access commenced
- The Company is supported by institutional shareholders: Blackrock World Mining Trust, Appian Natural Resources Fund, Greenstone Resources and Glencore
- Avanco is managed by highly experienced international and Brazilian mining professionals, most of whom are Portuguese speaking and reside in Brazil
- Whilst near term priorities are focused on life-of-mine growth, Brazil offers significant opportunities to enhance shareholder value through new discoveries, acquisitions or partnerships with neighbouring majors and other companies to increase exposure to copper and gold assets

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CARAJAS - TOTAL JORC Reported Mineral Resources <sup>5,6,7,8</sup>								
DEPOSIT	Category	Million Tonnes	Cu (%)	Au (ppm	)	Copper Metal (T)		old al (Oz)
	Measured	1.98	2.70	0.70		53,000	43,	000
	Indicated	5.72	2.80	0.70		161,000	123	,000
PB East <sup>9</sup>	Inferred	2.78	2.70	0.60		75,000	55,	000
	Total	10.48	2.80	0.70		289,000	221	,000
	Indicated	4.46	2.04	0.61		91,000	87,	000
PB West <sup>9</sup>	Inferred	2.74	1.72	0.56		47,000	49,	000
	Total	7.19	1.92	0.59		138,000	136	,000
PEDRA BRANCA	Total	17.67	2.44	0.65		427,000	357	,000
	Measured	2.83	3.01	0.72		85,000	66,	000
_	Indicated	1.65	2.20	0.42		36,000	22,	000
ANTAS NORTH <sup>9</sup>	Inferred	1.9	1.59	0.23		30,000	14,	000
	Total	6.38	2.38	0.50		152,000	102	,000
	Measured	0.59	1.34	0.18		8,000	3,0	000
	Indicated	7.5	0.7	0.2		53,000	49,	000
ANTAS SOUTH <sup>10,11</sup>	Inferred	1.99	1.18	0.2		24,000	13,	000
	Total	10.08	0.83	0.2		85,000	65,	000
TOTAL		34.13	1.95	0.49		664,000	524	,000
	ANTAS I	NORTH – JOR	C Report	ed Ore F	Reser	ves <sup>12,13</sup>		
Classification	Туре	Economic Cut- Off Cu%	Tonne (Mt)		per %)	Gold (g/t)	Copper Metal (T)	Gold (Oz)
Proved	ROM Ore	0.90	1.385	3.6	52	0.74	50,137	33,046
Probable	ROM Ore	0.90	1.264	2.7	72	0.57	34,381	23,231
PROVEN + P	ROBABLE R	OM ORE	2.649	3.	19	0.66	84,518	56,277
Proved	Low Grade	0.65	0.342	0.7	<b>7</b> 4	0.30	2,531	3,308
Probable	Low Grade	0.65	0.635	0.7	72	0.23	4,572	4,709
TOTAL PRO	OVEN + PRO	BABLE	3.63	2.	53	0.55	91,621	64,294

	CENTROGOLD - Foreign Resource Estimate. January 2011 <sup>3,4</sup>						
DEPOSIT	Au Cut-Off Grade	Category	Million Tonnes	Au (g/t)	Contained Gold		
		Indicated	49.20	1.17	1,855,000		
Cipoeira	oeira 0.33 g/t	Inferred	6.70	1.11	240,000		
	Total	55.90	1.16	2,095,000			
		Indicated	20.70	1.00	663,000		
Chega Tudo	0.31 g/t	Inferred	11.90	0.98	377,000		
		Total	32.60	0.99	1,040,000		
TOTAL		Total	88.50	1.10	3,135,000		



- The resource estimate has not been reported in accordance with the JORC Code 2012, and is a "Foreign Estimate" for the purposes of the ASX Listing Rules
- A Competent Person (under ASX Listing Rules) has not yet done sufficient work to classify the Foreign Estimate as a Mineral Resource in accordance with the JORC Code 2012
- It is uncertain that following evaluation of this Foreign Estimate, it will be able to be reported in accordance with the JORC Code 2012

#### **Competent Persons Statement**

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

- 1. The Pedra Branca (PB) 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. Gold mineralisation within the CentroGold project is typical of mesothermal vein-style, or orogenic-style gold deposits
- 3. This is the most recent foreign resource estimate published for CentroGold, and is contained within an independent Technical Report (Feasibility Study) on the CentroGold Project, reported under the standards of Canada's National Instrument (NI) 43-101. This is a publicly available document and can be accessed from the SEDAR website for public company filings
- 4. See ASX Announcement "Avanco to Acquire Advanced Gold Project", 7 October 2016, for Competent Person's Consent, material assumptions, Listing Rule 5.12 compliance and technical parameters supporting the Foreign Resource Estimate
  - a. The Company is not in procession of any new information since the above news release of 7 October 2016
  - b. The supporting information in the original news release (7 October 2016) continues to apply
- 5. Refer ASX Announcement "Resource Upgrade Advances Pedra Branca Development Strategy", 26 May 2016, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca East Mineral Resource Estimate
- 6. See ASX Announcement "Pedra Branca Resource Upgrade Delivers Substantial Increase in Both Contained Copper and Confidence", 13 July 2015, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca West resource estimate
- 7. 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
- 8. 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
- 9. Grade Tonnage Reported above a Cut-off Grade of 0.9% Copper
- 10. The Antas South JORC compliant resource was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012, on the basis that the information has not materially changed since it was last reported
- 11. Grade Tonnage Reported above a Cut-off Grade of 0.3% Cu for Oxide Resources
- 12. See ASX Announcement "Maiden Reserves Exceed Expectations for Antas Copper", 17 September 2014, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas North JORC (2012) Reported Reserve estimate
- 13. Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves



## **Interests in Mining Tenements Held**

Project	Property Name	Tenure Title Holder	Interest %	AREA (ha)	DNPM <sup>8</sup> No of Area	Status of Tenure
STAGE 1	RIO VERDE	AVB	100	7,290.69	PL 470	Mining Concession
	RIO VERDE	AVB	100	7,290.69	853.714/1993	Mining Concession
	SERRA VERDE	AVB	100	2,391	850.622/2007	#
	SERRA VERDE	AVB	100	7,359	850.892/2006	Granted to 2018
	ESTRELA EAST	VDM**	100	4,230	850.825/2005	Granted to 2019
	AGUA BOA	VDM	100	1,327	850.016/2013	#
	AGUA BOA	ARM	100	8,907	850.823/2005	***
	AGUA BOA	ARM	100	6,552	850.121/2009	Granted to 2016
	AGUA BOA	VDM	100	8,957	850.826/2012	***
STAGE 2	PEDRA BRANCA	VDM	100	3,195	850.318/2000	Final Report Approved
	PEDRA BRANCA	VDM	100	9,997	850.015/2008	Granted to 2016
	PEDRA BRANCA	VDM	100	8,881	850.570/2003	Granted to 2016
	PEDRA BRANCA	AVB	100	4,106	850.202/2013	Granted to 2016
	PEDRA BRANCA	VDM	100	9,391	850.707/2009	Granted to 2017
	PEDRA BRANCA	VDM	100	9,879	850.526/2004	Granted to 2017
	PEDRA BRANCA	VDM	100	1,040	850.278/2005	Granted to 2017
	PEDRA BRANCA	EST	100	4,998	850.053/2014	Granted to 2018
	PEDRA BRANCA	VDM	#	9,859	851.067/2007	Granted to 2018
	PEDRA BRANCA	VDM**	100	240	850.217/2000	Granted to 2018
	PEDRA BRANCA	AVB	#	5,000	851.674/2011	Granted to 2018
	PEDRA BRANCA	VDM	#	7,770	850.780/2012	Granted to 2018
	PEDRA BRANCA	VDM	100	9,988	850.226/2009	Granted to 2019
	PEDRA BRANCA	EST	#	5,000	850.228/2016	Granted to 2019
	PEDRA BRANCA	AVB	#	598	300.420/2011	#
	PEDRA BRANCA	VDM**	#	4,980	850.146/1995	#
	PEDRA BRANCA	VDM**	#	9,993	850.173/2002	#
	PEDRA BRANCA	VDM**	#	9,755	850.181/2001	#
	PEDRA BRANCA	VDM**	#	10,000	850.300/1993	#
	PEDRA BRANCA	EST	#	1,904	851.037/2013	#***
Carajas Regional	CARAJAS REGIONAL	ARM	100	9,724	850.288/2014	Granted to 2018
Trindade Iron Project	TRINDADE NORTH	AVB	100	4,967@	850.283/1999	Final Report Approved
Touro Nickel Project	TRINDADE SOUTH	AVB	#	9,797	850.781/2013	#
	TRINDADE SOUTH	AVB	#	9,797	850.569/2011	Granted to 2018

AVB = AVB Mineração Ltda. ARM = Avanco Resources Mineração Ltda. VDM = Vale Dourado Mineração Ltda. EST = Estela do Brazil Mineração Ltda.

 $<sup>\</sup>ensuremath{^{*}}$  Final Exploration Report approved by the National Department of Mineral Production.

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

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

<sup>@</sup> Pending size reduction

<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 (\$US'000)
Antas	1
Pedra Branca	677
CentroGold Project	88
Regional Exploration	179
Total	944