

**ASX Release**

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ASX Symbol: AVB, AVBO, AVBOB



**Avanco is using the Rio Verde High Grade Copper Project as a springboard to become a near term copper producer in the Carajas.**

# MARCH 2010 QUARTERLY ACTIVITIES REPORT

## HIGHLIGHTS

- **Avanco is pushing ahead with the development scenario for the high grade Rio Verde Copper Project.**
- **Exploration programmes at the Touro Nickel Project are progressing with additional geophysical and drilling programmes to be completed.**
- **The Company entered into a binding letter of intent to acquire the Guapore Nickel Copper PGM Project. The Project is situated in a highly prospective region for the discovery of new nickel sulphide deposits.**
- **The Company raised \$5,112,323 through a fully underwritten non renounceable rights issue.**

## RIO VERDE COPPER PROJECT

- **Scoping study on the Rio Verde High Grade Copper Project nearing completion and illustrates ~5,000tpa of copper sales with ~US\$57M cash flow with ~\$1.70 total cash costs for the opening six years under study.**
- **The high grade strategy focuses on the inferred and indicated JORC compliant 210,000t at 11.6%Cu resource.**
- **Pre-production Capex of ~US\$2M.**
- **Plant and infrastructures ~US\$9M to be funded from early cash flows.**
- **Grade control drilling to increase and upgrade resources to measured and indicated categories to be completed during third quarter of 2010.**
- **High Grade resource moved into a "ready-to-mine" status.**

Avanco's vision for copper production in the Carajas remains steadfast:

1. Very near term copper production from Rio Verde through exploitation of the high grade Inferred and Indicated JORC compliant resource at the Antas South deposit containing



**The Touro Nickel drill programme will resume in the approaching dry season. Soil geochemistry and geophysical surveys will be extended to cover a greater part of the Touro Nickel Project.**

<sup>1</sup>210,000t at 11.6%Cu.

2. Increase copper output by seamless development of heap leaching following the commissioning of the high grade flotation plant.
3. Develop and bring on stream new copper metal production via proximal Rio Verde targets or advanced stage acquisitions.

The mining study tests Avanco's opening near term copper strategy in exploiting the very high grade <sup>1</sup>Inferred and Indicated JORC compliant resource at the Antas South deposit located within the boundaries of the highly prospective 100% owned Rio Verde Property the World Class Carajas Mineral Province in northern Brazil.

In progressing the study the Company has examined a number of production scenarios including the current proposal of scheduling production from early mining of "out-of pit" direct ship saleable ores. This approach minimises initial capital requirements and enables concurrent construction and commissioning of a flotation beneficiation plant within 24 months self funded from out-of-pit copper revenues.

The study has tested the first 6 years of the project and is based on a mine plan of 300,000t which reflects what the Company anticipates will be identified before mining begins.

Key outcomes for the High Grade Copper Project include:-

Copper Production	~5,000tpa
Capex	US\$12.4M (pre-production US\$2M)
Total Revenue	US\$120M
Cash Flow @NPV=0	US\$57M *
Mining & Processing Opex	US\$51/t ore
FOB at Smelter Cost	86c/Lb Cu**
Total Cash Cost	US\$1.7/Lb Cu***

\* Before interest and taxes

\*\* Excludes smelter deductions and royalties but includes freight

\*\*\* Includes all smelter deductions and royalties, excludes precious metals credits

The above does not include any contribution from the expanded heap leach operations.

## **GEOLOGY & RESOURCES**

The high grade zone is a classic supergene enriched transition structure hosting sulphide and oxide copper mineralisation. The JORC compliant high grade zone was discovered at the end of drill lines at the Antas South Deposit with intersects reported previously as:

- **ARVA 17**      **38m at 7.49%Cu from 0m**  
**Incl. 14m at 18.99%Cu from 22m**  
**Incl. 4m at 50.6%Cu from 26m**
  
- **ARVA 24**      **26m at 5.47%Cu from 18m**  
**Incl. 6m at 21.02%Cu from 32m**  
**Incl. 4m at 28.%Cu from 32m**
  
- **ARVA 49**      **20m at 5.12%Cu from 13m**  
**Incl. 4m at 21.53%Cu from 17m**  
**Incl. 2m at 34.1%Cu from 19m**

The above intersections contain +25% copper which is believed to be associated with predominantly chalcocite mineralisation. By adopting a selective mining method, the Company believes that ~20,000t of ore at 25% Copper grade can be mined 'out-of-pit' and be direct shipped for sales.

The high grade zone is open along strike, the Company believes that additional high grade structures exist at Antas South and within neighbouring exploration targets and as such and will be discovered before production commences. The Company anticipates completing a program of grade control drilling in third quarter of 2010 to increase and upgrade resources to measured and indicated categories and move the high grade resource into a "ready-to-mine" status.

## **MINING**

The study examines open pit contract mining:

- Pre-production Capex US\$2M (access, pre-strip and site establishment)
- Mine Plan, initial 6 year production period under study
- Strip ratio = 6:1, free dig 95% & 5% drill and blast
- Resource recovery 95% with 15% dilution
- Direct mining Opex US\$31/t ore
- Indirect grade control, day works and pit dewatering costs of US\$200,000pa

## **PLANT**

A nominal 6,000tpm flotation beneficiation process is envisaged with 75% recovery of copper into 20% copper concentrates as reported previously. This is expected to be largely a second hand facility, sourced and constructed locally in demountable form to reduced costs associated with site works etc. Key plant and metallurgical parameters use in the study include:

- Plant throughput 70,000tpa at 9.5%Cu head to produce ~5,000tpa copper metal in +20%Cu concentrates.

- Plant/Infrastructure/working Capex US\$10M
- Sustaining Capex US\$0.4M (tails dam embankment lifts etc)
- Plant Opex \$20/t ROM ore

The current status of the mine site and design general arrangement is shown below and illustrates the high grade zone, the plant location and other infrastructures. Final condemnation drilling to sterilize the selected construction areas is yet to be completed. Due to the Rio Verde property being highly fertile for copper some re-positioning of infrastructures is not ruled out.

### **CONCENTRATE SALES AND ADMINISTRATION.**

Final concentrates including the out-of-pit parcels of direct saleable ores will be bagged for onward freight to the customer. Key variables used include:

- NSR=75% including broker fees
- Haulage/Shipping US\$220/t
- Copper price US\$2.5<\$3.0/lb
- General & Admin indirect costs =US\$350,000pa

Admin and on-costs are not expected to be significant as benefiting from the project's proximal location to the Carajas principle mining centre of Parauapebas which is less than 30km away with a population of 180,000. Parauapebas is an abundant source of skilled labour and a main centre for all necessary mining support services.

### **PERMITTING AND SCHEDULE**

The Rio Verde property is not situated in an environmentally sensitive area being predominantly pasture and arable land. The out-of-pit mining operations can commence on approval of the trial mining license. Critical path activities include grade control drilling and permitting with good progress on the later expected before end of the third quarter of 2010. Site works and pre-stripping activities will be scheduled to commence in the dry season.

### **ECONOMIC PERFORMANCE**

The benefit of the "out-of-pit" direct saleable component reduces start-up capital and provides the Company a minimum risk implementation scenario where revenues from out-of-pit sales will self-fund the construction of the flotation plant and associated site infrastructures during the second year (Y2), see Table 1.0 below.

The precision of the in-house study is considered to be +/-30% with results to date illustrating the following economic performance over the first six years of high grade operations only:

Total Capex	US\$12.4M (pre-production US\$2M)
Total Revenue	US\$120M
Total Cost of Sales	US\$50M
Cash Flow @NPV=0	US\$57M*
Mining & Processing Opex	US\$51/t ore
FOB at Smelter Cost	86c/Lb Cu**
Total Cash Cost	US\$1.7/Lb Cu***

\* Before interest and taxes

\*\* Excludes smelter deductions and royalties but includes freight

\*\*\* Includes all smelter deductions and royalties, excludes precious metals credits

## **ECONOMIC POTENTIAL**

The Company has identified the following areas as having opportunities to enhance project economics and will be investigated over the coming months:

- Improved metallurgical recoveries and concentrate grades
- Recovery of precious metals
- Economies associated with freight
- Improvements to NSR
- Sales premiums for delivering copper oxide concentrates to domestic customers.

## **FURTHER SCOPING STUDY WORK**

The Company is very encouraged by the results to date in testing the feasibility and economic viability of the High Grade Copper Project. With completion of the pending grade control drilling program more information will become available allowing confidence in the study outcomes to be improved to a definitive status. Areas of study that will be revisited include:-

- Resources, up-grading of categories and increase of tonnages.
- Final Pit designs.
- Improved flotation performance including benefits from precious metal credits.
- Condemnation drilling for infrastructure locations.
- Definitive site plan
- Implementation schedule

The Company will engage independent consultants to review and sign-off on completion of the definitive study document.

## **TOURO NICKEL PROJECT**

Following deterioration in weather and access conditions, the Touro drill programme has been temporarily suspended. The Company will resume drilling programmes in the approaching dry season. A total of

five diamond core drill holes were successfully completed for 720 metres. Drilling intersected a number of zones of magnetic banded pyroxenite with disseminated fine sulphides. The Company will take this opportunity to extend its soil geochemical and geophysical surveys to cover a greater area of the Touro Nickel Project. Results are pending.

## **GUAPORE NICKEL COPPER PGM PROJECT**

As part of the Company's growth and diversification into grass roots nickel sulphide exploration, Avanco has entered into a binding letter of intent to acquire the Guapore Nickel Copper PGM Project. The Project is situated in a highly prospective region for the discovery of new nickel sulphide deposits.

The Guapore Nickel Copper PGM Project is located in the south west of Mato Grosso State close to the Brazilian and Bolivian border. The site features excellent access and is 350 kilometres from Cuiaba, the state Capital. The Project comprises a single contiguous exploration licence application of over 9,800ha.

A strong magnetic anomaly occurs within the project area and is interpreted to be a differentiated mafic ultramafic sill associated with the Rio Alegre Intrusive Suite. The analytic signal magnetic image defines a strong magnetic anomaly with a sub circular shape, measuring 8.0 by 7.0 kilometres and structurally controlled by a north west trending thrust system. Nickel and copper sulphide mineralisation (chalcopyrite, pyrite, pyrrotite, pentlandite) hosted by serpentinised peridotite was recorded on a past drilling program on a similar intrusive body to the north of the Guapore Project. The transaction for the Guapore Project is subject to satisfactory due diligence which is well advanced.

## **CORPORATE**

The Company raised \$5,112,323 through a fully underwritten non renounceable rights issue.

### **Tony Polglase Executive Director**

*The information in this report that relates to mineral resources or ore resources is based on information compiled by Mr. Peter Ball who is a member of the Australian Institute of Mining and Metallurgy. Mr. Ball is the manager of Data Geo. Mr. Ball 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 as defined in the 2004 edition of the Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr. Ball consents to the inclusion in the report of the matter based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources and Exploration Results are based on information compiled by Mr Matthew Wood who is a Member of the Australian Institute of Mining and Metallurgy. Mr Wood is the Chairman of Avanco Resources Limited. Mr Wood 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 as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Wood consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

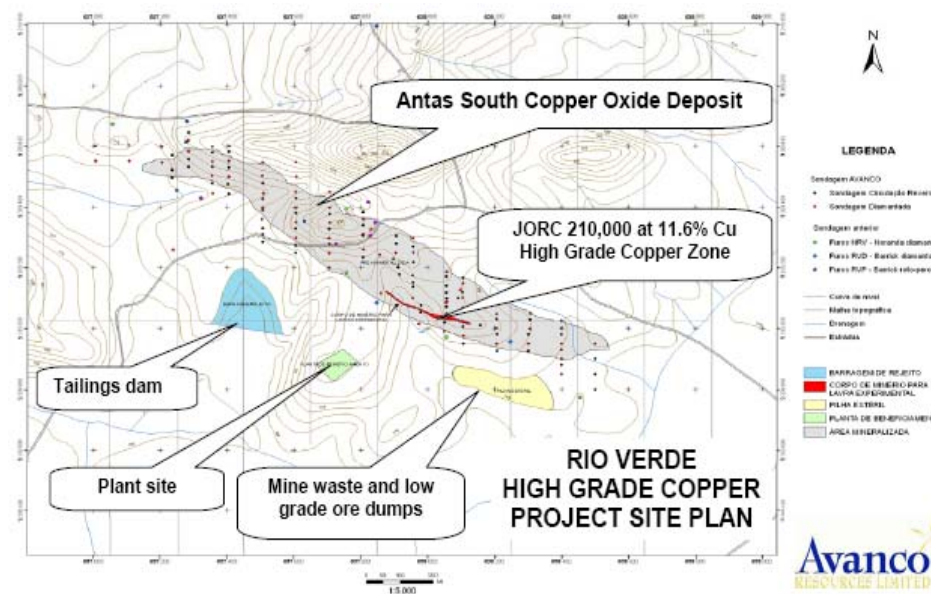
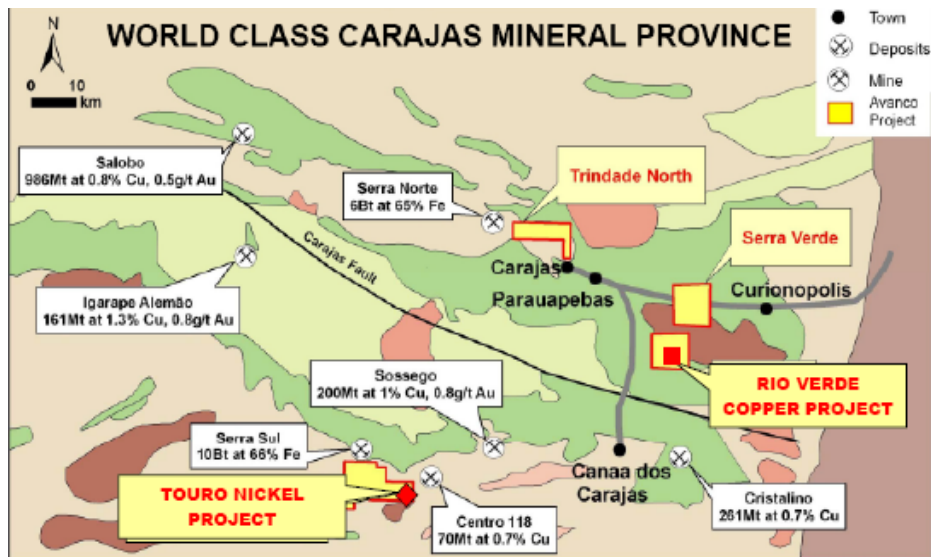
<sup>1</sup>JORC Resource Estimate - Carajas Copper Project

Antas South Deposit\* - Oxide and Transitional

All Material	Indicated		Inferred		Total Resource		
	Cu Tonnes	Cut %	Tonnes	Cu%	Tonnes	Cu%	Cu Tonnes
0.1	12,662,000	0.45	4,961,000	0.56	17,622,000	0.48	84,400
0.3	6,254,000	0.71	1,723,000	1.27	7,977,000	0.83	66,100
HGZ**	89,000	12.72	121,000	10.87	210,000	11.65	24,500

\*Antas South is part of the Carajas Copper Project - Rio Verde Property

\*\*The HGZ (High Grade Zone) is included within the overall estimation and no top-cut has been applied to the resource in this zone



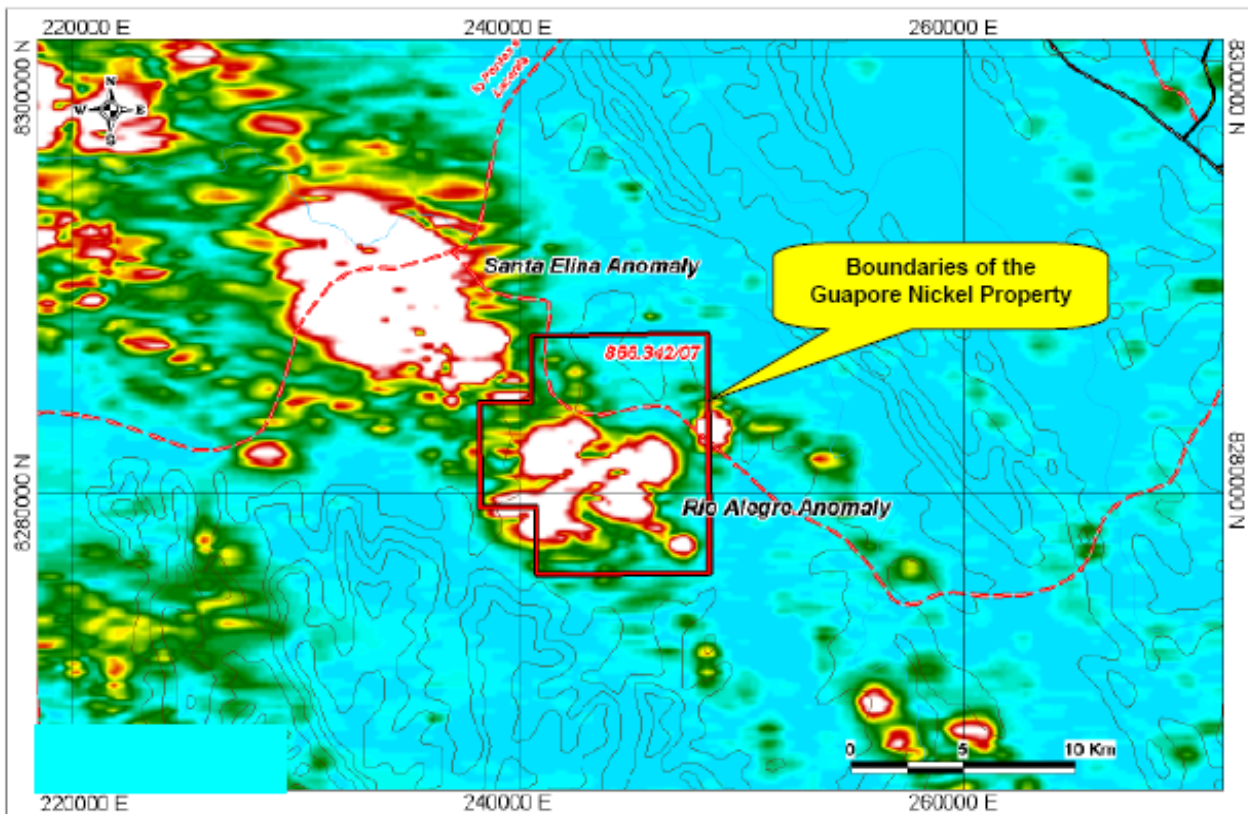
## Rio Verde High Grade Copper Project - Table 1.0

Years one to six only and expanded heap leach operations not included

Notes - Mine Plan includes JORC 210,000t + 90,000t  
No precious metals credits included

Precision on costs assumed +/-30%  
Rehab cost not included - new resources expected

ACTIVITIES		Y1	Y2	Y3	Y4	Y5	Y6	
Out of Pit Production								
Build Float Plant								
Float Concentrate Production								
CASH FLOW								TOTAL
ROM Production	tpa	10,000	10,000	70,000	70,000	70,000	70,000	300,000
ROM Grade	%Cu	25	25	9.5	9.5	9.5	9.5	
Plant Recovery	%	NA	NA	75	75	75	75	
Copper metal in Conc.	tpa	2,500	2,500	4,988	4,988	4,988	4,988	
Copper Price	US\$/Lb	2.5	2.5	3.0	3.0	3.0	3.0	
NSR	%	75	75	75	75	75	75	
<b>Net Sales Revenue</b>		<b>10.3</b>	<b>10.3</b>	<b>24.7</b>	<b>24.7</b>	<b>24.7</b>	<b>24.7</b>	<b>119.4</b>
Opex	US\$M	1.0	1.0	3.6	3.6	3.6	3.6	
G&A+Freight	US\$M	2.2	2.2	5.8	5.8	5.8	5.8	
Royalties	US\$M	0.6	0.6	1.2	1.2	1.2	1.2	
<b>Total Cost of Sales</b>	US\$M	<b>3.8</b>	<b>3.8</b>	<b>10.6</b>	<b>10.6</b>	<b>10.6</b>	<b>10.6</b>	<b>50.0</b>
Capex	US\$M	2.0	9.0	1.0	0.2			12.4
<b>Operating profit</b>	US\$M	<b>4.5</b>	<b>-2.5</b>	<b>13.1</b>	<b>13.9</b>	<b>14.1</b>	<b>13.9</b>	<b>57.0</b>
<b>Cum Cash flow</b>	US\$M	<b>4.5</b>	<b>2.0</b>	<b>15.1</b>	<b>29.0</b>	<b>43.1</b>	<b>57.0</b>	
KEY INDICATORS		Out of Pit		Flotation Operations				
Mining & Plant Opex	US\$/t ore		100.0				51.4	
Total Cash Cost	US\$/Lb		1.32				1.72	
FOB at Smelter Cost	US\$/Lb		0.58				0.86	



The Guapore magnetic anomaly interpreted to be a differentiated mafic ultramafic sill.