# **Quarterly Report**

to 31 March 2016

# **Highlights**

## **Operations**

- Gold Production Gold production for the March quarter was 32,074 ounces.
- Costs Cash costs for the March quarter were US\$721 per ounce. All-in Sustaining Costs ("AISC")\* for the March quarter were US\$902 per ounce.
- 2016 Mine Plan The March quarter is tracking above the overall 2016 Mine Plan with the total material moved 32% above March 2015 quarter. A budgeted higher strip ratio is evident this quarter associated with cutbacks at AB1, AB2 and Duckhead. The cutbacks will enable access and production of higher grade ores in the second half of 2016 as planned.

#### Corporate

- Capital Raising On 22 February 2016, the Company announced it had received commitments to raise \$50 million through the placement of 256.4 million fully paid ordinary shares in two tranches to domestic and international institutional and sophisticated investors.
   Subsequent to the announcement, the Company has completed both Tranches of the placement, receiving \$23.4 million in March 2016 and the remaining \$26.6 million in April 2016.
- Gold Sales Gold sales for the March quarter totalled 33,815 ounces at an average cash price received of US\$1,188 per ounce.
- Cash and Bullion Cash and bullion as at 31 March 2016 was \$38.6 million (31 December 2015 \$23.2 million) (bullion valued at AUD/USD = 0.77 and US\$1,232 per ounce). Tranche 2 placement proceeds of \$26.6 million were received in early April 2016 and are not included in Cash at the end of the quarter.

#### **Exploration**

- Tap AB1 Trough Lode Highly encouraging results from Tap AB1 Trough Lode were received during the quarter, including 33 m @ 31.82 g/t from 64 m to the bottom of hole (refer announcement 30 March 2016). The interval included 9 m @ 97.37 g/t from 82 m with a 2 m intersection grading 386.51 g/t. A 6,000 m follow up drilling program is underway testing extensions and definition of the high grade lode.
- Urucum Underground Pre-Feasibility Study ("PFS") A positive PFS was announced on 31 March 2016 based on results of the deep core drilling program completed at Urucum North in 2015. AMC Consultants Pty Ltd completed the study which yielded a pre-tax NPV<sub>5%</sub> (gold price US\$1,200) of \$69 million and IRR of 39%. Probable underground ore reserves were 3.0 million tonnes grading 3.61 g/t gold for 345,000 ounces. Measured, indicated and inferred resources totalled 4.8 million tonnes grading 3.76 g/t Au form 575,000 ounces at a 1.6 g/t lower cut off.

#### **Resources and Reserves**

- Ore Reserves Tucano Overall Ore Reserves as at 31 December 2015 were 28.9 million tonnes @ 1.59 g/t gold for 1.5 million ounces. Open pit reserves were 21.1 million tonnes @ 1.50 g/t gold for 1.0 million ounces and underground reserves were 3.0 million tonnes @ 3.61 g/t gold for 345,000 ounces.
- Mineral Resources Total mineral resources as at 31 December 2015 were 67.2 million tonnes @ 1.64 g/t gold for 3.5 million ounces.

<sup>\*</sup>AISC has been calculated in accordance with the World Gold Council's Guidance Note on Non-GAAP metrics released 27 June 2013.



# Operations Tucano Gold Mine (100%)

Production Summary	Unit	Mar 2016 Quarter	Mar 2015 Quarter	%
Total Waste Moved	tonnes	5,213,727	3,784,689	38%
Ore Mined	tonnes	599,612	604,295	-1%
Ore Milled	tonnes	995,207	941,854	6%
Head Grade	g/t	1.12	1.14	-1%
Plant Recovery	%	89.6%	90.0%	
Total Gold Recovered	ounces	32,074	30,939	4%
Total Gold Sold	ounces	33,815	32,941	3%

Cash Costs and All-In Sustaining Costs	Unit	Mar 2016 Quarter	Mar 2015 Quarter	%
On-Site Production Costs	US\$/ounce	680	856	
On-Site G&A Costs	US\$/ounce	41	68	
Cash Costs	US\$/ounce	721	924	-22%
Royalties	US\$/ounce	24	28	
On-Site Corporate Costs	US\$/ounce	13	17	
Exploration Costs (Sustaining)	US\$/ounce	28	2	
Capitalised Stripping Costs (Sustaining)	US\$/ounce	113	107	
Capital Expenditure (Sustaining)	US\$/ounce	3	2	
All-In Sustaining Costs*	US\$/ounce	902	1,080	-16%

<sup>\*</sup> AISC has been calculated in accordance with the World Gold Council's Guidance Note on Non-GAAP metrics released 27 June 2013 and in accordance with this Guidance Note, gold ounces sold are used as the denominator in the cost per ounce calculations. Production costs are inclusive of the effects of ore stockpile and GIC inventory movements.

#### **Production**

Gold recovered in the March 2016 quarter totalled 32,074 ounces, an increase of 4% over the March 2015 quarter. Gold production to date is in line with the Company's 2016 plan.

#### Costs

Despite a strengthening Brazilian Real during the quarter, overall operating costs are beginning to fall as the initial effects of a number of operational initiatives become apparent at Tucano. Ongoing cost benefits are expected as the full effects of process changes made by the new management team are realised.

As expected, an elevated strip ratio due to material movement associated with planned major cutbacks at AB1, AB2 and Duckhead were a significant contributor to mining costs this quarter. The cutbacks are progressing as planned and will enable access to higher grade ores and result in higher gold production in the second half of 2016 as previously highlighted.

Costs and production are in line with the Company's 2016 plan and Beadell remains on track to achieve its 2016 full year production and costs guidance.

#### **Mining**

For the March quarter, 599,612 tonnes of ore were mined. Total material movement was 5,813,339 tonnes, which is a 32% increase over the March 2015 quarter. The wet season commenced in January and notably, the month of March 2016 was the wettest March on record. Use of fresh rock for construction, maintenance and sheeting of haul roads and pit ramps is ongoing and is a key factor in the significantly improved ability to move material from the pits in the wet conditions.



Mining during the quarter was predominantly from Urucum Central North, Urucum South Tap AB1, AB2 and AB3. The Duckhead cutback continued during the quarter with the plan to mine ore at the completion of the wet season (around July).

#### **Processing**

During the March quarter, the CIL plant throughput was 995,207 tonnes, the mill feed grade was 1.12 g/t gold and the process plant recovery for the period was 89.6%.

Process improvements are underway in the plant in a number of areas including carbon management, consumable management and reagent usage. In addition, the percentage of fresh ore in the mill feed is gradually being increased and the mill is now running on a significantly higher blend of fresh material than budgeted.

Gold ore stockpiles at the end of March 2016 decreased by 9% to 4.4 million tonnes @ 0.71 g/t gold for 101,000 ounces plus marginal stockpiles of 1.5 million tonnes @ 0.45 g/t gold for 21,000 ounces. This is in line with using the higher grade stockpiles to feed the mill during rain events and to reduce the use of lower grade stockpiled ore.

# **Corporate & Finance**

#### **Gold Sales**

Gold sales totalled 33,815 ounces in the March quarter. The average cash price received was US\$1,188 per ounce.

#### **Cash & Bullion**

Cash and bullion as at 31 March 2016 totalled \$38.6 million (bullion valued at AUD/USD = 0.77 and US\$1,232 per ounce). Tranche 2 placement proceeds of \$26.6 million were received in early April 2016 and are not included in Cash at the end of the quarter.

During the March quarter, the Company paid another US\$5 million quarterly instalment in accordance with the terms of the Company's Santander – Itaú Facility. At quarter end, the total outstanding facility was US\$40 million with eight quarterly payments of US\$5 million remaining.

### **Capital and Exploration Expenditure**

Non-sustaining capital expenditure for the March quarter was \$1.3 million, which was largely associated with deforestation and construction of the long term tailings dams.

Non-sustaining exploration expenditure for the March quarter was \$0.2 million.

#### **Capital Raising**

On 22 February 2016, the Company announced it had received commitments to raise \$50 million through the placement of 256.4 million fully paid ordinary shares ("Shares") to domestic and international institutional and sophisticated investors ("Placement").

The Placement was completed in two tranches:

- Tranche 1 the Placement of 119.8 million Shares on 2 March 2016, at an issue price of \$0.195 per Share, which was not subject to shareholder approval and fell within the Company's placement capacity under ASX Listing Rule 7.1; and
- Tranche 2 the Placement of 136.6 million Shares, at an issue price of \$0.195 per Share, which was issued on 4 April 2016, following shareholder approval at a general meeting of shareholders held on 24 March 2016.



# Exploration

#### **Brazil**

In the March quarter, a total of 33,674 m of drilling, comprising 33,674 m of grade control reverse circulation (RC) drilling and 3,140 m of exploration / resource delineation RC drilling. A total of 172 m of diamond drilling was also completed.

Exploration and resource definition drilling focussed the Tap AB1 Trough Lode, Urucum Central and Gold Nose near Mine areas. Regional exploration focussed on the 100% owned Mutum prospect 20 km east of Tucano. A detailed progress report is expected to be released during the current quarter.

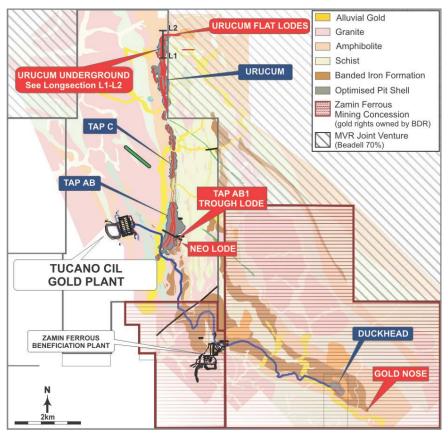


Figure 1. Tucano Near Mine plan showing open pit and drill target locations

#### Tap AB1 Trough Lode

A total of 79 holes for 6,129 m were drilled in the quarter targeting the Tap AB1 Trough Lode. Drilling intersected high grade gold mineralisation in a deeply weathered trough-shaped zone along the main structural contact separating banded iron formation (BIF) and clastic schist.

The Tap AB1 Trough Lode represents a continuation of the high grade Tap AB2 Trough Lode, which is located along the same contact zone to the north. Extremely deep weathering along this contact (>250 m) continues south to Tap AB1 Trough Lode where drilling is yet to fully define the extent and depth of oxide mineralisation.

Results from the recent drilling campaign were highly encouraging. Portions of the Neo and AB1 Trough Lode mineralized zones have been converted to reserves contributing to the overall increase in reserves reported on 14 April 2016. Follow up drilling is underway with a 6,000 m RC program to test extensions and better define the geometry and continuity of high grade mineralization. Significant results from the recently completed drill program are summarised below;



64 m @ 4.22 g/t from 78 m F01839 F01840 40 m @ 2.17 g/t from 120 m 15 m @ 7.53 g/t from 5 m GCRC18331 GCRC18630 7 m @ 13.26 g/t from 101 m 11 m @ 8.88 g/t from 61 m GCRC18648 10 m @ 9.29 g/t from 16 m GCRC18676 GCRC18680 14 m @ 7.39 g/t from 13 m GCRC18696 29 m @ 8.16 g/t from 0 m 13 m @ 6.06 g/t from 38 m GCRC18713 GCRC18789 33 m @ 31.82 g/t from 63 m

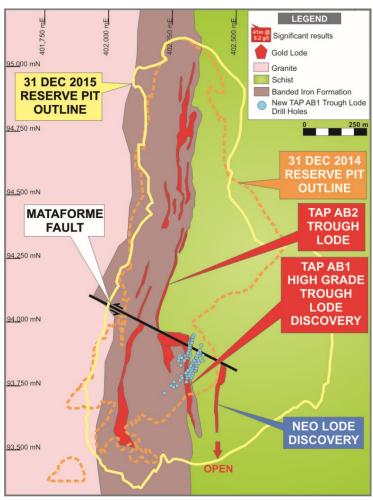


Figure 2. Tap AB plan showing location of new drill holes at Tap AB1 Trough Lode



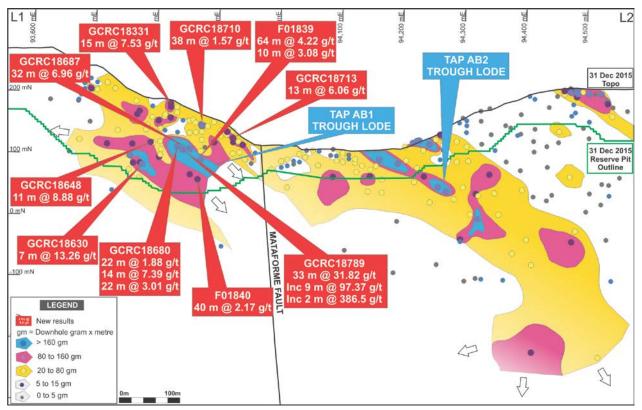


Figure 3. Tap AB1 & 2 Trough Lode Longsection looking west

# **Urucum Underground Reserve and PFS Results**

A positive PFS was announced on 31 March 2016 based on results of the deep core drilling program completed at Urucum North in 2015. AMC Consultants Pty Ltd completed the study which yielded a pretax NPV $_{5\%}$  (gold price US\$1,200) and IRR of \$69 million and 39%, respectively. Probable underground ore reserves were 3.0 million tonnes grading 3.61 g/t gold for 345,000 ounces. Measured, indicated and inferred resources totalled 4.8 million tonnes grading 3.76 g/t Au form 575,000 ounces at a 1.6 g/t lower cut off.

The stated results of the PFS are based on the Measured and Indicated Mineral Resources re-estimated to take into account a re-optimisation and re-design of the Urucum North open pit. Future deep drilling will be aimed at upgrading the Inferred Mineral Resources (1.93 million tonnes @ 3.01 g/t for 186,000 ounces at a 1.6 g/t lower cut off) to Measured and Indicated Mineral Resources and ultimately conversion to Ore Reserves, as well as continuing to explore the mineralisation at depth.

The Company believes there is good potential to further expand the Urucum Underground Mineral Resource proximal to areas of capital development contemplated by the PFS.



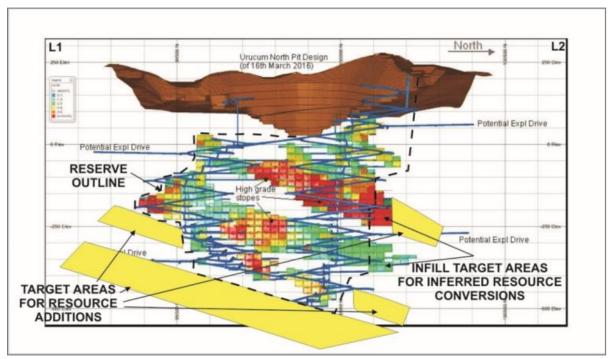


Figure 4. Urucum Underground longsection (facing west)

#### **Duckhead Mine Corridor**

A 9 hole, 480 m RC drilling program was completed at Gold Nose during the quarter. The Duckhead trend remains very prospective for high grade lode style mineralisation. Ongoing targeting and further drilling is planned for later in 2016.

## **Brazil Greenfields Exploration**

#### Tucano Regional

A review of regional targets has been completed as part of a regular ranking and prioritization exercise. Top ranked targets will be advanced to first pass drilling in 2016.

## Mutum (100%)

Encouraging results from first pass open hole percussion drilling has confirmed the presence of *in situ* saprolite-hosted gold mineralization associated with Banded Iron Formation. The results explain the origin of the 3 km long by 500 m wide gold in soil anomaly identified in 2015. The Mutum prospect is located 20 km east of Tucano.

#### Tartaruga Project (100%)

Auger drilling was completed in March. A review of targets and ranking exercise is being completed as part of a property-wide exploration prioritisation exercise.

#### **Resources & Reserves**

The Tucano Proved and Probable Ore Reserves as at 31 December 2015 was 28.9 million tonnes @ 1.59 g/t gold for 1.5 million ounces including underground reserves of 3.0 million tonnes @ 3.61 g/t gold for 345,000 ounces. Open pit reserves are estimated using a gold price of US \$1,100 per ounce and underground reserves a gold price of US \$1,120 per ounce. Total ore reserves after depletion increased by a net 175,000 ounces (+13%). Production depletion was 136,000 ounces resulting in the effective addition of 311,000 ounces (24%) of gold reserves.

Based on the new open pit reserve estimate a mine life of more than seven years is now expected.



The increase was predominantly a result of the addition of the Urucum Underground Probable Reserve. A net incremental increase was also achieved in the Tap AB1 pit where a portion of the Neo and AB1 Trough Lode discoveries have converted to reserves. The open pit strip ratio has improved 11% to 6.7 to 1 (from 7.5 to 1).

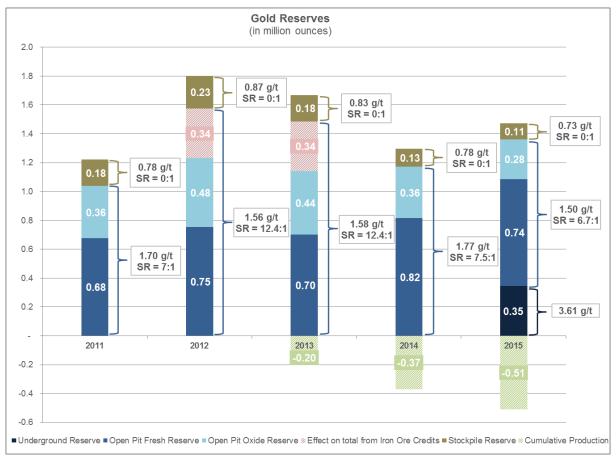


Figure 5. Tucano Reserve changes from 2011 to 2015

The Company's Measured, Indicated and Inferred Mineral Resources as at 31 December 2015 was 67.2 million tonnes @ 1.64 g/t gold for 3.5 million ounces.

Resource ounces declined 34% compared to the year-end 2014 results. Inferred resources make up the largest component (58%) of the overall decline. The main difference between the 2015 and 2014 estimations is that the Company has changed from a global in-situ geological resource model to a method of reporting open pit and underground lode-constrained resources. Underground lodes have been modelled at a higher cut-off grade than resources reporting to the overlying 2015 reserve pit. Consequently, a large volume of resource (previously reported below the reserve pit at Urucum North) has been excluded from the 2015 model where block grades are less than the marginal underground cut-off. Resources reported for Tap AB and Urucum South (exclusive of the Urucum North underground resource) were constrained by a US\$1,500/ounce resource pit shell. All resources below this shell are reported at the marginal cut-off grade for underground resources (assuming a US\$1,500/ounce gold price).

The resource ounces that have been removed from the resource, effectively remain in the ground and could convert back to resource and ultimately reserve should cut-off grades be adjusted as a result of other macro factors including an increase in gold price. At some point as gold price increases it is likely that the optimum mining method for the deeper parts of the Urucum North deposit could revert back to open pit rather than underground which could result in a significant increase in resource ounces. Exploration potential on the mine lease remains high and drilling is ongoing.



**ASX Code:** BDR

**Directors and Senior Management:** 

Craig Readhead Non-Exec. Chairman
Brant E. Hinze Non-Exec. Director
Timo Jauristo Non-Exec. Director

Simon Jackson CEO & Managing Director Glen Masterman Exec. Director Geology &

Corporate Development

Greg Barrett CFO / Company Secretary
Peter Holmes Chief Operating Officer
Luis Pablo Diaz General Manager - Brazil

**Corporate Details:** 

Issued capital: 1,055,067,540 ordinary shares

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## **Competent Persons Statement**

The information in this report relating to Mineral Resource, Open Pit Ore Reserves and Exploration Results are based on information compiled by Mr Robert Watkins who is a member of the Australasian Institute of Mining and Metallurgy and who has sufficient experience which is relevant to the styles 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Watkins is the Head of Geology of Beadell Resources and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information is extracted from the reports entitled "High Grade Tap AB1 Trough Lode Drill Results" created on 30 March 2016, "Positive Urucum Underground Pre-Feasibility Study" created on 31 March 2016 and "Ore Reserve and Mineral Resource Update" created on 14 April 2016 and are available to view on <a href="https://www.beadellresources.com.au">www.beadellresources.com.au</a>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.