



ASX ANNOUNCEMENT  
ASX Code: **BDR**

12 November 2010

**BEADELL GOLD RESOURCE INCREASES TO 4.6 Moz**

**Tucano Gold Resource Increases 48 % to 4.3 Moz**

Beadell Resources Ltd is pleased to announce that JORC resources at the Tucano project have increased by **48 % to 4.3 Moz** (Table 1). Global JORC resources for Tucano now total **90.4 Mt @ 1.5 g/t for 4.3 Moz of gold** at a 0.5 g/t cut off, comprising **19.5 Mt @ 1.5 g/t gold for 1.0 Moz of oxide** which will form the main ore source for the first 3 to 4 years of the operation followed by the primary ore which comprises a resource of **63.6 Mt @ 1.5 g/t for 3.1 Moz of gold**.

The global resource comprises Measured Resources from stockpiles of **7.4 Mt @ 0.8 g/t gold for 0.18 Moz**. Total Indicated Resources for Tucano are **40.1 Mt @ 1.5 g/t for 2.0 Moz** and total inferred resources are **42.9 Mt @ 1.6 g/t for 2.2 Moz**.

The new resource estimate is the result of a 6 month intensive drilling and resource estimation campaign completed by Beadell and leading international consulting group SRK Consulting. All resource models have been handed over for mining optimisation work to be completed by the end of this year as part of the Definitive Feasibility Study (DFS), and culminating in the release of a maiden JORC reserve.

Beadell's Managing Director Peter Bowler said "This is a great result for Beadell and exemplifies our belief that the Tucano resource will continue to grow into the future. We are moving rapidly towards a decision to mine at completion of the DFS at the start of next year and look forward to joining the ranks of mid tier gold producers by early 2012"

**Urucum – 48.8 Mt @ 1.6 g/t gold for 2.5 Moz**

The Urucum deposit is the largest of the known gold deposits at Tucano forming a 3 km long zone of mineralisation hosted in sheared and sulphidised Banded Iron Formation (BIF). Total resources for Urucum are **48.8 Mt @ 1.6 g/t for 2.5 Moz**. Urucum has a shallower weathering profile than the other deposits, however significant oxide mineralisation exists along the 3 km strike length totalling **7.7 Mt @ 1.3 g/t for 0.3 Moz**. The fresh and free-milling primary ore totalling **41.0 Mt @ 1.6 g/t for 2.2 Moz** has been drilled to approximately 500 m below surface where ore grade intercepts remain completely open at depth.

A recently released drill result from the northern end of Urucum of **73.9 m @ 3.9 g/t gold** from 114.1 m (see ASX release 5 November 2010) has not been included in the resource estimate highlighting the potential for the resource to increase with ongoing drilling.

#### **Tapereba AB – 25.3 Mt @ 1.5 g/t gold for 1.2 Moz**

Tapereba AB is the southernmost deposit along the main 7 km long north-trending mineralised BIF. Total resources for Tapereba AB are **25.3 Mt @ 1.5 g/t for 1.2 Moz** of gold. Total oxide resources for Tapereba AB stand at **6.7 Mt @ 1.7 g/t for 0.4 Moz** of gold with underlying fresh rock primary resources of **18.6 Mt @ 1.4 g/t for 0.8 Moz** of gold.

From south to north over the 2 km strike length, the deposit has been nominally split into 3 zones referred to as Tap AB 1, Tap AB 2 and Tap AB3. A high grade zone referred to as the Trough Zone forms a central lode to the broader deposit where extremely high grade results have been reported recently including **10.4 m @ 25.6 g/t gold and 10.3 m @ 23 g/t gold**.

At Tap AB 1 a gently west-dipping lode with very low strip ratio exists where recently reported approximate true width results included **33 m @ 4.3 g/t gold** from 4 m and **19 m @ 4.5 g/t gold** from 3 m.

Tapereba AB has been drilled to approximately 300 m below surface and remains completely open at depth. The south eastern end of Tapereba AB also remains completely open and is currently being followed up with infill and extensional drilling.

#### **Tapereba C – 6.5 Mt @ 1.2 g/t gold for 0.3 Moz**

Tapereba C is located between Tapereba AB to the south and Urucum to the north along the same north-trending BIF unit which forms a continuous mineralised trend over the 7 km length. Total resources for Tapereba C are **6.5 Mt @ 1.2 g/t for 0.3 Moz** of gold. The deposit has a deep weathering profile and is dominated by oxide mineralisation.

#### **Tapereba D – 2.4 Mt @ 1.2 g/t gold for 0.1 Moz**

Tapereba D is located immediately adjacent to the existing plant site. Mineralisation is hosted in a northwest trending structure splaying off the main north-south trending BIF that hosts the other deposits. Previous mining of heap leach oxide from Tap D1 and Tap D2 has resulted in remnant mineralisation existing beneath these pits and also in the unmined D3 lode.

#### **Duck Head – 0.1 Mt @ 17.1 g/t gold for 63 koz**

The Duck Head deposit is located approximately 6 km southeast of Tapereba AB along the same BIF unit that hosts the gold and also iron ore. The mineralisation is hosted in oxide material and remains open at depth. The extreme high grade nature and the plunging pipe type geometry of the mineralisation highlights the potential for additional extensions and repetitions to be discovered.

#### **Stockpiles – 7.4 Mt @ 0.8 g/t gold for 0.2 Moz**

A large inventory of spent ore and low grade stock piles adjacent to the plant site are an important source of ore for future processing. Total resources for spent ore and low grade stock piles are **5.8 Mt @ 0.8 g/t gold for 140 koz** and **1.5 Mt @ 0.9 g/t for 44 koz** respectively. Metallurgical testwork completed on these stock piles indicates excellent recoveries averaging 90 % for the spent ore.

Brazil	Measured Resource			Indicated Resource			Inferred Resource			Total Resource		
	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)
Urucum Oxide				3,036	1.21	118	4,708	1.43	217	7,744	1.34	335
Tapereba AB Oxide				4,712	1.88	284	1,985	1.32	84	6,697	1.71	369
Tapereba C Oxide				1,699	1.39	76	1,835	1.04	61	3,534	1.21	137
Tapereba D Oxide				1,124	1.22	44	287	1.58	15	1,411	1.29	59
Duckhead Oxide							115	17.06	63	115	17.06	63
<b>Total Oxide</b>				<b>10,571</b>	<b>1.54</b>	<b>522</b>	<b>8,930</b>	<b>1.53</b>	<b>440</b>	<b>19,501</b>	<b>1.54</b>	<b>962</b>
Urucum Primary				21,049	1.62	1095	19,974	1.67	1071	41,023	1.64	2,165
Tapereba AB Primary				7,837	1.23	309	10,755	1.47	509	18,591	1.37	817
Tapereba C Primary				318	1.25	13	2,665	1.25	107	2,983	1.25	120
Tapereba D Primary				401	1.09	14	592	1.2	23	993	1.16	37
<b>Total Primary</b>				<b>29,605</b>	<b>1.50</b>	<b>1,431</b>	<b>33,986</b>	<b>1.56</b>	<b>1,709</b>	<b>63,591</b>	<b>1.54</b>	<b>3,139</b>
Spent Ore	5,808	0.75	140							5,808	0.75	140
Low Grade	1,545	0.89	44							1,545	0.89	44
<b>Total Stock Pile</b>	<b>7,353</b>	<b>0.78</b>	<b>184</b>							<b>7,353</b>	<b>0.78</b>	<b>184</b>
<b>Total Tucano</b>	<b>7,353</b>	<b>0.78</b>	<b>184</b>	<b>40,176</b>	<b>1.51</b>	<b>1,953</b>	<b>42,916</b>	<b>1.56</b>	<b>2,150</b>	<b>90,445</b>	<b>1.47</b>	<b>4,286</b>
Tartaruga							5,500	1.6	279	5,500	1.6	279
<b>Total Brazil</b>	<b>7,353</b>	<b>0.78</b>	<b>184</b>	<b>40,176</b>	<b>1.51</b>	<b>1,953</b>	<b>48,416</b>	<b>1.56</b>	<b>2,429</b>	<b>95,945</b>	<b>1.48</b>	<b>4,565</b>

Australia	Measured			Indicated			Inferred			Total		
	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)	Tonnes ('000)	Grade g/t Au	Ounces ('000)
Reedy Creek							609	2.4	47	609	2.4	47
<b>Beadell Total</b>	<b>7,353</b>	<b>0.78</b>	<b>184</b>	<b>40,176</b>	<b>1.51</b>	<b>1,953</b>	<b>49,025</b>	<b>1.57</b>	<b>2,476</b>	<b>96,554</b>	<b>1.49</b>	<b>4,612</b>

**Table 1. Beadell JORC Resource Estimate**

Mineral resources were calculated using Ordinary Kriging (OK) methodology. The resources have been reported using a 0.5 g/t lower cut off. Top cuts vary between lodes and deposits, according to the statistical distributions of the grades. The resources have been divided into oxide and primary domains. For the purposes of reporting, the transitional material has been included as oxide. See Appendix 1 for resource estimation parameters.

#### Competency Statement

The information in this report relating to Tucano Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Daniel Guibal who is a member of the Australian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the various styles of mineralisation under consideration 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 Guibal is a full time employee of SRK and he consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report relating to Tartaruga and Reedy Creek Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Robert Watkins who is a member of the Australian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the various styles of mineralisation under consideration 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 Watkins is a full time employee of Beadell Resources Ltd and he consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

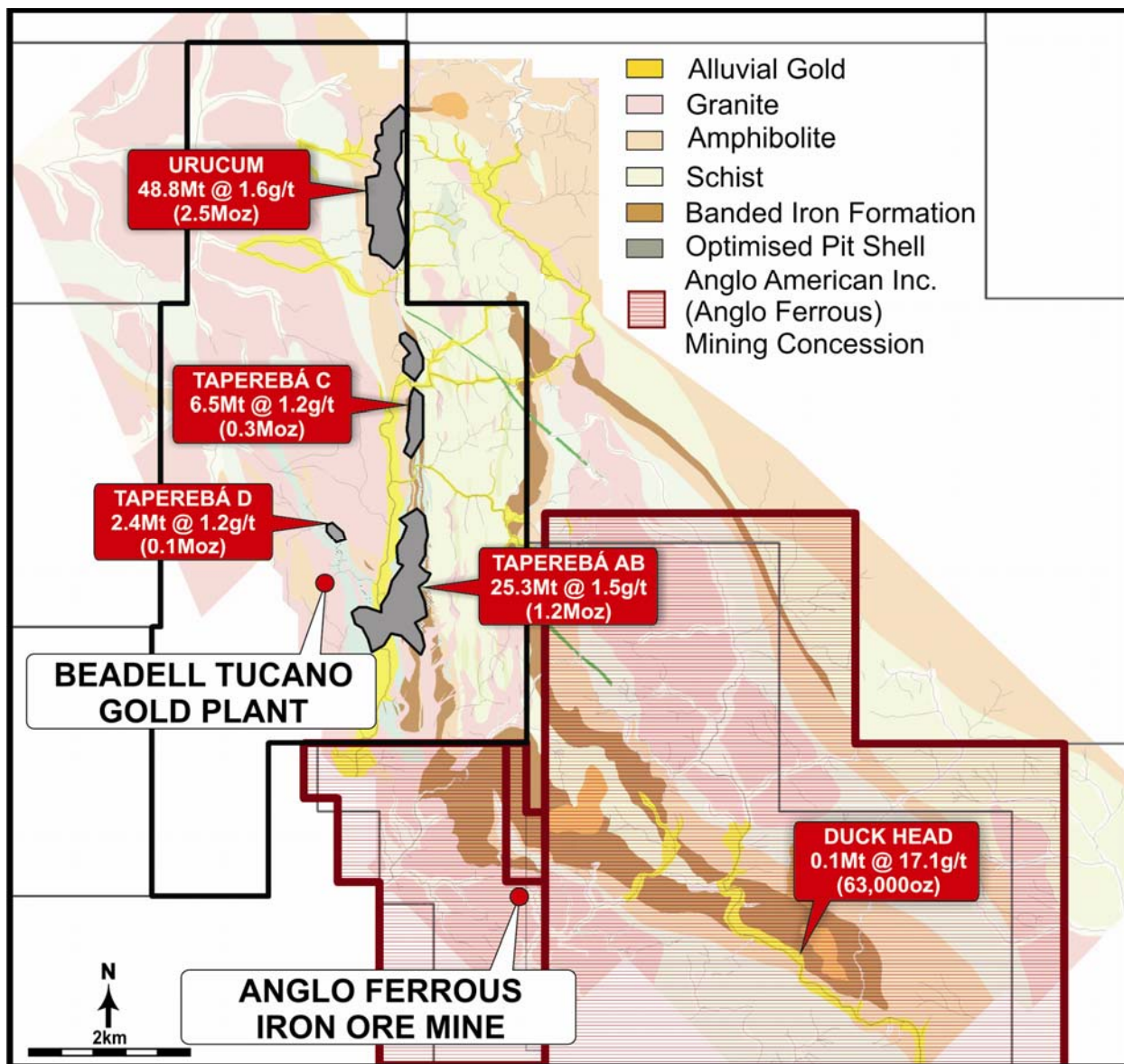


Figure 1. Tucano Deposit Locations

**For further information please contact:**

Peter Bowler | **Managing Director**  
 T: +61 8 9429 0801  
[peter.bowler@beadellresources.com.au](mailto:peter.bowler@beadellresources.com.au)

Rob Watkins | **Executive Director Geology**  
 T: +61 8 9429 0802  
[rob.watkins@beadellresources.com.au](mailto:rob.watkins@beadellresources.com.au)

**Competency Statement**

The information in this report relating to Exploration Results and Mineral Resources is based on information compiled by Mr Robert Watkins who is a member of the Australasian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the various styles of mineralisation under consideration to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Watkins is a full time employee of Beadell Resources Ltd. Mr Watkins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Appendix 1.

### Estimation Parameters for Tucano Deposits.

- Gold mineralisation at Urucum, Tapereba C and Tapereba AB occurs over a 7 km strike length and is associated with the subparallel intersection of a north-south shear zone and a BIF (Banded Iron Formation) unit which also host significant quantities of friable iron ore. Higher grades are associated with the more intensely hydrothermally altered rocks, particularly within the BIF unit. Deep oxidation has produced near-surface saprolitic mineral deposits overlying the primary sulphide mineralization. Additional oxide gold occurs in an overlying colluvium layer up to 10 metres thick. Primary mineralization consists of a series of sulphide-bearing lenses which strike north and north-northwest, and dip 60 to 80° east except for the western zone in Tapereba AB1 pit which dips shallowly 25-45° west. Individual lenses achieve a thickness of between 5m and 33m. Sulphide content ranges from 5% to 10% and is mostly pyrrhotite and pyrite.
- A summary of the drill holes in each Tucano Mineral Resource is tabulated below.

Deposit	Diamond Holes	Diamond Metres	RC Holes	RC Metres	Total Hole	Total Metres
Tapereba AB	476	62,315	429	24,315	905	86,630
Tapereba C	151	17,079	176	8,124	327	25,203
Tapereba D	80	7,636	79	5,843	159	13,479
Urucum	269	61,666	103	8,252	372	69,918
Duck Head	13	1,894	0	0	13	1,894

- RC Holes of 3 inches diameter were angled to the east and west at generally minus 60°. Entire samples are taken every metre, dried and split on site to 600g. 300g split of this sample is then pulverised to -100um and a 100g pulp shipped for offsite analysis.
- The diamond drill holes commence with HQ size in the colluvium/saprolite, reducing to NQ size in hard rock. Core is half cut to a maximum length of 1m, crushed (-2mm) and split to 600g. 300g of this sample is then pulverised to -100um and a 100g pulp shipped for offsite analysis.
- All gold determinations were carried out by standard 50g fire assay at SGS laboratories in Belo Horizonte. Pulps are retained on the mine site for storage.
- Diamond holes have been surveyed by techniques unaffected by magnetism such as Maxibore and more recently Deviflex methods.
- Drillhole collar locations and elevation are surveyed by total station.
- The resources have been drilled up to 500 vertical metres below surface on a 40m x 20m drill pattern with infill drilling (ongoing) down to a 20x20m pattern.
- Bulk densities have been measured on wet samples at irregular intervals in the oxide (where reasonable intact core can be collected) and every metre in the fresh material. Dry densities have been back-calculated for the oxide material at the modelling stage using the moisture content of various lithology types established from wet vs dry drill core density and insitu tests within the open pits at Tucano. Block model densities have been estimated using nearest neighbour technique and constrained within lithological, hardness and oxidation domains.
- For both RC and Diamond, a lab duplicate, field duplicate and certified standard are inserted every 20<sup>th</sup> sample. A blank is inserted at the start of every batch. Standard results are routinely checked to ensure values are within tolerance and the whole batch submitted for reanalysis if this is exceeded.
- Each model has been modelled separately in Isatis and imported into a sub-blocked Datamine model. Blocks 8m x 20m x 4m (x,y,z) were defined and ordinary kriging was used to estimate block grades within individual lode wireframes and a surrounding 0.1g/t low grade envelope.
- Oxidation, colluvium and resistance surfaces were modelled for each deposit. Geological domains were wireframed.
- Drill hole samples have been composited to 2m intervals for the resource calculation.
- Various top cuts were applied depending on the statistical distribution of gold within each lode or domain for each deposit.