



### **Maiden Hangingwall Lode Resource – 584,000t @ 3.8 g/t for 71,000 oz**

A maiden Hangingwall Lode JORC Indicated and Inferred Resource of **584,000 t @ 3.8 g/t for 71,000 oz** has been estimated at the Duckhead deposit, which as mentioned above, brings the expanded Duckhead total resource to **678,000 t @ 7.5 g/t gold for 164,000 oz**. The Hangingwall Lode resource remains completely open at depth below the shallow drilling of less than 100 m below surface.

The Hangingwall Lode resource comprises a total JORC Indicated Resource of 315,000 t @ 3.6 g/t for 36,000 oz and total JORC Inferred Resource of 270,000 t @ 4.0 g/t for 34,000 oz reported at a 1.0 g/t gold lower cut off. The main Hangingwall Lode consists of an approximately 20 m wide, steeply southwest dipping lode containing JORC Indicated and Inferred resources of 311,000 t @ 4.0 g/t for 40,000 oz.

The Hangingwall Lode is overlain by a 5 m thick mineralised colluvium blanket at surface covering an area of approximately 100 m x 100 m with a JORC Indicated Resource of 97,000 t @ 2.7 g/t for 8,000 oz.

### **Hangingwall Pit – 272,000 tonnes @ 3.2 g/t for 28,000 oz gold**

The new Hangingwall Lode is located less than 100 m from the high grade Main Lode resource. The high grade Main Lode starter pit has been redesigned and expanded to incorporate the new Hangingwall Lode forming a single first stage starter open pit with a Probable JORC Reserve of **70,000 tonnes @ 30.2 g/t for 68,000 oz** from the Duckhead high grade Main Lode and **272,000 tonnes @ 3.2 g/t for 28,000 oz** from the joined Hangingwall pit. The total JORC Probable Reserve for the combined Duckhead starter pit totals **342,000 tonnes @ 8.7 g/t for 96,000 oz**.

Physical outputs from the Hangingwall pit are itemised in Table 1 below showing that the Duckhead starter pit will be an extremely profitable open pit.

The Hangingwall starter pit reserve represents a first stage pit on the Hangingwall Lode. The Hangingwall Lode has been drilled to less than 100 m below surface and the starter pit is bottoming out on the base of Indicated resource. Further drilling is underway to extend and convert additional resources and reserves at both the Hangingwall and high grade Main Lodes.

The Hangingwall starter pit also contains significant amounts of friable itabirite iron ore comprising approximately 70% of the total material movement from the pit. Under the terms of the Duckhead Agreement with Anglo Ferrous, any iron ore mined by Beadell will be compensated on a cost recovery basis thereby significantly reducing waste stripping costs.

Approvals to mine the Duckhead gold starter pit are progressing well and Beadell maintains a target of April 2013 to start mining of open pit.

<b>Physicals</b>	<b>Open pit</b>
Gold Ore (000' tonnes)	272
Gold Grade (g/t)	3.2
Contained gold (000' ounces)	28
Milling recovery	96%
Recovered gold (000' ounces)	27
Total material – (dry million tonnes)	3.3
Iron ore – (wet million tonnes)	2.6

**Table 1. Hangingwall Pit Physicals**

### Duckhead Drill Results – New lode discovered in FVD038, 14 m @ 3.2 g/t from 87 m

Ongoing drilling results at the Duckhead deposit continues to show high potential for continued growth of the resource, with the discovery of a new high grade oxide lode intersected in the precollar FVD038 of **14 m @ 3.2 g/t gold** from 87 m. Drilling is under way to determine the extent and magnitude of this new lode.

Other highly encouraging results received from the high grade Main Lode in FVD037 include **6 m @ 23.2 g/t gold** from 148 m including **3 m @ 44.6 g/t gold** and this remains completely open at depth (Figure 1 & 2).

A significant result was received from the Hangingwall Lode of **13 m @ 5.9 g/t gold** from 73 m including **4 m @ 14.5 g/t gold** from 80 m. This latest Hangingwall result was recorded in fresh primary ore demonstrating the excellent continuity of the Hangingwall Lode. The recently discovered Hangingwall Lode remains completely open at depth and has only been drilled to approximately 80 m below surface (Figure 1 & 2).

The Duckhead deposit remains highly prospective for both direct extensions of the high grade Main and Hangingwall Lodes and also for the discovery of additional high grade lodes in the immediate area. Over the coming months drilling rates will increase significantly in the area as access is opened up for commencement of open pit mining operations.

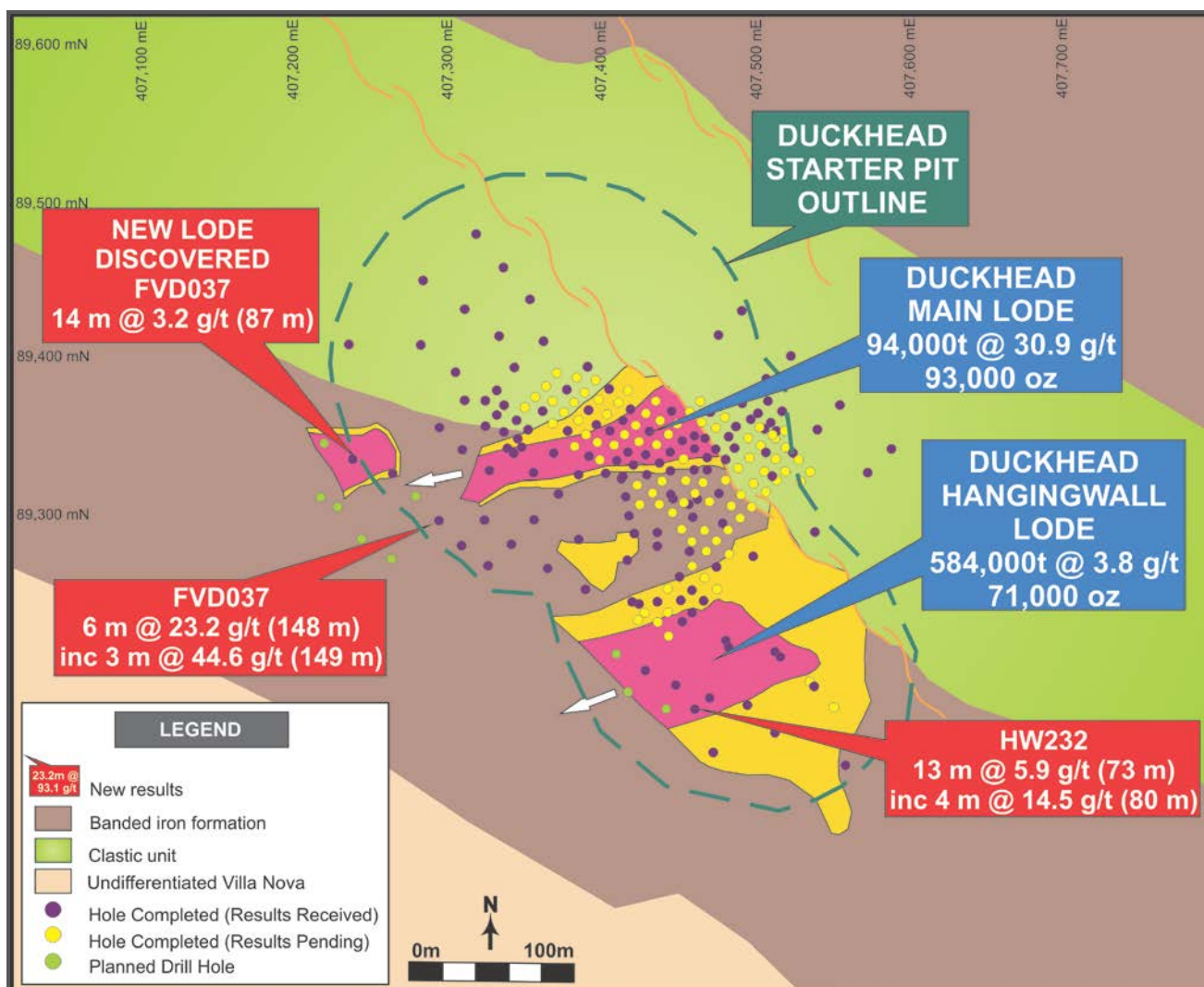


Figure 1. Duckhead plan showing location of new RC results and starter pit

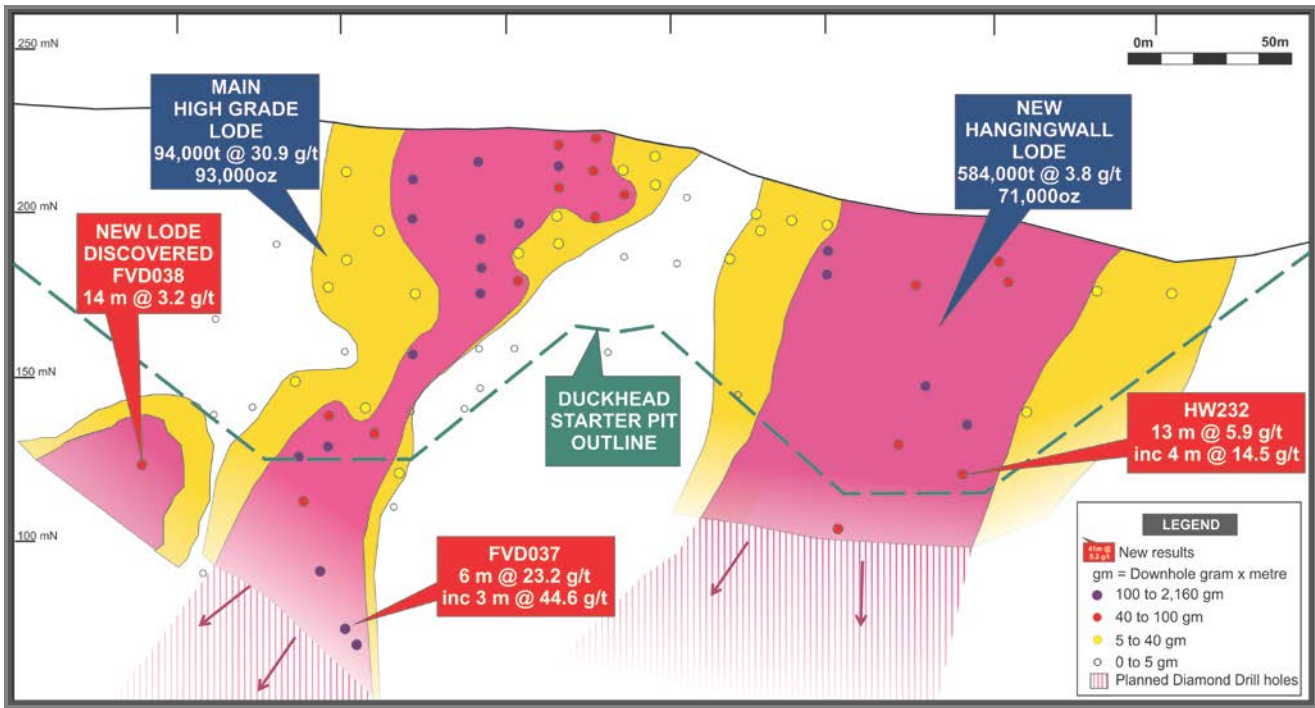


Figure 2. Duckhead long-section showing location of new RC drill results and starter pit

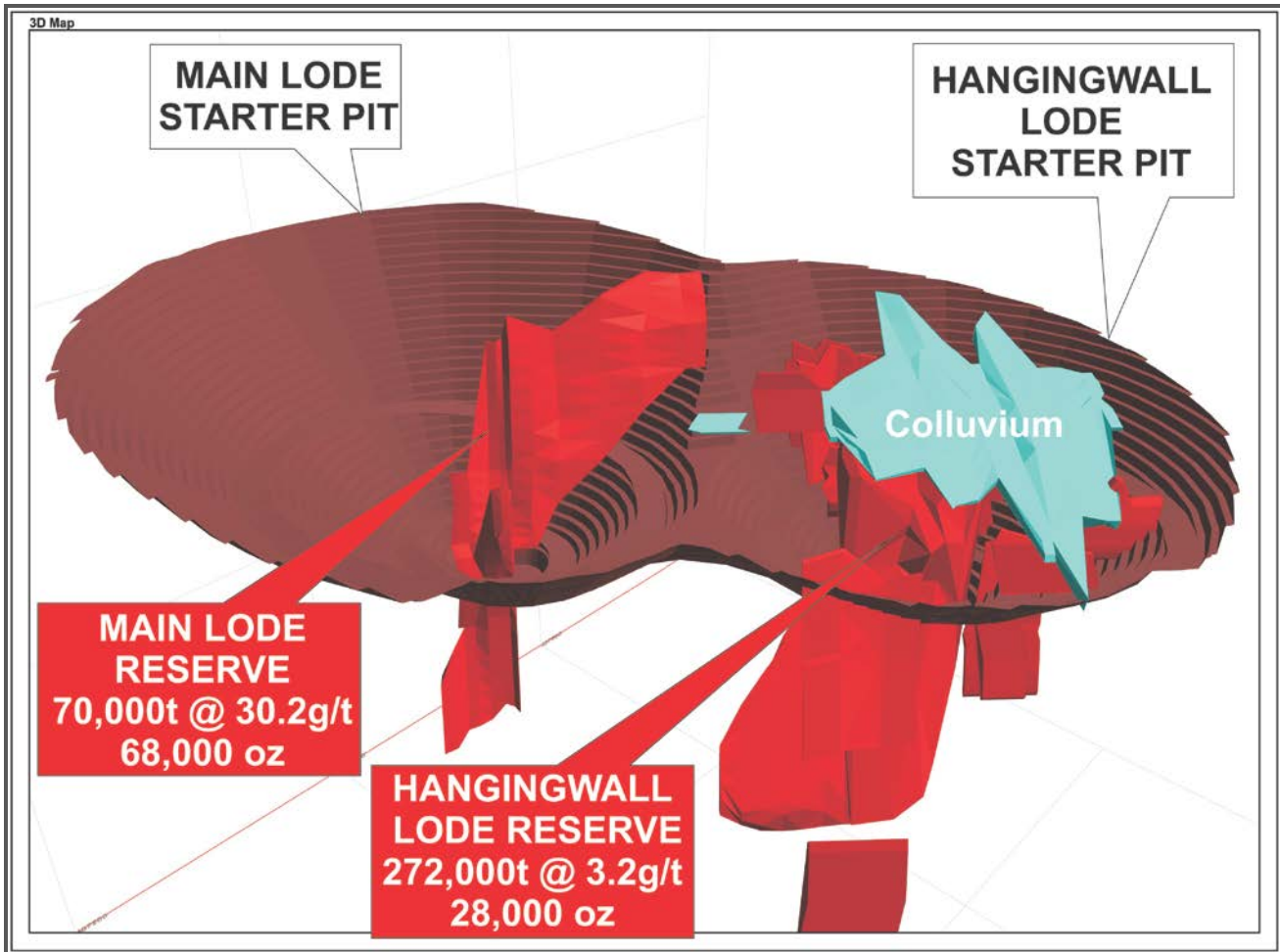


Figure 3. 3D image showing Duckhead Main Lode and Hangingwall Lode within starter pit



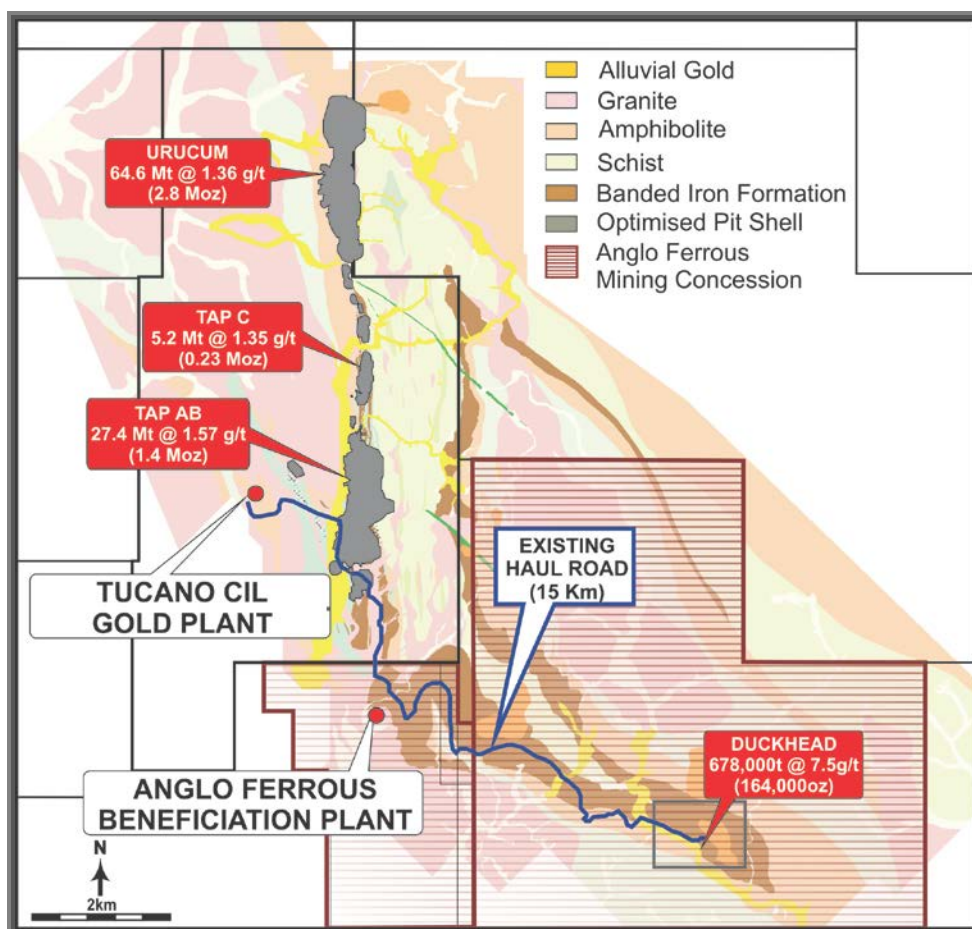


Figure 4. Tucano plan showing location of Duckhead and haul road access.

Duckhead Lode	Hole	From (m)	To (m)	Width (m)	Gold (g/t)
Duckhead Main Lode	FVD037	148	154	6	23.2
		149	152	3	44.6
Duckhead New Lode	FVD038	87	101	14	3.2
Duckhead Hangingwall Lode	HW232	73	86	13	5.9
		80	84	4	14.5
Duckhead Hangingwall Lode	HW314	0	2	2	1.1
		6	12	6	0.7
Duckhead Hangingwall Lode	HW330	0	10	10	0.9
		28	36	8	1.1
Duckhead Hangingwall Lode	HW352	40	44	4	1.6
		0	3	3	0.8
Duckhead Hangingwall Lode	HW359	4	6	2	0.8
Duckhead Hangingwall Lode	HW372	4	10	6	0.6
		35	47	12	2.0
Duckhead Hangingwall Lode	HW380	2	5	3	0.5

All results are reported as >0.5g/t with no greater than 2 m internal dilution.

Table 2. Duckhead new drill results.

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## **Competency Statement**

*The information in this report relating to Open Pit Ore Reserves is based on information compiled by Mr Mark Jewell 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jewell is a full time employee of Beadell Resource Ltd 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 in this report relating to Mineral Resources is based on information compiled by Mr Marcelo Batelochi 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 Batelochi is a consultant 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 in this report relating to Exploration Results 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**

### **Reserve Parameters for Duckhead Deposit**

- Whittle pit optimisation software was used to generate the pit design.
- The pit optimisation Geotechnical slope parameters were based on Tucano historical data and independent consultant review.
- The geotechnical parameters assume drained or partially drained slope conditions that include pit dewatering and depressurisation measures. These measures are considered technically possible considering the site conditions but have not yet been proven in the field.
- The mining model used a 10% mining dilution and 100% extraction of the ore to generate the diluted gold grades.
- Densities were based on lithological modelling and derived from an extensive database of specific gravity in situ measurements.
- Mining costs were estimated for an owner operator scenario, guided by the April 2011 DFS study cost estimates.
- The processing costs and processing recoveries were provided by Ausenco and allocated by material type for the pit optimisation purposes.
- The gold recoveries for this Ore Reserve were based on test work data trends for 80% passing sizes of approximately 115 microns.
- The operating costs for the 3.5 Mt/y throughput, used for this Ore Reserve, were calculated based on the unit cost and methodology outlined in the Tucano Definitive Feasibility Study for the 3 Mt/y plant but adjusted as fixed and variable costs for the higher throughput.
- Inferred Resource material blocks were classified as waste for pit optimisation purposes.
- Pit designs incorporate the use of ramps suitable for 100 ton haul trucks for the upper section and 35 ton trucks for the final 20m to pit bottom.
- Base gold revenue for the pit optimisations was US\$1,200 per troy ounce gold. A 2% royalty charge was deducted from this base revenue as selling costs. A US\$ 2 per troy ounce charge was used for refining charges.
- Hangingwall reserves are reported above a 1.0 g/t lower cut off. The Main Lode reserves are reported above a 1.5 g/t lower cut off.

## Resource Parameters for Duckhead Deposit

- Gold mineralisation at Duckhead occurs on a sheared contact between a BIF (Banded Iron Formation) unit which also host significant quantities of friable iron ore. Higher grades are associated with the more intensely sheared and hydrothermally altered rocks. Deep oxidation along the lode has produced abundant near-surface saprolitic mineral deposits. Additional oxide gold occurs in an overlying colluvium layer up to 10 metres thick. Primary mineralization has been intersected in the Hangingwall lode at a depth of approximately 60 m.
- A summary of the drill holes at Duckhead is tabulated below.

Deposit	Diamond Holes	Diamond Metres	RC Holes	RC Metres	Total Hole	Total Metres
Duckhead	13	1,894	140	9618	153	11,512

- Duckhead Hangingwall resource is reported above a 1.0 g/t gold lower cut-off grade.
- RC Holes of 5 and quarter inch diameter were angled to the northeast at generally minus 60°. Entire samples are taken every metre, cone split, then dried and split on site to 600g. 300g split of this sample is then pulverised to -100 um 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 600 g. 300 g of this sample is then pulverised to -100 um and a 100 g 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 Hangingwall resource has been drilled up to 100 vertical metres below surface on a 30 m x 30 m drill pattern.
- Densities were based on lithological modelling and derived from an extensive database of specific gravity in situ pit measurements.
- 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.
- The Duckhead resource was modelled and estimated using conventional 3D wireframing and block modelling within Surpac software.
- The hangingwall lode was defined using a 2 g/t Au mineralisation boundary and a 0.3 g/t Au low grade halo.
- Ordinary Kriging was used to estimate block grades into parent cells of 5m x 10m x 2m (xyz) within individual lode wireframes. Sub-blocks of 0.625m x 2.5m x 1m (x,y,z) were defined for volume resolution.
- A top cut was applied to individual intervals, cutting the grade to 20 g/t gold.
- Oxidation, colluvium and resistance surfaces were modelled. Geological domains were wireframed.
- Drill hole samples have been composited to 1 m intervals for the resource estimation.