



## PHOENIX'S MINERAL RESOURCES GROW BEYOND 4 MILLION OUNCES

### HIGHLIGHTS

- *Infill, extensional and validation drilling programmes completed at the Kintore, Red Dam, Burgundy and Castle Hill Stage 3 gold projects<sup>1</sup>*
- *Updated resource modelling completed by independent consultants*
- *Resource at Kintore grows to 686,000 ounces<sup>2</sup>*
- *Castle Hill Stage 3 Resource more than doubles to 272,000 ounces<sup>2</sup>*
- *Phoenix total Mineral Resources grow 6% to 4.02 million ounces<sup>2</sup> comprising:*
  - *Mill feed of 54.2Mt at 1.7g/t Au for 2,913,000 ounces*
  - *Heap leach feed of 58.3Mt at 0.6g/t Au for 1,109,000 ounces*
- *Updated open pit Reserve studies underway as part of the staged mine development plan and heap leach feasibility study*

ASX: PXG

**Table 1: Phoenix Gold – Summary of Mineral Resources<sup>2</sup> (see also Appendix 1)**

Project (Mill Feed)	Measured Mineral Resource			Indicated Mineral Resource			Inferred Mineral Resource			Total Mineral Resource		
	Mt	Au (g/t)	Au Oz	Mt	Au(g/t)	Au oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Mick Adams/Wadi				18.09	1.5	894,000	6.39	1.3	274,000	24.48	1.5	1,168,000
Kintore				3.03	1.6	160,000	4.21	1.8	239,000	7.24	1.7	399,000
Castle Hill Stage 3				2.38	1.4	109,000	1.36	1.3	59,000	3.74	1.4	168,000
Red Dam				2.05	2.1	140,000	1.04	2.2	74,000	3.09	2.2	214,000
Broads Dam				0.13	2.9	12,000	2.16	2.3	158,000	2.29	2.3	170,000
Burgundy	0.49	2.0	31,000	0.40	2.3	29,000	0.09	1.5	4,000	0.98	2.0	65,000
Kunanalling				0.46	2.4	35,000	4.12	1.7	229,000	4.58	1.8	264,000
Ora Banda				2.36	2.0	149,000	2.79	1.8	163,000	5.15	1.9	312,000
Carbine				1.70	1.6	86,000	0.21	2.1	14,000	1.91	1.6	100,000
Zuleika North							0.62	2.5	49,000	0.62	2.5	49,000
Stockpiles				0.08	1.4	4,000				0.08	2.5	4,000
<b>Total</b>	<b>0.49</b>	<b>2.0</b>	<b>31,000</b>	<b>30.68</b>	<b>1.6</b>	<b>1,618,000</b>	<b>22.99</b>	<b>1.7</b>	<b>1,263,000</b>	<b>54.16</b>	<b>1.7</b>	<b>2,913,000</b>

Project (Heap leach feed)	Measured Mineral Resource			Indicated Mineral Resource			Inferred Mineral Resource			Total Mineral Resource		
	Mt	Au (g/t)	Au Oz	Mt	Au(g/t)	Au oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Mick Adams/Wadi				21.54	0.6	400,000	10.98	0.6	198,000	32.52	0.6	598,000
Kintore				6.68	0.6	131,000	7.87	0.6	156,000	14.55	0.6	287,000
Castle Hill Stage 3				3.80	0.6	68,000	2.01	0.6	36,000	5.81	0.6	104,000
Burgundy	1.04	0.6	22,000	0.86	0.6	18,000	0.22	0.6	4,000	2.12	0.6	44,000
Red Dam				1.89	0.7	44,000	0.97	0.7	23,000	2.86	0.7	67,000
Stockpiles				0.48	0.6	9,000				0.48	0.6	9,000
<b>Total</b>				<b>35.25</b>	<b>0.6</b>	<b>670,000</b>	<b>22.05</b>	<b>0.6</b>	<b>417,000</b>	<b>58.34</b>	<b>0.6</b>	<b>1,109,000</b>

<b>Total Jan 2015</b>	<b>0.49</b>	<b>2.0</b>	<b>31,000</b>	<b>65.93</b>	<b>1.1</b>	<b>2,288,000</b>	<b>45.04</b>	<b>1.2</b>	<b>1,680,000</b>	<b>112.50</b>	<b>1.1</b>	<b>4,022,000</b>
-----------------------	-------------	------------	---------------	--------------	------------	------------------	--------------	------------	------------------	---------------	------------	------------------

"When the business commenced we had 595,000 ounces in Resource and no Reserves, and now to have achieved a Resource position of over 4 million ounces including a current Reserve of over 1.1 million ounces in less than 4 years is a testament to the quality of the assets and our exploration team in this world class gold producing region," Managing Director Jon Price said.

"With stock work style deposits on the Kunanalling shear and high grade open cut and underground deposits on the Zuleika shear, we look forward to continuing our search for the next significant discovery with multiple high priority targets identified," Mr Price said.

### Phoenix Gold Ltd

ABN 55 140 269 316

73 Dugan Street  
PO Box 100  
Kalgoorlie WA 6430  
Phone +61 8 9021 2704  
Fax +61 8 9021 3393

[www.phoenixgold.com.au](http://www.phoenixgold.com.au)  
[info@phoenixgold.com.au](mailto:info@phoenixgold.com.au)

<sup>1</sup> As announced on 27 May 2014 and 8 January 2015, 7 October 2014, 25 September 2014 and 16 September 2014 respectively

<sup>2</sup> See also qualification and competent persons statement on pages 16 and 17 and Appendix 1, after depletion (Dec 2014)



## Overview

Phoenix Gold Limited (**ASX: PXG**) ("**Phoenix**" or the "**Company**") is pleased to announce updated Mineral Resources for the 100% owned Kintore, Red Dam, Burgundy and Castle Hill Stage 3 gold projects. Infill, extensional and validation drilling programmes totalled 389 Reverse Circulation ("RC") holes for 33,468 metres completed during 2014. All data was validated and entered into the geological models for Resource evaluation by independent consultants Cube Consulting and Golder Associates.

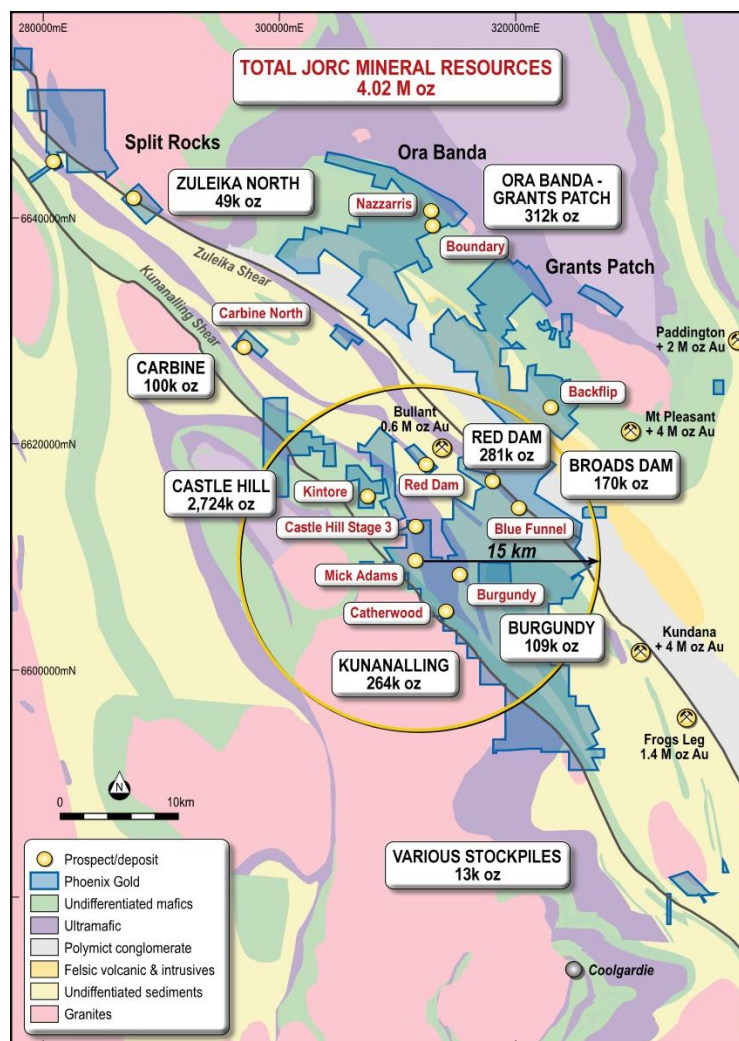
Phoenix's total Mineral Resources (JORC 2012) now stands at 4.02 million ounces<sup>3</sup> comprising:

- Mill feed of 54.16Mt at 1.70g/t Au for 2,913,000oz
- Heap leach feed of 58.34Mt at 0.60g/t Au for 1,109,000oz

This represents a 6% increase on the Mineral Resources of 3.8 million ounces as announced to the ASX on 4 February 2014 and allows for depletion from mining up to December 2014.

The projects are located on the highly prospective Zuleika and Kunanalling shear zones in the heart of the Western Australian Goldfields (Figure 1) less than 50 kilometres from the regional mining centre of Kalgoorlie.

14<sup>th</sup> January 2015



**Figure 1: Project locations, Resources summary and regional geology**

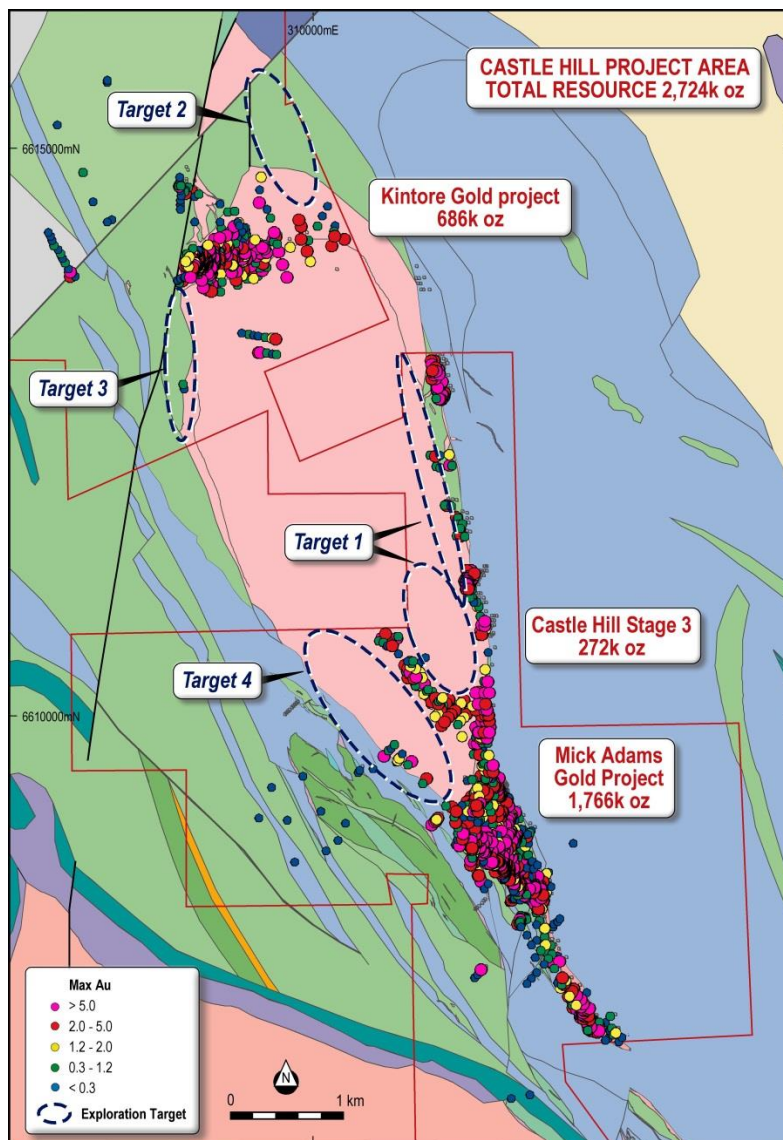
<sup>3</sup> see Table 1 on page 1 and also qualification and competent persons statement on pages 16 and 17 and Appendix 1, after depletion (Dec 2014)



## Kintore Project<sup>4</sup>

14<sup>th</sup> January 2015

As announced on the 27 May 2014 and 8 January 2015, Phases 1 and 2 of the infill and extensional drilling programme was completed with 284 RC holes totalling 21,392 metres at the Kintore Project (Castle Hill Stage 2) (Figure 2). The aim of the programme was to test further extensions to the mineralisation to the south and east of the deposits and at depth, validate historic holes drilled in the 1980s and convert Inferred material into Indicated category for estimation of Reserves.



**Figure 2: Kintore project (Castle Hill Stage 2) location and regional geology**

Significant mineralisation intercepted included 8m at 18.7g/t Au from 72m; 3m at 40.2g/t Au from 16m; 2m at 55.8g/t Au from 76m; 3m at 26.5g/t Au from 74m; 22m at 3.0g/t Au from 36m; 12m at 5.4g/t Au from 26m; 2m at 31.5g/t Au from 79m, 19m at 3.0g/t Au from 15m and 12m at 4.6g/t Au from 37m.

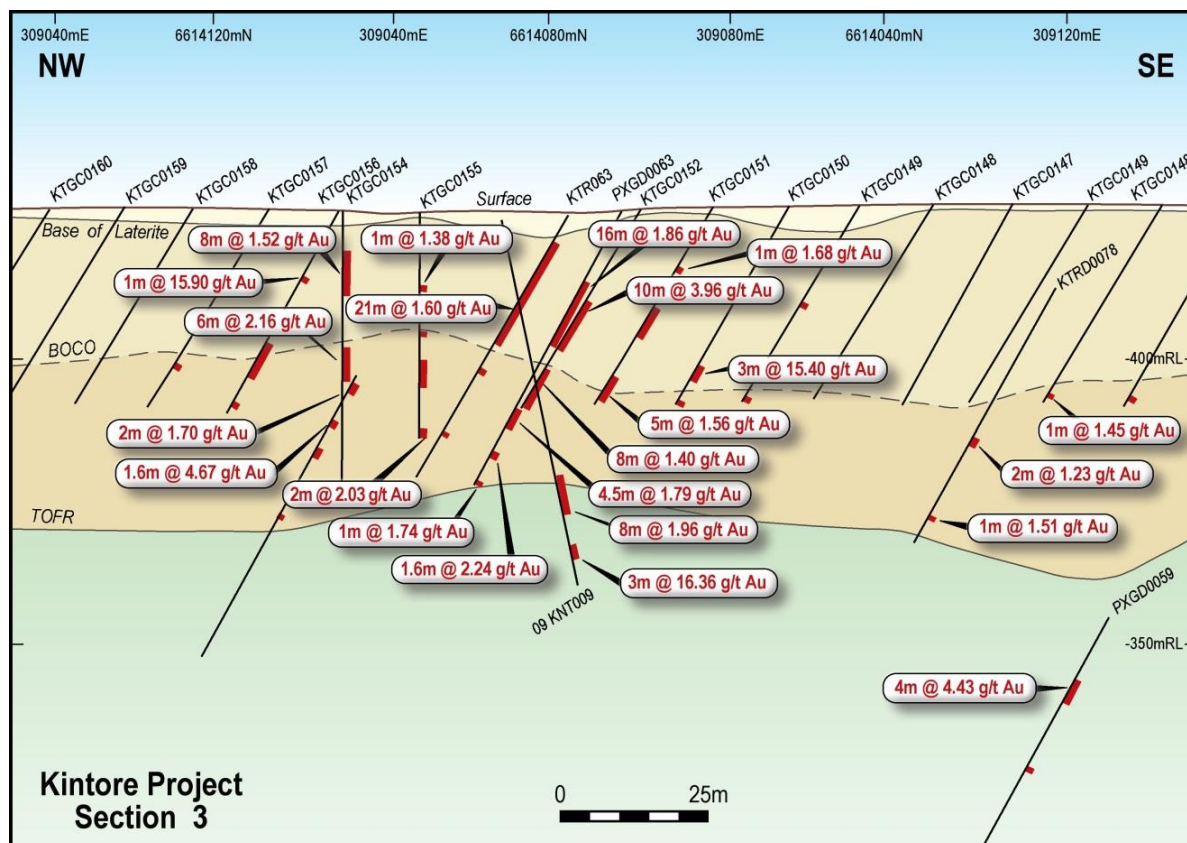
<sup>4</sup>For further details of the Kintore drilling and associated JORC tables (sections 1 and 2), please refer to the announcements released to the ASX on 27 May 2014 and 8 January 2015. See also Appendix 1 for section 3.





The drilling extended the boundary of the gold mineralisation to the south (20 to 25m) and at depth where it remains open along strike and at depth. The gold mineralisation also remains open to the west and east of the drilled area. The drilling also confirmed the tenor of gold mineralisation in some of the historic drilling.

14<sup>th</sup> January 2015



**Figure 3: Kintore project (Castle Hill Stage 2) cross section<sup>5</sup>**

The updated Mineral Resource (JORC 2012, see Table 1 on Page 1) for Kintore now stands at 686,000 ounces, up 37% from the 499,000 ounce Resource published in February 2014 and comprises:

- Mill feed of 4.72Mt at 1.70g/t Au for 408,000oz
- Heap leach feed of 14.94Mt at 0.60g/t Au for 295,000oz

## Kintore Geological Summary

The Kintore project, also known as Castle Hill Stage 2, covers the northern margin of the syn-tectonic granitoid intrusion named the Kintore Tonalite. The northern margin of the tonalite contacts a sequence of tholeiitic and high-magnesian basalts, which have been metamorphosed to hornfels facies adjacent to the contact. The Kintore tonalite is a fine to medium grained massive granitoid of granodioritic composition which is elliptical in plan. The 2 km wide tonalite intrudes ultramafic rocks of the Burbanks Formation in the Telegraph syncline to the east, and mafic/ultramafic rocks of the Burbanks and Hampton Formations to the west. In the Kintore project area the tonalite is 1.78 km in width. The mineralisation at Kintore delineated to date is predominantly orientated E-W with a southerly dip and is 800m in strike length and has a 400m horizontal width.

<sup>5</sup> For further details of the Kintore drilling and associated JORC tables (sections 1 and 2), please refer to the announcement released to the ASX on 27 May 2014 and January 8 2015. See also appendix 1 for section 3.



The dominant structural feature of the project area is the Kunanalling Shear Zone marking the western boundary of the Coolgardie Domain. It has been interpreted as an east dipping listric fault that does not extend below the supra-crustal rocks.

Three styles of mineralisation have been observed on the Kintore tenements to date:

## **Cement or palaeo-drainage mineralisation**

Much of the gold mined from the Kintore region in the early part of the nineteenth century was taken from what are called “cement deposits”. This mineralisation consisted auriferous material associated with two east-west trending Tertiary drainage system which appear to have been draining the north-eastern margin of the Kintore tonalite. The palaeo-drainages appear to coalesce further to the east. Gold mineralisation is associated with a thin (0.75m) basal horizon within the channels consisting of quartz grit with a cryptocrystalline quartz-kaolin matrix and with a pebbly to conglomeratic base. Gold occurs within the matrix (cement) and mined grades occur where the coarser clastic sections occurred at the base of the channel. The basal horizon is overlain by poorly stratified cemented sand which in turn is overlain by a kaolin bed and surficial ironstone and gravels. Historic records indicate that an estimated 20,160 tonnes at an average grade of 20.4g/t Au.

## **Laterite mineralisation**

Pisolitic capping covers the south-eastern portion of the tenement area and is commonly mineralised from surface to the weathered tonalite contact. Thicker higher grade zones relate either to root zones along underlying mineralised veins/structures or the presence of auriferous ferricrete-silcrete nodules at the laterite-weathering tonalite contact. Gold mineralisation within the pisolite cap has been interpreted as being geochemically remobilized from the underlying rock during laterisation.

## **Primary Mineralisation:**

The tonalite appears to be mineralised with gold which is commonly associated with minor quartz veins and disseminated into the surrounding rock. Primary gold mineralisation is associated with blebs of pyrite, arsenopyrite and rare chalcopyrite. Quartz veining intersected in drill core from previous drilling programs are orientated between 0550 and 0850 and vary in thickness from 2cm up to 50cm. A set of major lineaments is interpreted from magnetic and gravity data which are oriented at 3450 which offset 0550 vein set and associated gold mineralisation. Numerous quartz stringers and vein networks are associated with the 0550 quartz veins, these are interpreted as brecciation of the tonalite associated with deformation during the mineralising events.

## **Drilling Details**

RC percussion drilling completed in the March 2014 and December 2014 programmes were completed by Drilling Australia Pty Ltd. Face sampling hammers were used for collection of all down-hole samples.

Samples from the RC drilling were collected over 1m downhole intervals and reduced via cone splitter to produce a 3Kg sub-sample. 99% of the samples reported to the splitting device dry. Wet samples were split through the cone splitter which was washed and dried with compressed air after each sample.



Field quality control procedures for RC percussion drilling involved assay standards, blanks and collection of a field duplicate. Certified standard reference material was inserted in each holes sample stream every 30m starting at 15m. Blank material was inserted into each holes sample stream every 30m starting from 30m down the hole. Field duplicates were collected every 30m down the hole.

RC percussion samples were collected into pre-numbered calico bags at the rig by drilling personnel. A geologist or field assistant cross checked the bag number against the metre interval before recording sample number in triplicate in a sample submission book. Some randomisation of sample numbers was conducted.

Assay laboratories in Kalgoorlie and Perth were used for assaying. Gold assays were determined using a fire assay with 40g charge and AAS finish. Laboratories used completed internal standard regimes and re-assayed every 20th sample. Umpire checks were undertaken by different laboratory in Kalgoorlie and or Perth. Quality assurance / control for the programme showed acceptable performance

RC sample chips were geologically logged to a level of detail to support reporting of Exploration Results. Logging was both qualitative and quantitative; full descriptions of lithologies, alteration, and oxidation were noted on log sheets as well as percentage estimates of alteration minerals present, veining, and/or an sulphide minerals present. Magnetic susceptibility was also collected from the RC percussion sample intervals.

All drillhole collars were surveyed using a DGPS (+/- 0.2m) by Cardno Pty Ltd, qualified surveyors; downhole survey was completed on all RC percussion holes using an open-hole gyro compass using a magnetic north seeking tools. All drilling was planned and surveyed using MGA94\_Zone51 grid.



## Red Dam Project<sup>6</sup>

14<sup>th</sup> January 2015

As announced on the 7 October 2014, the infill and extensional drilling programmes were completed with 29 RC holes totalling 3,126m at the Red Dam project (Figure 1). The aim of the programme was to test the short range continuity of the central high grade zone and to test for up-dip extensions of the gold mineralisation in the northern peripheries of the deposit.

The project is located on the highly prospective Zuleika shear zone in the heart of the Western Australian Goldfields less than 50km from the regional mining centre of Kalgoorlie and immediately north of the Kundana gold province.

Significant mineralisation intercepted includes 23m at 8.9g/t Au from 88m, 1m at 87.8g/t Au from 107m, 11m at 5.3g/t Au from 31m, 2m at 25.8g/t Au from 64m, 17m at 2.6g/t Au from 73m, 12m at 2.9g/t Au from 93m, 7m at 4.8g/t Au from 82m, 9m at 3.4g/t Au from 44m.

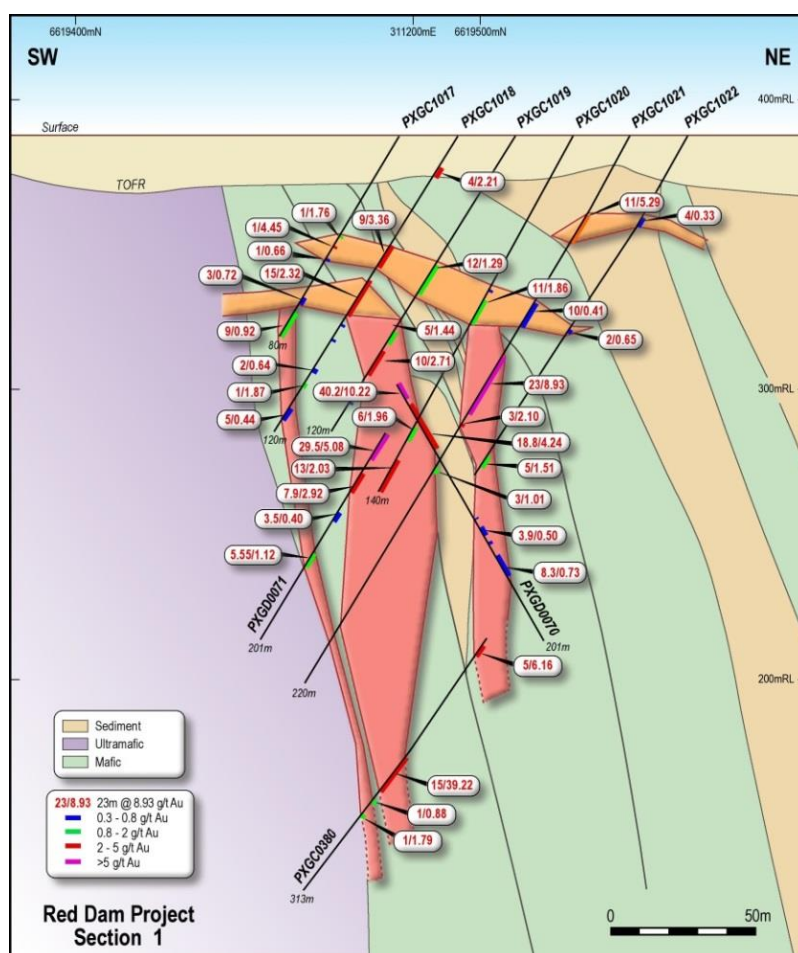


Figure 4: Red Dam project cross section<sup>6</sup>

The updated Mineral Resource (JORC 2012, see Table 1 on Page 1) for Red Dam now stands at 281,000 ounces, up 7% from the 262,000oz Resource published in February 2014 and comprises:

- Mill feed of 3.09Mt at 2.20g/t Au for 214,000oz
- Heap leach feed of 2.86Mt at 0.70g/t Au for 67,000oz

<sup>6</sup> For further details of the Red Dam drilling and associated JORC tables (sections 1 and 2), please refer to the announcement released to the ASX on 7 October 2014. See also Appendix 1



## Red Dam project geological summary

14<sup>th</sup> January 2015

The Red Dam project occurs within the Zuleika and Kunanalling structural corridor. The principal structure in the Red Dam area is interpreted as a splay of the Zuleika Shear, which approximately strikes to 315°. Within the Red Dam area this principal structure changes strike to 340°. Geological interpretation of the Red Dam area shows the stratigraphy consisting of basalt, quartz dolerite, tuffaceous sediments and agglomerate of intermediate composition flanked to the east by felsic to intermediate volcanics and minor sediments and to the west by talc-chlorite+/-carbonate ultramafics. The mineralised zone comprises a north-west striking steeply east dipping deformed stratigraphy of felsic to intermediate volcanics and volcanics, tuffaceous siltstones and sandstones, shales and carbonaceous shales, basalt and dolerite intrusives.

Structural data recorded from angled core holes indicates the shear foliation within the Red Dam area strikes sub-parallel to the stratigraphy (northwest-southeast- magnetic) and dips steeply (85-90°) to the north-east. Orientation data gathered from the core indicates the geological contacts and bedding laminations within the sedimentary units dip obliquely to the shear foliation.

Gold mineralisation at Red Dam occurs in most geological units however there are two zones which can be traced through most drilling sections. The bulk of the mineralisation is contained within these two zones. The principal mineralised zone is the Central Quartz Dolerite Lode which occurs within a quartz dolerite unit and is associated with both quartz-carbonate stockwork-style veining and late stage planar quartz-carbonate-pyrite veining. Gold mineralisation within this lode thickens where structures within the dolerite dip steeply to the west before rolling over to dip steeply to the east in the down dip position. The second mineralised position is on the dolerite/sediment contact. This mineralisation has been interpreted to occur consistently on the contact between the quartz-dolerite and hangingwall tuffaceous sediments. Gold mineralisation in this position is best developed within medium to coarse grained, silica-sericite-carbonate-leucoxene-sulphide altered tuffaceous sandstone units.

Weathering in the area is deep with up to 10m of transported soil overlying the deposit. Sporadic supergene mineralisation occurs at the base of oxidation approximately 30m below surface. Supergene mineralisation occurs at or near geological contacts while primary gold mineralisation and supergene enrichment zones are constrained within the zones noted above.

## Drilling Details

RC percussion drilling was completed in May through July 2014 at the Red Dam Project. A total of 29 holes for 3,126m were completed as part of an extension programme. Face sampling hammers were used for collection of all down-hole samples.

Samples from the RC drilling were collected over 1m downhole intervals and reduced via cone splitter to produce a 3Kg sub-sample. 99% of the samples reported to the splitting device dry. Wet samples were split through the cone splitter which was washed and dried with compressed air after each sample.

Field quality control procedures for RC percussion drilling involved assay standards, blanks and collection of a field duplicate. Certified standard reference material was inserted in each borehole's sample stream every 30m starting at 15m. Blank material was inserted into each holes sample stream every 30m starting from 30m down the hole. Field duplicates were collected every 30m down the hole.





RC percussion samples were collected into pre-numbered calico bags at the rig by drilling personnel. A geologist or field assistant cross checked the bag number against the metre interval before recording sample number in triplicate in a sample submission book. Some randomisation of sample numbers was conducted.

Assay laboratories in Kalgoorlie and Perth were used for assaying. Gold assays were determined using a fire assay with 40g charge and AAS finish. Laboratories used completed internal standard regimes and re-assayed every 20th sample. Umpire checks were undertaken by different laboratory in Kalgoorlie and or Perth. Quality assurance / control for the programme showed acceptable performance.

RC sample chips were geologically logged to a level of detail to support reporting of Exploration Results. Logging was both qualitative and quantitative; full descriptions of lithologies, alteration, and oxidation were noted on log sheets as well as percentage estimates of alteration minerals present, veining, and/or sulphide minerals present. Magnetic susceptibility was also collected from the RC percussion sample intervals.

All drillhole collars were surveyed using a DGPS (+/- 0.2m) by Cardno Pty Ltd, qualified surveyors; downhole survey was completed on all RC percussion holes using an open-hole gyro compass using a magnetic north seeking tool. All drilling was planned and surveyed using MGA94\_Zone51 grid.

14<sup>th</sup> January 2015



## Burgundy Project<sup>7</sup>

14<sup>th</sup> January 2015

As announced on the 25 September 2014, the infill and extensional drilling programmes were completed with 35 RC holes totalling 2,910m at the Burgundy project (Figure 1). The aim of the programme was to test further extensions to the mineralisation to the north and south of the deposit, validate historic holes and convert Inferred material into the Indicated category for updated estimation of Ore Reserves.

Significant mineralisation intercepted includes 3m at 77.9g/t Au from 5m, 1m at 142.0g/t Au from 38m, 38m at 1.2g/t Au from 48m, 17m at 2.0g/t Au from 29m, 19m at 1.6g/t Au from 26m, 20m at 1.5g/t Au from 24m, 15m at 1.9g/t Au from 38m, 14m at 1.9g/t Au from surface and 13m at 1.9g/t Au from 26m.

The drilling extended the boundary of the gold mineralisation to the north (20 to 25m) where it remains open along strike and at depth. The gold mineralisation also remains open to the west and east of the drilled area. The drilling also confirmed the tenor of gold mineralisation in some of the historic drilling.

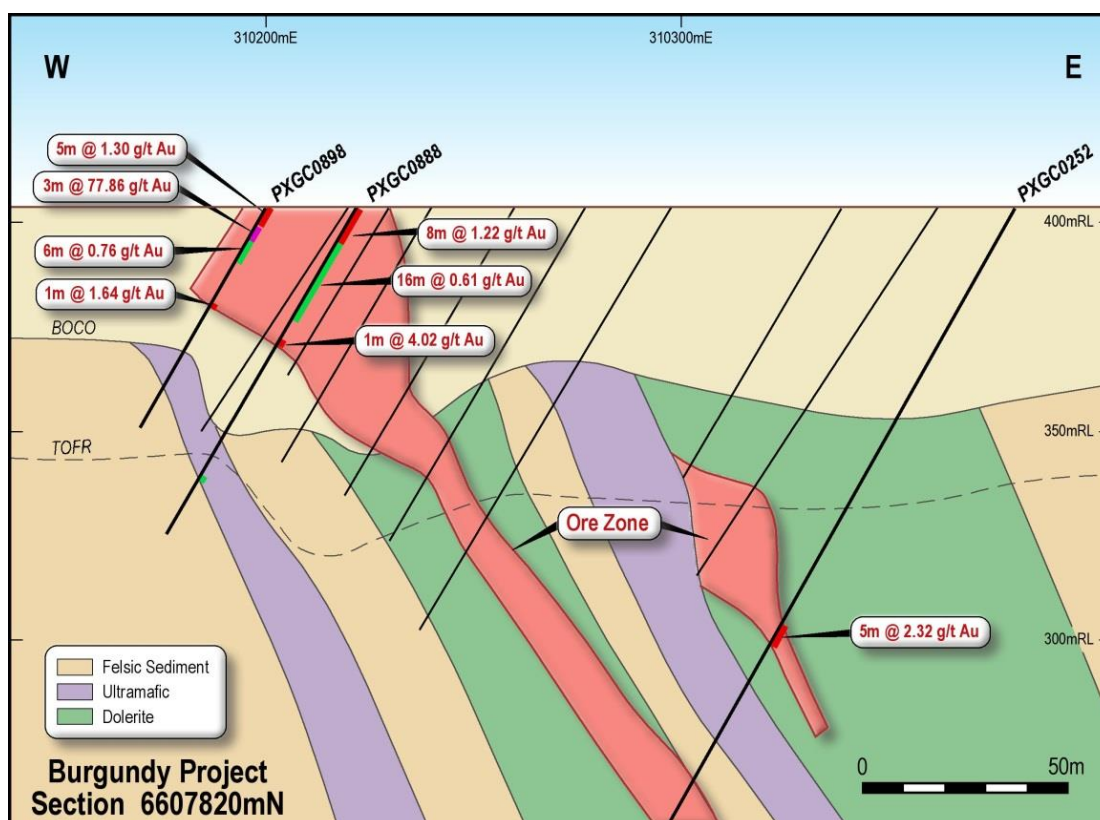


Figure 5: Burgundy project cross section<sup>7</sup>

The updated Mineral Resource (JORC 2012, see Table 1 on Page 1) for Burgundy now stands at 109,000oz, up 47% from the Resource published in February 2014 and comprises:

- Mill feed of 0.98Mt at 2.0g/t Au for 65,000oz
- Heap leach feed of 2.12Mt at 0.60g/t Au for 44,000oz

<sup>7</sup> For further details of the Burgundy drilling and associated JORC tables (sections 1 and 2), please refer to the announcement released to the ASX on 25 September 2014. See also Appendix 1 for section 3



## Burgundy project geological summary

14<sup>th</sup> January 2015

The Burgundy project overlies ultramafics high magnesian basalts and volcanic – epiclastic sedimentary rocks. Subordinate dolerites, gabbros and felsic porphyry dykes intrude the sequence. The south-western boundary of the project area lies adjacent to and parallel with the Kunanalling Shear Zone. The south-eastern boundary of the Burgundy project is underlain by the western limb of the Mungari Syncline defined by an extensive differentiated gabbro locally termed the Powder Sill. The dominant structural feature in the area is the shallowly plunging Telegraph Syncline.

The Burgundy project is located within the western limb of the Telegraph Syncline and occupies the stratigraphic horizon of doleritic intrusives bounded by felsic sediment packages which includes siltstones, graphitic shales and conglomerates. The doleritic intrusive is up to 50m in true thickness and comprises at least three sub-units, the most recognisable are a high magnesian basalt (has been interpreted as an ultramafic) margin, and coarse grained core of doleritic composition. The succession is repeated across drill sections.

The dominant structural feature within the immediate Burgundy area is the Crest Fault zone which is an anastomosing array of shears and faults. To the north of the project area the Crest Fault zone has been interpreted as axial planar to the Telegraph Syncline, within the project area the Crest Fault Zone is interpreted as propagating along the western limb. The Crest fault strikes at 315° dipping steeply to the east at 75°; in the project area the fault straightens to 350° with a resultant shallowing of dip to approximately 60 - 65°. Within the project area the contacts between the doleritic rocks and bounding sediment package is sheared/faulted which has generated a strong foliation in the rocks.

The bulk of the mineralisation at Burgundy is hosted in two sub-parallel north-south trending structures within the dolerite. Small parallel lodes have also been interpreted to form along other lithological contacts. The main ore zones dip to the east between 50 and 70° which are associated with zones of intense bleaching featuring albite and chlorite alteration, sometimes accompanied by sericite alteration. Coarse euhedral arsenopyrite and minor pyrite is associated with gold mineralisation. Gold mineralisation is also associated with quartz veining; interpreted as narrow discontinuous veins. Gold mineralisation thickens toward the northern of the project area where the ore body has been interpreted to truncate against a north-east trending cross fault.

Weathering in the area is deep; base of oxidation varies from 20 to 40m in depth and top of fresh rock averages around 70m deep. Within the oxidised rock horizon gold mineralisation has been enhanced by supergene processes, this has been interpreted as being constrained within enveloping structures with occasional “blow-outs” into the surrounding rock mass in and around cross faults. In these areas coarse re-mobilised gold is found within relic quartz veins. Gold mineralisation starts at surface at the northern end of the deposit and plunges to the south.

## Drilling Details

RC percussion drilling was completed at the Burgundy project during May to June 2014. A total of 35 holes for 2,910m were completed as part of an infill/due diligence program. Face sampling hammers were used for collection of all down-hole samples.

Samples from the RC drilling were collected over 1m downhole intervals and reduced via cone splitter to produce a 3Kg sub-sample. 99% of the samples reported to the splitting device dry. Wet samples were split through the cone splitter, which was washed and dried with compressed air after each sample.



Field quality control procedures for RC percussion drilling involved assay standards, blanks and collection of a field duplicate. Certified standard reference material was inserted in each holes sample stream every 30m starting at 15m. Blank material was inserted into each holes sample stream every 30m starting from 30m down the hole. Field duplicates were collected every 30m down the hole.

RC percussion samples were collected into pre-numbered calico bags at the rig by drilling personnel. A geologist or field assistant cross checked the bag number against the metre interval before recording sample number in triplicate in a sample submission book. Some randomisation of sample numbers was conducted.

Assay laboratories in Kalgoorlie and Perth were used for assaying. Gold assays were determined using a fire assay with 40g charge and AAS finish. Laboratories used completed internal standard regimes and re-assayed every 20th sample. Umpire checks were undertaken by different laboratory in Kalgoorlie and or Perth. Quality assurance / control for the programme showed acceptable performance.

RC sample chips were geologically logged to a level of detail to support reporting of Exploration Results. Logging was both qualitative and quantitative; full descriptions of lithologies, alteration, and oxidation were noted on log sheets as well as percentage estimates of alteration minerals present, veining, and/or an sulphide minerals present. Magnetic susceptibility was also collected from the RC percussion sample intervals.

All drillhole collars were surveyed using a DGPS (+/- 0.2m) by Cardno Pty Ltd, qualified surveyors; downhole survey was completed on all RC percussion holes using an open-hole gyro compass using a magnetic north seeking tool. All drilling was planned and surveyed using MGA94\_Zone51 grid.

## **Castle Hill Stage 3 Project**<sup>8</sup>

As announced on the 16 September 2014, the infill and extensional drilling programmes were completed with 41 RC holes totalling 6,040 metres within the Castle Hill Stage 3 project area. The area is immediately north of the Mick Adams gold project, covers 3km of strike and comprises the historic deposits of Wookie, Lady Alice and Picante. These deposits are structurally linked and have had very little to no exploration completed in the last 20 years.

The aim of the programme was to test lateral and depth extensions to the mineralisation both proximal and in between these deposits along strike to the north and south and also east and west.

Significant mineralisation intercepted includes 4m at 32.5g/t Au from 80m; 1m at 80.0g/t Au from 74m; 11m at 5.8g/t Au from 48m; 14m at 3.0g/t Au from 8m; 16m at 2.2g/t Au from 26m; 10m at 2.5g/t Au from 95m; 17m at 1.1g/t Au from 61m and 2m at 8.4g/t Au from 109m.

The drilling was successful in delineating the extent of the mineralisation north along the tonalite contact and defining additional gold mineralisation west internal to the tonalite. Further drilling is planned to test the extent of the gold mineralisation to the north, west and at depth.

The updated Mineral Resource (JORC 2012, see Table 1 on Page 1) for Castle Hill Stage 3 now stands at 272,000 ounces, up 262% from the 75,000oz Resource published in February 2014 and comprises:

- Mill feed of 3.74Mt at 1.4g/t Au for 168,000oz
- Heap leach feed of 5.81Mt at 0.60g/t Au for 104,000oz

<sup>8</sup> For further details of the Castle Hill Stage 3 drilling and associated JORC tables (sections 1 and 2), please refer to the announcement released to the ASX on 16 September 2014. See also Appendix 1





## Castle Hill Stage 3 Geological Summary

14<sup>th</sup> January 2015

The Castle Hill Stage 3 resource is comprised of three deposits from south to north: Wookie, Lady Alice and Picante. All of the deposits are structurally linked. The principal lithology to host gold mineralisation at Castle Hill Stage 3 is the Kintore Tonalite, a large intrusive granitoid of granodioritic composition. The tonalite intrudes a sequence of basaltic and ultramafic rocks to the east and west. The elliptical Kintore Tonalite attenuates to the south to form a very long narrow (80m wide in plan) intrusion which hosts the Mick Adam and Wadi gold mineralisation and a dyke swarm to the south-east which hosts the Outridge and Kiora gold mineralisation.

Gold mineralisation is also hosted along the eastern margin of the main body of the tonalite at Wookie and Picante. Gold mineralisation in this area is hosted within the tonalite and within the flanking mafic/ultramafic sequence.

The Lady Alice gold mineralisation is associated with a fault array hosted entirely within the bulk of the tonalite intrusive. The Lady Alice fault array coincides with the boundary between de-magnetised tonalite to the east and magnetised tonalite to the west. The fault array intersects the south-eastern margin of the Kintore at the southern end of the Wookie mineralisation. Vertical vein arrays and kinematic indicators at the nearby Mick Adam and Kiora deposits show the primary deformation at Castle Hill was extension with an east block down (sinistral normal) sense of movement, suggesting emplacement of the tonalite coincided with the beginning of an extensional doming event and the start of basin formation. The tonalite has therefore been interpreted as being emplaced in a relay zone between two fault tips. NE trending discrete faults are interpreted to be hard-linked transfer structures (perhaps zones of inherited weakness) which form jogs and hence local areas of dilation in the normal faults.

Mick Adam and Wadi are separated by a NE trending fault which has generated an offset of 250m across strike. Wookie (southern end of Castle Hill stage 3) is separated from the Mick Adam deposit by a similar NE trending structure. NW trending shear zones which were re-activated during sinistral transpression accommodate much of the compressional strain and act to preserve the extensional domain.

Primary mineralisation within the tonalite at Wookie and Lady Alice is related to narrow west dipping quartz veins containing moderately to extremely high gold grades and as fine disseminated gold within the tonalite groundmass.

The disseminated gold is commonly associated with minor blebs of pyrite, arsenopyrite and rare chalcopyrite. High gold grade veins are typically 10 to 20cm thick and commonly occur in extensional arrays of four to five veins generating high grade zones up to 10m in horizontal thickness. Extensional veins are more common along the eastern margin of the tonalite. The Picante deposit has been interpreted as a north-east plunging shoot at the intersection between a north-west trending fault and the tonalite contact.

Moderate to strong supergene mineralisation has been developed over all three deposits. Depth to this horizon varies from 8 to 20m below surface. The supergene mineralisation at Wookie and Lady Alice may be linked and further drilling is required to confirm this. At this stage both have been interpreted separately. Wookie and Picante are linked geologically and further drilling is required to test if gold mineralisation between the two deposits is continuous. Gold mineralisation remains open at depth on all three deposits and open to the north of Lady Alice and Picante.



## Drilling Details

14<sup>th</sup> January 2015

RC percussion drilling was completed in October 2013 by Drilling Australia Pty Ltd as part of the Castle Hill Stage 1 drilling campaign. Face sampling hammers were used for collection of all down-hole samples.

Samples from the RC drilling were collected over 1m downhole intervals and reduced via cone splitter to produce a 3Kg sub-sample. 99% of the samples reported to the splitting device dry. Wet samples were split through the cone splitter which was washed and dried with compressed air after each sample.

Field quality control procedures for RC percussion drilling involved assay standards, blanks and collection of a field duplicate. Certified standard reference material was inserted in each borehole sample stream every 30m starting at 15m. Blank material was inserted into each holes sample stream every 30m starting from 30m down the hole. Field duplicates were collected every 30m down the hole.

RC percussion samples were collected into pre-numbered calico bags at the rig by drilling personnel. A geologist or field assistant cross checked the bag number against the metre interval before recording the sample number in triplicate in a sample submission book. Some randomisation of sample numbers was conducted.

Assay laboratories in Kalgoorlie and Perth were used for assaying. Gold assays were determined using a fire assay with 40g charge and AAS finish. Laboratories used completed internal standard regimes and re-assayed every 20th sample. Umpire checks were undertaken by a different laboratory in Kalgoorlie and / or Perth. Quality assurance / control for the programme showed acceptable performance.

RC sample chips were geologically logged to a level of detail to support reporting of Exploration Results. Logging was both qualitative and quantitative; full descriptions of lithologies, alteration, and oxidation were noted on log sheets as well as percentage estimates of alteration minerals present, veining, and/or any sulphide minerals present. Magnetic susceptibility was also collected from the RC percussion sample intervals.

All drillhole collars were surveyed using a DGPS (+/- 0.2m) by Cardno Pty Ltd, qualified surveyors; downhole survey was completed on all RC percussion holes using an open-hole gyro compass using a magnetic north seeking tool. All drilling was planned and surveyed using MGA94\_Zone51 grid.



## About Phoenix

14<sup>th</sup> January 2015

Phoenix Gold Ltd is an emerging Australian exploration and development company with an extensive land holding on the Zuleika and Kunanalling shear zones northwest of Kalgoorlie in Western Australia, home to some of Australia's richest gold deposits.

Kalgoorlie-based Phoenix is aiming to significantly grow its JORC-classified resources, complete a definitive feasibility study on core projects and to self-fund aggressive exploration through the development of advanced mining projects that can deliver cash flow in the short term.

The 100% owned Castle Hill gold project is emerging as a flagship asset with the potential to become a multi-million ounce gold mine with excellent metallurgy and close to all major infrastructure. Castle Hill is one of many well-endowed gold systems within Phoenix's portfolio.

With a balanced mix of exploration (new discoveries and extensions) and development of a sustainable production profile, Phoenix aims to grow a significant gold company for the benefit of all stakeholders.

**Table 2: Phoenix Gold – Summary of Mineral Resources**

Project (Mill Feed)	Measured Mineral Resource			Indicated Mineral Resource			Inferred Mineral Resource			Total Mineral Resource		
	Mt	Au (g/t)	Au Oz	Mt	Au(g/t)	Au oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Mick Adams/Wadi Kintore				18.09	1.5	894,000	6.39	1.3	274,000	24.48	1.5	1,168,000
Castle Hill Stage 3				3.03	1.6	160,000	4.21	1.8	239,000	7.24	1.7	399,000
Red Dam				2.38	1.4	109,000	1.36	1.3	59,000	3.74	1.4	168,000
Broads Dam				2.05	2.1	140,000	1.04	2.2	74,000	3.09	2.2	214,000
Burgundy	0.49	2.0	31,000	0.13	2.9	12,000	2.16	2.3	158,000	2.29	2.3	170,000
Kunanalling				0.40	2.3	29,000	0.09	1.5	4,000	0.98	2.0	65,000
Ora Banda				0.46	2.4	35,000	4.12	1.7	229,000	4.58	1.8	264,000
Carbine				2.36	2.0	149,000	2.79	1.8	163,000	5.15	1.9	312,000
Zuleika North				1.70	1.6	86,000	0.21	2.1	14,000	1.91	1.6	100,000
Stockpiles							0.62	2.5	49,000	0.62	2.5	49,000
<b>Total</b>	<b>0.49</b>	<b>2.0</b>	<b>31,000</b>	<b>30.68</b>	<b>1.6</b>	<b>1,618,000</b>	<b>22.99</b>	<b>1.7</b>	<b>1,263,000</b>	<b>54.16</b>	<b>1.7</b>	<b>2,913,000</b>

Project (Heap leach feed)	Measured Mineral Resource			Indicated Mineral Resource			Inferred Mineral Resource			Total Mineral Resource		
	Mt	Au (g/t)	Au Oz	Mt	Au(g/t)	Au oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Mick Adams/Wadi Kintore				21.54	0.6	400,000	10.98	0.6	198,000	32.52	0.6	598,000
Castle Hill Stage 3				6.68	0.6	131,000	7.87	0.6	156,000	14.55	0.6	287,000
Burgundy	1.04	0.6	22,000	3.80	0.6	68,000	2.01	0.6	36,000	5.81	0.6	104,000
Red Dam				0.86	0.6	18,000	0.22	0.6	4,000	2.12	0.6	44,000
Stockpiles				1.89	0.7	44,000	0.97	0.7	23,000	2.86	0.7	67,000
<b>Total</b>				<b>0.48</b>	<b>0.6</b>	<b>9,000</b>	<b>0.48</b>	<b>0.6</b>	<b>9,000</b>	<b>0.48</b>	<b>0.6</b>	<b>9,000</b>

<b>Total Jan 2015</b>	<b>0.49</b>	<b>2.0</b>	<b>31,000</b>	<b>65.93</b>	<b>1.1</b>	<b>2,288,000</b>	<b>45.04</b>	<b>1.2</b>	<b>1,680,000</b>	<b>112.50</b>	<b>1.1</b>	<b>4,022,000</b>
-----------------------	-------------	------------	---------------	--------------	------------	------------------	--------------	------------	------------------	---------------	------------	------------------

Visit us at [www.phoenixgold.com.au](http://www.phoenixgold.com.au)

For further information please contact

## Investors

Jon Price, Managing Director - PXG  
(08) 90 212 704

[info@phoenixgold.com.au](mailto:info@phoenixgold.com.au)

## Media

Fiona Meiklejohn  
FTI Consulting

(08) 9485 8888 or 0415 660 076



## Qualification Statements

14<sup>th</sup> January 2015

The information in this report that relates to Mineral Resource Estimation for Castle Hill Stage 1 and Castle Hill Stage 3 is based on information compiled by Mr Brian Fitzpatrick, Senior Consulting Geologist for Cube Consulting. Mr Fitzpatrick is a Member of the Australasian Institute of Mining and Metallurgy and is also an accredited Chartered Professional Geologist. Mr Fitzpatrick has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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” (JORC Code). Mr Fitzpatrick consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Mineral Resource Estimation for Red Dam and Burgundy is based on information compiled by Dr Sia Khosrowshahi Principal Consulting Geologist for Golder Associates Pty Ltd. Dr Khosrowshahi is a Member of the Australasian Institute of Mining and Metallurgy. Dr Khosrowshahi has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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” (JORC Code). Dr Khosrowshahi consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to reporting of Exploration Results and Resources other than those mentioned above are based on information compiled by Ian Copeland who is an employee of the company and fairly represent this information. Mr Copeland is a Member of the Australasian Institute of Mining and Metallurgy. Mr Copeland have sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and the activities undertaken, to qualify as Competent Persons 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 Copeland consents to inclusion in this report of the matters based on information in the form and context in which it appears.





## Forward Looking Statements

14<sup>th</sup> January 2015

This release contains forward-looking statements. Wherever possible, words such as "intends", "expects", "scheduled", "estimates", "anticipates", "believes", and similar expressions or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, have been used to identify these forward-looking statements. Although the forward-looking statements contained in this release reflect management's current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, The Company cannot be certain that actual results will be consistent with these forward-looking statements. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the forward-looking statements. These factors should be considered carefully and prospective investors should not place undue reliance on the forward-looking statements. Forward- looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause the Company's actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements.

Although the Company has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors and risks that cause actions, events or results not to be anticipated, estimated or intended, including those risk factors discussed in the Company's public filings. There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective investors should not place undue reliance on forward-looking statements.

Any forward-looking statements are made as of the date of this release, and the Company assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law. This release may contain certain forward looking statements and projections regarding: estimated resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned strategies and corporate objectives.

Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. The Company does not make any representations and provides no warranties concerning the accuracy



## Appendix 1

14<sup>th</sup> January 2015

The following Table and Sections are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of Mineral Resources. The tables cover Table 2 – Section 3 (Estimation and reporting of Mineral Resources) for the Kintore, Red Dam, Burgundy and Castle Hill Stage 3 projects. For further detail of Table 2 Sections 1 and 2, please refer to the announcements made to the ASX on 27 May 2014 and 8 January 2015 for Kintore, 7 October 2014 for Red Dam, 25 September 2014 for Burgundy and 16 September 2014 for Castle Hill Stage 3.

### Section 3 Estimation and Reporting of Mineral Resources (Kintore)

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>A SQL drilling database is maintained by Phoenix Gold using Datashed software. Look-up tables and fixed formatting are used for entering logging, spatial and sampling data. Sample numbers are uniquely coded and pre-numbered bags used. Data transfer for downhole survey and assaying information is electronic via email or USB data stick. Historical data is validated and formatted into the Phoenix standard field settings for each record category. These workflow methods minimise the potential of errors.</li> <li>Following importation into the data is interrogated for duplication and non-conformity errors. Data is held from the master tables until all checks are completed and data integrity is completed.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Ian Copeland who is competent person for the resource estimate is a full time employee of Phoenix Gold Ltd and has made numerous site visits during exploration drilling of the Kintore.</li> <li>Not applicable.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation of the Kintore resource has increased from earlier interpretations as a result of 2013-2014 infill and extensional drilling as well as mapping from the current open pit.</li> <li>Historic and recent RC drilling and diamond core drilling were the main data sources for the geological interpretation. Logging information, including vein styles, alteration and mineral percentages, were assessed to correlate with gold mineralisation. Multi element geochemistry has been completed on recent drilling. Structural logging and analysis has been carried out on oriented diamond drill core and assisted with interpretation and modelling.</li> <li>The mineralisation zoning within the tonalite host are based on 0.3g/t Au grade cut off. An alternate interpretation had a broad mineralised envelope containing a large internal lower grade zone encompassing the tonalite. A geological model comprising wireframes of lithological units and weathering surfaces were used to constrain grade interpolation.</li> <li>The principal host lithology for gold mineralisation at Kintore is the Kintore Tonalite, a large intrusive granitoid of granodioritic composition.</li> <li>Historic and new drilling have confirmed the interpreted mineralisation; striking 255° and dipping sub-vertical to 70° toward the SSE. The recent drilling has refined the outer limits of the mineralised boundary and higher grade zones within the tonalite.</li> <li>Within the tonalite hosted primary mineralisation domains, gold mineralisation is</li> </ul>



Criteria	Commentary
	<p>either hosted in quartz filled extensional vein sets and stringers, or as disseminated sulphide mineralisation within the tonalite. Historic workings on a 055°-235° trend may be related to a local structural shear causing brecciation within the tonalite.</p> <ul style="list-style-type: none"> <li>Laterite or paleo-channel mineralisation and a mineralised supergene horizon interpreted in the transition zone (saprolite), are continuous with the top of the primary mineralisation marked by a narrow depleted zone between the laterite and saprolite zones. Lateral continuity of this zone is patchy. Continuity is also possibly a function of the proximity of primary mineralisation beneath the weathering horizon. A nominal cut-off grade of grade of 0.3g/t Au was used for the laterite and supergene mineralised domains.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The Kintore Mineral Resource area has dimensions of 1.2km (strike length) by 350m (width) and 280m (elevation). The maximum depth known to date for the deepest mineralisation is 280m below the surface. The laterite supergene mineralised domain extends over the entire strike length of the deposit.</li> <li>The main tonalite mineralised domains extend over the western part of the resource area for 850m. A smaller hanging wall domain has a strike extent of 160m in the southern part of the deposit. A narrow primary mineralised zone in the eastern area has a strike extent of 300m.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>The block model was constructed using interpolation of grade using Ordinary Kriging (OK). Estimation was constrained using semi-hard boundaries derived by coding both the block model and composite drill data within particular rock units and weathering zones. Ordinary Kriging was considered an appropriate method for the Kintore project given the current drilling density and knowledge of the geology.</li> <li>The grade estimate is based on 1m down-the-hole composites created using the Datamine software. The composite length of 1m was chosen because it was a multiple of the most common sample interval, whilst providing enough across strike detail of the mineralisation and continuity of the mineralisation. High grade top cuts were applied to the samples prior to compositing, statistical and geostatistical analysis. A top cut of 20gAu/t was applied to all mineralised domains. This was the 99<sup>th</sup> percentile of the total mineralised data. A lower threshold of 0.3gAu/t was used to separate mineralised and un-mineralised material in all domains.</li> <li>Detailed statistical and geostatistical analysis was completed on the captured estimation dataset. This included exploration data analysis, boundary analysis, indicator analysis, and cross-validation. The variography applied to grade estimation was generated using the Snowden Supervisor software. Variography was completed on each mineralisation domain separately. Cross validation was completed in Datamine testing block size, minimum and maximum sample numbers.</li> <li>Grade estimation was completed using Datamine software. Check models were completed using alternate estimation methods such Multiple Indicator Kriging, and Inverse Distance.</li> <li>The block size was 10m (E-W) x 10m (N-S) x 3m (RL). The 3m cell height was used to fit with current mining bench heights. Drill spacing varied from 12.m x 12.5m to 20m x 20m and 50m x 50m. The block size was selected as it approximated half the mean spatial distribution in the horizontal direction.</li> <li>The maximum distance of extrapolation from data points was half the drill</li> </ul>



14<sup>th</sup> January 2015

Criteria	Commentary
	<p>spacing. The interpolation utilised 2 estimation passes, with the first pass using 35m x 20m x30m search (X,Y,Z) strategy orientated along the direction of mineralisation continuity as delineated in the geostatistical analysis. A minimum of 6 and maximum of 14 composites were used and a maximum of 5 composites per drill hole. The second search strategy doubled the first dimensions in the X and Z directions.</p> <ul style="list-style-type: none"> <li>• Small underground mining production has been noted to have taken place at Kintore and some shallow prospector workings are visible but no significant production has taken place and no production records are available.</li> <li>• No by-product recoveries were considered.</li> <li>• No correlation between gold and other elements has been assessed.</li> <li>• No selective mining units were assumed in this estimate.</li> <li>• The mineralised domains acted as a semi-hard boundary to control the Mineral Resource estimate. The geological interpretation considered the broad geological understanding of the structural emplacement of the tonalite and the mineralisation styles outlined above.</li> <li>• The broad orientation of the estimation domains were aligned semi-parallel to the northern tonalite contact, which strikes approximately east-west and dips steeply towards the north. The primary mineralisation domains were extended into the transitional weathering area, but do not extend into the oxide domain.</li> <li>• The three dimensional continuity of the interpreted estimation domain was improved by reviewing the interpretation in plan, long section and cross section.</li> <li>• Block model validation was conducted by the following means:</li> <li>• Visual inspection of block model estimation in relation to raw drill data on a section by section basis.</li> <li>• Volumetric comparison of the wireframe/solid volume to the block model volume for each domain.</li> <li>• Model validations included global statistical comparisons of composite and block model estimated grades, using northing and RL relationship plots (swath plots).</li> <li>• Comparison of the cut grade composites with the block model grades for each domain in 3D.</li> <li>• Although mining activity is current at Kintore at the time of resource estimation insufficient information was available to reconcile the resource estimate with production. This process is on-going and will be updated in ensuing months.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>• The tonnages are estimated on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>• Cut-off grade for reporting is 1.0/t Au and 0.4g/t Au, in line with current economic considerations and proposed processing routes.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>• Current mining factors and assumptions are based on metallurgical testwork carried out by Independent Metallurgical Operations Ltd and geotechnical and mining parameters assessed by Golder Associates in the Definitive Feasibility Study work. Conventional open cut mining methods will be employed utilising a contract mining fleet and conventional drill and blast mining methods. Similarities with the style of mineralisation and Tonalite host rock at Castle Hill and the geotechnical study indicate that ground conditions are suitable for this mining method. Expected mining recovery and dilution rates for mining vary between domains based on the geometry of the domains. No assumptions on mining methodology have been made.</li> </ul>





14<sup>th</sup> January 2015

Criteria	Commentary
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>Initial metallurgical tests yielded leachable recoveries up to 95% in the Tonalite, with a high gravity component. There is good repeatability between field assay results and bulk metallurgical results. This result for the gravity recoveries from the primary rock types are up to 50% in the fresh Tonalite ore.</li> <li>The project plans to construct both a conventional mill with cyanide leach and a heap leach facility with reticulated cyanide leach. Both processes are planned to use the same carbon absorption, electro win and smelting of gold doré. Test-work and current processing has shown the mineralisation is free milling and leachable for both hard (fresh) and soft rock (transition and oxide) material.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>The Kintore deposit sits on a ridge formed by calcrete cement deposits and has been subject to previous mining disturbance. The site drainage generally trends to the south east and the deposit sits high into the landscape, therefore surface flow will be largely unaffected by mining activities. Previous searches of the area confirm there are no threatened or protected fauna or any declared rare and priority flora. A flora and fauna survey of the area is currently underway to re-affirm this.</li> <li>Aboriginal heritage surveys of the area returned no sites of significance.</li> <li>The Kintore historic town-site exists approximately 1km to the south but will remain undisturbed.</li> <li>A hydrogeological assessment of the area determined the water level to be sitting at 40m BGL and should mining of the deposit go below this, dewatering will be required. As there are no PDWSAs, wetlands or groundwater dependent ecosystems using the resource, impact from drawdown will be minimal.</li> <li>Studies of the area will be on-going to improve the knowledge of the area to enable environmental impacts to be reduced and successful closure outcomes to be achieved, including waste and soil characterisation.</li> <li>A Clearing permit is in place which covers the mining tenements which host the Kintore gold deposit, a Mining Proposal for current mining activity has been approved.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Recent samples from various zones in the weathering profile were submitted for analysis to by Phoenix Gold.</li> <li>The current density measurements were collected from 5 RC percussion holes using a downhole gamma survey conducted by ABIM Solutions Pty Ltd. Measurements were collected at 0.1m intervals, then composited across lithologies and oxidation states. Select samples were collected from 1 diamond holes and submitted to SGS Laboratories for density determination using the water displacement method.</li> <li>Bulk density was assigned within the block model attribute 'density' according to the weathering profiles and rock types.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>Blocks have been classified as Indicated or Inferred essentially based on data spacing and using a combination of search volume and number of data used for the estimation. Indicated Mineral Resources are defined nominally on 20m x 20m to 12.5m x 12.5m spaced drilling. Inferred Mineral Resources are defined by data density greater than 20m x 20m spaced drilling and confidence that the continuity of geology and mineralisation can be extended along strike and at depth.</li> <li>Classification limits may vary where grade and geology is extremely continuous even though drill spacing extends beyond the nominal limits specified above.</li> <li>The Mineral Resource estimate appropriately reflects the Competent Person's</li> </ul>



Criteria	Commentary
	view of the deposit.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>Audits and peer reviews of work carried out by Phoenix been conducted by other Phoenix staff.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>The Mineral Resources constitute a global resource estimate. All Mineral Resources above 0.8g/t Au would be relevant to technical and economic evaluation. It has been assumed that given the grade continuity, width of mineralisation and the Mineral Resources being less than 250m in depth, mining would be amenable to open cut techniques.</li> <li>The addition of new drilling data and updating of the model has provided an understanding of the global grade distribution – but not the local grade distribution. Close spaced grade control drilling is required to gain an understanding of the local grade distribution and local mineralisation controls. Understanding of these aspects will play an important role in the project's success.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources (Red Dam)

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>All drilling data is contained in a DataShed database and stored on a server, SQL-01, at Phoenix Gold Ltd. This centralised database has editing access limited to three Phoenix Gold database personnel. Validation in the database is set to prevent the accidental duplication, alteration or deletion of records. A small number of other Phoenix Gold geological and field staff have limited access to upload information to the database. There are full automatic validation checks in place to prevent the uploading of erroneous and incomplete data. Existing data acquired from historical databases is continually validated against paper historical records, other datasets, modern data as it is generated, and by observations from end users of the data. Any corrections that need to be made to historical data are documented in the database and in reports using the data.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>The Competent Person for drill-hole data and the supporting information, Mr Ian Copeland, has been on site since commencement of drilling by Phoenix Gold Ltd and has overseen all aspects of sample and geological data collection.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Phoenix is confident in the overall geological, weathering and mineralisation interpretation of the deposit. The interpretation work involved modelling lithology (shale, mafic, ultramafic and sediments), weathering (transported, oxide, transition and fresh) and the mineralisation model that was interpreted at a nominal cut-off grade of 0.3 g/t Au. Three dimensional wireframe modelling were carried out using Vulcan® software.</li> <li>The current drill hole spacing provides an acceptable degree of confidence in the interpretation and continuity of grade and geology and the definition of the boundary between weathered and fresh mineralisation.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The mineralisation associated with the Red Dam deposit extends in the strike direction (bearing of 135°) over a distance of approximately 850 m and approximately 150 m northeast-southwest. Drilling has intercepted Au mineralisation at up to 350 m below surface.</li> </ul>
<i>Estimation</i>	<ul style="list-style-type: none"> <li>Statistical and geostatistical analyses were carried out on drilling data</li> </ul>



Criteria	Commentary
<i>and modelling techniques</i>	<p>composited to 1 m downhole intervals. This included variography to model the spatial continuity of the grades within the mineralisation domains and weathered profiles.</p> <ul style="list-style-type: none"> <li>Multiple Indicator Kriging (MIK) was used for estimation of the mineralisation and background domains using Golder proprietary software.</li> <li>The MIK approach included a change of support using the Indirect Lognormal correction using a 0.08 variance correction factor to emulate a selective open pit mining scenario.</li> <li>High-grade treatment was applied for the mineralisation domains using spatial restraining. High-grade composites greater than a nominated threshold were used only in the estimation of blocks within a 20 m by 20 m by 5 m radius of the high-grade composite in the plane of the mineralisation. The high-grade thresholds used are: <ul style="list-style-type: none"> <li>10 g/t Au for flat lying mineralised oxide</li> <li>15 g/t Au for flat lying mineralised transition or fresh</li> <li>10, 15 and 30 g/t Au for mineralised oxide, transition and fresh composites contained within subvertical footwall wall lenses</li> <li>10, 20 and 20 g/t Au for mineralised oxide, transition and fresh composites contained within subvertical hanging wall lenses.</li> </ul> </li> <li>A geological block model was constructed with a parent cell size of 10 m (X) by 5 m (Y) by 5 m (Z) with sub-celling of 2.5 m (X) by 2.5 m (Y) by 0.5 m (Z) to achieve acceptable resolution of geological domains.</li> <li>The resource estimate grades were validated globally comparing statistics by domains between blocks and samples. Visual inspection and swath plots were used for local validations.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>The tonnages are estimated on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The resource model is constrained by assumptions about economic cut-off grades. The mineralisation domain in the geological interpretation is based on a nominal cut-off grade of 0.3 g/t Au. The Mineral Resources were reported using a range of cut-off grades between 0.2g/t Au and 3.0 g/t Au, applied on a block by block basis.</li> <li>The reporting cut-off grade for the Mineral Resource statement is defined as 0.5 to 1.0 g/t Au for potential leach feed and above 1 g/t Au cut-off for potential CIL feed. The cut-off grades on in-line with recent preliminary whittle optimisation work carried out on Red Dam model.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The Mineral Resource estimation approach has assumed that mining will take place using an open pit, selective mining method. The vertical block size is 5 m, which forms the basis of the assumed vertical selectivity in the Mineral Resource estimate.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The project plans for both the heap leach and conventional mill with cyanide leach processes. Initial metallurgical tests yielded leachable recoveries up to 95% (dolerite and basalt) to 62% (shale) with a moderate gravity component. There is good repeatability between field assay results and bulk metallurgical results. This result for the gravity recoverable gold from the primary rock types range between 35% and 59%.</li> </ul>



14<sup>th</sup> January 2015

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Overall the preliminary test work highlights that the Red Dam is amenable to conventional cyanide leaching and metallurgical performance would be enhanced by passing the ore through a gravity circuit prior to leaching.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Surface elevation at Red Dam (within the Telegraph area) is around 390 m above sea level. The immediate area is flat with around 1 m to 5 m of transported cover. Typical depth of completely weathered rock is around 30 m to 60 m with only blows of epithermal quartz outcropping.</li> <li>The deposit lies on a sparsely vegetated area with mainly saltbush and bluebush over the deposit as well as some eucalyptus and acacia species to the south where the soil cover is thicker.</li> <li>The Phoenix tenement holdings in the immediate area provide ample space for waste rock dumps and other mine infrastructure. There are no significant challenges to environmental rehabilitation of mine workings in this area.</li> <li>There is no current or proposed Crown or other reserves including conservation reserves or known Aboriginal heritage areas within these tenements.</li> <li>Mining is routinely carried out in the surrounding region and there is no known difference to distinguish the Red Dam from other projects in the area.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Selected holes were surveyed using downhole gamma for bulk density measurements. These were checked by selected samples in the holes being measured for BD using the water displacement method.</li> <li>Bulk density values have been measured during the years by a number of owners.</li> <li>Historically, the Initial density factors were based on sample pulps which did not provide suitable measurements for fresh rock.</li> <li>Subsequently, Carbine made a number of measurements using diamond core data and predominantly from fresh rock.</li> <li>Final bulk densities were calculated based on the weathering status.</li> <li>Average wet bulk density values were assigned to the block model by weathering domain.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The Mineral Resources were classified according to the following criteria and assumptions: <ul style="list-style-type: none"> <li>Measured Resources: Due to the complexity of the mineralisation lode system, no measured material has been defined for Red Dam deposit.</li> <li>Indicated Resources: the area of Red Dam classified as Indicated Resources has sections spaced at 50 m with drill holes at 50 m centres on-section.</li> <li>Inferred Resources: all remaining estimated blocks.</li> </ul> </li> <li>Extrapolation of mineralisation from drill hole was limited to 20 m to 30 m, generally half of the nominal drill hole spacing on section.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews have been undertaken on this Mineral Resource estimate.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>The relative accuracy is reflected in the Mineral Resource classification discussed above that is in line with industry acceptable standards.</li> </ul>





## Section 3 - Estimation and Reporting of Mineral Resources (Burgundy)

14<sup>th</sup> January 2015

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>All drilling data is contained in a DataShed database and stored on a server, SQL-01, at Phoenix Gold Ltd. This centralised database has editing access limited to three Phoenix Gold database personnel. Validation in the database is set to prevent the accidental duplication, alteration or deletion of records. A small number of other Phoenix Gold geological and field staff have limited access to upload information to the database. There are full automatic validation checks in place to prevent the uploading of erroneous and incomplete data. Existing data acquired from historical databases is continually validated against paper historical records, other datasets, modern data as it is generated, and by observations from end users of the data. Any corrections that need to be made to historical data are documented in the database and in reports using the data.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Golder visited the Burgundy deposit on 13 November 2014. During the site visit, Golder interviewed personnel and gathered information required to evaluate the appropriateness of the data and methodology used to estimate the resources.</li> <li>The Competent Person for drill hole data and the supporting information, Mr Ian Copeland, has been on site since commencement of drilling by Phoenix Gold Ltd and has overseen all aspects of sample and geological data collection.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Phoenix is confident in the overall geological, weathering and mineralisation interpretation of the deposit. The interpretation work involved modelling lithology (shale, mafic, ultramafic and sediments), weathering (transported, oxide, transition and fresh) and the mineralisation model that was interpreted at a nominal cut-off grade of 0.3 g/t Au. Three dimensional wireframe modelling were carried out using Vulcan® software.</li> <li>The current drill hole spacing provides an acceptable degree of confidence in the interpretation and continuity of grade and geology and the definition of the boundary between weathered and fresh mineralisation.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The mineralisation associated with the Burgundy deposit extends in the strike direction (bearing of 350°) over a distance of approximately 700 m and approximately 150 m east-west. Drilling has intercepted Au mineralisation at up to 150 m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>Statistical and geostatistical analyses were carried out on drilling data composited to 1 m downhole intervals. This included variography to model the spatial continuity of the grades within the mineralisation domains and weathered profiles.</li> <li>Multiple Indicator Kriging (MIK) was used for estimation of the mineralisation and background domains using Golder proprietary software.</li> <li>The MIK approach included a change of support using the Indirect Lognormal correction using a 0.08 variance correction factor to emulate a selective open pit mining scenario.</li> <li>High-grade treatment was applied for the mineralisation domains using spatial restraining. High grade composites greater than 10 g/t Au for mineralised oxide, 8 g/t Au for mineralised transition, 12 g/t Au for mineralised fresh and 0.5 g/t Au for all others were used only in the estimation of blocks within a 20 m by 20 m by 5 m radius of the high-grade composite in the plane of the mineralisation.</li> <li>A geological block model was constructed with a parent cell size of 10 m (X) by 5 m (Y) by 5 m (Z) with sub-celling of 2.5 m (X) by 2.5 m (Y) by 0.5 m (Z) to achieve acceptable resolution of geological domains.</li> </ul>



# ASX Announcements

14<sup>th</sup> January 2015

Criteria	Commentary
	<ul style="list-style-type: none"> <li>The resource estimate grades were validated globally comparing statistics by domains between blocks and samples. Visual inspection and swath plots were used for local validations.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a wet basis (see below for dry bulk density calculation details).</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The resource model is constrained by assumptions about economic cut-off grades. The mineralisation domain in the geological interpretation is based on a nominal cut-off grade of 0.3 g/t Au. The Mineral Resources were reported using a range of cut-off grades between 0.2 g/t Au and 3.0 g/t Au, applied on a block by block basis.</li> <li>The reporting cut-off grade for the Mineral Resource statement is defined as 0.5 to 1.0 g/t Au for potential leach feed and above 1 g/t Au cut-off for potential CIL feed. The cut-off grades on in-line with recent preliminary whittle optimisation work carried out Burgundy model.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The Mineral Resource estimation approach has assumed that mining will take place using an open pit, selective mining method. The vertical block size is 5 m, which forms the basis of the assumed vertical selectivity in the Mineral Resource estimate.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The project plans for both the heap leach and conventional mill with cyanide leach processes.</li> <li>Preliminary metallurgical testing was conducted by Ace Laboratories in Kalgoorlie on behalf of Mines &amp; Resource Australia and reported in Kerr (1996). Ten 2 kg samples from 1 m RC drilling intervals were collected from various grades of mineralisation as well as different weathering horizons. The technique used was a 72 hour bottle roll cyanide leach with duplicate fire assay on residues. Recoveries were high with an average of 96.7% over the ten samples processed with no refractory element apparent</li> <li>In 1996 Oretest Pty Ltd was commissioned by Resource Services Group to perform further cyanidation testwork, which was reported in Hales (1997). Seven 1 kg samples of core in fresh and oxidised material were analysed by a standard 72 hour bottle roll cyanide leach analysis.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Surface elevation at Burgundy (within the Telegraph area) is around 400 m above sea level. The immediate area is flat with around 1 m to 5 m of transported cover Typical depth of completely weathered rock is around 30 m to 60 m with only blows of epithermal quartz outcropping.</li> <li>The deposit lies on a sparsely vegetated area with mainly saltbush and bluebush over the deposit as well as some eucalyptus and acacia species to the south where the soil cover is thicker.</li> <li>The Phoenix tenement holdings in the immediate area provide ample space for waste rock dumps and other mine infrastructure. There are no significant challenges to environmental rehabilitation of mine workings in this area.</li> <li>There is no current or proposed Crown or other reserves including conservation reserves or known Aboriginal heritage areas within these tenements.</li> <li>Mining is routinely carried out in the surrounding region and there is no known difference to distinguish the Burgundy deposit from other projects in the area.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Bulk density values have been measured during the years by a number of owners.</li> </ul>



14<sup>th</sup> January 2015

Criteria	Commentary
	<ul style="list-style-type: none"> <li>The first set of measurements was carried out by MRA from two diamond core holes. A total of 17 samples were tested. The traditional water displacement method was used for strongly weathered material as opposed to the measured method for competent fresh rock.</li> <li>Cazaly tested 22 HQ3 core samples at Amdel Perth. The method used included the wax-coating – water displacement method.</li> <li>Final bulk densities were calculated based on the weathering status.</li> <li>Average wet bulk density values were assigned to the block model by weathering domain based on average values calculated from 39 density data points</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The Mineral Resources were classified according to the following criteria and assumptions: <ul style="list-style-type: none"> <li>Measured Resources: the area of Burgundy classified as Measured Resources has sections spaced at 20 m with drill holes at 20 m centres on-section. The kriging slope of regression was used as a guide, with the aim that the region classified as Measured Resources is generally supported by blocks with a slope greater than 0.85.</li> <li>Indicated Resources: the area of Burgundy classified as Indicated Resources has sections spaced at 60 m with drill holes at 60 m centres on-section. The kriging slope of regression was used as a guide, with the aim that the region classified as Indicated Resources is generally supported by blocks with a slope greater than 0.65.</li> <li>Inferred Resources: all remaining estimated blocks.</li> </ul> </li> <li>Extrapolation of mineralisation from drill hole was limited to 20 m to 30 m, generally half of the nominal drill hole spacing on section.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews have been undertaken on this Mineral Resource estimate.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>The relative accuracy is reflected in the Mineral Resource classification discussed above that is in line with industry acceptable standards.</li> </ul>

## Section 3 - Estimation and Reporting of Mineral Resources (Castle Hill Stage 3)

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Drilling Database is maintained by Phoenix Gold in Datashed software, look-up tables and fixed formatting are used for entering logging, spatial and sampling data for the deposit databases. Sample numbers are uniquely coded and pre-numbered bags used. Data transfer for downhole survey and assaying information is electronic via email or USB data stick. Historical data is validated and formatted into the Phoenix standard field settings for each record category. These workflow methods minimise the potential of errors.</li> <li>Cube received data directly exported from Datashed in ASCII format, then completed validation checks on the database comparing collar points to the topography, maximum hole depths checks between tables and the collar data, duplicate numbering, missing data, and interval error checks using validation rules in MS Excel before importing records into MS Access. Cube then verified the data using visual inspection of the drillholes in Surpac v6.3.2, in 3D to</li> </ul>



Criteria	Commentary
	identify inconsistencies of drillhole traces.
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Cube staff conducted 5 site visits during 2013. During the site visits, Cube inspected the deposit area including old workings, RC drilling and sampling, and the core farm. Notes and photographs were taken along with discussions with site personnel regarding geology and mineralisation of the deposits, procedures, sampling and database procedures, and Quality Control procedures. No other major issues were encountered.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation Castle Hill Stage 3 areas is good as a result of recent infill RC drilling programs for Wookie and historical close spaced drilling at Picante. The Castle Hill Stage 3 mineralised zones are structurally linked, with Wookie and Picante being hosted in the same lithological unit as Mick Adam and Wadi and are interpreted as being part of a single mineralised system. The principal lithology to host gold mineralisation at Castle Hill Stage3 is the Kintore Tonalite a large intrusive granitoid of granodioritic composition. The tonalite intrudes a sequence of basaltic and ultramafic rocks to the east and west. The elliptical Kintore Tonalite attenuates to the south to form very long narrow (80m wide in plan) intrusion. Gold mineralisation is hosted along the eastern margin of the main body of the tonalite at Wookie and Picante. Gold mineralisation is hosted within the tonalite and bounded on the hanging wall side by the flanking ultramafic/mafic sequence.</li> <li>Petrography and multi element geochemistry have been completed on recent drilling for the Mick Adam resource to the south which has the same host rock and a similar style of mineralisation.</li> <li>The main deposits are hosted within the tonalite lithologies with broad domains and recent drilling has refined the mineralised domain boundaries of the tonalite boundary and deeper extensions. The new infill drilling has confirmed strike continuity of the tonalite hosted mineralisation and resulted in changes to the distinctions between supergene mineralisation and primary mineralisation, and simplified the main tonalite mineralisation at Wookie.</li> <li>Primary mineralisation is predominantly hosted within the tonalite and occurs as discrete narrow west dipping quartz veins containing moderately to extremely high gold grades and as fine disseminated gold within the tonalite groundmass.</li> <li>The tonalite hosted mineralisation is a broadly consistent zone, but it is likely to contain a series of stacked wide sub-domains of mineralisation separated by discrete zones of poor mineralisation. Where extensional higher grade veins are more common, gold mineralisation has greater continuity as is the case along the eastern hanging wall margin of the tonalite. Supergene mineralisation is not as well developed as in other Castle Hill deposits. There is some evidence of supergene enrichment over the central portions of the high grade domain at Picante.</li> <li>For mineralised domain interpretation and 3D modelling, lithological contact on the hanging wall was used as boundary for wireframing, with the footwall contact less certain. A nominal lower grade limit (0.3g/t) was applied for the footwall limit, corresponding with a lower grade log-normal population threshold.</li> <li>Gaps in mineralisation along the N-S trend were mostly due to less drilling information.</li> </ul>



14<sup>th</sup> January 2015

Criteria	Commentary
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The Castle Hill Stage 3 Mineral Resource area has dimensions of 1.8 km (strike length) by 130 m (maximum width) and 175 m (elevation). The maximum depth known to date for the deepest mineralisation at Picante is 220 below the surface. The gold mineralisation system exists along a sheared contact margin with ultramafic hanging wall, and the host mineralisation dominated by a broad main tonalite unit extending from the Wookie tonalite hosted mineralisation to the Picante tonalite unit where the mineralisation plunges steeply north. The Wookie mineralised zones and Picante are separated by gaps in drilling information with no apparent structural breaks noted to date.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>The block model was constructed using interpolation of grade via a combination of Ordinary Kriging (OK) and Local Uniform Conditioning (LUC). The LUC interpolation was used for the tonalite hosted mineralisation for Picante and Wookie which contain the majority of concentrated drilling data and the bulk of the mineralisation for the Castle Hill Stage 3 model. This method was chosen over the OK method to provide better local grade estimation for mining evaluation at an SMU scale. The method potentially, provides more representative grades where there is a mixture of high grade veins and diffuse lower grades in the broad tonalite unit. OK estimation was carried out for comparison analysis and whether it was more appropriate for parts of the mineralisation which are more sparsely drilled. The smaller supergene mineralisation has far less drilling and data points and was estimated using the OK method alone.</li> <li>Resource modelling summary for domain coding and compositing: <ul style="list-style-type: none"> <li>Only RC and DD sample data was used for the resource estimation work;</li> <li>Mineralised domains were digitised on to cross-section using 3D strings and then wireframed to generate solids;</li> <li>Geology was used to separate the different mineralised zones, within these zones a threshold grade of 0.3g/t Au was used to separate mineralised rock from un-mineralised rock;</li> <li>Sub-domains were generated to represent each weathering material type across each of the mineralised zones (oxide, transition, fresh);</li> <li>Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains and oxidation surfaces;</li> <li>Sample data was composited to 2 metre downhole length using a best fit-method. There were consequently no residuals. Intervals with no assays were excluded from the compositing routine.</li> </ul> </li> <li>Resource modelling exploratory &amp; spatial data analysis summary: <ul style="list-style-type: none"> <li>Statistical analysis for Au undertaken for each domain to identify the distribution of each population and detect statistical outliers;</li> <li>Composite gold grade distributions within domains was assessed including comparison analysis between tonalite domains and between oxide zones within a mineralised domain;</li> <li>The influence of extreme grade values was reduced by top-cutting where required. The top-cut levels were determined using a combination of top-cut analysis tools (grade histograms, log probability plots and CVs);</li> <li>Top-cuts were reviewed and applied on a domain basis for the OK estimation.</li> <li>Variogram analysis was conducted on all domains to assess against</li> </ul> </li> </ul>





14<sup>th</sup> January 2015

Criteria	Commentary
	<p>interpreted orientation of mineralised domains and build variogram model parameters for Au grade interpolation.</p> <ul style="list-style-type: none"> <li>For mineralised domains estimated, interpolation parameters were set to a minimum number of 14 composites and a maximum number of 40 composites for the estimate. Maximum search ellipse of 160metres was used.</li> <li>The maximum distance of extrapolation from data points was half the drill spacing.</li> <li>Computer software used for the modelling and estimation was Surpac v. 6.3.2 with Isatis software used to conduct geostatistical analysis and grade interpolation for LUC estimation for specific lode domains.</li> <li>This Mineral Resource is updated from the August 2013 Mineral Resource statement for Wookie and an update of the December 2012 Mineral Resource statement for Picante. During the validation process, comparison tables were setup to compare previous model estimates, and OK versus LUC estimates in order to check the impact of new infill drilling and to assess the appropriateness of the different estimation techniques.</li> <li>Changes in the estimation parameters for the Picante December 2012 estimate (based on 2005 resource model) included the following: <ul style="list-style-type: none"> <li>Differences in 3D wireframe interpretation, mostly due to the different criteria used for mineralised domain boundary – the 2014 model used a grade threshold of 0.3 g/t whereas the 2005 model used a grade boundary of 0.8-1.0g/t;</li> <li>Composite length for samples was 2m lengths for 2014 model vs 1m for 2005 model;</li> <li>Estimation methodology - LUC local estimation method (2014) vs ID<sup>2</sup> estimation method (2005);</li> <li>Cut-off grade - 0.8g/t Au (2014) vs 1.0g/t Au (2005). ;</li> <li>Significant changes in classification – no Measured category in 2014 model, whereas 2005 model has a significant proportion of the resource as Measured;</li> <li>Overall total metal content difference between the two models is 3%.</li> </ul> </li> <li>There has been no previous mining activity at Picante and Wookie</li> <li>No by-product recoveries were considered.</li> <li>Arsenic (ppm) was assayed for the most recent drilling, but not estimated. Although some arsenopyrite has been seen in high grade veins in the tonalite hosted mineralisation locally, the visible gold in these veins do not appear to be associated directly with the sulphides.</li> <li>The parent block size used is 10mN, 10m E and 2.5m RL and sub-blocked to 5.0mN x 2.5mE x 1.25mRL. The bulk of the drilling data was on 100/50m x 25m (Wookie) and 20 x 20m (Picante) spaced sections.</li> <li>No assumptions of selective mining units were made.</li> <li>No correlation between gold and other elements has been assessed for any of the deposits.</li> <li>The mineralised domains acted as a hard boundary to control the Mineral Resource estimate.</li> <li>Composite gold grade distributions within these zones were assessed to determine if a high grade cut should be applied. In general only a very small number of outlier values are included in the estimation domains that required top-cut values to be applied.</li> <li>Block model validation was conducted by the following means:</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>Visual inspection of block model estimation in relation to raw drill data on a section by section basis;</li> <li>Volumetric comparison of the wireframe/solid volume to that of the block model volume for each domain;</li> <li>A global statistical comparisons of input and block grades, and local composite grade (by northing and RL) relationship plots (swath plots), to the block model estimated grade for each domain; and</li> <li>Comparison the cut grade drillhole composites with the block model grades for each lode domain in 3D.</li> </ul> <ul style="list-style-type: none"> <li>No previous mining has taken place and therefor no reconciliation data is available.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>The tonnages are estimated on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>Cut-off grade for reporting is 0.8/t Au and 0.4g/t Au, in line with recommendations from Phoenix Gold based on economic considerations and previous optimisation studies for the Castle Hill Projects - bulk open pit mining at 5m bench height. Both heap leach and milling options were reviewed with the selected cut-off grades being optimal for each processing path.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The preliminary mining studies are based on open cut mining methods using a contract mining fleet and conventional drill and blast mining methods. Limited geotechnical drilling, as well as existing small open cut pits, indicate that ground conditions are suitable for this mining method. Expected mining recovery and dilution rates for mining vary between domains based on the geometry of the domains. No assumptions on mining methodology have been made.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>Metallurgical tests yielded recoveries of 92% to 98% with high gravity component. The project plans to construct both a conventional mill with cyanide vat leach and a heap leach facility with reticulated cyanide leach. Both processes are planned to use the same carbon absorption, electro win and smelting of gold Dior. At this stage it appears that the mineralisation is free milling and leachable for each of the deposits, for both hard (fresh) and soft rock (transition and oxide) material. Previous mining at Kiora appears to support this assumption.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Flora and fauna surveys at Castle Hill have not discovered any significant impediments to the proposed operations at this stage. The project does lie within the Great Western Woodlands. Stygofauna surveys are yet to be completed but it is unlikely, based on similar nearby studies to be an issue. The major host rock for the deposits is a tonalite. There are very few sulphides associated with either the mineralisation or the waste material. It is not expected that either the tailings, or waste land forms are going to contain any deleterious elements. There is limited topsoil coverage over the project area. Saprolite clays in existing pits appear to support vegetation recovery without rehabilitation. There is very limited ground water in the project area, so mining and processing effects on the water table are not expected to be significant.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Bulk density determinations are assumed and have been assigned to each weathering type based on data typical of the host material in similar geological settings at Mick Adam with measurements described as follows: <ul style="list-style-type: none"> <li>Bulk densities derived from dry density measurements of drill core</li> </ul> </li> </ul>



Criteria	Commentary
	<p>and open pit measurements from the Mick Adam/Wadi deposits;</p> <ul style="list-style-type: none"> <li>▪ Bulk densities were also based on historic measured data by Mikado Resources in 1998, and from assumptions;</li> <li>▪ The current bulk density measurements completed include selected holes surveyed using downhole gamma for density measurements. These were checked by selected samples being measured for SG by the water displacement method;</li> <li>▪ Density measurements have also been taken by downhole surveys of 11 RC holes;</li> <li>▪ Further selected samples from diamond drilling were assessed through the water displacement method.</li> </ul> <ul style="list-style-type: none"> <li>• Bulk density was assigned within the block model attribute 'density' according to the weathering profiles and rock types</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• Blocks have been classified as Indicated or Inferred essentially based on data spacing and using a combination of search volume and number of data used for the estimation. Indicated Mineral Resources are defined nominally on 50 x 25m to 25m x 25m spaced drilling. Inferred Mineral Resources are defined by data density greater than 50m x 25m spaced drilling and confidence that the continuity of geology and mineralisation can be extended along strike and at depth.</li> <li>• Classification limits may vary where grade and geology is extremely continuous even though drill spacing extends passed the nominal limits specified. For Wookie, due to the bulk low grade nature and grade continuity over a large distance it is prudent to classify areas of the tonalite as Indicated if the search criteria were met. For Picante, with the close spaced drilling at 20m x 20m, this has increased confidence sufficient for Indicated classification to be assigned for a large portion of the mineralised envelope..</li> <li>• The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The Castle Hill Stage 3 Mineral Resource estimates for June 2014 have been updated from the December 2013 estimates. A review and updating of previous interpretations and modelling were completed by Cube following additional drilling data provided by Phoenix Gold up to February 2013. A previous resource estimate completed in 2005 for Picante was updated in May 2014 by Cube. The satellite resource areas of Lady Alice have not been changed from the August model. Peer reviews of work carried out by Cube in 2014 have been conducted by other Cube staff.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• The recent input drill data has increased the knowledge of the extent of mineralisation which has been used to develop the current Mineral Resource estimate. The LUC estimation provides a better estimate of local grade estimate for mining evaluation over OK estimation and is also a robust estimate for a broad bulk mineralised zone within which local variability in grade will be high. Outside of the main Picante and Wookie mineralised domains, local variations can be expected within the interpreted mineralised domains. The use of OK has assisted in reducing the risk associated with any high nugget observed in the gold distribution. The additional benefit of OK is it inherently assists in de-clustering the data during the estimate.</li> <li>• The Mineral Resources constitute a global resource estimate.</li> <li>• Modelling has provided an understanding of the global grade distribution – but</li> </ul>



Criteria	Commentary
	not the local grade distribution. Close spaced grade control drilling is required to gain an understanding of the local grade distribution and local mineralisation controls. Understanding of these aspects will play an important role in the project’s success. There are no historical records available and no recent mining activity has taken place on these areas to reconcile against the current model.

14<sup>th</sup> January 2015