



# Explanatory Notes

Newcrest Mining Limited

8 February 2013

## Mineral Resource & Ore Reserve Explanatory Notes 2012

These notes provide additional information in support of the 2012 Resources and Reserves Statement released 8 February, 2013.

Key points are:

- Changes include growth due to exploration success, normal production depletion from operating mines and other adjustments.
- Group Mineral Resources are estimated at 161.2 million ounces of gold and 20.98 million tonnes of copper. This represents a year-on-year increase of 11.5 million ounces of gold (7.7%) and 0.94 million tonnes of copper (4.7%) after mining depletion. Silver Mineral Resources are estimated at 142.2 million ounces.
- Group Ore Reserves are estimated at 87.3 million ounces of gold and 12.10 million tonnes of copper. This represents a year-on-year increase of 8.1 million ounces of gold (10.3%) and 3.64 million tonnes of copper (43.0%) after mining depletion. Silver Ore Reserves are estimated at 77.2 million ounces. This result is inclusive of the August 2012 Golpu Ore Reserve announcement. Ore Reserves are quoted as a subset of Mineral Resources.
- Independent external and internal reviews were conducted on Mineral Resource estimates for Cadia East, Bonikro and Hidden Valley Kaveroi.
- Independent external and internal reviews were conducted on Ore Reserve estimates for Cadia East, Hidden Valley (Kaveroi), Bonikro and Telfer (O'Callaghans).
- Metal price assumptions for all Mineral Resource estimates other than Gosowong Province are US\$1,350 per ounce of gold (US\$1,100 in 2011), US\$3.10 per pound of copper (US\$2.70 in 2011) and US\$23.00 per ounce of silver (\$20.00 in 2011).
- Metal price assumptions for all Ore Reserve estimates other than Gosowong Province are US\$1,250 per ounce of gold (US\$950 in 2011), US\$2.70 per pound of copper (US\$2.30 in 2011) and US\$20.00 per ounce of silver (\$15.00 in 2011).
- Metal price assumptions for the Gosowong Province Mineral Resources and Ore Reserves are US\$1,400 per ounce of gold reflecting the adoption of a short term price outlook for these shorter life orebodies.
- For all Ore Reserve and Mineral Resource estimates (other than Gosowong Province) with an Australian cost base, a USD to AUD exchange rate assumption of 0.80 for metal price conversion was applied (unchanged from 2011). The exchange rate assumption for Gosowong Province was 0.90.

- Where appropriate, Mineral Resources are constrained spatially either within a notional US\$1400 per ounce of gold and US\$4.00 per pound of copper pit shell, or within an underground mining shape based on a marginal cut-off.
- Ore Reserves for Hidden Valley and Golpu in PNG are based on a Competent Person's statement provided on behalf of the Morobe Mining Joint Venture (MMJV) by our 50% partners Harmony Gold Mining Company Limited. Further details on MMJV Mineral Resources and Ore Reserves are available on the Harmony website [www.harmony.co.za](http://www.harmony.co.za).
- These explanatory notes should be read in conjunction with Newcrest's 2012 Resources and Reserves Statement which is available on the Newcrest website at [www.newcrest.com.au](http://www.newcrest.com.au).
- Ore reserves and resources information set out in these Explanatory Notes has been prepared in accordance with the 2004 edition of the Australasian Code for the Reporting of Exploration results, Mineral Resources and Ore Reserves (The JORC Code).
- As a company with a secondary listing on the Toronto Stock Exchange, Newcrest Mining Limited is required to include a reconciliation of the material differences between The JORC Code and the applicable definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM Definition Standards). In relation to the December 2012 Resources and Reserves Statement, the reconciliation is set out in Newcrest's Canadian News Release dated 8 February 2013, and is available at [www.sedar.com](http://www.sedar.com) and at Newcrest's website [www.newcrest.com.au](http://www.newcrest.com.au).

## 1. CADIA PROVINCE (NSW)

The 100% Newcrest owned Cadia Valley Operations are located south of Orange in the central west of New South Wales. Mining commenced in 1998 with a large-scale open pit at Cadia Hill, followed by development of a bulk tonnage underground mine at Ridgeway. The Cadia East deposit is being developed as a large underground mining operation and reached first commercial production in 2012.

The porphyry-related deposits within Cadia Valley host gold and copper. Minor molybdenum and silver mineralisation is also present. Metal is produced either in a copper concentrate containing elevated gold values or as gold doré. Concentrate is piped to a filter plant at the nearby town of Blayney before transport by rail to Port Kembla for export to international customers.

The Cadia Valley Mineral Resources and Ore Reserves are reported and/or based on an estimated 'value' that incorporates the forecast revenue streams from both recoverable gold and copper and the realisation costs (concentrate transport, smelting and refining).

### 1.1 Cadia East Underground

Cadia East is a single, very large, low to moderate grade, porphyry related gold – copper – silver – molybdenum deposit, located adjacent the eastern edge of the Cadia Hill Open Pit. A Feasibility Study was completed for the Cadia East project in April 2010. The orebody is to be mined via two lifts (PC1 and PC2) over the next 30 years using the Panel Caving mining method. Development has been completed for the undercut and extraction levels associated with the initial panel cave (PC1) and commercial production commenced in the last quarter of 2012.

The Cadia East mineralisation can be divided into two broad overlapping zones; an upper, copper-rich, disseminated zone and, a deeper gold-rich sheeted vein zone proximal to the main monzonite bodies. The upper, copper-rich portion of the deposit is stratigraphically controlled within a volcanoclastic unit. Sulphide mineralisation is predominantly chalcopyrite, with lesser bornite and pyrite. Gold grade increases as disseminated chalcopyrite levels decrease and disseminated and vein bornite levels increase. The deeper gold-rich zone is centred on a core of steeply dipping sheeted quartz-calcite-bornite-chalcopyrite veins. The highest gold grades are associated with bornite-rich veins. Molybdenite forms a mineralised blanket above and to the east of the higher grade gold envelope. To date, the known mineralised system (defined by a 0.1% Cu shell) extends approximately 2.5 kilometres east-west, 0.7 kilometres north-south and 1.8 kilometres vertically. The deposit does not outcrop as it is overlain by between 80 and 200 metres of post mineralisation sandstones and shales.

### Mineral Resource

The Cadia East resource model was updated in May 2012 following extensive underground drilling (predominately hydrofracture drilling in PC1). The new resource model contains estimates for copper, gold, silver, molybdenum, fluorine and sulphur. Ordinary Kriging was used to estimate copper, gold, molybdenum, fluorine and sulphur and Inverse Distance Squared (ID2) was used to estimate silver.

The Cadia East Mineral Resource is reported within a notional marginal outline based on the proposed bulk underground mining method. Due to the non-selective nature of this mining

method, the entire content of the volume is reported including internal dilution. The reporting shell was updated in December 2012 to reflect new metal price assumptions. The Mineral Resource figure includes both in-situ material within the resource outline and broken but not extracted material within the current cave – ‘cave stocks’. No surface stockpiles are included in the resource.

The Mineral Resource is classified into Indicated and Inferred Resources based on an assessment of grade and geological continuity and data density.

Changes during the year include depletion due to mining and additions associated with the new resource model and the new reporting shell. The net effect is an increase of 4.4Moz in contained gold, 0.95Mt in contained copper, and 16.7Moz in contained silver.

### Cadia East Mineral Resource

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Mineral Resource	2,800	0.41	38	0.26	7.5	0.57	52
Measured Mineral Resource							
Indicated Mineral Resource	2,500	0.42	34	0.28	6.8	0.60	48
Inferred Mineral Resource	360	0.34	4.0	0.19	0.69	0.40	4.6

### Ore Reserve

There is an increase in the Cadia East Ore Reserve of 1.3Moz in contained gold, 0.55Mt in contained copper and 11.1Moz in contained silver, compared to 2011. Differences between the 2011 and 2012 Ore Reserve estimate relate to the application of higher metal price assumptions and the new resource model from May 2012. The new model led to changes in the mining blocks on Lifts 1 and 2, with metal previously accounted for in Lift 0 now contained within the Lift 1 mining block and Lift 3 now contained within Lift 2.

### Cadia East Ore Reserve

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Ore Reserve	1,500	0.50	24	0.29	4.2	0.66	31
Proved Ore Reserve							
Probable Ore Reserve	1,500	0.50	24	0.29	4.2	0.66	31

## 1.2 Ridgeway Underground

The Ridgeway deposit is a structurally-controlled gold-copper porphyry orebody characterised by stockwork and sheeted quartz veins containing copper sulphides and gold. To date the known mineralised system extends approximately 400m east-west, 250m north-south and in excess of 1000m vertically.

The Ridgeway mineralisation has been exploited by large scale underground mining using sub-level cave (SLC) extraction and Block Caving (Ridgeway Deeps) below the SLC. The mine,

which supplies approximately 6-7 Mt of gold-copper ore annually to the Cadia concentrator, produces gold as doré and in copper concentrate.

## Mineral Resource

The Ridgeway Mineral Resource includes the operating block cave (Lift 1) and sub-level cave (Halo) as well as the yet to be developed block cave (Lift 2) and remnant SLC. The geological model for major lithological and structural boundaries is based on drill-hole data and knowledge gained from underground exposure and previous mining. Gold and copper grade, mineralised quartz content and copper mineralogy are used to control grade interpolation in the estimate. The grades for each domain were interpolated separately using Ordinary Kriging. The 2012 Mineral Resource is estimated from the same grade model as that used for the 2011 report.

The Ridgeway Mineral Resource is reported within a notional marginal shell based on the bulk underground mining methods. The reporting shell was updated in December 2012 to reflect new metal price assumptions and incorporates the design of both block caves (which includes estimate material to be mined as internal dilution within the block caves). The Mineral Resource figure includes both in-situ material within the resource outline and broken but not yet extracted material within the current cave – ‘cave stocks’. No surface stockpiles are included in the resource.

Changes during the year include depletion due to mining and additions associated with the revised reporting shell. The net effect is an increase of 0.1Moz in contained gold, 0.07Mt in contained copper, and 0.2Moz in contained silver.

### Ridgeway Mineral Resource

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Mineral Resource	180	0.60	3.4	0.35	0.61	0.69	3.9
Measured Mineral Resource	0.11	1.2		0.51		1.4	
Indicated Mineral Resource	130	0.68	2.9	0.34	0.44	0.79	3.3
Inferred Mineral Resource	43	0.37	0.51	0.39	0.17	0.41	0.57

## Ore Reserve

Construction of the Ridgeway Deeps Lift 1 block cave was completed in October 2010 with mining planned for completion in 2017. A study has been completed for the remainder of the deposit and this has identified a second, lower block cave (Lift 2) which can be economically mined in the future.

The basis of estimation is an economic (value) cut-off, based on operating costs as defined in the planning process. Ore Reserves are based on the mining of Lift 1 over the next 5 years (to end in 2017) and later scheduled production from Lift 2 for a further 8-9 years.

The Ore Reserve has reduced by 0.3Moz in contained gold, 0.03Mt in contained copper and 0.2Moz in contained silver compared with the previous year, primarily due to mining depletion but slightly offset by increases in metal prices.

**Ridgeway Ore Reserve**

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Ore Reserve	100	0.68	2.2	0.32	0.32	0.75	2.4
Proved Ore Reserve							
Probable Ore Reserve	100	0.68	2.17	0.32	0.32	0.75	2.4

**1.3 Cadia Hill**

Cadia Hill is a porphyry related sheeted vein deposit hosted by Ordovician intrusive with minor volcanic rocks.

Cadia Hill was the first deposit in the Cadia Valley Operations group to be mined. Cadia Hill operated as a large open pit from July 1998 until June 2012 (when the current phase of mining was completed).

**Mineral Resource**

The Cadia Hill Mineral Resource estimate is based on 2009 grade model informed by extensive diamond drilling (on a notional 50 by 50 metre grid) as well as substantial grade control and mapping data accumulated over thirteen years of mine production. Grade was estimated via a combination of Multiple Indicator Kriging and Ordinary Kriging.

The Mineral Resource has been reported within a notional spatial constraining pit shell above a 'value' cut-off. The constraining shell remains unchanged since December 2011. The material inside this shell is classified into Indicated and Inferred Resource based on grade and geological continuity and data density. All stockpile material is classified as Measured Resource.

Changes during the year include depletion due to mining and additions associated with an increase in the metal price assumptions. The net result is a decrease of 0.02Moz in contained gold and 0.01Mt in contained copper.

**Cadia Hill Mineral Resource**

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	460	0.36	5.3	0.11	0.50
Measured Mineral Resource	170	0.44	2.4	0.13	0.21
Indicated Mineral Resource	36	0.40	0.46	0.13	0.05
Inferred Mineral Resource	250	0.30	2.5	0.10	0.25

**Ore Reserve**

The Cadia Hill Open Pit is a large scale conventional hard rock mine. The mining of Cutback 3 was completed in June 2012, after 14 years of continual operation. The 2012 Ore Reserve is made up of low-grade stockpiles and Cutback 4, which is planned to be mined in the future.

Ore is classified within pit designs using a net block value to take into account the contributions of gold, copper and silver. The principal change to the 2012 Ore Reserve from the 2011 Ore Reserve is due to mining depletion resulting in an overall reduction of 0.2Moz in contained gold and 0.02Mt in contained copper.

Stockpiles are reported with the Cadia Hill Mineral Resource and Ore Reserve and consist of ore mined from both Cadia Hill and the previously mined Cadia Extended Open Pit. The grades are based on grade control data. The stockpiles are reported as both a Measured Resource and Proved Reserve.

#### Cadia Hill Ore Reserve

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	79	0.54	1.4	0.14	0.11
Proved Ore Reserve	75	0.55	1.3	0.14	0.11
Probable Ore Reserve	3.7	0.35	0.04	0.13	

#### 1.4 Cadia Extended

The Cadia Extended gold-copper mineralisation is located on the north-west limits of the Cadia Hill Open Pit and has similar characteristics to a large low grade porphyry style deposit. The remaining deposit, located partly beneath the backfilled pit, is considered to have bulk underground mining potential.

##### Mineral Resource

Mineralisation comprises a combination of vein controlled and disseminated gold, copper and molybdenum. It is focused within a corridor of increased alteration, structural deformation and quartz veining within a large monzonite body and adjacent to a contact with Ordovician volcanics. A series of high grade pegmatite structures also exist in the monzonite body but only one of these has been sufficiently drilled to be modelled and included in this resource estimate.

The resource is constrained within an outline that approximates the degree of selectivity afforded by a block cave mining method. The value calculation was changed in 2011 to better reflect the low grades, (similarity to Cadia East ore type) and recognition that it would be processed through the low grade processing facility.

The Cadia Extended Mineral Resource figures are unchanged from previous estimate.

#### Cadia Extended Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	83	0.35	0.93	0.20	0.16
Measured Mineral Resource					
Indicated Mineral Resource	82	0.35	0.92	0.20	0.16
Inferred Mineral Resource	0.33	0.23		0.17	

## Ore Reserve

No Ore Reserve has been estimated for the Cadia Extended deposit.

### 1.5 Big Cadia

Big Cadia is centred on an area of shallow historic workings located north of the Cadia Hill Open Pit and east of the Ridgeway Mine cave zone. The mineralisation is skarn style (altered calcareous sediments adjacent to porphyry systems) and has been evaluated as suitable for open pit mining. The mineralisation outcrops and comprises an oxide lens and a deeper sulphide body down to approximately 400m below surface.

## Mineral Resource

As in previous reports, the Big Cadia Mineral Resource is reported on a value basis incorporating forecast revenue streams from both gold and copper and reflecting the cost structure anticipated from long term planning models. The Mineral Resource is constrained within notional pit shell limits. The 2012 Mineral Resource is estimated from the same grade model as that used to develop the 2011 estimate.

Changes during the year relate to the increase in the metal price assumptions. The net result is an increase in contained metal in Mineral Resources of 0.01Moz in contained gold.

### Big Cadia Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	49	0.35	0.56	0.37	0.18
Measured Mineral Resource					
Indicated Mineral Resource	47	0.36	0.55	0.37	0.17
Inferred Mineral Resource	1.9	0.21	0.01	0.37	0.01

## Ore Reserve

The extraction method for Big Cadia is proposed to be open pit mining utilising medium to large scale loading and hauling equipment. The project is to be developed as a two stage operation that corresponds to the upper and lower valley regions. Each stage represents a duration of 3-5 years for both mining and processing. Ore will be processed through the existing CVO plant, blended with other ore sources.

The Big Cadia Ore Reserve has increased marginally since 2011, by 0.01Moz in contained gold and 0.01Mt in contained copper driven by the increase in metal price assumptions.

### Big Cadia Ore Reserve

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	32	0.39	0.40	0.39	0.12
Proved Ore Reserve					
Probable Ore Reserve	32	0.39	0.40	0.39	0.12

## **2. TELFER PROVINCE (WA)**

The 100% Newcrest owned Telfer Gold Mine is located within the Great Sandy Desert of Western Australia, approximately 485km by road south-east of Port Hedland and 680km north-east of Newman. The mine has operated in its current format since the commissioning of the large scale grinding and flotation circuits in late 2004.

Gold and copper mineralisation in the Telfer Province is largely structurally controlled reefs, veins and stockworks hosted by sedimentary rocks of Proterozoic age. Deep weathering depleted the copper in the upper parts of the deposits allowing historical gold production using gravity and cyanide leaching processes. Ore processing facilities now exploit the large gold and copper sulphide Mineral Resources using flotation to produce a copper concentrate containing elevated gold levels. A gravity circuit is used to produce a gold doré. Concentrate is exported to customers via Port Hedland. Small tonnages of oxide material are processed through the dump leach circuit.

The Telfer operation is comprised of Telfer Open Pit (Main Dome and West Dome) and Telfer Underground. Open Pit mining is a conventional truck and hydraulic excavator operation. Selective mining techniques are used for excavation of the high-grade reefs, while stockwork ore and waste are mined using bulk methods. The limited quantities of near-surface oxidised stockwork are also bulk mined.

Recent production is primarily from the Telfer Main Dome and West Dome Open Pits and the Telfer Underground sub-level cave (SLC).

### **2.1 Main Dome Open Pit**

The Main Dome deposit is the largest deposit in the Telfer area and occurs as a series of stacked stratabound reefs and discordant stockworks within a folded dome structure. Historically, the deposit has been mined by both open pit and selective underground methods. Currently, the upper portion of the deposit is mined as a large scale open pit.

The Main Dome Open Pit is approximately 2.8 km x 1.3km and 350m at the deepest point. The recovery route for gold and copper varies based on characteristics of the ore with the majority processed by gravity and sulphide flotation.

### **Mineral Resource**

The Main Dome Mineral Resource is centred on mineralisation currently being mined in the Main Dome Open Pit. The grade estimate is based on data from approximately 7,000 resource definition drillholes with approximately 161,000 four-metre downhole composites. These holes are from all periods of operations but are predominantly from the Feasibility Study Phase (1998 to 2003). Supporting datasets include blastholes and reverse circulation percussion holes from open pit grade control drilling and face samples from underground mine development on high grade reefs.

The Telfer Main Dome resource model is comprised of estimates for gold, copper, cyanide soluble copper, sulphur and density. Four main stockwork domains and ten reefs were estimated within the Main Dome model. Multiple Indicator Kriging was used to estimate stockwork related mineralisation and Ordinary Kriging for the reef estimates.

The 2012 Mineral Resource is estimated from the same grade model as that used for the 2011 estimate.

The Mineral Resource has been reported within a notional spatial constraining pit shell above a value cut-off. The constraining shell remains unchanged since December 2011. The material inside this shell is classified into Indicated and Inferred Resource based on grade and geological continuity and data density. The majority of stockpile material is classified as Measured Resource (including operational and dump leach stockpiles).

Changes during the year include depletion due to mining, metallurgical and cost adjustments and increases to metal price assumptions. The net result is a decrease of 0.35Moz in contained gold.

### Telfer Main Dome Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	460	0.63	9.2	0.08	0.36
Measured Mineral Resource	28	0.43	0.39	0.07	0.02
Indicated Mineral Resource	380	0.65	7.9	0.08	0.30
Inferred Mineral Resource	50	0.57	0.92	0.07	0.04

### Ore Reserve

The Main Dome Ore Reserve estimate is defined within an existing final pit design based on detailed geotechnical assessment and practical mining considerations and as depleted at 31 December 2012. Final pit designs and interim cutbacks have been developed from pit optimisation shells. The Ore Reserves are defined using a block value cut-off approach. The Main Dome Ore Reserve includes low-grade stockpiles and dump leach stockpiles.

Impacts on the Ore Reserve estimate are mainly due to mining depletion, offset by an increase in metal prices. The net impact has been an additional 0.24Moz in contained gold and 0.02Mt in contained copper.

### Telfer Main Dome Ore Reserve

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	270	0.73	6.4	0.09	0.25
Proved Ore Reserve	28	0.43	0.39	0.07	0.02
Probable Ore Reserve	240	0.76	6.0	0.09	0.23

## 2.2 West Dome Open Pit

The West Dome deposit is located approximately 3km northwest of the Main Dome deposit and is a continuation of the folded sedimentary sequence in a second sub-parallel structure.

The West Dome Open Pit is a conventional truck and hydraulic excavator operation. Recoveries for both gold and copper vary depending upon the process mode within the flotation circuits or by heap leaching if ore characteristics are suitable.

### Mineral Resource

The West Dome resource model is based on the data from approximately 5,100 resource definition drill holes with 133,000 four-metre assay composites completed since project inception to September 2010.

The West Dome resource model is comprised of estimates for gold, copper, cyanide soluble copper, sulphur and density. Four main stockwork domains and one reef domain were estimated within the West Dome model. Multiple Indicator Kriging was used to estimate stockwork related mineralisation and Ordinary Kriging for the reef estimate.

The 2012 Mineral Resource is estimated from the same grade model as that used for the 2011 report. The Mineral Resource has been reported within a notional spatial constraining pit shell above a value cut-off. The constraining shell remains unchanged since December 2011. The material inside this shell is classified into Indicated and Inferred Resource based on grade and geological continuity and data density. All stockpile material is included in the Main Dome Mineral Resource.

Changes during the year include depletion due to mining, metallurgical and cost adjustments and increases to metal price assumptions. The net result is a decrease of 0.8Moz in contained gold and 0.03Mt in contained copper.

### Telfer West Dome Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	410	0.53	7.1	0.06	0.24
Measured Mineral Resource					
Indicated Mineral Resource	390	0.53	6.6	0.06	0.22
Inferred Mineral Resource	27	0.54	0.47	0.07	0.02

### Ore Reserve

The West Dome Ore Reserve estimate is based on extraction by means of conventional open pit bulk mining methods. Processing rates and recovery parameters for West Dome are the same as those assumed for the Main Dome Open Pit Ore Reserve estimate.

The West Dome Ore Reserve estimate is defined within an existing final pit design based on geotechnical assessment and practical mining considerations. Final pit designs and interim cutbacks have been developed from pit optimisation shells. The Ore Reserves are defined by a block value cut-off approach.

The West Dome Ore Reserve has decreased since the 2011 estimate, by 0.19Moz in contained gold and 0.01Mt in contained copper, due to depletion, a change in resource coding and improvements in the ore selection methodology.

### Telfer West Dome Ore Reserve

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	180	0.61	3.6	0.06	0.11
Proved Ore Reserve					
Probable Ore Reserve	180	0.61	3.6	0.06	0.11

### 2.3 Telfer Underground (SLC, External SLC and VSC)

The Telfer UG Mineral Resource comprises the operating Sub Level Cave (SLC) mine, the Vertical Stockwork Corridor (which lies directly below the existing SLC) and selective high grade reef mining external to the SLC. Mineralisation includes stratabound reefs, cross cutting veins and stockwork zones around the reefs.

#### Mineral Resource

**SLC:** The Telfer SLC is focused on the recumbently-folded eastern limb of the Main Dome structure that hosts conformable sulphide rich reefs, veins in structurally disrupted areas and stockworks in brittle sediments.

The Telfer SLC Mineral Resource estimate is based on sample data from surface and underground diamond and reverse circulation drilling, bulk sampling, development mapping and face sampling. The Telfer SLC resource model is comprised of estimates for gold, copper, cyanide soluble copper, sulphur, arsenic, cobalt and density. The resource model was originally constructed in 2002.

The Telfer SLC Mineral Resource is reported within a notional marginal outline based on the bulk underground mining method. The reporting shell was updated in December 2012 to reflect new metal price assumptions and incorporates the maximum expanse of the SLC cave. Due to the non-selective nature of this mining method, the entire content of the volume is reported including internal dilution. The Mineral Resource includes both in-situ material within the resource outline and broken but not yet extracted material within the current cave – ‘cave stocks’. No surface stockpiles are included in the resource estimate. The Telfer SLC Resource is limited to the base of the planned Ore Reserve volume (4470RL). Material below this level is included in the VSC Resource.

Changes during the year include depletion due to mining and additions associated with the new reporting shell. The net effect is a decrease of 0.2Moz in contained gold and a decrease of 0.02Mt in contained copper.

**VSC:** The Vertical Stockwork Corridor (VSC) Mineral Resource lies directly below the existing Telfer SLC Mineral Resource (separated at the 4470R level). No mining has occurred to date within the VSC.

The VSC represents a structurally controlled style of gold and copper mineralisation hosted within a steep west-dipping fold-axial related breccia and stockwork zone within brittle sandstone host rocks. The VSC mineralised zone has been recognised over a 1,000m strike length 600m vertically with widths of up to 60m. The VSC Mineral Resource is based on sample data from 114 drill holes generating 14,781 five-metre composites.

The resource model is comprised of estimates for gold and copper using Ordinary Kriging (within a central breccia zone) and Multiple Indicator Kriging (in the surrounding stockwork zone). The VSC Mineral Resource is reported within a notional marginal outline based on the proposed SLC configuration. Due to the non-selective nature of this mining method, the entire content of the volume is reported including internal dilution. The VSC Mineral Resource estimate remains unchanged from 2011 report.

**External SLC:** The Telfer External to SLC Mineral Resource includes the M35 and M50 Reefs and the Western Flanks (comprising high grade sub-vertical veins and the I30 reef - beyond the current SLC footprint).

The estimation of the External to SLC Mineral Resource is based on sample data from surface and underground diamond drilling, development mapping with face sampling and bulk sampling from dedicated drives.

The M35 and M50 Reef grade models were estimated in April 2011 as part of the larger Main Dome mineralised system. The reefs were estimated by Ordinary Kriging of reef intercept assays either from face samples (where drives are established), or from wider spaced drill holes beyond mine development. There has been no change to the Western Flanks resource model during this reporting period

The External to SLC Mineral Resource is reported based on geological domains. Changes during the year include depletion due to mining and additions associated with the transfer of M35 reef material (from the Main Dome Mineral Resource). The net result is a decrease of 0.02Moz in contained gold.

### Telfer Underground Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	98	1.2	3.7	0.31	0.30
Measured Mineral Resource					
Indicated Mineral Resource	78	1.3	3.2	0.32	0.25
Inferred Mineral Resource	21	0.76	0.50	0.25	0.05

### Ore Reserve

**SLC:** The predominant mining method for extraction of the Telfer Underground Mineral Resource is SLC. In the Western Flanks area, it is proposed that mining will comprise room and pillar mining and up-hole stoping methods. The M50 Reef was re-accessed in July 2009 and long-hole open stope mining has continued since that time.

Mining design and production follows the method which has been employed since production commenced in 2006.

A depletion of reserves due to mining was offset by an increase in metal prices for a net decrease in the SLC Ore Reserve of 0.14Moz in contained gold and 0.01Mt in contained copper.

**External SLC:** Mining depletion has been offset by the inclusion of the M35 reef resulting in no significant change to the External to SLC Ore Reserve (Western Flanks, M35 and M50 Reefs) since the 2011 estimate.

**VSC:** The VSC Ore Reserve has remained unchanged since first reported. The mining method proposed is similar to the employed for the past six years in the SLC operation, although conducted on a longitudinal orientation rather than transverse.

### Telfer Underground Ore Reserve

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	45	1.1	1.6	0.30	0.14
Proved Ore Reserve					
Probable Ore Reserve	45	1.1	1.6	0.30	0.14

## 2.4 Other (Camp Dome and Satellites)

The Camp Dome Deposit is a satellite copper-only deposit located approximately 20km north of the Telfer Operations. Mineralisation is quartz sulphide veins hosted in a folded sediment package. Weathering of primary mineralisation has resulted in a chalcocite rich and associated secondary copper 'blanket' at the oxidation boundary. No significant gold grades have been intersected in drillholes.

The Telfer Satellites are three gold and copper deposits – Backdoor West, Big Tree and Dolphy, all located between approximately 20 to 30 kilometres south of the Telfer processing facilities. These resources represent potential additional ore feed to the current processing facilities. The combined Telfer Satellites Mineral Resource is based on heap leaching of oxide material and sulphide flotation of primary material after transporting back to Telfer for processing.

### Mineral Resource

The 2012 Mineral Resource estimate for Camp Dome and Telfer Satellites have been developed from the grade models used for the 2011 estimate.

The Camp Dome Mineral Resource estimate is based on data from 58 drill holes totalling 14,943m (42 holes are reverse circulation percussion with the remainder diamond core). A limited number of historical drill holes are included in the informing samples used to develop the estimate. Hole spacing is typically 100m on 100m to 200m spaced sections. Estimation domains reflect the leached, enriched and primary mineralisation zones. Only copper, cyanide soluble copper and sulphur is estimated in the Mineral Resource, no gold is present. Grades are estimated by Ordinary Kriging of 4m composites into 50m x 50m x 10m cells. The Mineral Resource is classified as an Inferred Resource due to the wide drill spacing and resulting uncertainty of grade and geological continuity.

The Backdoor West Mineral Resource is based on a small tonnage, medium grade gold and copper deposit formed in a thrust and fault system cross-cutting stratigraphy. The Mineral Resource estimate is based on data from 33 drillholes with 3,316 assay records. Gold, copper and cyanide soluble copper to copper ratios were modelled by Ordinary Kriging. The Mineral

Resource is reported using a gold cut-off based on dump leaching. All Mineral Resources are classified as Inferred Resources based on geological and grade continuity and drill density.

Dolphy is a small tonnage, high grade structurally controlled deposit limited by faulting. Drilling includes reverse circulation percussion, air-core and limited diamond holes with a total of 133 holes providing 7,957 assays. Grades for gold, copper and sulphur were estimated using Ordinary Kriging. The Mineral Resource has been classified as Indicated and Inferred Resource based on geological continuity and drill density. The resource is reported using a gold cut-off which assumes that the ore will be transported to the Telfer plant for processing. An optimised pit shell has not been used to constrain the Mineral Resource.

The Big Tree Mineral Resource is structurally controlled and hosted in sediments within a dome structure similar to the Telfer deposits. Mineralisation is associated with quartz veins and weathered sulphides near surface. The Mineral Resource estimate is based on 230 reverse circulation and diamond drill holes totalling 22,150m with approximate drill spacing from 12.5m x 25 m to 25m x 50m. Gold and copper grades were estimated using Ordinary Kriging interpolation. The resource classification reflects drill density and grade and geological continuity. No unweathered basement mineralisation is included in the Mineral Resource and the resource is not constrained by an optimised pit shell.

### Telfer Satellites Mineral Resource

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	16	0.42	0.22	0.33	0.05
Measured Mineral Resource					
Indicated Mineral Resource	0.57	4.2	0.08	0.03	
Inferred Mineral Resource	16	0.28	0.14	0.34	0.05

### Ore Reserve

No Ore Reserves have been estimated for the Camp Dome or Telfer Satellite deposits.

### 2.5 O'Callaghans

The O'Callaghans poly-metallic deposit is located approximately 10 km south of Telfer Gold Mine. Mineralisation containing economic quantities of tungsten, copper, zinc and lead has been identified approximately 300m below surface as a sub-horizontal layer of poly-metallic skarn (altered limestone) mineralisation up to 60m thick on the contact between a large granitic intrusion and overlying limestones. Molybdenum and silver are present but are not currently considered economically significant. O'Callaghans is currently the subject of a pre-feasibility study.

### Mineral Resource

The O'Callaghans Mineral Resource estimate is unchanged from June 2010.

The Mineral Resource estimate is based on 184 drill holes (RC pre-collars with diamond tails). Average drillhole spacing through the main ore zone is approximately 100m x 100m. A 200m x 200m test area in the centre of the mineralisation was drilled at 50m x 50m intervals to evaluate

short distance grade continuity. The resource has been estimated using Ordinary Kriging. The total inventory of the main mineralised horizon has been reported using a minimum mining height of 5m.

### O'Callaghans Mineral Resource

	Ore		Tungsten Trioxide		Copper		Zinc		Lead	
	Mt	%	Mt	%	Mt	%	Mt	%	Mt	%
Total Mineral Resource	78	0.33	0.26	0.29	0.22	0.50	0.39	0.25	0.19	
Measured Mineral Resource										
Indicated Mineral Resource	69	0.34	0.24	0.29	0.20	0.55	0.38	0.27	0.18	
Inferred Mineral Resource	9.0	0.25	0.02	0.24	0.02	0.15	0.01	0.07	0.01	

### Ore Reserve

The O'Callaghans Ore Reserve estimate is based on stoping with fill using Telfer's established underground mining capability. Mining methodology is based on substantially limiting subsidence of the overlying limestone. Costs have been estimated using Telfer's established performance with additional costs for new fill and processing work elements.

Ore is proposed to be trucked to the surface and treated at a processing plant to be constructed adjacent to the portal. Processing recovery estimates are based on laboratory test work. The Tungsten price has been increased from US\$12/lb to US\$14/lb was offset by a change to metallurgical assumptions and has resulted in a decrease of 0.01Mt in contained tungsten trioxide, but increases of 0.03Mt in contained copper, 0.06Mt in contained zinc and 0.03Mt in contained lead, since the 2011 estimate.

### O'Callaghans Ore Reserve

	Ore		Tungsten Trioxide		Copper		Zinc		Lead	
	Mt	%	Mt	%	Mt	%	Mt	%	Mt	%
Total Ore Reserve	59	0.28	0.16	0.29	0.17	0.62	0.36	0.30	0.18	
Proved Ore Reserve										
Probable Ore Reserve	59	0.28	0.16	0.29	0.17	0.62	0.36	0.30	0.18	

## 3. LIHIR (PNG)

The Lihir Gold Mine is located on Niolam Island, 900 kilometres north of Port Moresby in the New Ireland Province of Papua New Guinea. As Niolam Island is the principal island of the Lihir Group, it is generally referred to as Lihir Island.

The Lihir Gold Mine is 100% owned by Newcrest and became part of Newcrest in September 2010 with the merger of Lihir Gold Limited and Newcrest.

Lihir is a volcanic sea mount that rises steeply from sea level to approximately 600 metres above sea level. At its widest points, the island measures 22 kilometres from north to south and 14.5 kilometres from east to west.

The Luise Caldera, in which all of the known ore deposits are located, is on the east coast of the island. Exploration work has identified several adjacent and partly overlapping mineral deposits in the Luise Caldera, the principal ones being Lienetz, Minifie, Coastal and Kapit. The limits of the mineralisation have not been completely defined and are open at depth, along strike and to the east (currently limited by the Pacific Ocean). Gold occurs mainly as sub-micron sized particles in pyrite and marcasite and is predominantly refractory in nature.

The Lihir Gold Mine consists of three linked open pits, Minifie, Lienetz and Kapit, that will be mined over the project life. The mine operates by conventional open pit methods. The plant's facilities first crush and grind the ore. A flotation plant is used to concentrate a portion of the material as required, before it is fed to autoclaves for pressure oxidation followed by conventional CIL technology to recover gold.

## Mineral Resource

The Lihir resource model was updated in October 2012 with the inclusion of data from additional drilling. The 2012 Mineral Resource estimate is based on the data from approximately 2,250 drill holes completed since project inception up to July 2012.

The Lihir Mineral Resource model is comprised of estimates for gold, sulphur, copper, molybdenum, arsenic, silver and density. Localised Uniform Conditioning was used to estimate gold, sulphur, copper, molybdenum, arsenic and silver while density was estimated using Ordinary Kriging.

The Mineral Resource has been reported within a notional spatial constraining pit shell above a marginal gold cut-off. The material inside this shell is classified into Indicated and Inferred Resource based on grade and geological continuity and data density. All stockpile material is classified as Measured Resource.

Changes during the year include depletion due to mining and additions associated with the new resource model and updated metal price assumptions. The net result is an increase of 7.6Moz in contained gold.

### Lihir Mineral Resource

	Ore	Gold	
	Mt	g/t	Moz
Total Mineral Resource	1,000	2.0	64
Measured Mineral Resource	100	2.3	7.6
Indicated Mineral Resource	770	1.9	48
Inferred Mineral Resource	150	1.9	9.0

## Ore Reserve

Current operations at Lihir involve open pit mining of the Minifie and Lienitz orebodies by conventional shovel-truck operation, barge disposal of waste rock and shore based and in-pit stockpiling of lower grade ore. Mining of the Kapit orebody and eastern extent of Lienetz orebody requires further depressurisation and the construction of a sea wall around the eastern extent.

There has been an increase in the Ore Reserve of 1.2Moz in contained gold since the 2011 estimate. This increase can be attributed to an updated resource model and an increase in gold price offset by mining depletion.

#### Lihir Ore Reserve

	Ore	Gold	
	Mt	g/t	Moz
Total Ore Reserve	480	2.1	33
Proved Ore Reserve	100	2.3	7.6
Probable Ore Reserve	380	2.1	25

#### 4. CÔTE d'IVOIRE (WEST AFRICA)

The main focus of the Project is Bonikro which is currently operating as an open cut mine. The Bonikro Gold Mine is located within the Oumé Project area in central to southern Côte d'Ivoire. The Oumé Project is located approximately 230km northwest of Abidjan, between the regional centres of Oumé, Hiré and Kokoumbo.

The Côte d'Ivoire Project comprises the Bonikro orogenic gold deposit, and the Hiré and Dougbafla East structurally controlled narrow vein style deposits. Mineral Resources have been estimated for all three deposits and an Ore Reserve has been estimated for the Bonikro deposits.

The Bonikro Gold Mine (and associated exploration leases) was acquired by Newcrest through the merger of Lihir Gold Limited and Newcrest in September 2010. Construction of the Bonikro Gold Mine started in 2007 and the first gold was poured in 2008. Bonikro employs a conventional open pit mining method. The predominant method of gold recovery is CIL, however with approximately 40% of the gold recovered via a gravity circuit.

The Hiré deposit is located within 10-12 kilometres of the Bonikro deposit. The Hiré deposit is currently the focus of a feasibility study to evaluate its potential as an open pit mine (with processing at the nearby Bonikro processing facility).

#### Mineral Resource

**Bonikro:** The Bonikro Mineral Resource estimate has been updated since December 2011 with the inclusion of additional drilling data.

The geology of the Bonikro deposit is dominated by a felsic (granitic) porphyry with a strike length of 1000m and a width of up to 300m. The porphyry has been intersected in drilling up to 500m below surface.

Mineralisation occurs primarily in two modes; (1) structurally controlled shear zones, and (2) as stockwork veining. The shear zones are developed within both the porphyry and the basalts while the stockwork mineralisation is exclusively confined to the porphyry. The deposit geology allows two distinct domains to be defined; the Mafic Shear (geologically distinct shear in the mafics), and the felsic domain (the geologically interpreted porphyry intrusive).

Drilling density varies from 20m x 25m (Indicated Resource) to 100m x 100m (Inferred Resource). The estimate is based on data collected predominantly from reverse circulation and diamond drilling from 423 surface and in-pit holes. Indicator Kriging is selected as the estimation method for the Felsic domains. Estimation of the Mafic Shear is by Ordinary Kriging.

There has been a net decrease in the Bonikro Mineral Resource of 0.17Moz contained gold since December 2011 after accounting for mining depletion and the application of the US\$1,400 per ounce gold price pit shell spatial constraint. The decrease in the resource estimate is due to the new resource model and application of the spatial constraint.

**Hire and Dougbafla East:** The resource estimates for Hiré and Dougbafla East are based on data collected predominantly from RC drilling. The modelling methodology is based on interpretation of hard domain boundaries from assay data and estimation into these interpreted domains using Ordinary Kriging.

The Mineral Resource estimates for Hiré and Dougbafla East are unchanged from December 2011.

### Ivory Coast Mineral Resource

	Ore	Gold	
	Mt	g/t	Moz
Total Mineral Resource	65	1.3	2.7
Measured Mineral Resource	4.0	0.83	0.11
Indicated Mineral Resource	47	1.4	2.1
Inferred Mineral Resource	14	1.1	0.50

### Ore Reserve

The Bonikro Ore Reserve estimate has been revised since of the completion of additional drilling and subsequent geological modelling. The Ore Reserve, which is based on a Life of Mine 3.5Mtpa processing rate, has increased by 0.27Moz in contained gold since the previous estimate. (Plant is currently operating at 2Mtpa with low grade material being stockpiled for the plant expansion)

The main driver of the estimate increase was the upgrading of a significant amount of the resource from Inferred to Indicated category, which increased the amount of material that could be classified as Probable Reserve. The pit design was re-optimised using the updated resource model.

The Bonikro Ore Reserve includes stockpiles.

### Bonikro Ore Reserve

	Ore	Gold	
	Mt	g/t	Moz
Total Ore Reserve	35	1.2	1.4
Proved Ore Reserve	4.0	0.83	0.11
Probable Ore Reserve	31	1.3	1.2

## 5. GOSOWONG PROVINCE (INDONESIA)

Gosowong is located on the island of Halmahera in North Maluku Province in the eastern part of the Republic of Indonesia. Gosowong is owned and operated by PT Nusa Halmahera Minerals (PT NHM), an incorporated joint venture between Newcrest Singapore Holdings Ltd<sup>1</sup> (75%) and PT ANTAM (25%). Tenure over all Gosowong deposits is covered by a 6th generation Contract of Work No.B.143/PRES/3/1997.

For the purpose of reporting Mineral Resources and Ore Reserves, Newcrest is reporting 100% of the assets. Actual metal production is marketed by PTNHM.

All economic mineralisation at Gosowong is of low sulphidation epithermal type occurring as mineralised fault systems resulting from the inflow of high temperature gold and silver bearing fluids. The ore shoots are narrow and approximately planar although irregular and complex in local detail. The deposits are relatively moderate to low in dip averaging around 40-50 degrees in the Kencana – Gosowong structural corridor and sub-vertical in the Toguraci corridor. Silver to gold ratio in the ore is approximately 1:1.

Gosowong has been in production since 1999. Both open pit and underground mining methods have been utilised with current mining from underground operations at Kencana (K1, K2 and K-Link) and ramping up of production from Toguraci (Midas and Damar) along with mining from the Gosowong open pit cutback.

The Gosowong Mineral Resource estimate is a combination of resources estimated for the Kencana orebodies (K1, K2 and K-link), Toguraci orebodies (Damar, Yahut-BOD, Midas, Wulan and Kayu Manis), Gosowong Open Pit, Gosowong tailings and stockpiles.

### 5.1 Toguraci

The Toguraci low sulphidation epithermal gold vein deposits are located 2 km south west of the Gosowong mine and form part of the Gosowong Goldfield. The vein structures at Toguraci are narrow with horizontal widths typically ranging between 0.1m and 5m.

Open pit mining at Toguraci commenced in October 2003, with the mining of the Damar vein and then subsequently extending to the T-Fault, Midas, and Jembatan veins and later to the Damar and Kayu Manis veins. Open pit mining at Toguraci concluded in October 2006.

#### Mineral Resource

The Toguraci Mineral Resource estimate has been updated to account for additional resource drilling since December 2011. Of the five shoots identified, two have been updated this year; Damar and Midas. The model is comprised of estimates for gold and silver. Density was assigned according to previous determined values. Estimation was by Ordinary Kriging. Domaining was performed using mineralised envelopes, with additional internal domaining using indicator simulation.

There has been a decrease in the Damar Mineral Resource estimate of 0.03Moz in contained gold and a neutral contained silver balance since December 2011 due to mining depletion and a

<sup>1</sup> Newcrest Singapore Holdings is a wholly owned subsidiary of Newcrest Mining Limited.

new resource model. The Damar Mineral Resource is classified as Indicated and Inferred Resource.

There has been a decrease in the Midas Mineral Resource estimate of 0.02Moz in contained gold and 0.02Moz in contained silver since December 2011 due to mining depletion and a new resource model. The Midas Mineral Resource is classified as Indicated and Inferred Resource.

The Mineral Resource estimates for Kayu Manis, Yahut-BOD and Wulan are unchanged from December 2011.

### Toguraci Mineral Resource

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Mineral Resource	1.4	18	0.85	43	2.0
Measured Mineral Resource					
Indicated Mineral Resource	1.1	21	0.75	49	1.8
Inferred Mineral Resource	0.31	9.6	0.09	20	0.20

### Ore Reserve

The Toguraci Ore Reserve estimate combines the Damar, Kayu Manis, Midas, Wulan and Yahut-BOD orebodies. The operation is currently being mined using longhole stoping (Avoca style).

The overall Ore Reserve estimate has decreased by 0.06Moz in contained gold and 0.04Moz in contained silver since December 2011. Decreases have been due to mining depletion.

### Toguraci Ore Reserve

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Ore Reserve	1.2	14	0.56	35	1.4
Proved Ore Reserve					
Probable Ore Reserve	1.2	14	0.56	35	1.4

## 5.2 Kencana

The Kencana mineralised system is a complex intersecting network of structures consisting of well developed epithermal vein zones (K1 and K2) and link structures. The (K1) Kencana deposit was discovered in 2002 and gold production commenced in early 2006.

Since June 2009, production has been mainly from the Kencana K2 and K-Link systems as well as from the K1 orebody. Mining is either by the underhand cut and fill method with cemented paste fill or longhole open stoping (limited to K1 at depth and K-link).

## Mineral Resource

The Kencana Mineral Resource estimate has been updated to account for mine production and grade control drilling data since December 2011.

The Kencana Mineral Resource is estimated using surface and underground drilling data (obtained via diamond drilling) in addition to underground mine development (face mapping and sampling data). The model is comprised of estimates for gold and silver. Density was assigned according to previous modelled values. Estimation was by Ordinary Kriging into ore zone wireframes. The resource models have been validated against production data (where available).

The K1 Mineral Resource has decreased by 0.05Moz in contained gold and 0.04Moz in contained silver since December 2011. The variances have been attributed to mining depletion and model adjustments. The K1 resource is classified as Indicated.

The combined K2, K-link Mineral Resource has decreased by 0.3Moz in contained gold and 0.12Moz in contained silver since December 2011. The variances have been attributed to mining depletion and model adjustments. The K2 resource is classified as Indicated Resource.

### Kencana Mineral Resource

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Mineral Resource	2.2	15	1.0	9.7	0.70
Measured Mineral Resource					
Indicated Mineral Resource	2.2	15	1.0	9.7	0.70
Inferred Mineral Resource					

## Ore Reserve

Two underground mining methods are used at Kencana, underhand cut-and-fill and longhole stoping. The Kencana Ore Reserve is based on the October 2012 resource update.

The Kencana Ore Reserve estimate has been reduced by 0.33Moz in contained gold and 0.15Moz in contained silver since the 2011 estimate due to mining depletion.

### Kencana Ore Reserve

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Ore Reserve	2.5	11	0.88	7.9	0.63
Proved Ore Reserve					
Probable Ore Reserve	2.5	11	0.88	7.9	0.63

## 5.3 Other Deposits (Gosowong Open Pit and Stockpiles)

Included in Other Deposits are the Gosowong Open Pit 'cutback' and the Gosowong tailings.

The Gosowong Open Pit deposit was mined between 1999 and 2002, producing 0.77Moz of gold. Open pit ore production re-commenced in 2012. A wall slip in the south-west area of the pit has hampered production and pit designs have been modified to maximise metal recovery from the remaining Open Pit Mineral Resource and Ore Reserve.

### Mineral Resource

The total Mineral Resource for Gosowong - Other Deposits includes the open pit and stockpiles and tailings scheduled for re-treatment. The Mineral Resource has decreased due to mining depletion by 0.04Moz in contained gold and 0.1Moz in contained silver since December 2011.

#### Gosowong Open Pit Mineral Resource

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Mineral Resource	1.0	4.8	0.16	13	0.42
Measured Mineral Resource					
Indicated Mineral Resource	1.0	4.8	0.16	13	0.42
Inferred Mineral Resource					

### Ore Reserve

The Gosowong Open Pit is a small scale operation being mined as a cutback of the original pit which was completed in 2002. The Gosowong Ore Reserve estimate has been prepared using a regularised June 2010 Resource model.

The total Gosowong Ore Reserve includes stockpiles and tailings scheduled for re-treatment. The 2012 Ore Reserve has decreased by 0.07Moz in contained gold and 0.18Moz in contained silver since the 2011 estimate, mainly due to depletion.

#### Gosowong Open Pit Ore Reserve

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Ore Reserve	0.91	3.7	0.11	7.6	0.22
Proved Ore Reserve					
Probable Ore Reserve	0.91	3.7	0.11	7.6	0.22

## 6. NAMOSI JV (FIJI)

The Namosi Project is located in the south-eastern part of Viti Levu, the main island of the Republic of Fiji, 30km west-northwest of the Fijian capital city of Suva. Newcrest entered into the Namosi Joint Venture in 2007 and now holds a 69.94% interest in the joint venture and is manager of project activities.

The known porphyry-style copper-gold systems in Fiji occur mainly in the southeast of Viti Levu. These are the Namosi deposits associated with diorite porphyry and quartz diorite porphyry including the Waisoi, Wainabama and Waivaka districts.

The Namosi Project includes a Mineral Resource and Ore Reserve estimate for Waisoi and a Mineral Resource estimate for Wainaulo (both of which are contained in the Waivaka district). The Ore Reserve estimate for Waisoi is based on extraction via two open pits; Waisoi East and Waisoi West.

## 6.1 Wainaulo

The Wainaulo deposit lies in the Waivaka Corridor, which is a 5km long east-north-east trending zone of porphyry-related mineralisation. The geology of the Waivaka area comprises a Tertiary sequence of volcanic and volcanoclastic rocks of the Medrausucu Group which is intruded by dioritic porphyry intrusions.

Copper and gold mineralisation is hosted in and adjacent to the porphyry intrusions and is dominated by vein-hosted sulphide mineralisation, and lesser fracture fill and disseminated styles. Bornite and chalcopyrite are the dominant copper sulphides observed in fresh rock. Controls on mineralisation are predominantly proximal porphyry intrusions and preferred structural orientations that parallel the broader corridor.

### Mineral Resource

The Wainaulo Mineral Resource estimate is unchanged from June 2010.

The Wainaulo model is based on a 3-dimensional geology model that incorporates interpretations of lithological, structural and mineralisation features which are observed to have an impact on the distribution and/or tenor of mineralisation. The model incorporates all available drill holes up to the April, 2010 (totalling 11 Namosi Joint Venture drill holes and 9 historical drill holes by Nittetsu). The database used for the resource estimation includes a total of approximately 12,700 assayed and 314 density measurements from core samples. The integrity of the historical data has been comprehensively checked and as a result no drill data has been excluded from the estimation database.

The resource tonnage and grade have been estimated using Ordinary Kriging into 50m x 50m x 45m blocks. Density values have been assigned to the block model based on sulphide species domains and oxidation state.

The Wainaulo Mineral Resource has been classified as Inferred Resource based on an assessment of drill hole spacing, style of mineralisation, mining selectivity and geological and grade continuity. The Wainaulo Mineral Resource estimate is reported using a marginal copper cut-off grade inside a conceptual mining outline.

### Wainaulo Mineral Resource (69.94%)

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	66	0.12	0.24	0.72	0.47
Measured Mineral Resource					
Indicated Mineral Resource					
Inferred Mineral Resource	66	0.12	0.24	0.72	0.47

## Ore Reserve

No Ore Reserve has been estimated for the Wainaulo deposit.

### 6.2 Waisoi

The Waisoi porphyry Cu-Au-Mo mineralisation occurs within a sequence of Tertiary volcanics and porphyritic intrusive rocks located within the main volcanic island of the Fiji Islands group. The mineralisation at Waisoi occurs as disseminations, fracture fill and vein fill. Chalcopyrite and bornite are the dominant copper sulphide minerals, although covellite, digenite and chalcocite have also been observed. The approximate extents of the system (at 0.1% Cu) are 2.7km E-W, 1.6km N-S and ~1000m vertically. The deposit includes two broad overlapping zones; Waisoi East and Waisoi West.

Waisoi is currently the subject of a pre-feasibility study to evaluate its potential as a bulk open pit operation.

The Waisoi Mineral Resource and Ore Reserve estimates are reported and/or based on an estimated value that incorporates the forecast revenue streams from recoverable gold, copper and molybdenum and the realisation costs (concentrate transport, smelting and refining).

### Mineral Resource

The Waisoi Mineral Resource estimate was reviewed in May 2011 based on additional drilling. As part of this work, the resource classification was upgraded in some areas (due to increased geological and grade confidence), but no further changes were made to the model (the block estimates for copper, gold and molybdenum remained unchanged). The resource is classified into Indicated Resource and Inferred Resource based on grade and geological continuity and data density.

The Waisoi Mineral Resource is based on a 3-dimensional geology model that incorporates interpretations of lithological, structural and mineralisation features which are observed to have an impact on the distribution and/or tenor of mineralisation. The model incorporates all available drill holes (totalling >300 holes). The integrity of the historical data has been comprehensively checked and as a result no drill data has been excluded from the estimate.

The model for Waisoi includes grade estimates for copper, gold, sulphur and molybdenum. The tonnage and grade estimates for copper and gold have been estimated by Conditional Co-Simulation using the Direct Block Simulation methodology. The tonnage and grade estimates for molybdenum and sulphur have been estimated by Ordinary Kriging. Density values have been assigned based on oxidation state and lithology (in that order).

Changes during the year include an increase associated with new metal price assumptions and a decrease associated with updated slope parameters. The net effect is a decrease of 0.11Moz in contained gold and 0.08Mt in contained copper since the December 2011 estimate (69.94% terms).

**Waisoi Mineral Resource (69.94%)**

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	1,500	0.11	5.3	0.33	5.0
Measured Mineral Resource					
Indicated Mineral Resource	1,300	0.11	4.7	0.33	4.5
Inferred Mineral Resource	200	0.09	0.58	0.27	0.54

**Ore Reserve**

The pre-feasibility update on the Waisoi deposit has been on-going during 2012.

Some changes have been incorporated in this Ore Reserve estimate, the most notable of these being an updated resource classification of the Waisoi resource model, informed by updated geological information (classification) and updated final pit design as a result of updated processing costs and geotechnical slope parameters and price spatial constraint shells based on higher metal prices. Reserve metal prices have increased. A block-by-block value algorithm for the identification of ore and waste has also been applied.

The Waisoi Ore Reserve estimate has increased by 0.83Moz in contained gold and 0.78Mt in contained copper since the 2011 estimate (69.94% terms).

**Waisoi Ore Reserve (69.94%)**

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	940	0.12	3.6	0.37	3.5
Proved Ore Reserve					
Probable Ore Reserve	940	0.12	3.6	0.37	3.5

**7. MOROBE MINING JOINT VENTURES (PNG) - Hidden Valley Kaveroi / Hamata**

Newcrest holds 50% joint venture interests with Harmony Gold Mining Company Limited (Harmony) in the Morobe Mining Joint Ventures (MMJV) established to explore, develop and mine deposits located within leases in the Morobe province of Papua New Guinea. The MMJV operates a gold/silver mine at Hidden Valley, 90 kilometres south southwest of Lae. The MMJV is also conducting a major exploration and resource development project at Wafi- Golpu which is located approximately 70 kilometres northwest of the Hidden Valley mine.

Mineral Resource and Ore Reserve estimates for MMJV assets have been prepared on behalf of the joint venture by Competent Persons provided by Harmony and Newcrest or Competent Persons directly employed within the MMJV.

The Hidden Valley Project comprises structurally controlled epithermal stockwork style gold – silver deposits at Hidden Valley Kaveroi and Hamata. The deposits are predominantly hosted in granite with minor metasediments. Mineral Resources and Ore Reserves have been estimated for both the Hidden Valley and Hamata deposits.

The Mineral Resource is comprised of resources estimated at the Hidden Valley Kaveroi deposit and the Hamata deposit, and includes broken ore stockpiles. Several changes have been incorporated in this Mineral Resource estimate, the most notable being an updated resource model for the Hidden Valley Kaveroi deposit.

### 7.1 Hidden Valley / Kaveroi

The Hidden Valley Mine consists of the Hidden Valley Kaveroi and Hamata open pits located approximately 6km apart and an ore processing facility, situated in steep, heavily forested, mountainous terrain. Both pits employ conventional truck/excavator mining techniques. The ore treatment plant was commissioned in August 2009.

#### Mineral Resource

Several changes have been incorporated in this Mineral Resource estimate, the most notable being an updated resource model informed by additional drilling.

The Hidden Valley Kaveroi Mineral Resource is classified into Measured, Indicated and Inferred Resource based on grade and geological continuity and data density. The Mineral Resource has been reported using a value algorithm which takes into account the revenue, processing and realisation costs for gold and silver.

The total Hidden Valley Mineral Resource has increased by 0.22Moz in contained gold and 0.9Moz in contained silver since December 2011 (50% terms). The variances have been attributed to mining depletion and model adjustments. In addition, the metal price assumptions have been revised which resulted in a lower cut-off grade.

#### Hidden Valley/Kaveroi Mineral Resource (50%)

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Mineral Resource	75	1.3	3.0	24	58
Measured Mineral Resource	0.79	1.2	0.03	20	0.51
Indicated Mineral Resource	69	1.3	2.9	24	54
Inferred Mineral Resource	5.0	0.94	0.15	21	3.4

#### Ore Reserve

Current mine operations are centred on the Hidden Valley Kaveroi Stage 2 and Stage 3 Cutbacks.

Some changes have been incorporated in this Ore Reserve estimate, the most notable of these being an updated resource model for the Hidden Valley Open Pit, informed by updated geological information and interpretation, mining depletion and a reserve metal price increase.

The combined impact of changes to the Hidden Valley Kaveroi Ore Reserve estimate is an increase of 0.04Moz in contained gold and an decrease of 2.27Moz in contained silver (50% terms). The decrease in silver was driven by the updated resource model and the spatial constraint of the ridgeline and waste dumps.

**Hidden Valley/Kaveroi Ore Reserve (50%)**

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Ore Reserve	35	1.5	1.7	28	32
Proved Ore Reserve	0.79	1.2	0.03	20	0.51
Probable Ore Reserve	35	1.5	1.6	29	32

**7.2 Hamata****Mineral Resource**

The Hamata resource was previously estimated using both Ordinary Kriging and Multiple Indicator Kriging grade estimation methods based on a Change of Support correction for a selective mining unit size of 10mN x 10mE x 2.5mRL. The drill hole sample composite size used was 2 metre lengths within mineralised domains generated from sectional interpretations.

The only change to the Hamata Mineral Resource this year is depletion due to mining, amounting to 0.01Moz in contained gold (50% terms).

**Hamata Mineral Resource (50%)**

	Ore	Gold	
	Mt	g/t	Moz
Total Mineral Resource	3.4	2.0	0.22
Measured Mineral Resource			
Indicated Mineral Resource	2.9	2.0	0.19
Inferred Mineral Resource	0.46	2.4	0.04

**Ore Reserve**

Current mine operations are concentrated on Hamata Stage 2 Cutback.

The Hamata Ore Reserve includes stockpiles. Since the 2011 estimate, the Ore Reserve has decreased by 0.03Moz in contained gold (50% terms) mainly due to mining depletion.

**Hamata Ore Reserve (50%)**

	Ore	Gold	
	Mt	g/t	Moz
Total Ore Reserve	2.1	2.1	0.14
Proved Ore Reserve			
Probable Ore Reserve	2.1	2.1	0.14

## 8. MOROBE MINING JOINT VENTURES (PNG) - Wafi-Golpu

The Wafi-Golpu Project comprises the Wafi epithermal deposit, the Nambonga porphyry deposit and the Golpu porphyry deposit. Mineral Resources have been estimated for all three deposits and Ore Reserves have been estimated for the Golpu deposit.

The Golpu Project Pre-Feasibility Study was completed in August 2012. Details of the findings of the Pre-Feasibility Study are set out in Newcrest's 29 August 2012 market release regarding the *Pre-Feasibility Study and Reserves Upgrade for Golpu*. The proposed mining method is block caving with a two lift strategy.

The current resource areas are part of a large intrusive system with extensive and complex overprinting alteration patterns. Drill density outside of the existing resource areas remains patchy, and the full potential of the system is yet to be realised.

### 8.1 Nambonga

The Nambonga North prospect, lies approximately 2 kilometres north-west of Golpu, The Nambonga copper-gold porphyry does not outcrop.

The Nambonga porphyry represents a moderate tonnage, low grade gold – copper porphyry system similar in nature to Golpu. Chalcopyrite is the dominant copper sulphide mineral within and proximal to the porphyry and galena and sphalerite are present in steep, late-forming structures.

#### Mineral Resource

The December 2012 Mineral Resource estimate figure is unchanged from the previously reported figure (December 2011). The Nambonga deposit is an advanced exploration target and no mining has been conducted in the project area.

#### Nambonga Mineral Resource (50%)

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	20	0.79	0.51	0.22	0.04
Measured Mineral Resource					
Indicated Mineral Resource					
Inferred Mineral Resource	20	0.79	0.51	0.22	0.04

#### Ore Reserve

No Ore Reserve has been estimated for the Nambonga deposit.

### 8.2 Wafi

The Wafi deposit is centred on high sulphidation epithermal mineralisation within a larger epithermal and porphyry related complex in granted Exploration Licence EL440, approximately 60km southwest of Lae, PNG. The Wafi deposit outcrops less than 1 km to the south of the top of the Golpu porphyry deposit.

The gold deposits are hosted in the metasedimentary units of the Owen Stanley Metamorphics and are located peripheral to the diatreme breccia complex. Mineralisation occurs as disseminated sulphides and quartz vein-stockworks in advanced argillic to intermediate argillic altered meta-sedimentary units with an apparent affinity with coarser grained sediments.

## Mineral Resource

In 2012, the resource model for Wafi was updated following additional drilling, modelling and technical studies. The Wafi resource model contains estimates for gold, silver, arsenic and sulphur. Estimation domains are based on a combination of rock type, alteration and structural zones within an outer constraining shell. The estimation method used for gold was a two part process: 1) Multiple Indicator Kriging (MIK) into panels and 2) redistributing the panel grade into SMU sized blocks via a local MIK estimate. Ordinary Kriging was used to estimate silver, arsenic and sulphur.

The Wafi Mineral Resource includes oxide material from the Golpu deposit accessible within the Wafi pit shell. All material inside the Mineral Resource is classified into Indicated and Inferred Resource categories based on grade and geological continuity and drill spacing.

Changes during the year include the new resource model, updated metal price assumptions and adoption of a spatial constraint (US\$1400 pit shell). The net result is an increase of 0.5Moz in contained gold and 7.4Moz in contained silver in the Mineral Resource.

### Wafi Mineral Resource (50%)

	Ore	Gold		Silver	
	Mt	g/t	Moz	g/t	Moz
Total Mineral Resource	68	1.7	3.6	3.4	7.4
Measured Mineral Resource					
Indicated Mineral Resource	57	1.7	3.1	3.6	6.5
Inferred Mineral Resource	11	1.3	0.47	2.5	0.90

## Ore Reserve

No Ore Reserve has been estimated for the Wafi deposit.

### 8.3 Golpu

The Golpu deposit is centred on porphyry-style mineralisation within a larger epithermal and porphyry related complex in granted Exploration Licence EL440, approximately 60km southwest of Lae, PNG. Two distinct Cu-Au mineralisation events have been identified at Golpu. The dominant porphyry style mineralisation forms upright mineralised zones centred on a multi-phase intrusive complex of 'finger' porphyry stocks and dykes hosted in the surrounding metasediments. At upper levels of the porphyry complex, an interpreted latter stage, high sulphidation epithermal event including argillic and phyllic alteration zones has overprinted the porphyry mineralisation forming a sheet-like draped 'cap' to the system.

At Golpu, four compositionally and texturally distinct intrusive phases occur, including 1.) sparsely porphyritic feldspar-phyric diorite; 2.) crowded feldspar phyric diorite; 3.) hornblende-

bearing feldspar-phyric diorite and 4.) quartz eye 'square' feldspar-phyric diorite. Field-based observations group these rocks into the feldspar-phyric Golpu, quartz eye bearing Golpu West, and the mafic rich Hornblende Porphyry Intrusives. Evidence exists to show that the Golpu diorite is multiphase, with crystal crowded and sparsely porphyritic variants. Single intrusions pinch and swell vertically over tens of metres and form dykes, pipes and stocks.

Mineralisation is disseminated and microfracture controlled. Textural evidence exists for at least two stages of sulphide mineralisation; bornite/chalcopyrite rim and overprints of early formed pyrite/pyrite; fracture controlled sulphide veinlets cut quartz-magnetite veins and centrally-seamed chalcopyrite quartz vein occur throughout the deposit.

The dimension of the mineralised system (as currently defined) is approximately 800m north-south x 500 west-east and greater than 2,000m vertically from surface. The epithermal overprint extends to a depth of 250m below surface in the porphyry centre to approximately 600m on the eastern porphyry margin.

## Mineral Resource

In 2012, the resource model for Golpu was updated following additional drilling, modelling and technical studies. The Golpu Mineral Resource model is comprised of estimates for copper, gold, silver, molybdenum, arsenic, sulphur, lead, zinc and iron. A combination of lithological and alteration domains have been used to constrain the estimate. The estimation method used was Ordinary Kriging into 40m x 40m x 40m parent blocks with sub-celling to 10m x 10m x 10m.

The Golpu Mineral Resource estimate is reported within an outer constraining shell which reflects the proposed bulk underground mining method of block caving with ore processing by sulphide flotation as outlined in the Golpu Pre-feasibility Study. The reporting shell was updated in 2012 to reflect revised metal price assumptions. The Mineral Resource is classified into Indicated or Inferred Resource categories based on data spacing and grade and geological continuity.

Changes during the year include the new resource model and updated spatial constraint. The net result is an increase of 0.5Moz in contained gold, 0.1Mt in contained copper, and 0.4Moz in contained silver (50% terms).

### Golpu Mineral Resource (50%)

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Mineral Resource	500	0.63	10	0.90	4.5	1.1	18
Measured Mineral Resource							
Indicated Mineral Resource	400	0.64	8.3	0.92	3.7	1.1	15
Inferred Mineral Resource	95	0.61	1.8	0.80	0.76	1.0	3.2

## Ore Reserve

The Golpu Project Pre-Feasibility Study was completed in August 2012. The proposed mining method is block caving with an initial two lift strategy. It is proposed that access to the mine would be via twin declines developed from the Watut River flats. It is proposed that an inclined conveyor would facilitate the transport of ore to the process plant located near the portal of the

access declines. It is proposed that production from Lift 1 would reach 15Mtpa, while Lift 2 will increase to 22Mtpa.

It is proposed that ore would be processed on site at the proposed treatment plant using conventional flotation methods to produce a copper concentrate containing the gold. It is proposed that the concentrate would be shipped to Asia or Europe from the existing port of Lae.

Additional drilling has resulted in extensions to the resource model and subsequently a significant increase in the Ore Reserve estimate in the order of 5.5Moz in contained gold, 2.3Moz in contained copper since the 2011 estimate (50% Newcrest basis). The updated resource model also included a silver estimate for the first time resulting in reserve of 9.9Moz in contained silver added in 2012.

### Golpu Ore Reserve (50%)

	Ore	Gold		Copper		Silver	
	Mt	g/t	Moz	%	Mt	g/t	Moz
Total Ore Reserve	230	0.86	6.2	1.20	2.7	1.4	9.9
Proved Ore Reserve							
Probable Ore Reserve	230	0.86	6.2	1.20	2.7	1.4	9.9

## 9. MARSDEN (NSW)

Marsden (100% Newcrest) copper-gold porphyry deposit is located between the NSW towns of Forbes and West Wyalong approximately 150 kilometres southwest of the Cadia Valley Operation. The deposit is centred on porphyry-style gold, copper and molybdenum mineralisation, located beneath 110 metres of cover. The deposit is terminated on the eastern side and at depth by a major, west-dipping regional fault called the Marsden Thrust. The deposit has a higher-grade gold and copper core with grades generally decreasing with distance away from the core.

### Mineral Resource

The Marsden resource model is unchanged from December 2011. The resource model is based on data from 54 core drill holes (both NQ3 and HQ3) drilled on approximately 100 x 100m and 100 x 50m grid spacing. The resource tonnage and grade have been estimated using Ordinary Kriging.

The Marsden Mineral Resource estimate is reported on a value basis similar to that used for open pit Mineral Resources at the Cadia Valley Operations. The value estimation includes long term revenue assumptions and incorporates mining costs based on similarities with Cadia Hill Gold Mine.

Minor changes have been made to the reporting of the Mineral Resource estimate. These changes include; an increase in the metal price assumptions and an alignment of the value calculation between the Mineral Resource and the Ore Reserve estimates. The net result is an increase in tonnes and an increase of 0.03Moz in contained gold and 0.02Mt in contained copper since December 2011. The Marsden Mineral Resource is classified as Indicated and Inferred Resource.

**Marsden Mineral Resource**

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Mineral Resource	230	0.17	1.3	0.34	0.78
Measured Mineral Resource					
Indicated Mineral Resource	200	0.19	1.2	0.37	0.72
Inferred Mineral Resource	35	0.08	0.08	0.17	0.06

**Ore Reserve**

Marsden forms part of the Strategic Plan for Cadia Valley Operations as a medium to long term production source.

Capital and operating cost assumptions are based on the assumed availability of existing third party processing facilities in the vicinity of the Marsden deposit or acquisition of a second hand plant. Commercial agreements to access these third party facilities are not currently in place. Newcrest has reasonable expectations that such agreements can be negotiated within the financial parameters assumed for the basis of the Ore Reserve estimate.

There is a minor increase from the previously reported reserves due to increased metal prices.

**Marsden Ore Reserve**

	Ore	Gold		Copper	
	Mt	g/t	Moz	%	Mt
Total Ore Reserve	100	0.28	0.91	0.47	0.47
Proved Ore Reserve					
Probable Ore Reserve	100	0.28	0.91	0.47	0.47

## COMPETENT PERSON STATEMENT

These explanatory notes have been compiled by C. Moorhead, EGM Minerals for Newcrest Mining Limited who is a Fellow of The Australasian Institute of Mining and Metallurgy, and a full-time employee of Newcrest Mining Limited. Mr Moorhead has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code and is a Qualified Person within the meaning of NI 43-101.

Information in this report that relates to Mineral Resources and Ore Reserves is based on and accurately reflects reports prepared by the Competent Persons named in the table below. All these persons, except Greg Job and Paul Dunham, are full-time employees of Newcrest Mining Limited or the relevant subsidiary. Greg Job is a full time employee of Harmony Gold Mining Company Limited. Paul Dunham is employed by the MMJV. Each Competent Person consents to the inclusion of material in the form and context in which it appears. All the Competent Persons named are Members of The Australasian Institute of Mining and Metallurgy and / or The Australian Institute of Geoscientists and possess relevant experience in relation to the mineralisation being reported on by them to qualify as Competent Persons as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition).

Mineral Resources		Ore Reserves	
Deposit/Province	Competent Person	Deposit/Province	Competent Person
Cadia Valley (including Marsden)	Ann Winchester	Cadia Valley (Underground)	Lino Manca
Telfer (Including satellites), O'Callaghans	James Biggam	Cadia Valley (Open Pits), Marsden	Steven Butt
Lihir Operations	Geoff Smart	Telfer (Open Pits)	Justin Clout
Gosowong	Colin McMillan	Telfer (Underground)	Nigel Clark
Bonikro	Craig Irvine	Gosowong, O'Callaghans	Darryl Dyason
Namosi	Vik Singh	Lihir Operations, Bonikro, Namosi, Hidden Valley Operations	Anton Kruger
Hidden Valley Operations	Greg Job (Harmony)	Wafi-Golpu	German Flores
Wafi-Golpu	Paul Dunham (MMJV)		