

ABN: 74 084 669 036

 Registered Office

 P
 +61 2 9696 2900

 F
 +61 2 9696 2901

 Level 28
 175 Liverpool Street

 Sydney NSW 2022

www.evolutionmining.com.au

# **ASX Announcement**

23 April 2013

# DECEMBER 2012 RESOURCE AND RESERVE STATEMENT

Evolution Mining Limited (ASX: EVN) is pleased to report that it has completed an update to its Mineral Resource and Ore Reserve estimates as at 31 December 2012.

Group Mineral Resources are now estimated at 7.7 million ounces gold equivalent, an increase of 10% compared to the June 2012 estimate of 7.0 million ounces. This change is after accounting for depletion by mining and is due to a significant increase at Pajingo (406koz) and increases at Edna May (101koz), Mt Rawdon (94koz) and Cracow (73koz).

Group Ore Reserves are now estimated at 3.6 million ounces gold equivalent, an increase of 7% compared to the June 2012 estimate of 3.3 million ounces. This change is after accounting for depletion by mining and is largely due to increases at Pajingo (145koz) and Mt Rawdon (112koz).

The most significant increase achieved in both Mineral Resources and Ore Reserves is the result of new drilling carried out in the 12 months to 31 December 2012. New geological interpretation and a rigorous reassessment of Evolution's very large drilling database, particularly at Pajingo, also added significant ounces to both Mineral Resources and Ore Reserves. The commodity prices used for the resource and reserve update remain the same as those used for the previous estimate. Similarly, there have not been material changes to the cut-off grades used to estimate the Ore Reserves.

Resource definition drilling programs at all operations also resulted in a marked increase in Resource confidence with the amount of gold equivalent in the Measured category increasing 20%, Indicated increasing by 12% and Inferred consequently decreasing by 6%.

This resource and reserve update includes all exploration and resource definition drilling information up to 31 December 2012 and has been depleted for mining to 31 December 2012. Moving forward, the Group Mineral Resource and Ore Reserve statement will be updated annually only, with a 31 December cut-off date.

The Mineral Resources and Ore Reserves have been prepared according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2004 JORC Code). Mineral Resources are reported inclusive of Ore Reserves.

Explanatory notes containing information on the parameters and methods used to estimate Mineral Resources and Ore Reserves are provided in the appendices to this announcement.

## **Evolution Mining Mineral Resource Statement- December 2012**

	Gold			Measured			Indicated			Inferred		То	tal Resou	rce
Project	Туре	Cut-Off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)									
Pajingo	Open-Pit	0.5	0.01	3.6	1	0.17	5.0	28	0.32	1.2	12	0.51	2.6	42
Pajingo <sup>1</sup>	Underground	2.5	1.14	8.4	306	3.27	5.9	621	2.06	5.1	337	6.46	6.1	1,264
Cracow <sup>1</sup>	Underground	2.3	0.28	8.6	79	1.11	7.7	275	2.90	5.2	488	4.29	6.1	842
Edna May <sup>1</sup>	Open-Pit	0.4	21.1	0.9	629	16.5	1.0	514	8.18	0.9	226	45.8	0.9	1,369
Edna May	Underground	3.0	-	-	-	0.63	7.2	146	0.58	6.9	128	1.21	7.1	273
Mt Carlton	Open-Pit	0.35	9.28	2.0	587	14.7	1.5	695	1.41	1.5	68	25.4	1.7	1,350
Mt Rawdon <sup>1</sup>	Open-Pit	0.23	1.84	0.4	23	51.5	0.7	1,203	3.42	0.6	62	56.7	0.7	1,288
Twin Hills	Open-Pit	0.5	-	-	-	2.42	2.2	170	0.64	1.7	35	3.06	2.1	204
Twin Hills	Underground	2.3	0.54	4.1	71	0.01	3.5	36	0.01	3.9	87	1.56	3.9	194
	Total		34.1	1.5	1,696	90.6	1.3	3,688	20.2	2.2	1,443	145	1.5	6,827

	Silver		l	Measured			Indicated			Inferred		То	tal Resou	rce
Project	Туре	Cut-Off	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)									
Mt Carlton <sup>1</sup>	Open-Pit	*	11.7	57	21,437	14.9	19	9,004	1.51	16	796	28.1	35	31,237
Total		11.7	57	21,437	14.9	19	9,004	1.51	16	796	28.1	35	31,237	

	Copper			Measured			Indicated			Inferred		То	tal Resour	ce
Project	Туре	Cut-Off	Tonnes (Mt)	Copper Grade (%)	Copper Metal (kt)									
Mt Carlton <sup>1</sup>	Open-Pit	*	11.7	0.24	27.9	14.9	0.21	32.1	1.51	0.20	3.0	28.1	0.22	63.1
Total		11.7	0.24	27.9	14.9	0.21	32.1	1.51	0.20	3.0	28.1	0.22	63.1	

		Measured			Indicated			Inferred		То	tal Resour	rce
Gold Equivalent	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)
Total Group	36.5	1.9	2,228	90.9	1.4	3,992	20.3	2.3	1,470	148	1.6	7,691

#### Notes:

Data is reported to significant figures and differences may occur due to rounding

Mineral Resources are reported inclusive of Ore Reserves <sup>1</sup> Includes stockpiles \* Combined figure for V2 using 0.35g/t Au cut-off and A39 using 42g/t Ag cut-off

The gold equivalence calculation represents total metal value for each metal summed and expressed in equivalent gold grade and ounces

The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/b Cu Metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88.0% for silver at A39 and 92.0% for copper as indicated by metallurgical testwork 1 Troy Ounce = 31.1034768 grams

Au Eq for Silver = ((Price Ag per Oz x Ag Recovery)/(Price Au per Oz x Au Recovery)) x Ag Grade Au Eq for Copper = ((Price Cu per lb x 2204.623) x (Cu Recovery)) / ((Price Au per Oz x Au Recovery / 31.1034768) x (Cu Grade / 100))

# **Evolution Mining** Mineral Resource Comparison – June 2012 to December 2012

Gold	r	Measured		I	Indicated			Inferred			Total	
Period	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)									
June 2012	28.5	1.5	1,332	85.1	1.2	3,280	24.0	2.0	1,540	138	1.4	6,152
December 2012	34.1	1.5	1,696	90.6	1.3	3,688	20.2	2.2	1,443	145	1.5	6,827
Absolute Change	5.67	0	363	5.53	0.1	408	-3.77	0.2	-97	7.43	0.1	675
Relative Change	20%	0%	27%	6%	8%	12%	-16%	10%	-6%	5%	5%	11%

Silver	I	Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)									
June 2012	11.4	57	20,790	14.9	19	9,004	1.51	16	796	27.9	34	30,590
December 2012	11.7	57	21,437	14.9	19	9,004	1.51	16	796	28.1	35	31,237
Absolute Change	0.25	1	647	0	0	0	0	0	0	0.25	1	647
Relative Change	2%	1%	3%	0%	0%	0%	0%	0%	0%	1%	1%	2%

Copper		Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Copper Grade (g/t)	Copper Metal (koz)									
June 2012	11.4	0.24	27.6	14.9	0.21	32.1	1.51	0.20	3.0	27.9	0.23	62.8
December 2012	11.7	0.24	27.9	14.9	0.21	32.1	1.51	0.20	3.0	28.1	0.22	63.1
Absolute Change	0.25	0	0.3	0	0	0	0	0	0	0.25	-0.01	0.3
Relative Change	2%	0%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	1%

Gold Equivalent	l I	Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)									
June 2012	30.8	1.9	1,852	85.3	1.3	3,577	24.1	2.0	1,567	140	1.6	6,996
December 2012	36.5	1.9	2,228	90.9	1.4	3,992	20.3	2.3	1,470	148	1.6	7,691
Absolute Change	5.67	0	376	5.53	0.1	415	-3.77	0.3	-97	7.43	0.1	695
Relative Change	18%	0%	20%	6%	8%	12%	-16%	15%	-6%	5%	4%	10%

Notes: Data is reported to significant figures and differences may occur due to rounding Mineral Resources are reported inclusive of Ore Reserves

# **Evolution Mining Ore Reserve Statement – December 2012**

	Gold			Proved			Probable		т	otal Reserv	e
Project	Туре	Cut-Off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)
Pajingo	Open-Pit	0.65	0.01	3.9	1	0.17	5.6	30	0.18	5.5	31
Pajingo <sup>1</sup>	Underground	3.0	0.56	7.1	129	0.88	6.0	169	1.44	6.4	298
Cracow <sup>1</sup>	Underground	3.6	0.17	8.3	46	1.44	4.9	226	1.61	5.3	273
Edna May <sup>1</sup>	Open-Pit	0.4	13.4	0.9	402	9.14	1.0	306	22.5	1.0	709
Mt Carlton	Open-Pit	0.69	4.52	3.1	446	4.61	2.5	366	9.13	2.8	812
Mt Rawdon <sup>1</sup>	Open-Pit	0.3	1.08	0.5	17	38.7	0.8	1,009	39.8	0.8	1,026
	Total		19.7	1.6	1,042	54.9	1.2	2,106	75	1.3	3,148

	Silver			Proved			Probable		т	otal Reserv	re 🛛
Project	Туре	Cut-Off	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)
Mt Carlton <sup>1</sup>	Open-Pit	**	5.81	69	12,969	4.61	20	2,991	10.4	48	15,960
	Total			69	12,969	4.61	20	2,991	10.4	48	15,960

	Copper			Proved			Probable		т	otal Reserv	e
Project	Туре	Cut-Off	Tonnes (Mt)	Copper Grade (%)	Copper Metal (kt)	Tonnes (Mt)	Copper Grade (%)	Copper Metal (kt)	Tonnes (Mt)	Copper Grade (%)	Copper Metal (kt)
Mt Carlton <sup>1</sup>	Open-Pit	**	5.81	0.29	17.1	4.61	0.23	10.5	10.4	0.26	27.6
Total			5.81	0.29	17.1	4.61	0.23	10.5	10.4	0.26	27.6

		Proved			Probable		т	otal Reserv	e
Gold Equivalent	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)
Total Group	21.0	2.0	1,365	54.9	1.2	2,204	75.9	1.5	3,570

#### Notes:

Data is reported to significant figures and differences may occur due to rounding <sup>1</sup> Includes stockpiles \*\* Combined figure for V2 using 0.69g/t Au cut-off and A39 using 53g/t Ag cut-off

The gold equivalence calculation represents total metal value for each metal summed and expressed in equivalent gold grade or ounces

The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/b Cu metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88.0% for silver at A39 and 92.0% for copper as indicated by metallurgical testwork

1 Troy Ounce = 31.1034768 grams Au Eq for Silver = ((Price Ag per Oz x Ag Recovery)/(Price Au per Oz x Au Recovery)) x Ag Grade Au Eq for Copper = ((Price Cu per lb x 2204.623) x (Cu Recovery)) / ((Price Au per Oz x Au Recovery / 31.1034768) x (Cu Grade / 100))

# **Evolution Mining** Ore Reserve Comparison – June 2012 to December 2012

Gold		Proved			Probable		Total			
Period	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	
June 2012	18.2	1.6	927	54.1	1.1	1,991	72.4	1.3	2,918	
December 2012	19.7	1.6	1,042	54.9	1.2	2,106	74.7	1.3	3,148	
Absolute Change	1.50	0	115	0.79	0.1	115	2.28	0.1	230	
Relative Change	8%	0%	12%	1%	9%	6%	3%	5%	8%	

Silver		Proved			Probable		Total			
Period	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)	Tonnes (Mt)	Silver Grade (g/t)	Silver Metal (koz)	
June 2012	5.56	69	12,322	4.61	20	2,991	10.2	47	15,313	
December 2012	5.81	69	12,969	4.61	20	2,991	10.4	48	15,960	
Absolute Change	0.25	0	647	0	0	0	0.25	1	647	
Relative Change	5%	1%	5%	0%	0%	0%	2%	2%	4%	

Copper		Proved			Probable		Total			
Period	Tonnes (Mt)	Copper Grade (g/t)	Copper Metal (koz)	Tonnes (Mt)	Copper Grade (g/t)	Copper Metal (koz)	Tonnes (Mt)	Copper Grade (g/t)	Copper Metal (koz)	
June 2012	5.56	0.30	16.8	4.61	0.23	10.5	10.2	0.3	27.3	
December 2012	5.81	0.29	17.1	4.61	0.23	10.5	10.4	0.3	27.6	
Absolute Change	0.25	0.00	0.3	0.00	0.00	0.0	0.25	-0.00	0.2	
Relative Change	5%	0%	2%	0%	0%	0%	2%	-2%	1%	

Gold Equivalent		Proved			Probable		Total			
Period	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	Tonnes (Mt)	Gold Equiv. Grade (g/t)	Gold Equiv. Metal (koz)	
June 2012	19.3	2.0	1,236	54.1	1.2	2,090	73.4	1.4	3,326	
December 2012	21.0	2.0	1,365	54.9	1.2	2,204	75.9	1.5	3,570	
Absolute Change	1.75	0.0	130	0.79	0.0	114	2.53	0.1	244	
Relative Change	9%	0%	10%	1%	0%	5%	3%	4%	7%	

Notes: Data is reported to significant figures and differences may occur due to rounding

## **Competent Persons Statement**

The information in this statement that relates to the Mineral Resources or Ore Reserves listed in the table below is based on work compiled by the person whose name appears in the same row, who is employed on a full-time basis by Evolution Mining and is a member of the institute named in that row. Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he or she has undertaken to qualify as a Competent Person as defined by the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2004 JORC Code). Each person named in the table below consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Resource/Reserve	Name of Competent Person	Institute
Cracow Mineral Resources	Shane Pike	Australasian Institute of Mining and Metallurgy
Cracow Ore Reserves	Fusheng Li	Australasian Institute of Mining and Metallurgy
Pajingo Mineral Resources	Calvin Ferguson	Australasian Institute of Mining and Metallurgy
Pajingo Ore Reserves – Open-Pit	Tony Wallace	Australasian Institute of Mining and Metallurgy
Pajingo Ore Reserves – Underground	Johan Booyse	Australasian Institute of Mining and Metallurgy
Edna May Mineral Resources	John Winterbottom	Australian Institute of Geoscientists
Edna May Ore Reserves	Luke Cox	Australasian Institute of Mining and Metallurgy
Mt Carlton Mineral Resources	John Winterbottom	Australian Institute of Geoscientists
Mt Carlton Ore Reserves	Tony Wallace	Australasian Institute of Mining and Metallurgy
Mt Rawdon Mineral Resources	Hans Andersen	Australasian Institute of Mining and Metallurgy
Mt Rawdon Ore Reserves	Tony Wallace	Australasian Institute of Mining and Metallurgy
Twin Hills Mineral Resources	John Winterbottom	Australian Institute of Geoscientists

#### For further information please contact:

Investor Enquiries Bryan O'Hara Investor Relations Evolution Mining Limited Tel: +61 2 9696 2900

#### Media Contact

Suk Hee Lee Media Relations FTI – Media Relations Tel: +61 2 8298 6100

## **About Evolution Mining**

Evolution Mining is a leading, growth-focused Australian gold miner. The Company operates five wholly-owned Australian operations – Cracow, Mt Rawdon, Pajingo and Mt Carlton in Queensland and Edna May in Western Australia. Group production for the current financial year is forecast at between 370,000 and 410,000 ounces gold equivalent with cash operating costs expected to be in the range of A\$730 per ounce to A\$790 per ounce.

## Appendix A

## **Discussion of Mineral Resources, Ore Reserves and Comparisons**

#### **Pajingo Mineral Resource**

The December 2012 Pajingo Mineral Resource estimate of 6.97 million tonnes at 5.8g/t gold for 1,306koz represents an increase of 406koz (+45%) net of mining depletion compared to the June 2012 Mineral Resource.

Material changes in the December 2012 Mineral Resource estimate compared to the June 2012 estimate include:

- An Increase of 145koz to the Jandam area (includes the Vera South lode, Faith, Leaping Dog and Olivia lodes that were reported individually for the site June 2012 Mineral Resources) as a result of drilling, new geological interpretation and Mineral Resource estimation methodology changes (refer below);
- An increase of 135koz at Venue Underground as a result of drilling, new geological interpretation and Mineral Resource estimation methodology changes;
- An increase of 90koz at Sonia and Sonia East as a result of drilling, new geological interpretation and Mineral Resource estimation methodology changes;
- A combined increase of 34koz at Orchid, Veracity, Zed and Janine as a result of drilling, new geological interpretation and Mineral Resource estimation methodology changes; and
- Mining depletion of 41koz.

Mineral Resource estimation methodology changes at Pajingo involved changes to the geological domaining, compositing and estimation search parameters.

Open-pit Mineral Resources are reported at a 0.5g/t gold cut-off, constrained by a A\$1,350/oz pit optimisation shell and estimated using non-linear estimation methods into blocks with dimensions of 5 metres east by 2 metres north by 2.5 metres elevation.

Underground Mineral Resources are reported at a 2.5g/t gold cut-off, and largely estimated using Ordinary Kriging into parent blocks with dimensions 15 metres east by 5 metres north by 15 metres elevation and sub-blocks of 1.5 metres east by 0.5 metres north and 1.5 metres elevation.

#### **Pajingo Ore Reserve**

The December 2012 Pajingo Ore Reserve estimate of 1.62 million tonnes at 6.3g/t gold for 329koz represents an increase of 145koz (+79%) net of mining depletion compared to the June 2012 Ore Reserve.

The significant increase in the Ore Reserve is attributable to extensional and Resource definition drilling (primarily within the Zed and Sonia lodes), Mineral Resource estimation methodology changes, and re-evaluation of the remnant Mineral Resource areas and inclusion of these areas to the Ore Reserves (primarily at Jandam).

Material changes in the December 2012 Ore Reserve estimate compared to the June 2012 estimate include:

- An increase of 77koz for Jandam as a result of re-evaluation of the remnant Mineral Resource areas and inclusion of these areas in the Ore Reserves;
- An increase of 71koz for Zed as a result of extensional and resource definition drilling;
- An Increase of 26koz for Sonia as a result of extensional and resource definition drilling; and
- Mining depletion of 41koz.

Ore Reserves are reported above a cut-off grade of 3.0g/t gold (diluted panel grade) for underground and 0.65g/t gold cut-off for the open-pit. Ore Reserves were estimated based on a gold price of A\$1,350/oz and a gold recovery of 96.0%.

## **Cracow Mineral Resource**

The December 2012 Cracow Mineral Resource estimate of 4.29 million tonnes at 6.1g/t gold for 842koz represents an increase of 73koz (+10%) net of mining depletion compared to the June 2012 Mineral Resource.

Material changes in the December 2012 Mineral Resource estimate compared to the June 2012 estimate include:

- Maiden reportable resources for the Coronation and Griffin structures of 93koz; and
- Mining depletion of 55koz.

Mineral Resources are reported above a cut-off of 2.3g/t gold and estimated using Ordinary Kriging into blocks with a range of dimensions optimised to the characteristics and geometry of each deposit.

## **Cracow Ore Reserve**

The December 2012 Cracow Ore Reserve estimate of 1.61 million tonnes at 5.3g/t gold for 273koz represents an increase of 31koz (+13%) net of mining depletion compared to the June 2012 Ore Reserve.

Material changes in the December 2012 Ore Reserve estimate compared to the June 2012 estimate include:

- An increase of 39koz at Empire as a result of resource definition drilling;
- An increase of 36koz at Roses Pride as a result of resource definition drilling;
- An increase of 14koz at Klondyke North as a result of resource definition drilling;
- Addition of 8koz at Griffin as a result of discovery and resource definition drilling; and
- Mining depletion of 55koz (inclusive of mineralisation mined outside of the Ore Reserve).

Ore Reserves are reported above an average cut-off of 3.6g/t gold (varying slightly for different mining areas) and estimated based on a gold price of A\$1,350/oz, a gold recovery of 93.0% and costs projected from historical performance.

#### **Mt Rawdon Mineral Resource**

The December 2012 Mt Rawdon Mineral Resource estimate of 56.7 million tonnes at 0.7g/t gold for 1,288koz represents an increase of 94koz (+8%) net of mining depletion compared to the June 2012 Mineral Resource.

Material changes in the December 2012 Mineral Resource estimate compared to the June 2012 estimate include:

- An increase of 139koz due to model methodology changes (refer below);
- Mining depletion of 58koz; and
- An increase of 13koz from stockpile balances.

The June 2012 estimate was performed using Ordinary Kriging while the December 2012 estimate was performed using Multiple Indicator Kriging (MIK). Consequent enhancements to the Mineral Resource estimate includes improved internal waste domaining of the post-mineralisation intrusive to better constrain the mineralised zones.

The MIK method was reconciled with the July 2012 – December 2012 production showing an improved correlation between the December 2012 estimation and achieved mining performance. The variance was within approximately 1% on contained ounces compared to the reconciled mined figures.

Mineral Resources are reported above a cut-off of 0.23g/t gold and below the 31 December 2012 pit surface within a A\$1,800/oz pit optimisation shell.

#### Mt Rawdon Ore Reserve

The December 2012 Mt Rawdon Ore Reserve estimate of 39.8 million tonnes at 0.8g/t gold for 1,026koz represents an increase of 112koz (+12%) net of mining depletion compared to the June 2012 Ore Reserve.

The Ore Reserve increase reflects an increase of the Indicated Mineral Resources for December 2012. The increase in Indicated Mineral Resources is due to an increase in gold estimated by the change in the modelling technique to MIK and resource definition drilling during 2012. Subsequent conversion of the Indicated Mineral Resources has resulted in an increase of the Ore Reserves.

The December 2012 Ore Reserve estimate has been reported above the cut-off of 0.3g/t gold using a A\$1,350/oz gold price and gold recovery of 89.5%.

#### **Edna May Mineral Resource**

The December 2012 Edna May Mineral Resource estimate of 47.0 million tonnes at 1.1g/t gold for 1,643koz represents an increase of 101koz (+7%) net of mining depletion compared to June 2012 Mineral Resource.

The Edna May underground Mineral Resource remains unchanged since the June 2012 Mineral Resource as there has been no new geological data or interpretation.

Material changes in the December 2012 Mineral Resource estimate compared to the June 2012 estimate include:

- An increase of 63koz in the Edna May open-pit due to resource definition drilling;
- An increase of 23koz in the Greenfinch open-pit due to resource definition drilling;
- Mining depletion of 54koz; and
- A 14koz increase from a stockpile balance change.

The Mineral Resources are reported at a 0.4g/t gold cut-off for the Edna May and Greenfinch open-pits and a 3.0g/t gold cut-off for the Edna May underground.

The Edna May open-pit resource is reported above the 1050mRL (290 metres below the natural surface) and below the 31 December 2012 pit surface. The Edna May and Greenfinch open-pit resources were estimated using E-Type Multiple Indicator Kriging into blocks with dimensions 25 metres east by 25 metres north by 5 elevation and 20 metres east by 15 metres north by 5 elevation respectively.

The Edna May underground resource is reported below the 1050mRL and above the 800mRL and estimated using Ordinary Kriging into blocks with dimensions 5 metres east by 5 metres north by 5m elevation.

#### Edna May Ore Reserve

The December 2012 Edna May Ore Reserve estimate of 22.5 million tonnes at 1.0 g/t gold for 709koz represents a decrease of 59koz (-8%) net of mining depletion compared to June 2012 Ore Reserve.

The decrease in the December 2012 Ore Reserve estimate compared to the June 2012 estimate was due to mining depletion.

The Ore Reserve is reported above a cut-off of 0.4g/t gold and estimated using a gold price of A\$1,500/oz and a gold recovery of 91.0%.

#### **Mt Carlton Mineral Resource**

The Mt Carlton Mineral Resource consists of the V2 and A39 deposits and stockpiled material from the A39 open-pit.

The December 2012 V2 Mineral Resource estimate of 25.2 million tonnes at 1.7g/t gold, 19g/t silver and 0.24% copper for 1,350koz gold, 15.1Moz silver and 59.7kt copper is unchanged from the June 2012 estimate. No

additional resource definition drilling or Mineral Resource estimates have been conducted since the June 2012 estimate.

The December 2012 A39 Mineral Resource estimate of 2.95 million tonnes at 170g/t silver and 0.12% copper for 16,134koz silver and 3.4kt of copper represents an increase of 647koz silver compared to the June 2012 estimate. The change is a result of grade-control drilling having identified additional mineralisation in the A39 open-pit. This material has been mined and trucked to the Run of Mine ("ROM") stockpile and is recorded as stockpile material in the Mineral Resource statement. No additional resource definition drilling or Mineral Resource estimates have been conducted since the June 2012 estimate.

The V2 Mineral Resource is reported above a cut-off of 0.35 g/t Au and estimated using E-Type Multiple Indicator Kriging into blocks with dimensions 25 metres east by 25 metres north by 5 metres elevation.

The A39 Mineral Resource is reported above a cut-off of 42g/t silver and estimated using a combination of Ordinary Kriging for more broadly spaced resource definition drilling and Sequential Gaussian Simulation for close spaced grade-control drilled areas, into blocks with dimensions 10 metres east by 10 metres north by 2.5 metres elevation. The A39 Mineral Resource is reported below the 31 December 2012 pit surface.

## Mt Carlton Ore Reserves

The December 2012 Mt Carlton Ore Reserve estimate of 10.4 million tonnes at 3.7g/t gold equivalent for 1.23 million gold equivalent ounces represents a small increase compared to the June 2012 estimate as a result of grade-control drilling having identified additional mineralisation in the A39 open-pit (see discussion under Mt Carlton Mineral Resources above).

The V2 deposit Ore Reserve is reported at a 0.69 g/t gold cut-off and used metal recoveries proportionate to head grade with gold recovery ranging from 82.0% to 90.0% and silver and copper recoveries ranging from 84.0% to 90.0%. The A39 deposit Ore Reserve is reported at a 53g/t silver cut-off and used 88.0% and 92.0% for silver and copper recoveries respectively. Mt Carlton Ore Reserves are estimated using metal prices of A\$1,350/oz for gold, A\$28.00/oz for silver and A\$2.00/lb for copper.

#### **Twin Hills Mineral Resource**

The December 2012 Twin Hills Mineral Resource estimate of 4.62 million tonnes at 2.7g/t gold for 399koz remains unchanged from the June 2012 estimate. There are no changes to the Mineral Resource as no new drilling or estimation has been conducted at Twin Hills during the period.

The Mineral Resource estimate for the Twin Hills open-pit deposit is reported above a cut-off of 0.5g/t gold and within a A\$1,500/oz pit shell. The Mineral Resource estimates for the Twin Hills Underground Deposits are reported above a cut-off of 2.0g/t gold.

# Appendix B Mineral Resources and Ore Reserve Tables by Project

			Pajin	go Miner	al Resou	irces - De	ecember	2012				
	1	Measured		Indicated				Inferred		Tot	al Resou	ce
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
Open-Pit												
Venue	0.01	3.6	1	0.17	5.0	28	0.01	1.5	0.4	0.19	4.8	30
Orchid	-	-	-	-	-	-	0.32	1.2	12	0.32	1.2	12
Underground												
Cindy	0.004	5.9	1	0.07	6.1	13	0.03	3.7	3	0.10	5.4	17
Jandam	0.67	7.3	158	1.33	5.5	236	0.96	4.7	144	2.96	5.7	539
Sonia	0.12	16.8	66	0.15	9.0	44	0.08	7.5	19	0.35	11.3	129
Veracity	0.14	8.7	38	0.23	4.8	35	0.07	3.7	9	0.44	5.8	82
Janine	0.01	8.3	3	0.05	5.6	10	0.03	5.5	6	0.10	5.9	19
Venue	-	-	-	0.66	6.0	126	0.30	5.3	51	0.96	5.8	177
Zed	0.11	6.9	25	0.65	5.7	118	0.43	4.9	68	1.19	5.5	211
Sonia East	0.04	9.6	12	0.13	9.1	39	0.16	7.2	37	0.33	8.2	88
Stockpile	0.03	1.6	2	-	-	-	-	-	-	0.03	1.6	2
Total Pajingo	1.15	8.3	307	3.44	5.9	649	2.38	4.6	349	6.97	5.8	1,306

Pajingo Mineral Resources Comparison - June 2012 to December 2012

					•							
	I	Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
June 2012	0.27	6.6	58	2.33	5.4	401	2.79	4.9	441	5.39	5.2	900
December 2012	1.15	8.3	307	3.44	5.9	649	2.38	4.6	349	6.97	5.8	1,306
Absolute Change	0.87	1.7	249	1.11	0.5	248	-0.41	-0.3	-92	1.58	0.6	406
Relative Change	318%	26%	430%	48%	9%	62%	-15%	-6%	-21%	29%	12%	45%

#### Notes:

Data is reported to significant figures and differences may occur due to rounding

Mineral Resources are inclusive of Ore Reserves

Pajingo Mineral Resources have been reported above a cut-off grade of 2.5 g/t gold for underground, 0.5 g/t gold for open-pit and constrained to an A\$1,350/oz pit design

Pajingo underground Mineral Resources were estimated using Ordinary Kriging into blocks with dimensions 15 metres east by 5 metres north by 15 metres elevation

Pajingo open-pit Mineral Resources were estimated using Multiple Indicator Kriging into blocks with dimensions 5 metres east by 2 metres north and 2.5 metres elevation

Competent Person: Calvin Ferguson a member of the Australasian Institute of Mining and Metallurgy

		Pajing	o Ore Res	serves - D	ecembe	r 2012				
		Proved		I	Probable		Total Reserve			
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	
Open-Pit										
Venue	0.01	3.9	1	0.17	5.6	30	0.18	5.5	31	
Underground										
Cindy	-	-	-	0.03	5.9	6	0.03	5.9	6	
Jandam	0.27	6.6	58	0.12	5.5	21	0.39	6.2	79	
Sonia	0.14	10.4	47	0.11	8.1	28	0.25	9.4	75	
Zed	0.07	6.0	13	0.48	5.4	84	0.55	5.5	97	
Sonia East	0.05	6.0	10	0.14	6.7	29	0.19	6.5	39	
Stockpile	0.03	1.6	2	-	-	-	0.03	1.6	2	
Total Pajingo	0.57	7.1	130	1.05	5.9	199	1.62	6.3	329	

## Pajingo Ore Reserves Comparison - June 2012 to December 2012

		Proved			Probable		Total			
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	
June 2012	0.05	6.0	9	1.07	5.1	175	1.12	5.1	184	
December 2012	0.57	7.1	131	1.05	5.9	199	1.62	6.3	330	
Absolute Change	0.53	1.1	122	-0.02	0.8	24	0.50	1.2	145	
Relative Change	1150%	18%	1381%	-2%	16%	14%	45%	23%	79%	

#### Notes:

Data is reported to significant figures and differences may occur due to rounding Ore Reserves are reported above a 3.0 g/t gold cut-off underground and 0.65 g/t gold cut-off for open pit

Ore Reserves are calculated using a A\$1,350/oz gold price and a gold recovery of 96.0% Underground Competent Person: Johan Booyse a member of the Australasian Institute of Mining and Metallurgy Open-pit Competent Person: Tony Wallace a member of the Australasian Institute of Mining and Metallurgy

			Cracow	Mineral F	Resourc	es - Dec	ember 20	12				
	N	leasured	ł	I	ndicated	l		Inferred		Total Resource		
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
Crown Shoot	0.07	9.0	20	-	-	-	0.38	4.5	55	0.45	5.2	74
Empire	-	-	-	0.08	14.8	37	0.40	6.4	84	0.48	7.8	121
Kilkenny	0.06	8.8	17	0.23	7.4	55	0.70	5.1	115	0.99	5.9	187
Klondyke North Shoot	0.001	6.8	0.3	0.23	6.0	44	0.16	3.7	19	0.39	5.1	63
Phoenix	0.03	9.6	10	0.02	8.3	6	0.02	6.4	5	0.08	8.3	20
Roses Pride	0.06	9.9	18	0.14	9.9	43	0.14	6.0	27	0.33	8.3	88
Royal Shoot	0.00	11.0	0.4	-	-	-	0.09	6.7	18	0.09	6.8	19
Sovereign Shoot	0.03	4.4	4	0.12	4.3	17	0.38	3.6	44	0.53	3.8	65
Tipperary	0.01	7.2	3	0.24	7.8	61	0.23	5.6	42	0.49	6.7	106
Coronation	-	-	-	-	-	-	0.34	6.2	69	0.34	6.2	69
Griffin	-	-	-	0.06	7.0	12	0.06	5.4	11	0.12	6.1	24
Stockpile	0.02	8.7	6	-	-	-	-	-	-	0.02	8.7	6
Total Cracow	0.28	8.6	79	1.11	7.7	275	2.90	5.2	488	4.29	6.1	842

Cracow Mineral Resources Comparison - June 2012 to December 2012

	Measured			Indicated				Inferred		Total			
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)										
June 2012	0.20	8.9	58	1.06	7.3	248	2.83	5.1	462	4.09	5.8	768	
December 2012	0.28	8.6	79	1.11	7.7	275	2.90	5.2	488	4.29	6.1	842	
Absolute Change	0.08	-0.3	20	0.05	0.4	27	0.07	0.1	26	0.20	0.3	73	
Relative Change	39%	-3%	35%	5%	5%	11%	3%	2%	6%	5%	4%	10%	

#### Notes:

Data is reported to significant figures and differences may occur due to rounding Mineral Resources are inclusive of Ore Reserves

Cracow Mineral Resources have been reported above a cut-off grade of 2.3 g/t gold Cracow was estimated using Ordinary Kriging into blocks with a range of dimensions optimised to the characteristics and geometry of each deposit Competent Person: Shane Pike a member of the Australasian Institute of Mining and Metallurgy

Cracow Ore Reserves - December 2012													
		Proved		F	Probable	•	Total Reserve						
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)				
Crown Shoot	0.03	11.2	12	0.002	1.1	0.1	0.04	10.7	12				
Empire	-	-	-	0.18	6.6	39	0.18	6.6	39				
Kilkenny	0.02	8.3	5	0.22	5.4	38	0.24	5.6	43				
Klondyke North Shoot	-	-	-	0.30	3.7	36	0.30	3.7	36				
Phoenix	0.03	5.0	4	0.03	5.1	4	0.05	5.1	9				
Roses Pride	0.06	8.3	17	0.26	4.8	41	0.32	5.5	58				
Sovereign Shoot	-	-	-	0.04	3.8	5	0.04	3.8	5				
Tipperary	0.01	7.0	2	0.35	4.8	54	0.36	4.9	57				
Griffin	-	-	-	0.05	4.9	8	0.05	4.9	8				
Stockpile	0.02	8.7	6	-	-	-	0.02	8.7	6				
Total Cracow	0.17	8.3	46	1.44	4.9	226	1.61	5.3	273				

Cracow Ore Reserves Comparison - June 2012 to December 2012													
		Proved			Probable			Total					
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)				
June 2012	0.13	10.9	44	1.16	5.3	198	1.28	5.9	242				
December 2012	0.17	8.3	46	1.44	4.9	226	1.61	5.3	273				
Absolute Change	0.05	-2.6	2	0.28	-0.4	29	0.33	-0.6	31				
Relative Change	38%	-24%	5%	25%	-8%	14%	26%	-10%	13%				

**Notes:** Data is reported to significant figures and differences may occur due to rounding Ore Reserves are reported above a 3.6 g/t gold cut-off Ore Reserves are calculated using a A\$1,350/oz gold price and a gold recovery of 93.0% Competent Person: Fusheng Li a member of the Australasian Institute of Mining and Metallurgy

Mt Rawdon Mineral Resources - December 2012													
	Ν	leasure	d	l	ndicated	k		Inferred		Total Resource			
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)										
Mt Rawdon	-	-	-	51.5	0.7	1,203	3.42	0.6	62	54.9	0.7	1,265	
Stockpile	1.84	0.4	23	-	-	-	-	-	-	1.84	0.4	23	
Total Mt Rawdon	1.84	0.4	23	51.5	0.7	1,203	3.42	0.6	62	56.7	0.7	1,288	

Mt Rawdon Mineral Resources Comparison - June 2012 to December 2012														
		Measure	d		Indicated	I		Inferred		Total				
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)											
June 2012	0.61	0.5	10	44.7	0.7	1,059	7.17	0.5	125	52.5	0.7	1,194		
December 2012	1.84	0.4	23	51.5	0.7	1,203	3.42	0.6	62	56.7	0.7	1,288		
Absolute Change	1.22	-0.1	13	6.72	0.0	144	-3.75	0.1	-63	4.19	0.0	94		
Relative Change	199%	-19%	127%	15%	0%	14%	-52%	18%	-51%	8%	0%	8%		

Data is reported to significant figures and differences may occur due to rounding

Mineral Resources are inclusive of Ore Reserves

Mt Rawdon Mineral Resources have been reported above a cut-off grade of 0.23 g/t gold and constrained to an A\$1,800/oz pit optimisation shell

Mt Rawdon was estimated using Multiple Indicator Kriging into blocks with dimensions 20 metres east by 20 metres north by 10 metres elevation

Competent Person: Hans Andersen a member of the Australasian Institute of Mining and Metallurgy

Mt Rawdon Ore Reserves - December 2012													
		Proved		I	Probable	•	Total Reserve						
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)				
Mt Rawdon	-	-	-	38.7	0.8	1,009	38.7	0.8	1,009				
Stockpile	1.08	0.5	17	-	-	-	1.08	0.5	17				
Total Mt Rawdon	1.08	0.5	17	38.7	0.8	1,009	39.8	0.8	1,026				

		Proved			Probable		Total			
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	
June 2012	0.61	0.5	10	35.6	0.8	904	36.2	0.8	914	
December 2012	1.08	0.5	17	38.7	0.8	1,009	39.8	0.8	1,026	
Absolute Change	0.46	0.0	7	3.1	0.0	105	3.6	0.0	112	
Relative Change	76%	0%	68%	9%	0%	12%	10%	2%	12%	

Data is reported to significant figures and differences may occur due to rounding Ore Reserves are reported above a 0.3 g/t gold cut-off Ore Reserves are calculated using a A\$1,350/oz gold price and a variable gold recovery, approximately 89.5% for average head grade reported Competent Person: Tony Wallace a member of the Australasian Institute of Mining and Metallurgy

		I	Edna May	/ Mineral	Resour	ces - De	cember 2	2012				
	Measured			Indicated			Inferred			Total Resource		
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
Open-Pit												
Edna May	17.8	1.0	554	14.2	1.0	432	6.84	0.8	180	38.7	0.9	1,166
Greenfinch	0.82	1.1	30	2.40	1.1	82	1.35	1.1	46	4.57	1.1	158
Underground												
Edna May	-	-	-	0.63	7.2	146	0.58	6.9	128	1.21	7.1	273
Stockpile	2.48	0.6	46	-	-	-	-	-	-	2.48	0.6	46
Total Edna May	21.1	0.9	629	17.2	1.2	660	8.76	1.3	354	47.0	1.1	1,643

	Edna May Mineral Resources Comparison - June 2012 to December 2012														
	l	Measured			Indicated			Inferred		Total					
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)			
June 2012	17.8	1.0	549	19.5	1.1	672	8.44	1.2	321	45.8	1.0	1,542			
December 2012	21.1	0.9	629	17.2	1.2	660	8.76	1.3	354	47.0	1.1	1,643			
Absolute Change	3.24	-0.1	80	-2.35	0.1	-12	0.32	0.1	33	1.21	0.0	101			
Relative Change	18%	-10%	15%	-12%	9%	-2%	4%	8%	10%	3%	4%	7%			

Data is reported to significant figures and differences may occur due to rounding

Mineral Resources are inclusive of Ore Reserves

Edna May and Greenfinch Mineral Resources have been reported above a cut-off grade of 0.4 g/t gold and Edna May underground reported above 3.0 g/t gold

Edna May and Greenfinch were estimated using E-Type Multiple Indicator Kriging (MIK) into blocks with dimensions 25 metres east by 25 metres north by 5 metres elevation and 20 metres east by 15 metres north by 5 metres elevation respectively. Edna May

open-pit was reported above the 1050mRL (290 metres below surface) Edna May underground deposit was estimated using Ordinary Kriging into blocks with dimensions 5 metres east by 5 metres north by 5 metres elevation and is reported below the 1050mRL

Competent Person: John Winterbottom a member of Australian Institute of Geoscientists

Edna May Ore Reserves - December 2012													
Proved Probable Total Res													
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)				
Open-Pit													
Edna May	10.1	1.0	329	7.43	1.0	248	17.5	1.0	577				
Greenfinch	0.78	1.1	28	1.71	1.1	58	2.50	1.1	86				
Stockpile	2.48	0.6	46	-	-	-	2.48	0.6	46				
Total Edna May	13.4	0.9	402	9.1	1.0	306	22.5	1.0	709				

Ed	Edna May Ore Reserves Comparison - June 2012 to December 2012													
		Proved			Probable		Total							
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)					
June 2012	12.9	1.0	418	11.7	0.9	349	24.7	1.0	767					
December 2012	13.4	0.9	402	9.14	1.0	306	22.5	1.0	709					
Absolute Change	0.46	-0.1	-16	-2.58	0.1	-43	-2.13	0.0	-59					
Relative Change	4%	-10%	-4%	-22%	11%	-12%	-9%	1%	-8%					

Data is reported to significant figures and differences may occur due to rounding Ore Reserves are reported above a 0.4 g/t gold cut-off Ore Reserves were calculated using a A\$1,500/oz gold price and a gold recovery of 91.0% Competent Person: Luke Cox a member of the Australasian Institute of Mining and Metallurgy

	Gold - Mt Carlton Mineral Resources - December 2012													
	N	leasure	d	I	Indicated			Inferred		Total Resource				
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)		
A39	-	-	-	-	-	-	-	-	-	-	-	-		
V2	9.02	2.0	586	14.7	1.5	695	1.41	1.5	68	25.2	1.7	1,350		
Stockpile	0.25	0.1	1	-	-	-	-	-	-	0.25	0.1	1		
Total Mt Carlton	9.28	2.0	587	14.7	1.5	695	1.41	1.5	68	25.4	1.7	1,350		

## Silver - Mt Carlton Mineral Resources - December 2012

	Measured			Indicated				Inferred		Total Resource			
Mineral Resource	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)										
A39	2.38	192	14,631	0.23	80	594	0.10	85	262	2.70	178	15,487	
V2	9.02	21	6,159	14.7	18	8,410	1.41	12	534	25.2	19	15,103	
Stockpile	0.25	80	647	-	-	-	-	-	-	0.25	80	647	
Total Mt Carlton	11.7	57	21,437	14.9	19	9,004	1.51	16	796	28.1	35	31,237	

		Coppe	er - MtCa	arlton Mii	neral Re	sources	- Decem	ber 201	2			
	N	leasured	k	I	ndicated	l		Inferred		Tota	al Resou	rce
Mineral Resource	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)									
A39	2.38	0.13	3.1	0.23	0.01	0.0	0.10	0.00	0.0	2.70	0.12	3.1
V2	9.02	0.27	24.5	14.7	0.22	32.1	1.41	0.22	3.0	25.2	0.24	59.7
Stockpile	0.25	0.11	0.3	-	-	-	-	-	-	0.25	0.11	0.3
Total Mt Carlton	11.7	0.24	27.9	14.9	0.21	32.1	1.51	0.20	3.0	28.1	0.22	63.1

## Gold Equivalent - Mt Carlton Mineral Resources - December 2012

	Μ	leasure	d	I	ndicated	ł		Inferred		Tota	al Resou	irce
Mineral Resource	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)									
A39	2.38	4.0	307	0.23	1.6	12	0.10	1.7	5	2.70	3.7	325
V2	9.02	2.8	798	14.7	2.1	988	1.41	2.0	90	25.2	2.3	1,876
Stockpile	0.25	1.7	14	-	-	-	-	-	-	0.25	1.7	14
Total Mt Carlton	11.7	3.0	1,119	14.9	2.1	1,000	1.51	2.0	95	28.1	2.5	2,214

	•	Gold - Mt	Carlton Mi	ineral Res	ources C	omparisor	n - June 2	012 to De	cember 20	12		
		Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
June 2012	9.02	2.0	586	14.71	1.5	695	1.41	1.5	68	25.2	1.7	1,350
December 2012	9.02	2.0	586	14.71	1.5	695	1.41	1.5	68	25.2	1.7	1,350
Absolute Change	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Relative Change	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Silver - Mt Carlton Mineral Resources Comparison - June 2012 to December 2012

		Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)									
June 2012	11.4	57	20,790	14.9	19	9,004	1.51	16	796	27.9	34	30,590
December 2012	11.7	57	21,437	14.9	19	9,004	1.51	16	796	28.1	35	31,237
Absolute Change	0.25	0.5	647	0.00	0	0	0.00	0	0	0.25	0.4	647
Relative Change	2%	1%	3%	0%	0%	0%	0%	0%	0%	1%	1%	2%

	С	opper - M	t Carlton	Mineral Re	esources	Comparis	on - June	2012 to D	ecember 2	2012		
		Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)									
June 2012	11.4	0.24	27.5	14.9	0.21	32.1	1.51	0.20	3.0	27.9	0.23	62.8
December 2012	11.7	0.24	27.9	14.9	0.21	32.1	1.51	0.20	3.0	28.1	0.22	63.1
Absolute Change	0.25	0.00	0.4	0.00	0.00	0.0	0.00	0.00	0.0	0.25	-0.01	0.3
Relative Change	2%	0%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	0%

G	30	ld	Equ	uiva	len	t -	Mt	Car	lton	Μ	inera	I F	Resourc	ces (	Compar	ison	- J	une	20	12	2 to	рΙ	Decer	nber	· 20	01	2

		Measured			Indicated			Inferred			Total	
Period	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)									
June 2012	11.4	3.0	1,106	14.9	2.1	1,000	1.51	2.0	95	27.9	2.4	2,200
December 2012	11.7	3.0	1,119	14.9	2.1	1,000	1.51	2.0	95	28.1	2.5	2,214
Absolute Change	0.25	0.0	14	0.00	0.0	0	0.00	0.0	0	0.25	0.1	14
Relative Change	2%	0%	1%	0%	0%	0%	0%	0%	0%	1%	4%	1%

Data is reported to significant figures and differences may occur due to rounding

Mineral Resources are inclusive of Ore Reserves

Mt Carlton V2 deposit Mineral Resources have been reported above a cut-off grade of 0.35 g/t gold and A39 deposit reported above 42g/t silver

Mt Carlton V2 deposit was estimated using E-Type Multiple Indicator Kriging into blocks with dimensions 25 metres east by 25 metres north by 5 metres elevation

Mt Carlton A39 deposit was estimated using a combination of Ordinary Kriging, for more broadly spaced Resource Definition drilling, and Sequential Gaussian Simulation for close spaced grade control drilled areas of the deposit into blocks with dimensions 10 metres by 10 metres by 2.5 metres elevation

Competent Person: John Winterbottom a member of Australian Institute of Geoscientists

The gold equivalence calculation represents total metal value for each metal summed and expressed in equivalent gold grade and ounces. The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/lb Cu. Metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88.0% silver at A39 and 92.0% for copper as indicated by metallurgical testwork

1 Troy Ounce = 31.1034768 grams

Au Eq for Silver = ((Price Ag per Oz x Ag Recovery)/(Price Au per Oz x Au Recovery)) x Ag Grade

Au Eq for Copper = ((Price Cu per lb x 2204.623) x (Cu Recovery)) / (Price Au per Oz x Au Recovery / 31.1034768) x (Cu Grade / 100)

	Gold - I	Mt Carl	ton Ore F	Reserves	- Dece	mber 201	2		
		Proved		F	Probable	•	Tot	al Resei	ve
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)
A39	-	-	-	-	-	-	-	-	-
V2	4.52	3.1	446	4.61	2.5	366	9.13	2.8	812
Total Mt Carlton	4.52	3.1	446	4.61	2.5	366	9.13	2.8	812

# Silver - Mt Carlton Ore Reserves - December 2012

		Proved		F	Probable	•	Tot	al Reser	ve
Ore Reserve	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)
A39	1.04	265	8,852	-	-	-	1.04	265	8,852
V2	4.52	24	3,470	4.61	20	2,991	9.13	22	6,461
Stockpile	0.25	80	647	-	-	-	0.25	80	647
Total Mt Carlton	5.81	69	12,969	4.6	20	2,991	10.4	48	15,960

	Copper -	• Mt Car	lton Ore	Reserve	s - Dec	ember 20	12		
		Proved		F	Probable		Tot	al Reser	ve
Ore Reserve	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)
A39	1.04	0.24	2.5	-	-	-	1.04	0.24	2.5
V2	4.52	0.32	14.3	4.61	0.23	10.5	9.13	0.27	24.8
Stockpile	0.25	0.11	0.3	-	-	-	0.25	0.11	0.3
Total Mt Carlton	5.81	0.29	17.1	4.61	0.23	10.5	10.4	0.26	27.6

Gold Equivalent - Mt Carlton Ore Reserves - December 2012

		Proved		F	Probable	•	Tot	al Reser	ve
Ore Reserve	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)
A39	1.04	5.6	188	-	-	-	1.04	5.6	188
V2	4.52	3.9	567	4.61	3.1	464	9.13	3.5	1,031
Stockpile	0.25	1.7	14	-	-	-	0.25	1.7	14
Total Mt Carlton	5.81	4.1	769	4.61	3.1	464	10.4	3.7	1,233

Go	Gold - Mt Carlton Ore Reserves Comparison - June 2012 to December 2012														
		Proved			Probable			Total							
Period	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)						
June 2012	4.52	3.1	446	4.61	2.5	366	9.13	2.8	812						
December 2012	4.52	3.1	446	4.61	2.5	366	9.13	2.8	812						
Absolute Change	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0						
Relative Change	0%	0%	0%	0%	0%	0%	0%	0%	0%						

#### Silver - Mt Carlton Ore Reserves Comparison - June 2012 to December 2012

		Proved			Probable		Total			
Period	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	
June 2012	5.56	69	12,322	4.61	20	2,991	10.2	47	15,313	
December 2012	5.81	69	12,969	4.61	20	2,991	10.4	48	15,960	
Absolute Change	0.25	0.4	647	0.00	0	0	0.25	0.8	647	
Relative Change	5%	1%	5%	0%	0%	0%	2%	2%	4%	

#### Copper - Mt Carlton Ore Reserves Comparison - June 2012 to December 2012

		Proved			Probable		Total			
Period	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	
June 2012	5.56	0.30	16.8	4.61	0.23	10.5	10.2	0.27	27.3	
December 2012	5.81	0.29	17.1	4.61	0.23	10.5	10.4	0.26	27.6	
Absolute Change	0.25	0.01	0.3	0.00	0.00	0.0	0.25	-0.01	0.2	
Relative Change	5%	0%	2%	0%	0%	0%	2%	-2%	1%	

#### Gold Equivalent - Mt Carlton Ore Reserves Comparison - June 2012 to December 2012

		Proved			Probable		Total			
Period	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)	Tonnes (Mt)	Grade AuEq (g/t)	Cont. Metal AuEq (koz)	
June 2012	5.56	4.2	755	4.61	3.1	464	10.2	3.7	1,220	
December 2012	5.81	4.1	769	4.61	3.1	464	10.4	3.7	1,233	
Absolute Change	0.25	-0.1	15	0.00	0.0	0	0.25	-0.0	13	
Relative Change	5%	-2%	2%	0%	0%	0%	2%	-1%	1%	

#### Notes:

Data is reported to significant figures and differences may occur due to rounding

V2 Ore Reserves are reported above a 0.69 g/t gold cut-off and A39 Ore Reserves reported above a 53 g/t silver cut-off

Ore Reserves were calculated using a gold price of A\$1,350/oz, silver price of A\$28.00/oz silver price and copper price of A\$2.00/lb V2 deposit used variable recoveries proportionate to head grade with gold recovery ranging from 82.0% to 90.0%, silver and copper recoveries ranged from 84.0% to 92.0%

A39 deposit used 88.0% and 92.0% for silver and copper recoveries respectively

Smelter payabilities were also considered in the reserve calculation

Competent Person: Tony Wallace a member of the Australasian Institute of Mining and Metallurgy

The gold equivalence calculation represents total metal value for each metal summed and expressed in equivalent gold grade and ounces. The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/lb Cu. Metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88.0% silver at A39 and 92.0% for copper as indicated by metallurgical testwork Au Eq for Silver = ((Price Ag per Oz x Ag Recovery)/(Price Au per Oz x Au Recovery)) x Ag Grade

Au Eq for Copper = ((Price Cu per lb x 2204.623) x (Cu Recovery)) / (Price Au per Oz x Au Recovery / 31.1034768) x (Cu Grade / 100)

Twin Hills Mineral Resources - December 2012												
Mineral Resource	Measured			Indicated			Inferred			Total Resource		
	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
Open-Pit												
309 Deposit	-	-	-	2.42	2.2	170	0.64	1.7	35	3.06	2.1	204
Underground												
Lone Sister	0.54	4.1	71	0.28	3.4	31	0.20	2.8	18	1.02	3.7	120
309 Deposit	-	-	-	0.04	3.9	5	0.50	4.3	69	0.54	4.3	74
Total Twin Hills	0.54	4.1	71	2.74	2.3	205	1.34	2.8	122	4.62	2.7	399

Data is reported to significant figures and differences may occur due to rounding Twin Hills Mineral Resources have been reported above a cut-off grade of 2.0 g/t gold for underground, 0.5 g/t gold for open-pit and

within a A\$1,500/oz pit shell Twin Hills Lone Sister was estimated using Ordinary Kriging and 309 using Multiple Indicator Kriging (E Type) into blocks with dimensions 5 metres east by 5 metres north by 5 metres elevation Competent Person: John Winterbottom a member of Australian Institute of Geoscientists