

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**

25 September 2012

# June 2012 Resources and Reserves 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 30 June 2012.

Group Mineral Resources are now estimated at 7.0 million ounces gold equivalent, a slight increase of 0.4% compared to the June 2011 estimate of 6.97 million ounces. Resources depleted by mining have effectively been replaced by newly defined mineralisation at Pajingo and an increase to the Edna May underground resource. Mineral Resources are reported inclusive of Ore Reserves.

Group Ore Reserves are now estimated at 3.33 million ounces gold equivalent, a decrease of 4.6% compared to the June 2011 estimate of 3.49 million ounces. This change is largely due to depletion by mining of approximately 400koz predominantly offset by significant reserve increases at Pajingo and Cracow. The Mineral Resources and Ore Reserves have been prepared according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

This resource and reserve update only includes exploration and resource definition drilling information up to 31 December 2011 but has been depleted for mining to 30 June 2012. This discrepancy in timing is a consequence of the large task of compiling the disparate databases for projects that were previously owned by three different companies and then using similar estimation practices across the projects for the first time under Evolution ownership. Recent exploration success at Cracow (Coronation discovery) and at Pajingo (Moonlight prospect), in particular, have not been included in this resource and reserve update as information was unavailable at the cut-off date.

Evolution has made a strong commitment to exploration and resource definition drilling at each of its mines. The Company has budgeted A\$28 million for exploration and A\$12 million for resource definition drilling in the current financial year. It has an extensive and highly prospective exploration portfolio in Queensland and Western Australia and expects to increase resources and reserves in excess of mining depletion over the next 12 months.

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

| Gol                    | Gold Resources |         |                     | Measured            |                     |                     | Indicated           |                     |                     | Inferred            |                     |                     | Total Resources     |                     |  |  |
|------------------------|----------------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|
| Project                | Туре           | Cut-Off | Tonnes<br>(Million) | Gold Grade<br>(g/t) | Gold Metal<br>(koz) |  |  |
| Cracow <sup>1</sup>    | Underground    | 2.3     | 0.203               | 8.9                 | 58                  | 1.06                | 7.3                 | 248                 | 2.83                | 5.1                 | 462                 | 4.09                | 5.8                 | 768                 |  |  |
| Edna May <sup>1</sup>  | Open-pit       | 0.4     | 17.8                | 1.0                 | 549                 | 18.9                | 0.9                 | 526                 | 7.87                | 0.8                 | 194                 | 44.6                | 0.9                 | 1,269               |  |  |
| Edna May               | Underground    | 3.0     | -                   | -                   | -                   | 0.63                | 7.2                 | 146                 | 0.576               | 6.9                 | 127                 | 1.21                | 7.0                 | 273                 |  |  |
| Mt Carlton             | Open-pit       | 0.4     | 9.02                | 2.0                 | 586                 | 14.7                | 1.5                 | 695                 | 1.41                | 1.5                 | 68                  | 25.2                | 1.7                 | 1,350               |  |  |
| Mt Rawdon <sup>1</sup> | Open-pit       | 0.2     | 0.614               | 0.5                 | 10                  | 44.7                | 0.7                 | 1,058               | 7.17                | 0.5                 | 125                 | 52.5                | 0.7                 | 1,194               |  |  |
| Pajingo                | Open-pit       | 0.7     | -                   | -                   | -                   | 0.221               | 3.7                 | 26                  | 0.01                | 2.2                 | 1                   | 0.231               | 3.6                 | 27                  |  |  |
| Pajingo <sup>1</sup>   | Underground    | 2.4     | 0.274               | 6.6                 | 58                  | 2.11                | 5.5                 | 375                 | 2.78                | 4.9                 | 440                 | 5.16                | 5.3                 | 873                 |  |  |
| Twin Hills             | Open-pit       | 0.5     | -                   | -                   | -                   | 2.42                | 2.2                 | 170                 | 0.64                | 1.7                 | 35                  | 3.06                | 2.1                 | 204                 |  |  |
| Twin Hills             | Underground    | 2.0     | 0.54                | 4.1                 | 71                  | 0.32                | 3.5                 | 36                  | 0.7                 | 3.9                 | 87                  | 1.56                | 3.9                 | 194                 |  |  |
|                        | Sub Total      |         | 28.5                | 1.5                 | 1,332               | 85.1                | 1.2                 | 3,280               | 24.0                | 2.0                 | 1,540               | 138                 | 1.4                 | 6,152               |  |  |

| Silve      | er Resources | 3       |                     | Measured              |                       |                     | Indicated             |                       |                     | Inferred              |                       | Total Resources     |                       |                       |
|------------|--------------|---------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|
| Project    | Туре         | Cut-Off | Tonnes<br>(Million) | Silver<br>Grade (g/t) | Silver Metal<br>(koz) |
| Mt Carlton | Open-pit     | *       | 11.4                | 57                    | 20,790                | 14.9                | 19                    | 9,004                 | 1.5                 | 16                    | 796                   | 27.9                | 34                    | 30,590                |
|            | Total        |         | 11.4                | 57                    | 20,790                | 14.9                | 19                    | 9,004                 | 1.5                 | 16                    | 796                   | 27.9                | 34                    | 30,590                |

| Сорр       | er Resource | s       | Measured            |                     |                   | Indicated           |                     |                      |                     | Inferred            |                   | Total Resources     |                     |                   |  |
|------------|-------------|---------|---------------------|---------------------|-------------------|---------------------|---------------------|----------------------|---------------------|---------------------|-------------------|---------------------|---------------------|-------------------|--|
| Project    | Туре        | Cut-Off | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal (kt) | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal<br>(kt) | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal (kt) | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal (kt) |  |
| Mt Carlton | Open-pit    | *       | 11.4                | 0.24                | 27.6              | 14.9                | 0.21                | 32.1                 | 1.51                | 0.20                | 3.0               | 27.9                | 0.23                | 62.8              |  |
|            | Total       |         | 11.4                | 0.24                | 27.6              | 14.9                | 0.21                | 32.1                 | 1.51                | 0.20                | 3.0               | 27.9                | 0.23                | 62.8              |  |

|                           | Measured            |                            |                            | Indicated           |                            |                            | Inferred            |                            |                            | Total Resources     |                            |                            |
|---------------------------|---------------------|----------------------------|----------------------------|---------------------|----------------------------|----------------------------|---------------------|----------------------------|----------------------------|---------------------|----------------------------|----------------------------|
| Gold Equivalent Resources | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) |
| Total Group               | 30.8                | 1.9                        | 1,852                      | 85.3                | 1.3                        | 3,577                      | 24.1                | 2.0                        | 1,567                      | 140                 | 1.6                        | 6,996                      |

## Notes:

- <sup>1</sup> Includes stockpiles
- \* Combined figure for V2 using 0.35g/t Au cut-off and A39 using 42 g/t Ag cut-off Mineral Resource figures are inclusive of Ore Reserves
- Data is reported to significant figures and differences may occur due to rounding

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$2.00/lb\ Cu$ 

Metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88% silver at A39 and 92.0% for copper as indicated by metallurgical

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 Statement - June 2012

| Go                     | ld Reserves                                   |         |                     | Proved              |                     |                     | Probable            |                     | Total Reserve       |                     |                     |  |
|------------------------|-----------------------------------------------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| Project                | Туре                                          | Cut-Off | Tonnes<br>(Million) | Gold Grade<br>(g/t) | Gold Metal<br>(koz) | Tonnes<br>(Million) | Gold Grade<br>(g/t) | Gold Metal<br>(koz) | Tonnes<br>(Million) | Gold Grade<br>(g/t) | Gold Metal<br>(koz) |  |
| Cracow <sup>1</sup>    | Underground                                   | 3.0     | 0.126               | 10.9                | 44                  | 1.16                | 5.3                 | 198                 | 1.28                | 5.9                 | 242                 |  |
| Edna May <sup>1</sup>  | Open-pit                                      | 0.4     | 12.9                | 1.0                 | 418                 | 11.7                | 0.9                 | 349                 | 24.6                | 1.0                 | 767                 |  |
| Mt Carlton             | Open-pit                                      | 0.7     | 4.52                | 3.1                 | 446                 | 4.61                | 2.5                 | 366                 | 9.13                | 2.8                 | 812                 |  |
| Mt Rawdon <sup>1</sup> | Open-pit                                      | 0.3     | 0.614               | 0.5                 | 10                  | 35.6                | 0.8                 | 904                 | 36.2                | 0.8                 | 914                 |  |
| Pajingo                | Open-pit                                      | 0.7     | -                   | -                   | -                   | 0.214               | 3.3                 | 23                  | 0.214               | 3.3                 | 23                  |  |
| Pajingo <sup>1</sup>   | ajingo <sup>1</sup> Underground 3.0 0.046 6.0 |         | 6.0                 | 9                   | 0.859               | 5.5                 | 153                 | 0.904               | 5.6                 | 161                 |                     |  |
|                        | Total                                         |         | 18.2                | 1.6                 | 927                 | 54.1                | 1.1                 | 1,991               | 72.4                | 1.3                 | 2,918               |  |

| Silv       | er Reserves |         | Proved              |                       |                       |                     | Probable              |                       |                     | Total Reserv          | ve                    |
|------------|-------------|---------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|
| Project    | Туре        | Cut-Off | Tonnes<br>(Million) | Silver<br>Grade (g/t) | Silver Metal<br>(koz) | Tonnes<br>(Million) | Silver<br>Grade (g/t) | Silver Metal<br>(koz) | Tonnes<br>(Million) | Silver<br>Grade (g/t) | Silver Metal<br>(koz) |
| Mt Carlton | Open-pit    | **      | 5.56                | 69                    | 12,322                | 4.61                | 20                    | 2,991                 | 10.2                | 47                    | 15,313                |
|            | Total       |         | 5.56                | 69                    | 12,322                | 4.61                | 20                    | 2,991                 | 10.2                | 47                    | 15,313                |

| Cop        | per Reserves | 5       |                     | Proved              |                   |                     | Probable            |                      |                     | Total Reser         | ve                |
|------------|--------------|---------|---------------------|---------------------|-------------------|---------------------|---------------------|----------------------|---------------------|---------------------|-------------------|
| Project    | Туре         | Cut-Off | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal (kt) | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal<br>(kt) | Tonnes<br>(Million) | Copper<br>Grade (%) | Copper Metal (kt) |
| Mt Carlton | Open-pit     | **      | 5.56                | 0.30                | 16.8              | 4.61                | 0.23                | 10.5                 | 10.2                | 0.27                | 27.3              |
|            | Total        |         | 5.56                | 0.30                | 16.8              | 4.61                | 0.23                | 10.5                 | 10.2                | 0.27                | 27.3              |

|                          |                     | Proved                     |                            |                     | Probable                   |                            | Total Reserve       |                            |                            |  |
|--------------------------|---------------------|----------------------------|----------------------------|---------------------|----------------------------|----------------------------|---------------------|----------------------------|----------------------------|--|
| Gold Equivalent Reserves | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) | Tonnes<br>(Million) | Gold Equiv.<br>Grade (g/t) | Gold Equiv.<br>Metal (koz) |  |
| Total Group              | 19.3                | 2.0                        | 1,236                      | 54.1                | 1.2                        | 2,090                      | 73.4                | 1.4                        | 3,326                      |  |

### Notes:

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

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/lb Cu
Metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88% 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)



# **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 the employer named in that row 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" (JORC Code). Each person named in the table below consents to the inclusion in this report of the matters based on his or her information in the form and context in which they appear.

| Resource/Reserve                                     | Name of Competent<br>Person | Employer                                           | Institute                                       |
|------------------------------------------------------|-----------------------------|----------------------------------------------------|-------------------------------------------------|
| Mt Carlton Ore Reserve                               | John Wyche                  | Australian Mine Design and Development Pty Limited | Australasian Institute of Mining and Metallurgy |
| Mt Carlton Mineral Resources                         | John Winterbottom           | Evolution Mining                                   | Australian Institute of Geoscientists           |
| Pajingo Mineral Resources                            | Calvin Ferguson             | Evolution Mining                                   | Australasian Institute of Mining and Metallurgy |
| Pajingo Underground Ore Reserves                     | Andrew Fox                  | Formerly Evolution Mining                          | Australasian Institute of Mining and Metallurgy |
| Pajingo Open-pit Ore Reserves                        | Cameron Skinner             | Evolution Mining                                   | Australasian Institute of Mining and Metallurgy |
| Twin Hills Mineral Resources                         | Peter Brown                 | Formerly Evolution Mining                          | Australian Institute of Geoscientists           |
| Edna May Underground Mineral Resource                | John Winterbottom           | Evolution Mining                                   | Australian Institute of Geoscientists           |
| Edna May Open-pit Mineral Resources and Ore Reserves | Luke Cox                    | Evolution Mining                                   | Australasian Institute of Mining and Metallurgy |
| Cracow Mineral Resources                             | John Winterbottom           | Evolution Mining                                   | Australian Institute of Geoscientists           |
| Cracow Ore Reserves                                  | Fusheng Li                  | Evolution Mining                                   | Australasian Institute of Mining and Metallurgy |
| Mt Rawdon Mineral Resource                           | John Winterbottom           | Evolution Mining                                   | Australian Institute of Geoscientists           |
| Mt Rawdon Ore Reserve                                | Karl Smith                  | Karl Smith Mine and<br>Geology Consulting Pty Ltd  | Australasian Institute of Mining and Metallurgy |

# For further information please contact:

# **Investor Enquiries**

Donna Kelly and Liesl Kemp Investor Relations Evolution Mining Limited Tel: +61 8 6216 9700 **Media Contact** 

Michael Vaughan Media Relations FTI – Media Relations

Tel: +61 2 8298 6100

# Appendix A

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

# **Pajingo Mineral Resource**

The June 2012 Pajingo Mineral Resource estimate of 5.39 million tonnes at 5.2g/t gold for 900koz represents an increase of 172koz (24%) net of mining depletion compared to the previous estimate. Changes in the 2012 Mineral Resource estimate compared to the previously reported estimate include:

- An increase of 375koz as a result of resource definition drilling within the main Vera-Nancy trend successfully defining additional resources at the Jandam and Faith lodes;
- · New mineralised lodes at Janine, Olivia and Leaping Dog;
- A decrease of 116koz due to a change in the cut-off grade for underground resources from 1.0g/t to 2.4g/t gold; and
- · Mining depletion.

Open-pit Mineral Resources are reported at a 0.65g/t gold cut-off, constrained to an A\$1,350 per ounce pit shell and estimated using Ordinary Kriging into blocks with dimensions 10 metres east by 4 metres north by 5 metres elevation.

Underground Mineral Resources are reported at a 2.4 g/t gold cut-off and estimated using Ordinary Kriging into blocks with dimensions 10 metres east by 5 metres north by 10 metres elevation.

# Pajingo Ore Reserves

The June 2012 Pajingo Ore Reserve estimate of 1.12 million tonnes at 5.1g/t gold for 184koz represents an increase of 44koz ounces (31%) net of mining depletion compared to the 2011 Ore Reserve estimate.

Changes in the 2012 Ore Reserve estimate compared to the previously reported estimate include:

- Increase in Faith Ore Reserve of 13koz gold;
- Increase in Sonia Ore Reserve of 14koz gold due to additional drilling in Sonia and Sonia East;
- Increase in Veracity Ore Reserve of 19koz gold;
- Inclusion of Leaping Dog Ore Reserve of 13koz gold: and
- Mining depletion.

The Ore Reserves are reported at a 3.0g/t gold (diluted panel grade) cut-off for underground and 0.65g/t gold for open pit. Ore Reserves were estimated based on a gold price of A\$1,350 per ounce and a gold recovery of 96%.

### **Cracow Mineral Resource**

The June 2012 Cracow Mineral Resource estimate of 4.09 million tonnes at 5.8g/t gold for 768koz represents a decrease of 124koz (14%) net of mining depletion compared to the previous estimate.

Changes in the 2012 Mineral Resource estimate compared to the previously reported estimate include:

- Decrease in ounces due to the narrowing of some lode structures;
- Change in cut-off grade from 2.5g/t gold to 2.3g/t gold resulting in a 14koz increase; and
- Mining depletion.

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

# **Cracow Ore Reserves**

The June 2012 Cracow Ore Reserve estimate of 1.28 million tonnes at 5.9g/t gold for 242koz represents a minimal change(-1%) net of mining depletion compared to the previous estimate.

Changes in the 2012 Ore Reserve estimate compared to the previously reported estimate include:

- Increases at the Kilkenny and Roses Pride lodes (20koz net of depletion);
- Extension of the Klondyke North Shoot as a result of additional drilling (17koz); and
- Mining depletion.

The Ore Reserves have been reported above a cut-off grade of 3.0g/t gold. Ore Reserves were estimated based on a gold price of A\$1,350 per ounce and a gold recovery of 93%.

# Mt Rawdon Mineral Resource

The June 2012 Mt Rawdon Mineral Resource estimate of 52.5 million tonnes at 0.7g/t gold for 1,194koz represents an increase of167koz (16%) net of mining depletion compared to the previous estimate.

Changes in the 2012 Mineral Resource estimate compared to the previously reported estimate include:

- Increase of 307koz as a result of constraining mineralisation to an A\$1,800 per ounce pit shell (from A\$1200 per ounce previously) and a change in cut-off grade from 0.38g/t gold to 0.23g/t gold.
- Decrease of 32koz due to model methodology changes;
- 2koz increase from a stockpile balance change; and
- Mining depletion.

The Mineral Resources are reported at a 0.23g/t gold (un-factored model grade) cut-off, constrained to an A\$1,800 per ounce pit shell and estimated using Ordinary Kriging into blocks with dimensions 20 metres east by 20 metres north by 10 elevation.

### Mt Rawdon Ore Reserves

The June 2012 Mt Rawdon Ore Reserve estimate of 36.2 million tonnes at 0.8g/t gold for 914koz represents a slight decrease (1%) net of mining depletion compared to the previous estimate.

Changes in the 2012 Ore Reserve estimate compared to the previously reported estimate include:

- Increase of 101koz due to lowering the cut-off from 0.4g/t to 0.3g/t gold and changing the gold price assumption from A\$1,133 per ounce to A\$1,350 per ounce;
- Decrease of 6koz due to model methodology changes; and
- Mining depletion

The Ore Reserves are reported at a 0.30g/t gold (un-factored model grade) cut-off. Ore Reserves were estimated based on a gold price of A\$1,350 per ounce and a variable gold recovery averaging 89.5%.

# **Edna May Mineral Resource**

The June 2012 Edna May Mineral Resource estimate of 45.8 million tonnes at 1.0g/t gold for 1,542koz represents a decrease of 220koz (13%) net of mining depletion compared to the 2011 estimate.

An increase in the underground Mineral Resource estimate of 107koz was off-set by the following changes:

- Decrease of 67koz due to re-interpretation of mineralisation outside the Edna May Gneiss within the open-pit resource:
- Decrease of 38koz due to reporting average grades (E-Type<sup>1</sup>) panel grades excluding panels from the openpit resource below the 0.4g/t cut-off rather than using the recovery proportion assigned to a panel;
- Decrease of 146koz due to improved structural domaining to better capture the changes in orientation of mineralisation; and
- Mining depletion.

The Mineral Resources are reported at a 0.4g/t gold cut-off for Edna May and Greenfinch open-pits and 3.0g/t gold cut-off for the Edna May Underground. Edna May and Greenfinch 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. Edna May open pit was reported above the 1050mRL (290 metres below surface).

Edna May's underground deposit was estimated using a combination of Ordinary Kriging into blocks with dimensions 5 metres east by 5metres north by 5m elevation and is reported below the 1050mRL. No additional drilling has been included in the 2012 Mineral Resource as compared to the previously reported Mineral Resource.

# **Edna May Ore Reserves**

The June 2012 Edna May Ore Reserve estimate of 24.6 million tonnes at 1.0g/t gold for 767koz represents a decrease of 160koz (17%) net of mining depletion compared to the 2011 estimate.

Changes in the 2012 Ore Reserve estimate compared to the previously reported estimate include:

- Decrease of 83koz due to optimisation of the open-pit design using the revised Mineral Resource estimate (i.e. excludes mineralisation outside the Edna May Gneiss, and uses E-Type grade estimates), and an increase in the input costs for the Ore Reserve estimation; and
- Mining depletion.

The 2012 Ore Reserves are reported at a 0.4g/t gold cut-off. Ore Reserves were estimated based on a gold price of A\$1,500 per ounce gold price and a gold recovery of 91.5%.

## Mt Carlton Mineral Resource

The June 2012 Mt Carlton Mineral Resource estimate of 27.9 million tonnes at 2.4g/t gold equivalent for 2.2 million gold equivalent ounces represents a 2% increase in gold equivalent ounces compared to the previous estimate. Changes in the 2012 Mineral Resource estimate compared to the previously reported estimate are a result of:

- Changes in grade estimation methodology from a recovery value model to an average grade (E-Type) model; and
- Changes in cut-off value parameters from an in-situ value of \$A20/t previously to a cut-off grade of 0.35g/t gold for V2 and 42g/t silver for A39.

The Mt Carlton Mineral Resource consists of the V2 and A39 deposits.

<sup>&</sup>lt;sup>1</sup> The E-Type estimate is taken as the mean grade for a block in space accounting for the estimation error or uncertainty of the resultant grade. The identification of the mean value is based on the CCDF (conditional cumulative distribution function) of real data.



The V2 deposit Mineral Resources are reported at a 0.35g/t gold cut-off and estimated using E-Type Multiple Indicator Kriging into blocks with dimensions 25 metres east by 25 metres north by 5 elevation.

The A39 deposit Mineral Resources are reported at a 42g/t silver cut-off 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 of the deposit into blocks with dimensions 10 metres by 10 metres by 2.5m elevation.

#### Mt Carlton Ore Reserves

The June 2012 Mt Carlton Ore Reserve estimate of 10.2 million tonnes at 3.7g/t gold equivalent for 1.22 million gold equivalent ounces represents a slight decrease (3%) in gold equivalent ounces compared to the previous estimate.

Changes are largely the result of a change in grade estimation technique from a recovery value model to an average grade (E-Type) model.

Changes in the 2012 Ore Reserve estimate compared to the 2011 Ore Reserve estimate are a result of:

- Updated resource model using a simpler grade estimation technique and additional drilling;
- Updated metal prices, process recoveries, mining costs, smelter payables, concentrate transport costs and royalties; and
- New final pit designs based on updated pit optimisation with updated resource model and inputs.

Mt Carlton Ore Reserves are estimated based on metal prices of A\$1,350 per ounce for gold, A\$28.00 per ounce for silver and A\$2.00 per pound for copper.

The V2 deposit Ore Reserves are reported at a 0.69g/t gold cut-off. The V2 deposit Ore Reserve estimate used variable metal recoveries proportionate to head grade with gold recovery ranging from 82 to 90% and silver and copper recoveries ranging from 84 to 92%.

The A39 Deposit Ore Reserves are reported at a 53g/t silver cut-off. The A39 deposit Ore Reserve estimate used metal recoveries proportionate to head grade with a silver recovery of 88% and copper recovery of 92%.

The new modelling parameters as described above have also seen the waste to ore ratios improve significantly at both the V2 and A39 pits. The V2 strip ratio (waste tonnes to ore tonnes) has fallen to 2.7 from 3.9 previously and the A39 strip ratio has fallen to 3.3 from 11.9 previously.

# Twin Hills Mineral Resource

The June 2012 Twin Hills Mineral Resource estimate of 4.62 million tonnes at 2.7g/t gold for 398koz is unchanged from the 2011 estimate as no new drilling or estimation has been conducted at Twin Hills.

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

# **Twin Hills Ore Reserves**

No Ore Reserves have been estimated for Twin Hills.

# Appendix B Mineral Resources and Ore Reserve Tables by Operation

| Pajingo Mineral Resources - June 2012 |        |           |                |        |            |                |        |           |                |        |           |                |  |
|---------------------------------------|--------|-----------|----------------|--------|------------|----------------|--------|-----------|----------------|--------|-----------|----------------|--|
| Mineral                               | Meas   | ured Reso | urce           | Indic  | cated Reso | ource          | Infe   | rred Reso | urce           | То     | tal Resou | rce            |  |
| Resources by                          | Tonnes | Grade     | Cont.<br>Metal | Tonnes | Grade      | Cont.<br>Metal | Tonnes | Grade     | Cont.<br>Metal | Tonnes | Grade     | Cont.<br>Metal |  |
| Lodes                                 | Mt     | Au (g/t)  | Au<br>(koz)    | Mt     | Au (g/t)   | Au<br>(koz)    | Mt     | Au (g/t)  | Au<br>(koz)    | Mt     | Au (g/t)  | Au<br>(koz)    |  |
| Underground                           |        |           |                |        |            |                |        |           |                |        |           |                |  |
| Cindy                                 | -      | -         | -              | 0.06   | 7.2        | 14             | 0.043  | 4.8       | 7              | 0.104  | 6.2       | 21             |  |
| Venue                                 | -      | -         | -              | 0.137  | 4.5        | 20             | 0.18   | 3.8       | 22             | 0.317  | 4.1       | 42             |  |
| Faith                                 | 0.002  | 5.7       | 0.3            | 0.174  | 6.0        | 34             | 0.125  | 4.7       | 19             | 0.301  | 5.5       | 53             |  |
| Jandam <sup>1</sup>                   | 0.213  | 6.6       | 45             | 0.846  | 5.0        | 137            | 0.691  | 4.6       | 101            | 1.75   | 5.0       | 283            |  |
| Sonia <sup>2</sup>                    | -      | -         | -              | 0.22   | 8.2        | 58             | 0.248  | 8.7       | 69             | 0.468  | 8.5       | 128            |  |
| Veracity                              | -      | -         | -              | 0.308  | 5.3        | 53             | 0.074  | 5.1       | 12             | 0.383  | 5.3       | 65             |  |
| Zed                                   | -      | -         | -              | 0.225  | 5.4        | 39             | 1.05   | 4.9       | 167            | 1.28   | 5.0       | 206            |  |
| Leaping Dog                           | 0.053  | 6.6       | 11             | 0.077  | 4.6        | 11             | 0.005  | 5.1       | 1              | 0.134  | 5.4       | 23             |  |
| Olivia                                | -      | -         | -              | -      | -          | -              | 0.305  | 3.6       | 35             | 0.305  | 3.6       | 35             |  |
| Janine                                | -      | -         | -              | 0.059  | 4.5        | 8              | 0.06   | 3.7       | 7              | 0.119  | 4.1       | 16             |  |
| Open-Pit                              |        |           |                |        |            |                |        |           |                |        |           |                |  |
| Venue <sup>3</sup>                    | -      | -         | -              | 0.221  | 3.7        | 26             | 0.01   | 2.2       | 1              | 0.231  | 3.6       | 27             |  |
| Stockpiles                            | 0.008  | 5.3       | 1              | -      | -          | -              | -      | -         | -              | 0.008  | 5.3       | 1              |  |
| Total                                 | 0.274  | 6.6       | 58             | 2.33   | 5.4        | 401            | 2.79   | 4.9       | 441            | 5.39   | 5.2       | 900            |  |

<sup>&</sup>lt;sup>1</sup> Includes J1, J1 HW, J2, J3 and J4 Lodes <sup>2</sup> Includes Sonia and Sonia East Lodes

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

Pajingo Mineral Resources have been reported above a cut-off grade of 2.4g/t of gold for underground, 0.65 g/t of gold for open pit and constrained to an A\$1,350 pit design

Pajingo was estimated using Ordinary Kriging into blocks with dimensions 10 metres East by 5 metres North by 10 metres elevation Mineral Resource figures are inclusive of Ore Reserves

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

| Pajingo Ore Reserves - June 2012 |        |          |             |        |          |             |        |          |             |  |  |  |  |
|----------------------------------|--------|----------|-------------|--------|----------|-------------|--------|----------|-------------|--|--|--|--|
| Ore Becerves by                  |        | Proved   |             |        | Probable |             |        | Total    |             |  |  |  |  |
| Ore Reserves by<br>Lodes         | Tonnes | Grade    | Cont. Metal | Tonnes | Grade    | Cont. Metal | Tonnes | Grade    | Cont. Metal |  |  |  |  |
|                                  | Mt     | Au (g/t) | Au (koz)    | Mt     | Au (g/t) | Au (koz)    | Mt     | Au (g/t) | Au (koz)    |  |  |  |  |
| Underground                      |        |          |             |        |          |             |        |          |             |  |  |  |  |
| Cindy                            | -      | -        | -           | 0.031  | 5.9      | 6           | 0.031  | 5.9      | 6           |  |  |  |  |
| Faith                            | 0.003  | 4.2      | 0.4         | 0.171  | 5.5      | 30          | 0.174  | 5.5      | 31          |  |  |  |  |
| Jandam <sup>1</sup>              | -      | -        | -           | 0.018  | 4.4      | 3           | 0.018  | 4.4      | 3           |  |  |  |  |
| Leaping Dog                      | 0.035  | 6.3      | 7           | 0.04   | 4.6      | 6           | 0.075  | 5.4      | 13          |  |  |  |  |
| Sonia <sup>2</sup>               | -      | -        | -           | 0.219  | 7.1      | 50          | 0.219  | 7.1      | 50          |  |  |  |  |
| Veracity                         | -      | -        | -           | 0.228  | 4.4      | 32          | 0.228  | 4.4      | 32          |  |  |  |  |
| Zed                              | -      | -        | -           | 0.152  | 5.3      | 26          | 0.152  | 5.3      | 26          |  |  |  |  |
| Open-pit                         |        |          |             |        |          |             |        |          |             |  |  |  |  |
| Venue <sup>3</sup>               | -      | -        | -           | 0.214  | 3.3      | 23          | 0.214  | 3.3      | 23          |  |  |  |  |
| Stockpiles                       | 0.008  | 5.3      | 1           | -      | -        | -           | 0.008  | 5.3      | 1           |  |  |  |  |
| Total                            | 0.046  | 6.0      | 9           | 1.07   | 5.1      | 175         | 1.12   | 5.1      | 184         |  |  |  |  |

<sup>&</sup>lt;sup>1</sup> Includes J1, J1 HW, J2, J3 and J4 Lodes

## Notes:

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

Ore Reserves are reported above a 3.0g/t gold cut-off

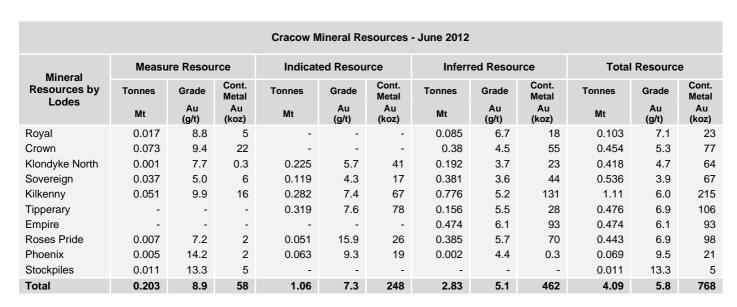
Ore Reserves are calculated using a A\$1,350 per ounce gold price and a gold recovery of 96% Underground Competent Person: Andrew Fox a member of the Australasian Institute of Mining and Metallurgy

Open-pit Competent Person: Cameron Skinner a member of the Australasian Institute of Mining and Metallurgy

<sup>&</sup>lt;sup>3</sup> Includes Venue and Vera North Upper Lodes

<sup>&</sup>lt;sup>2</sup> Includes Sonia and Sonia East Lodes

<sup>&</sup>lt;sup>3</sup> Includes Venue and Vera North Upper Lodes



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

Cracow Mineral Resources have been reported above a cut-off grade of 2.3 g/t of gold

Cracow was estimated using Ordinary Kriging into blocks with a range of dimensions optimised to the characteristics and geometry of each deposit

Mineral Resource figures are inclusive of Ore Reserves

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

| Cracow Ore Reserves - June 2012 |        |          |                |        |          |                |              |          |                |  |  |  |  |
|---------------------------------|--------|----------|----------------|--------|----------|----------------|--------------|----------|----------------|--|--|--|--|
|                                 |        | Proved   |                |        | Probable |                |              | Total    |                |  |  |  |  |
| Ore Reserves by Lodes           | Tonnes | Grade    | Cont.<br>Metal | Tonnes | Grade    | Cont.<br>Metal | Tonnes       | Grade    | Cont.<br>Metal |  |  |  |  |
|                                 | Mt     | Au (g/t) | Au (koz)       | Mt     | Au (g/t) | Au (koz)       | Mt           | Au (g/t) | Au (koz)       |  |  |  |  |
| Royal                           | 0.015  | 8.0      | 4              | -      | -        | -              | 0.015        | 8.0      | 4              |  |  |  |  |
| Crown                           | 0.032  | 12.2     | 13             | 0.003  | 1.0      | 0.1            | 0.035        | 11.1     | 13             |  |  |  |  |
| Klondyke North                  | 0.0004 | 5.7      | 0.1            | 0.158  | 4.4      | 22             | 0.159        | 4.4      | 22             |  |  |  |  |
| Sovereign                       | 0.004  | 7.5      | 1              | 0.038  | 4.3      | 5              | 0.042        | 4.7      | 6              |  |  |  |  |
| Kilkenny                        | 0.053  | 11.8     | 20             | 0.368  | 4.7      | 55             | 0.421        | 5.6      | 75             |  |  |  |  |
| Roses Pride                     | 0.007  | 4.6      | 1              | 0.094  | 8.1      | 24             | 0.101        | 7.8      | 25             |  |  |  |  |
| Phoenix                         | 0.002  | 8.5      | 1              | 0.096  | 7.7      | 24             | 0.098        | 7.7      | 24             |  |  |  |  |
| Tipperary                       | -      | -        | -              | 0.398  | 5.2      | 66             | 0.398        | 5.2      | 66             |  |  |  |  |
| Stockpiles                      | 0.011  | 13.3     | 5              | -      | -        | -              | 0.011        | 13.3     | 5              |  |  |  |  |
| Total                           | 0.126  | 10.9     | 44             | 1.16   | 5.3      | 198            | 1.28 5.9 242 |          |                |  |  |  |  |

### 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

Ore Reserves are calculated using a A\$1,350 per ounce gold price and a gold recovery of 93%

Cracow tonnes and grades are stated to a number of significant digits reflecting confidence of the estimate

Competent Person: Fusheng Li a member of the Australasian Institute of Mining and Metallurgy



**Total** 

Stockpiles

0.6

0.6

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

10

10

44.7

0.5

0.5

Mt Rawdon Mineral Resources have been reported above a cut-off grade of 0.23 g/t of gold and constrained to an A\$1,800 pit optimisation shell Mt Rawdon was estimated using Ordinary Kriging into blocks with dimensions 20 metres East by 20 metres North by 5 elevation

1,058

7.17

0.7

Mineral Resource figures are inclusive of Ore Reserves Competent Person: John Winterbottom a member of Australian Institute of Geoscientists

|                     |                       |          | Mt Rawdoi      | n Ore Reserv | res - June 2012     | 2                      |                             |                     |                        |  |
|---------------------|-----------------------|----------|----------------|--------------|---------------------|------------------------|-----------------------------|---------------------|------------------------|--|
|                     | Proved Probable Total |          |                |              |                     |                        |                             |                     |                        |  |
| Ore Reserves        | Tonnes                | Grade    | Cont.<br>Metal | Tonnes       | Grade               | Cont.<br>Metal         | Tonnes Grade Cont.<br>Metal |                     |                        |  |
|                     |                       |          |                |              |                     |                        |                             |                     |                        |  |
|                     | Mt                    | Au (g/t) | Au (koz)       | Mt           | Au (g/t)            | Au (koz)               | Mt                          | Au (g/t)            | Au (koz)               |  |
| Open Pit            | Mt -                  | Au (g/t) | Au (koz)       | Mt<br>35.6   | <b>Au (g/t)</b> 0.8 | <b>Au (koz)</b><br>904 | Mt<br>35.6                  | <b>Au (g/t)</b> 0.8 | <b>Au (koz)</b><br>904 |  |
| Open Pit Stockpiles |                       |          | , ,            |              |                     | , ,                    |                             | ,                   |                        |  |

### Notes:

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 per ounce gold price and a variable gold recovery, approximately 89.5% for average head grade reported

Mt Rawdon tonnes and grades are stated to a number of significant digits reflecting confidence of the estimate

Competent Person: Karl Smith a member of the Australasian Institute of Mining and Metallurgy

0.6

52.5

0.5

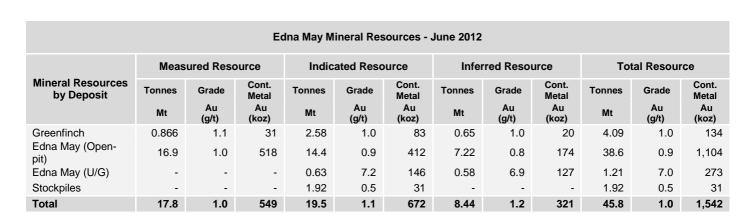
125

0.5

0.7

10

1,194



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

Edna May and Greenfinch Mineral Resources have been reported above a cut-off grade of 0.4g/t of gold and Edna May underground reported above 3g/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 elevation and 20 metres East by 15 metres North by 5 elevation respectively. Edna May open-pit was reported above the 1050mRL (290 metres below surface)

Edna Mays underground deposit was estimated using a combination of Ordinary Kriging into blocks with dimensions 5 metres East by 5metres North by 5m elevation and is reported below the 1050mRL

Mineral Resource figures are inclusive of Ore Reserves

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

Competent Person: Open-pit & Greenfinch, Luke Cox a member of the Australasian Institute of Mining and Metallurgy

|                            |        |          | Edna May Or    | e Reserves - | June 2012 |                |        |              |                |
|----------------------------|--------|----------|----------------|--------------|-----------|----------------|--------|--------------|----------------|
|                            |        | Proved   |                |              | Probable  |                | Tota   | al Ore Reser | ves            |
| Ore Reserves by<br>Deposit | Tonnes | Grade    | Cont.<br>Metal | Tonnes       | Grade     | Cont.<br>Metal | Tonnes | Grade        | Cont.<br>Metal |
|                            | Mt     | Au (g/t) | Au (koz)       | Mt           | Au (g/t)  | Au (koz)       | Mt     | Au (g/t)     | Au (koz)       |
| Greenfinch                 | 0.8    | 1.1      | 28             | 1.7          | 1.0       | 58             | 2.5    | 1.1          | 86             |
| Edna May (OP)              | 12.1   | 1.0      | 390            | 8.07         | 1.0       | 259            | 20.2   | 1.0          | 649            |
| Edna May (U/G)             | -      | -        | -              | -            | -         | -              | -      | -            | -              |
| Stockpiles                 | -      | -        | -              | 1.92         | 0.5       | 31             | 1.92   | 0.5          | 31             |
| Total                      | 12.9   | 1.0      | 418            | 11.7         | 0.9       | 349            | 24.6   | 1.0          | 767            |

# Notes:

Ore Reserves are reported above a 0.4g/t gold cut-off

Ore Reserves were calculated using a A\$1,500 per ounce gold price and a gold recovery of 91.5%

Competent Person: Luke Cox a member of the Australasian Institute of Mining and Metallurgy

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

|                                                                       | Gold - Mt Carlton Mineral Resources - June 2012 |          |                |        |          |                |        |          |                |        |          |                |  |  |
|-----------------------------------------------------------------------|-------------------------------------------------|----------|----------------|--------|----------|----------------|--------|----------|----------------|--------|----------|----------------|--|--|
| Measured Resource Indicated Resource Inferred Resource Total Resource |                                                 |          |                |        |          |                |        |          |                |        | ce       |                |  |  |
| Mineral<br>Resources                                                  | Tonnes                                          | Grade    | Cont.<br>Metal | Tonnes | Grade    | Cont.Me<br>tal | Tonnes | Grade    | Cont.<br>Metal | Tonnes | Grade    | Cont.<br>Metal |  |  |
| by Deposit                                                            | Mt                                              | Au (g/t) | Au<br>(koz)    | Mt     | Au (g/t) | Au<br>(koz)    | Mt     | Au (g/t) | Au<br>(koz)    | Mt     | Au (g/t) | Au<br>(koz)    |  |  |
| V2                                                                    | 9.02                                            | 2.0      | 586            | 14.7   | 1.5      | 695            | 1.41   | 1.5      | 68             | 25.2   | 1.7      | 1,350          |  |  |
| Total                                                                 |                                                 |          |                |        |          |                |        |          |                |        | 1,350    |                |  |  |

|                      | Silver - Mt Carlton Mineral Resources - June 2012 |           |                |                      |           |                |        |            |                |                |                  |             |  |  |
|----------------------|---------------------------------------------------|-----------|----------------|----------------------|-----------|----------------|--------|------------|----------------|----------------|------------------|-------------|--|--|
|                      | Meas                                              | ured Reso | urce           | Indic                | ated Reso | urce           | Infe   | rred Resou | ırce           | Total Resource |                  |             |  |  |
| Mineral<br>Resources | Tonnes                                            | Grade     | Cont.<br>Metal | Tonnes               | Grade     | Cont.<br>Metal | Tonnes | Grade      | Cont.<br>Metal | Tonnes         | Tonnes Grade Cor |             |  |  |
| by Deposit           | Mt                                                | Ag (g/t)  | Ag<br>(koz)    | Mt Ag (g/t) Ag (koz) |           |                | Mt     | Ag (g/t)   | Ag<br>(koz)    | Mt             | Ag (g/t)         | Ag<br>(koz) |  |  |
| V2                   | 9.02                                              | 21        | 6,159          | 14.7                 | 18        | 8,410          | 1.41   | 12         | 534            | 25.2           | 19               | 15,103      |  |  |
| A39                  | 2.38                                              | 192       | 14,631         | 0.231                | 80        | 594            | 0.095  | 85         | 262            | 2.7            | 178              | 15,487      |  |  |
| Total                | 11.4                                              | 57        | 20,790         | 14.9                 | 19        | 9,004          | 1.51   | 16         | 796            | 27.9           | 34               | 30,590      |  |  |

|                         | Copper - Mt Carlton Mineral Resources - June 2012 |           |                |        |           |                |                |        |                |        |        |                |  |  |
|-------------------------|---------------------------------------------------|-----------|----------------|--------|-----------|----------------|----------------|--------|----------------|--------|--------|----------------|--|--|
| Mineral                 | Meas                                              | ured Reso | urce           | Indic  | ated Reso | ırce           | Total Resource |        |                |        |        |                |  |  |
| Resources<br>by Deposit | Tonnes                                            | Grade     | Cont.<br>Metal | Tonnes | Grade     | Cont.<br>Metal | Tonnes         | Grade  | Cont.<br>Metal | Tonnes | Grade  | Cont.<br>Metal |  |  |
| by Deposit              | Sit Mt Cu (%) Cu (kt                              |           |                | Mt     | Cu (%)    | Cu (kt)        | Mt             | Cu (%) | Cu (kt)        | Mt     | Cu (%) | Cu (kt)        |  |  |
| 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           |  |  |
| A39                     |                                                   |           |                |        | 0.01      | 0.03           | 0.095          | 0.04   | 0.004          | 2.7    | 0.12   | 3.1            |  |  |
| Total                   | 11.4                                              | 0.24      | 27.6           | 14.9   | 0.21      | 32.1           | 1.51           | 0.20   | 3.0            | 27.9   | 0.23   | 62.8           |  |  |

| Gold Equivalence (Silver) - Mt Carlton Mineral Resources - June 2012 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |               |            |           |                |        |               |                |                |               |                |  |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|------------|-----------|----------------|--------|---------------|----------------|----------------|---------------|----------------|--|
|                                                                      | Meas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ured Reso     | urce          | Indic      | ated Reso | urce           | Infe   | rred Resou    | ırce           | Total Resource |               |                |  |
| Resources                                                            | The state of the s |               |               |            | Grade     | Cont.<br>Metal | Tonnes | Grade         | Cont.<br>Metal | Tonnes         | Grade         | Cont.<br>Metal |  |
| by Deposit                                                           | Mt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AuEq<br>(g/t) | AuEq<br>(koz) | Eq M+ AuEq |           | AuEq<br>(koz)  | Mt     | AuEq<br>(g/t) |                |                | AuEq<br>(g/t) | AuEq<br>(koz)  |  |
| V2                                                                   | 9.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.5           | 131           | 14.7       | 0.4       | 178            | 1.41   | 0.2           | 11             | 25.2           | 0.4           | 320            |  |
| A39                                                                  | 2.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.9           | 297           | 0.231      | 1.6       | 12             | 0.095  | 1.7           | 5              | 2.7            | 3.6           | 314            |  |
| Sub-Total                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |               |            |           |                |        |               |                | 27.9           | 0.7           | 634            |  |

|                      | Gold Equivalence (Copper) - Mt Carlton Mineral Resources - June 2012 |               |                |                                      |               |                |        |               |                |                |               |                |  |  |
|----------------------|----------------------------------------------------------------------|---------------|----------------|--------------------------------------|---------------|----------------|--------|---------------|----------------|----------------|---------------|----------------|--|--|
|                      | Meas                                                                 | ured Reso     | urce           | Indicated Resource Inferred Resource |               |                |        |               |                | Total Resource |               |                |  |  |
| Mineral<br>Resources | Tonnes                                                               | Grade         | Cont.<br>Metal | Tonnes                               | Grade         | Cont.<br>Metal | Tonnes | Grade         | Cont.<br>Metal | Tonnes         | Grade         | Cont.<br>Metal |  |  |
| by Deposit           | Mt                                                                   | AuEq<br>(g/t) | AuEq<br>(koz)  | Mt                                   | AuEq<br>(g/t) | AuEq<br>(koz)  | Mt     | AuEq<br>(g/t) | AuEq<br>(koz)  | Mt             | AuEq<br>(g/t) | AuEq<br>(koz)  |  |  |
| V2                   | 9.02                                                                 | 0.3           | 82             | 14.7                                 | 0.2           | 107            | 1.41   | 0.2           | 10             | 25.2           | 0.2           | 199            |  |  |
| A39                  | 2.38                                                                 | 0.1           | 10             | 0.231                                | 0.01          | 0.1            | 0.095  | 0.004         | 0.01           | 2.7            | 0.1           | 10             |  |  |
| Sub-Total            | 11.4                                                                 | 0.3           | 92             | 14.9                                 | 0.2           | 107            | 1.51   | 0.2           | 10             | 27.9           | 0.2           | 210            |  |  |

|                      | Total Gold Equivalence - Mt Carlton Mineral Resources - June 2012 |               |                |                          |           |                |        |               |                |                |               |                |  |  |
|----------------------|-------------------------------------------------------------------|---------------|----------------|--------------------------|-----------|----------------|--------|---------------|----------------|----------------|---------------|----------------|--|--|
|                      | Meas                                                              | ured Reso     | urce           | Indic                    | ated Reso | urce           | Infe   | rred Resou    | ırce           | Total Resource |               |                |  |  |
| Mineral<br>Resources | Tonnes                                                            | Grade         | Cont.<br>Metal | Tonnes                   | Grade     | Cont.<br>Metal | Tonnes | Grade         | Cont.<br>Metal | Tonnes         | Grade         | Cont.<br>Metal |  |  |
| by Deposit           | Mt                                                                | AuEq<br>(g/t) | AuEq<br>(koz)  | Mt AuEq AuEq (g/t) (koz) |           |                | Mt     | AuEq<br>(g/t) | AuEq<br>(koz)  | Mt             | AuEq<br>(g/t) | AuEq<br>(koz)  |  |  |
| V2                   | 9.02                                                              | 2.8           | 799            | 14.7                     | 2.1       | 981            | 1.41   | 2.0           | 90             | 25.2           | 2.3           | 1,869          |  |  |
| A39                  | 2.38                                                              | 4.0           | 307            | 0.231                    | 1.6       | 12             | 0.095  | 1.7           | 5              | 2.7            | 3.7           | 325            |  |  |
| Total                | 11.4                                                              | 3.0           | 1.106          | 14.9                     | 2.1       | 993            | 1.51   | 2.0           | 95             | 27.9           | 2.4           | 2.193          |  |  |



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

Mt Carlton V2 deposit Mineral Resources have been reported above a cut-off grade of 0.35 g/t of gold and A39 deposit reported above 42 g/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 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 2.5m elevation

Mineral Resource figures are inclusive of Ore Reserves

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 or ounces The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/lb Cu. Gold, silver and copper will each be recovered to concentrate:

metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88% silver at A39 and 92.0% for copper as indicated by metallurgical testwork

1 Troy Ounce = 31.1034768 grams

1t = 2204.62262 lb

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 - Mt Carlt | on Mine Ore              | Reserves - Ju | ne 2012  |                      |          |          |
|-------------------------------------------|--------|----------|-----------------|--------------------------|---------------|----------|----------------------|----------|----------|
| Mineral Proved Probable Total Ore Reserve |        |          |                 |                          |               |          |                      |          |          |
| Reserves by                               | Tonnes | Grade    | Cont. Metal     | Tonnes Grade Cont. Metal |               |          | Tonnes Grade Cont. N |          |          |
| Deposit                                   | Mt     | Au (g/t) | Au (koz)        | Mt                       | Au (g/t)      | Au (koz) | Mt                   | Au (g/t) | Au (koz) |
| V2                                        | 4.52   | 3.1      | 446             | 4.61                     | 2.5           | 366      | 9.13                 | 2.8      | 812      |
| Total                                     | 4.52   | 3.1      | 446             | 4.61                     | 2.5           | 366      | 9.13                 | 2.8      | 812      |

|             |                                   |          | Silver - Mt C | arlton Ore Re | serves - June | 2012        |        |          |             |  |
|-------------|-----------------------------------|----------|---------------|---------------|---------------|-------------|--------|----------|-------------|--|
| Mineral     | Proved Probable Total Ore Reserve |          |               |               |               |             |        |          |             |  |
| Reserves by | Tonnes                            | Grade    | Cont. Metal   | Tonnes        | Grade         | Cont. Metal | Tonnes | Grade    | Cont. Metal |  |
| Deposit     | Mt                                | Ag (g/t) | Ag (koz)      | Mt            | Ag (g/t)      | Ag (koz)    | Mt     | Ag (g/t) | Ag (koz)    |  |
| V2          | 4.52                              | 24       | 3,470         | 4.61          | 20            | 2,991       | 9.13   | 22       | 6,461       |  |
| A39         | 1.04                              | 265      | 8,852         | -             | -             | -           | 1.04   | 265      | 8,852       |  |
| Total       | 5.56                              | 69       | 12,322        | 4.61          | 20            | 2,991       | 10.2   | 47       | 15,313      |  |

|             |                                           |        | Copper - Mt ( | Carlton Ore R | eserves - Jun | e 2012      |        |        |             |  |  |
|-------------|-------------------------------------------|--------|---------------|---------------|---------------|-------------|--------|--------|-------------|--|--|
| Mineral     | Mineral Proved Probable Total Ore Reserve |        |               |               |               |             |        |        |             |  |  |
| Reserves by | Tonnes                                    | Grade  | Cont. Metal   | Tonnes        | Grade         | Cont. Metal | Tonnes | Grade  | Cont. Metal |  |  |
| Deposit     | Mt                                        | Cu (%) | Cu (kt)       | Mt            | Cu (%)        | Cu (kt)     | Mt     | Cu (%) | Cu (kt)     |  |  |
| V2          | 4.52                                      | 0.32   | 14.3          | 4.61          | 0.23          | 10.5        | 9.13   | 0.27   | 24.8        |  |  |
| A39         | 1.04                                      | 0.24   | 2.5           | -             | -             | -           | 1.04   | 0.24   | 2.5         |  |  |
| Total       | 5.56                                      | 0.30   | 16.8          | 4.61          | 0.23          | 10.5        | 10.2   | 0.27   | 27.3        |  |  |

|             |        | Gold Eq    | uivalence (Sil | ver) - Mt Carlt | on Ore Reser | ves - June 20 | 12     |               |             |
|-------------|--------|------------|----------------|-----------------|--------------|---------------|--------|---------------|-------------|
| Mineral     |        | Proved     |                |                 | Probable     |               | То     | tal Ore Reser | ve          |
| Reserves by | Tonnes | Grade      | Cont. Metal    | Tonnes          | Grade        | Cont. Metal   | Tonnes | Grade         | Cont. Metal |
| Deposit     | Mt     | AuEq (g/t) | AuEq (koz)     | Mt              | AuEq (g/t)   | AuEq (koz)    | Mt     | AuEq (g/t)    | AuEq (koz)  |
| V2          | 4.52   | 0.5        | 74             | 4.61            | 0.4          | 63            | 9.13   | 0.5           | 137         |
| A39         | 1.04   | 5.4        | 180            | -               | -            | -             | 1.04   | 5.4           | 180         |
| Total       | 5.56   | 1.4        | 253            | 4.61            | 0.4          | 63            | 10.2   | 1.0           | 317         |

| Gold Equivalence (Copper) - Mt Carlton Ore Reserves - June 2012 |              |            |             |        |            |             |                   |            |             |  |
|-----------------------------------------------------------------|--------------|------------|-------------|--------|------------|-------------|-------------------|------------|-------------|--|
| Mineral                                                         |              | Proved     |             |        | Probable   |             | Total Ore Reserve |            |             |  |
| Reserves by                                                     | Tonnes Grade |            | Cont. Metal | Tonnes | Grade      | Cont. Metal | Tonnes            | Grade      | Cont. Metal |  |
| Deposit                                                         | Mt           | AuEq (g/t) | AuEq (koz)  | Mt     | AuEq (g/t) | AuEq (koz)  | Mt                | AuEq (g/t) | AuEq (koz)  |  |
| V2                                                              | 4.52         | 0.3        | 48          | 4.61   | 0.2        | 35          | 9.13              | 0.3        | 83          |  |
| A39                                                             | 1.04         | 0.2        | 8           | -      | -          | -           | 1.04              | 0.2        | 8           |  |
| Total                                                           | 5.56         | 0.3        | 56          | 4.61   | 0.2        | 35          | 10.2              | 0.3        | 91          |  |

| Total Gold Equivalence - Mt Carlton Ore Reserves - June 2012 |        |            |             |        |            |             |                   |            |             |  |  |
|--------------------------------------------------------------|--------|------------|-------------|--------|------------|-------------|-------------------|------------|-------------|--|--|
| Mineral<br>Reserves by<br>Deposit                            | Proved |            |             |        | Probable   |             | Total Ore Reserve |            |             |  |  |
|                                                              | Tonnes | Grade      | Cont. Metal | Tonnes | Grade      | Cont. Metal | Tonnes            | Grade      | Cont. Metal |  |  |
|                                                              | Mt     | AuEq (g/t) | AuEq (koz)  | Mt     | AuEq (g/t) | AuEq (koz)  | Mt                | AuEq (g/t) | AuEq (koz)  |  |  |
| V2                                                           | 4.52   | 3.9        | 567         | 4.61   | 3.1        | 464         | 9.13              | 3.5        | 1,032       |  |  |
| A39                                                          | 1.04   | 5.6        | 188         | -      | -          | -           | 1.04              | 5.6        | 188         |  |  |
| Total                                                        | 5.56   | 4.2        | 755         | 4.61   | 3.1        | 464         | 10.2              | 3.7        | 1,220       |  |  |



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 53g/t silver cut-off

Ore Reserves were calculated using a A\$1,350 per ounce gold price, a silver price of A\$28 per ounce and a copper price of A\$2 per pound V2 deposit used variable recoveries proportionate to head grade with gold recovery ranging from82 to 90%, Silver and copper recoveries ranged from 84 to 92%

A39 deposit used 88% and 92% for silver and copper recoveries respectively, with no recovery attributed to gold Smelter payabilities were also considered in the reserve calculation

Competent Person: John Wyche 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 or ounces The prices used in the calculation being A\$1350/oz Au, A\$28.00/oz Ag and A\$2.00/lb Cu. Gold, silver and copper will each be recovered to concentrate;

metallurgical recovery to concentrate of 90.0% for gold, 92.0% for silver at V2 and 88% silver at A39 and 92.0% for copper as indicated by metallurgical testwork

1 Troy Ounce = 31.1034768 grams

1t = 2204.62262 lb

Au Eq for Silver = ( (Price Aq per Oz x Aq Recovery)/(Price Au per Oz x Au Recovery) ) x Aq 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 - June 2012 |                   |          |                |                    |          |                |                   |          |                |                |          |                |
|------------------------------------------|-------------------|----------|----------------|--------------------|----------|----------------|-------------------|----------|----------------|----------------|----------|----------------|
| Mineral<br>Resources by<br>Deposit       | Measured Resource |          |                | Indicated Resource |          |                | Inferred Resource |          |                | Total Resource |          |                |
|                                          | Tonnes            | Grade    | Cont.<br>Metal | Tonnes             | Grade    | Cont.<br>Metal | Tonnes            | Grade    | Cont.<br>Metal | Tonnes         | Grade    | Cont.<br>Metal |
|                                          | Mt                | Au (g/t) | Au<br>(koz)    | Mt                 | Au (g/t) | Au<br>(koz)    | Mt                | Au (g/t) | Au<br>(koz)    | Mt             | Au (g/t) | Au<br>(koz)    |
| Underground                              |                   |          |                |                    |          |                |                   |          |                |                |          |                |
| 309                                      | -                 | -        | -              | 0.04               | 3.9      | 5              | 0.5               | 4.3      | 69             | 0.54           | 4.3      | 74             |
| Lone Sister                              | 0.54              | 4.1      | 71             | 0.28               | 3.4      | 31             | 0.2               | 2.8      | 18             | 1.02           | 3.7      | 120            |
| Open-Pit                                 |                   |          |                |                    |          |                |                   |          |                |                |          |                |
| 309                                      | -                 | -        | -              | 2.42               | 2.2      | 170            | 0.64              | 1.7      | 35             | 3.06           | 2.1      | 204            |
| Stockpiles                               | -                 | -        | -              | -                  | -        | -              | -                 | -        | -              | -              | -        | -              |
| Total                                    | 0.54              | 4.1      | 71             | 2.74               | 2.3      | 205            | 1.34              | 2.8      | 122            | 4.62           | 2.7      | 398            |

#### Notes

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 2.0g/t of gold for underground, 0.5 g/t of gold for open-pit and within a A\$1,500 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: Peter Brown a member of the Australasian Institute of Mining and Metallurgy