

8 March 2011

Manager Announcements Company Announcements Office Australian Securities Exchange Limited Level 4, 20 Bridge Street Sydney NSW 2000

www.regisresources.com

Level 1 1 Alvan Street Subiaco WA 6008 Australia

Subiaco WA 6904 Australia

P 08 9442 2200 F 08 9442 2290

## **Garden Well Gold Deposit**

## Resource Increases to 2.14 Million Ounces

# **Highlights**

- Updated JORC compliant resource at Garden Well estimated at 49.0 Mt at 1.36 g/t Au for 2.14 million ounces of gold.
- Total resource has increased by 287,000 ounces (16%) and the Indicated category (capable of conversion to reserve) has increased by 276,000 ounces (19%) to 1,760,000 ounces.
- Regis is in the process of estimating an update to the maiden (December 2010) JORC compliant reserve of 27.5 Mt at 1.52 g/t for 1.34 million ounces from this new resource. It is expected that the new reserve estimate will be completed in March 2011.
- The increase in the resource is predominantly the result of deeper RC and diamond drilling extending the resource outline to a depth of 270 metres below surface for 400 metres of the 960 metre strike length in the fresh rock zone.
- A 30 hole diamond drilling programme commenced in January 2011 with a view to extending the resource envelope to around 270 metres depth for the balance of the 560 metre strike length at Garden Well. The results of this programme will be included in the resource and reserve update scheduled for June 2011.
- The maximum depth of the updated resource is 300 metres below surface with 90% of the contained gold within 220 metres of surface and 99% of the contained gold within 270 metres of surface.
- Mineralisation remains open at depth and along strike to the south.
- Preliminary feasibility study work indicates an optimal size processing plant at Garden Well with a nameplate capacity of 4 million tonnes per annum, to generate gold production from Garden Well in the order of 180,000 ounces per annum.



# **Updated Resource**

The board of Regis Resources Limited is pleased to announce an updated JORC compliant resource for the Garden Well Gold Deposit of 2.14 million ounces of contained gold. The resource was estimated by independent geological consultants SRK Consulting using the Ordinary Kriging estimation technique on a block size of 20 m x 20 m x 5 m. Uniform conditioning was used to estimate the proportion of the kriged panel estimate above the 0.5 g/t Au cut-off using a SMU size of 5 m x 5 m x 2.5 m.

The updated resource is as follows:

Category	Tonnes (Millions)	Gold Grade (g/t)	Contained Gold (Ounces)
Indicated	39.5	1.39	1,760,100
Inferred	9.5	1.23	375,800
	49.0	1.36	2,135,900

Notes: Estimation parameters follow in Appendix 1 to this announcement Rounded to two significant figures. Rounding errors may occur.

The increase in the resource is predominantly the result of deeper RC and diamond drilling extending the resource outline to a depth of 270 metres below surface for 400 metres of the 960 metre strike length in the fresh rock zone.

The resource has been estimated to a maximum depth below surface of 300 metres with 90% of the contained gold within 220 metres of surface and 99% of the contained gold within 270 metres of surface.

A 30 hole diamond drilling programme commenced in January 2011 with a view to extending the resource envelope to around 270 metres depth for the balance of the 560 metre strike length at Garden Well.

The previous JORC compliant resource, estimated in December 2010 on the same basis as the above, was as follows:

Category	Tonnes (Millions)	Gold Grade (g/t)	Contained Gold (Ounces)
Indicated	32.5	1.42	1,484,000
Inferred	9.9	1.14	364,000
	42.4	1.36	1,849,000

Notes: Rounded to two significant figures. Rounding errors may occur.

## **Ore Reserve Studies**

The current JORC compliant ore reserve, estimated from the previous, December 2010, resource (1.85 million ounces) is as follows:

Category	Tonnes (Millions)	Gold Grade (g/t)	Contained Gold (Ounces)
Proven	0	0	0
Probable	27.5	1.52	1,340,000
	27.5	1.52	1.340.000

Notes: 0.6 g/t Au lower cut off grade. Rounded to two significant figures.



As tabled above the maiden JORC compliant reserve (December 2010) stands at 27.5 Mt at 1.52 g/t for 1.34 million ounces. Within the optimised reserve pit shell there was a further Inferred Resource of 3.3 Mt at 1.31 g/t for 138,000 ounces, taking total in pit resources to 1.48 million ounces. The Inferred Resource was not included in the reserve and was not included in the calculation of estimated cash costs on the reserve.

The current reserve has been estimated to a maximum depth below surface of only 215 metres and over 95% of the contained gold is within 180 metres of surface. It is expected that the pit optimisation and Ore Reserve studies underway will result in an optimised pit shell which will drive significantly deeper.

Regis has commenced updated pit optimisation and Ore Reserve study for the Garden Well project with a view to reporting an updated JORC reserve in March 2011.

## Further Update to Resources and Reserves

Further updated Resource and Reserve estimates will be completed by June 2011 to take in to account the current 30 hole diamond drilling programme testing the fresh rock zone at depth and further extensional RC drilling along strike to the south.

# **Development Strategy**

The board of Regis believes that the updated 2.14 million ounce resource at Garden Well confirms the likelihood of further reserve upgrades at the project and forms a very strong basis for the Definitive Feasibility Study currently underway in to the development of the Garden Well project as a second stand alone milling operation at the Duketon Gold Project.

The growth of the resource and reserve base and preliminary feasibility study work indicate that the optimal size processing plant to be constructed at Garden Well will have a nameplate throughput capacity in the order of 4 million tonnes per annum. At the current reserve grade and metallurgical recovery, this throughput should see the Garden Well project produce approximately 180,000 ounces of gold per annum.

The Company is targeting the following development timetable:

Milestone	Targeted Timing
Complete feasibility studies and financing	June 2011 quarter
Commence project construction	September 2011 quarter
Commence gold production	September 2012 quarter

The delivery of this strategy and the timing of it will, of course, be dependent on numerous factors, not limited to the assessment of all technical issues, statutory licensing processes and successful completion of feasibility studies.



## Regis Managing Director Mark Clark commented:

"The increased JORC resource estimate of 2.14 million ounces at Garden Well continues to confirm that the deposit is one of the best virgin gold discoveries in Australia in some time. It is a single pit project with a confirmed strike length of over one kilometre and is still open at depth and to the south. It is expected that the current 1.34 million ounce JORC reserve will be updated in March 2011.

Regis will continue to expedite the development plan with a view to commencing development in July 2011 and gold production in mid 2012. With the expected scale of the processing plant increasing to 4 million tonnes per annum, successful development of the Garden Well deposit should lift Regis' gold production to around 270,000 ounces per annum, commencing in financial year 2012/13."

Yours sincerely

**Regis Resources Limited** 

Mark Clark Managing Director

### **Background**

The Garden Well project is 100% owned by Regis and is located on granted mining leases approximately 30 kilometres south of the Moolart Well gold mine operations. Garden Well was discovered in November 2009 and since that time Regis has drilled in excess of 70,000 metres of Aircore, RC and Diamond drilling at the project.

### **Qualification Statements**

The information in this report relating to wireframe interpretation, geostatistical modelling calculations and Mineral Resources has been prepared by Mr Bruce Sommerville who is a member of the Australasian Institute of Mining and Metallurgy. Mr Sommerville has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sommerville is a full time employee of SRK Consulting and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The other technical information in this report has been reviewed and approved by Mr Morgan Hart who is a member of the Australasian Institute of Mining and Metallurgy. Mr Hart has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Morgan Hart is a director and full time employee of Regis Resources Ltd and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



#### **APPENDIX 1**

#### **Estimation Parameters for the Garden Well Gold Resource**

- The Garden Well gold mineral resource consists of Archaen aged oxide and fresh rock gold mineralisation hosted within a wide strongly sheared zone in an ultramafic unit, at the contact with a fine grained sediment package. The shear zone and ultramafic and sedimentary units trend north-south and dip moderately steep to the east. The ultramafic rocks have undergone intense shearing and hydrothermal alteration within the shear zone to produce an unusual mineral assemblage of dolomite, quartz, fuchsite, chlorite, pyrite and arsenopyrite. The gold mineralisation is buried below 30m of barren palaeochannel clays and sands defining a Tertiary aged lacustrine environment.
- The mineral resource is based on 152 RC holes for 32,321m, 214 Aircore holes for 20,222m and 11 Diamond holes for 3,886m. Aircore and RC drilling contributed to the geological interpretation and wireframes which have been confirmed by diamond drilling. Aircore and RC assays have been used for the resource calculations. All holes were drilled at 60 degrees towards 270 degrees.
- Drill holes used in the resource were completed by Challenge Drilling contractors.
- Drilling includes RC and Aircore face sample bit methods with 60 degree inclined holes.
- RC samples were collected at the drill as 4m composite samples in the transported cover sequence, and 1m samples below the alluvial unconformity. One metre samples were split at 80:20 using a cone splitter. All RC drill holes were surveyed at the collar and at 30m intervals down hole using a single shot Eastman camera.
- Aircore samples were collected at the drill as 4m composite samples in the transported cover sequence, and 1m samples below the alluvial unconformity. One metre samples were split at 75:25 using a single tier riffle splitter.
- Where possible Aircore drill holes were surveyed at the collar and at 80m down hole using a single shot Eastman camera.
- Aircore sample weights vary from 1.5 to 2.0kg and RC samples from 2.5 to 3.0kg.
- The resource has been drilled to 270 vertical metres on an 80m x 40m drill pattern. Infill drilling was included to 40m x 40m and is ongoing.
- QA-QC procedures were equivalent across Aircore and RC drilling. Blind QAQC samples were inserted every 25<sup>th</sup> sample (sample numbers ending in 00, 25, 50, 75), including Certified Standards and Blanks. Duplicate QAQC samples were inserted every 20<sup>th</sup> sample (sample numbers ending in 20, 40, 60, 80).
- All resource assays by 40g Fire Assay method with AAS finish at KalAssay, Kalgoorlie or Ultratrace, Perth. All lab pulps have been retained in storage.
- Bulk dry densities used for the mineral resource were based on 38 diamond core measurements. Mean bulk densities were calculated at 1.75 t/m³ for oxide, 2.64 t/m³ for transition and 2.87 t/m³ for fresh
- Oxidation boundaries were wireframed and included in modeling. All densities were included to calculate a total.
- All drill collars were surveyed by DGPS.
- Drill hole samples have been composited to 2m intervals for resource calculations.
- Each model has been block modeled separately with Datamine. Blocks 20m x 20m x 5m were defined and ordinary kriging was used to estimate the block grades within the resource boundary to a maximum vertical depth of 300m.
- Grade population distributions determined no top cut was required although threshold cuts were applied for both models
- Boundary wireframes were extended up to 60m beyond unconstrained deep intersections.