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Company Announcements Office Australian Stock Exchange Ltd

# MINERAL RESOURCE ESTIMATES FOR PREMIUM AND SWIFT AT GIDGEE

Legend Mining Limited wishes to advise of the results of a recently completed mineral resource estimate conducted on two areas of the Gidgee Mine in Western Australia.

Recent and historical drilling has identified approximately 110,000 ounces of gold to 250 metres depth in the Premium area and approximately 74,000 ounces of gold to 130 metres depth in the Swift area. The Swift area mineral resources are comprised of a number of mineralised bodies. (Refer Table 1 below and Tables 2 & 3 overleaf)

**Table 1: Summary of Mineral Resource Estimate** 

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Area	Depth	Tonnes	Grade	Ounces	Resource
	_		(g/t Au)		Classification
Premium	0 m to120 m	360,000	2.75	32,000	Indicated
	120 m to 250 m	232,000	10.5	78,000	Indicated
Swift	0 m to 100 m	494,000	3.1	49,000	Indicated
	80 m to 130 m	86,000	9.2	25,000	Inferred

A preliminary review of these mineral resources suggests that Premium and Swift on their own will not provide sufficient ore reserves to justify the reopening of the Gidgee Mill, and additional mineral resources outside Premium and Swift will be required. Proper economic evaluation to determine the viability of mining these resources and other resources in the Gidgee area will be undertaken in Q1 and Q2 2006.

At Premium and Swift, exploration drilling during 2005 has identified gold mineralisation within both new and existing mineralised structures, and has provided a clearer understanding of the local structural controls at Gidgee. This work has also identified a number of high grade mineralised "cross structures" (trending 290 - 310 degrees magnetic) which are semi-parallel to the historical drilling direction, and are therefore possibly underrepresented in the drilling database and resources modelled in fresh rock to date.

The improved understanding of structural controls in the Swift and Premium areas will assist in targeting deeper high grade mineralised structures within the Gidgee Mine area in 2006. In addition, Legend will commence drill testing of regional opportunities for shallow high grade oxide mineralisation which could potentially be blended with fresh high grade ore from Gidgee.

## Background

Legend Mining Limited's ultimate exploration objective in the Gidgee greenstone belt is the discovery of a multi-million ounce gold deposit. The immediate goal in 2005 has been the discovery and delineation of enough mineral resources in the Gidgee near mine environment from which +3 years of ore reserves could be estimated to enable re-commissioning of the 650,000 tonne per annum Gidgee mill.

Exploration RC drilling during 2005 was focused on the Premium area, below and surrounding the North Swan Bitter open pit, and the Swift area, some 700 metres east of Premium. RC drilling for the year totaled 204 holes for 41,239 metres. (GDC 011 to GDC 215 inclusive), however results from the last phase of RC drilling in November/December 2005 (GDC 191 – GDC215) are incomplete and have not been included into this recently completed mineral resource estimate.

At Premium, the RC drilling has indicated that the host structures strike 300 to 340 degrees and mostly dip 35-40 degrees to the southwest, with some steeper structures dipping 70-90 degrees to the north east. At Swift, the drilling has indicated that the high-grade gold zones intersected during 2005 are part of a series of flattish lying mineralized shoots within a gently east dipping structure.

#### 2005 Resource Estimation Process

Geological modeling and wireframing in November-December 2005 has produced estimates of partially diluted mineral resources for Premium and Swift areas (Refer Table 2 overleaf) using specific modeling parameters. (Refer Table 3 overleaf).

These mineral resources consist of a number of bodies requiring further dilution for mining shape and underground development and any loss due to mining method. Proper economic evaluation will be required to determine the viability of mining these mineral resources at various gold prices.

The mineral resources are based on fire assays from a combination of reverse circulation and diamond drill holes, all of which have been quality controlled.

Dermot Ryan Director 28<sup>th</sup> December 2005

Forward-Looking Statements: This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Legend Mining Limited's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Legend believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Table 2: Partially Diluted\* Mineral Resources at Premium & Swift based on drilling to 31 October 2005.

# Premium Area

surface. ie. from 520 Classification	m RL to 400m RL  Material Type	Tonnes	Grade	Ounces
			(g/t gold)	
	Oxide	151,000	2.45	
	Transition	134,000	2.56	
	Fresh	75,000	3.70	
Indicated		360,000	2.75	32,000
From depth of 120m ie. from 400m RL to	to 250 from surface. 270m RL.			
Classification	Material Type	Tonnes	Grade (g/t gold)	Ounces
Indicated	Fresh	232,000	10.5	78,000

Block Model Cut Off Grades Down to 400metre RL	Minimum Horizontal Mining Width	Added Dilution	Dilution Direction
1.0g/t oxide	2 metres	0.25 metres	N-S
1.0g/t Transition	2 metres	0.75 metres	N-S
1.5g/t Fresh	2 metres	1.5 metres	N-S
Block Model Cut Off Grades Below 400 metre RL			
3.0g/t Fresh	2 metres	1.0m	N-S

## Swift Area

From surface to dept surface ie. from 520t	th of 100 metres from n RL to 420m RL.			
Classification	Material Type	Tonnes	Grade (g/t gold)	Ounces
	Oxide	269,000	2.73	
	Transition	225,000	3.46	
Indicated		494,000	3.1	49,000
From depth of 80m to 130m from surface. ie. from 440m RL to 390m RL.				
Classification	Material Type	Tonnes	Grade (g/t gold)	Ounces
Inferred	Fresh	86,000	9.2	25,000

Block Model Cut Off Grades Down to 420metre RL.	Minimum Horizontal Mining Width	Added Dilution	Dilution Direction
1.0g/t Oxide	2 metres	0.25 metres	N-S
1.0g/t Transition	2 metres	0.75 metres	N-S
Block Model Cut Off Grades Below 440metre RL.			
3.0g/t Fresh	2 metres	1.0m	N-S

<sup>\*</sup> These mineral resources consist of a number of bodies requiring further dilution for mining shape and underground development and any loss due to mining method.

# **Table 3:** Modeling Parameters

#### 1. Top Cuts

Premium		Swift	
Oxide	10g/t gold	Oxide	20g/t gold
Transition	30g/t gold	Transition	30g/t gold
Fresh	60g/t gold	Fresh	30g/t gold

## 2. Interpretation

The wireframe model is based on Intersection Selection which used a cutoff grade of 0.3g/t Au and a minimum down hole length of 5 metres which is about equivalent to 2.5 metres horizontal.

#### 3. Block Size

• 0.5 metre NS, 5 metre EW, 5 metre RL

### 4. Grade Interpolation

- 60 metres in the NS direction, with a 30° plunge to south (20% of shapes were interpolated with a plunge to the north),
- 30 metres EW.
- 3 metres down hole.

#### 5.. Block Discretisation

1x2x2 points

#### 6. Search

- Ellipsoid
- Maximum 32 points
- Inverse distance squared (ID<sup>2</sup>)

## 7. Variance optimized model

 Block modeling parameters were varied so that the block variance matched the theoretical variance based on the variography as closely as possible.

#### 8. Bulk Densities

- Oxide 1.8 tonnes per cubic metre
- Transition 2.2 tonnes per cubic metre
- Fresh 2.6 tonnes per cubic metre

The information contained in this report is based on data compiled by Dr S Carras FAusIMM of Carras Mining Pty Ltd. Dr Carras has 30 year 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 "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and consents to the inclusion in this report of the information in the form and context in which it appears. Legend Mining Limited's Exploration Manager Mr Donald Thomson MAusIMM and his geological staff have provided assistance on all geological matters.