



24 October 2006

ASX Announcement

## MULTIPLE ZINC-MINERALIZED LAYERS IDENTIFIED AT MT GIBSON

**Legend Mining Limited (Legend) today announced the identification of five zinc-mineralized layers at Mt Gibson, with two of the more strongly mineralized layers open to the north (Figure 1).**

Zinc sulphide is associated with five laminated cherty metasediments intercalated with mafic and intermediate volcanics. Significantly, some of these mineralized metasediments coincide with a major change in the composition of the volcanic rocks and at least one has been identified as a sea-floor exhalite containing laminated zinc sulphide.

Better base metal results from the latter three holes (LMGD-006 to LMGD-008) of the eight hole diamond drilling program are tabulated in Table 1, including **2.3m at 2.65% zinc from 486.7m and 0.2m at 6.84% zinc from 718.8m in hole LMGD-008**. While these intersections are not ore-grade, they substantially increase the area of known zinc sulphide mineralization and indicate an overall improvement in the system towards the north.

The initial eight hole exploration program supports the premise that Mt Gibson represents a large, fertile mineral system with potential to host a base metal orebody. The predictive geological model developed as a result of the recent drilling has identified important trends (vectors) to new opportunities within this large base metal system.

More high-grade, gold-bearing quartz veins have also been intersected, including **1m at 19.8g/t Au from 495m and 1m at 18.8g/t Au from 709m in hole LMGD-007**. The wide-separation of adjoining holes makes it difficult to develop a robust geological model for this veining. However, there are at least two generations of gold-bearing veins at Mt Gibson with the following characteristics:-

1. steep-dipping veins, also anomalous in lead and zinc, and aligned with the principal shear fabric. These veins are interpreted to reflect remobilized syngenetic mineralization, and
2. relatively flat-lying veins that are not anomalous in copper, lead or zinc and are interpreted to represent a later, overprinting gold event.

In summary, the greatest potential for the discovery of a zinc sulphide orebody is interpreted to lie to the north of Legend hole LMGD-004 (refer to Figure 1) within the 6.0km-long section of dominantly undrilled volcanic stratigraphy. An expansion of the drill coverage, supported by airborne Versatile Time Domain Electro Magnetics (VTM) to discriminate discrete conductors, is currently being evaluated.

A program to drill test the relatively flat-lying, high-grade, gold-bearing quartz veins as a possible underground mining opportunity is also currently being considered.

## Background

The Mt Gibson Project is located in the Murchison Province 290km northeast of Perth, Western Australia and 100km south of the world-class Golden Grove volcanic-hosted massive sulphide (zinc-copper) mine owned by Oxiana Limited. Both Mt Gibson and Golden Grove lie within the same volcano-sedimentary sequence (Yalgoo-Singleton Greenstone Belt).

Legend acquired Mt Gibson from Oroya Mining Limited in November 2005, principally to pursue the base metal (zinc-copper) potential beneath the oxide gold pits. The gold mine operated for 12 years from 1986 and produced in excess of 800,000 ounces of gold. The one million tonne per annum processing plant is currently on care and maintenance.

The Mt Gibson oxide gold ore was also anomalous in zinc and most of the deep diamond hole drilled beneath the open pits over a strike of 5km have intersected zinc sulphide mineralization, thus confirming the broad continuity of the system.

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Visit: [www.legendmining.com.au](http://www.legendmining.com.au) to download a colour version of Figure 1.

*The information in this announcement that relates to Exploration Results has been reviewed by Mr Robert Perring, a Member of the Australian Institute of Geoscientists, whose services are provided by Quadramin. Mr Perring has sufficient relevant experience in the styles of mineralisation and types of deposit under consideration, and in the activity 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" (the JORC Code), and consents to the inclusion of the information in the form and context in which it appears.*

**Table 1: Assay Result Summary Hole LMGD-006 to LMGD-008**

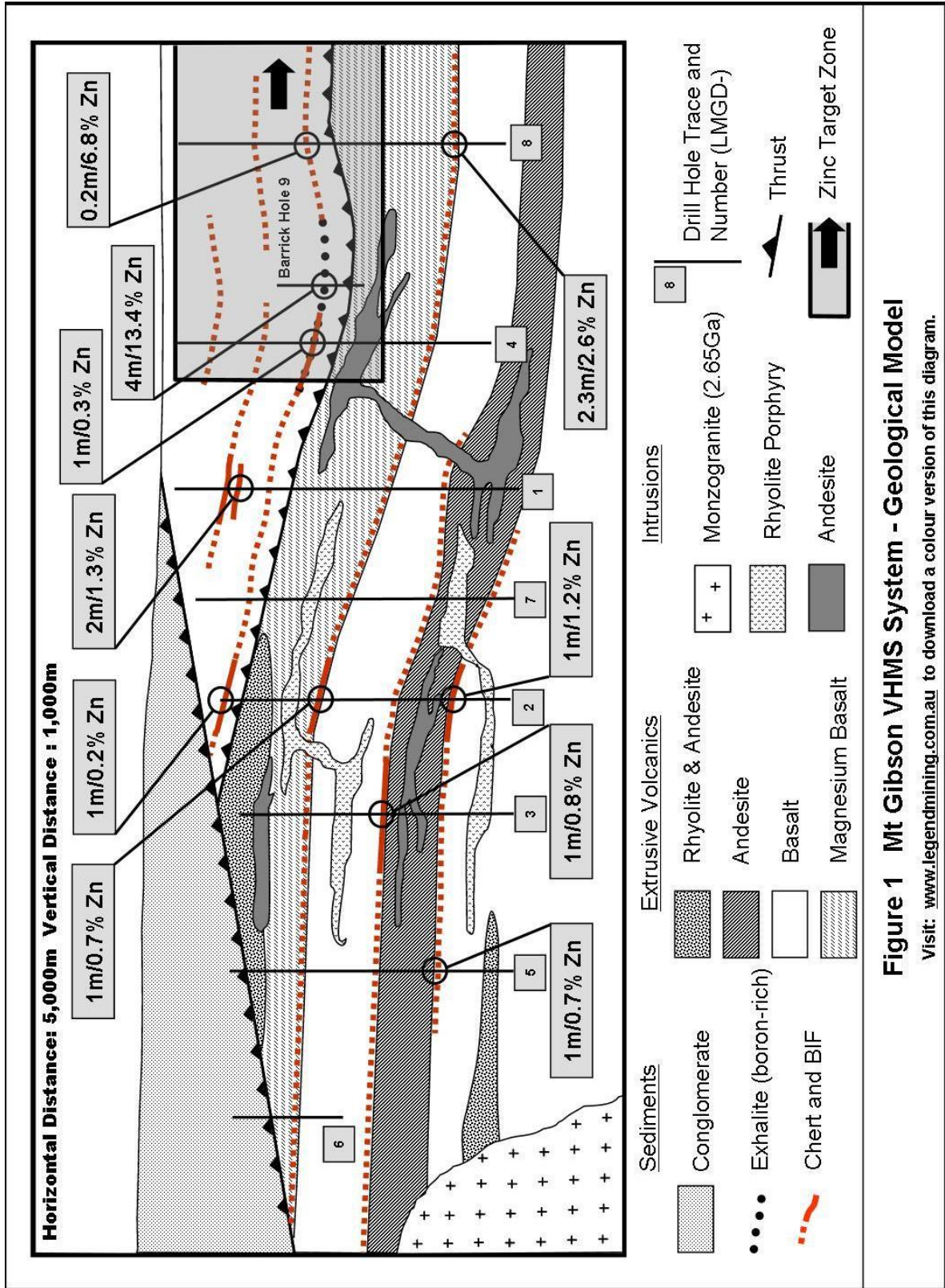
Only intervals assaying above 1.0g/t Au, 0.1% Cu, 0.2% Pb and/or 0.2% Zn listed.

Hole Number	From (m)	To (m)	Interval (m)	Grade of Mineralisation
LMGD-006	275	276	1	0.41% Cu, 0.25% Zn
	307	308	1	0.26% Zn
	320	321	1	0.31% Zn
	436	437	1	2.1g/t Au
	438	439	1	1.1g/t Au
LMGD-007	40	44	4	0.53% Zn
	459	460	1	0.28% Zn
	492	493	1	0.13% Cu
	493	494	1	1.1g/t Au, 0.18% Cu
	495	496	1	<b>19.8g/t Au</b> , 0.18% Cu, 0.49% Zn
	497	499	2	2.6g/t Au
	501	502	1	1.3g/t Au
	504	505	1	2.0g/t Au
	528	529	1	3.2g/t Au
	546	547	1	3.5g/t Au
	552	553	1	0.16% Cu
	561	562	1	1.1g/t Au
	563	564	1	1.1g/t Au, 0.23% Cu
	576	577	1	0.12% Cu
	579	580	1	3.1g/t Au
	596	597	1	1.7g/t Au
	663	664	1	0.12% Cu
	664	665	1	1.2g/t Au, 0.11% Cu
	666	667	1	4.4g/t Au
	673	675	2	2.5g/t Au
	690	691	1	4.3g/t Au
	709	710	1	<b>18.8g/t Au</b>
	711	712	1	1.3g/t Au
712	714	2	0.25% Cu	
762	764	2	1.4g/t Au, 0.12% Cu	
768	771	3	1.8g/t Au	
LMGD-008	302	303	1	0.25% Zn
	486.7	489	2.3	2.65% Zn
	531	532	1	0.29% Zn
	651	652	1	0.36% Zn
	654	655	1	0.36% Zn
	718.8	719	0.2	6.84% Zn, 0.23% Pb
	796	797	1	0.54% Zn

Sampling based on nominal 1m intervals of half-NQ core unless otherwise indicated. Zinc (Zn), copper (Cu) and lead (Pb) determined by four acid digest and ICP/OES finish. Gold (Au) determined by fire assay and ICP/OES finish. Samples assayed at Ultra Trace Pty Ltd, Perth.

**Table 2: Completed Diamond Drill Holes**

<b>Hole Number</b>	<b>North (MGA94)</b>	<b>East (MGA94)</b>	<b>Hole Angle and Direction (Magnetic)</b>	<b>Final Depth (Metres)</b>	<b>Percentage of Hole Sampled for Assay</b>
LMGD-001	6711025	517385	58° to 303°	887.3	47%
LMGD-002	6710013	516870	56° to 303°	756.3	64%
LMGD-003	6709437	516723	50° to 303°	789.3	56%
LMGD-004	6711730	517574	59° to 303°	684.6	51%
LMGD-005	6708323	516358	65° to 273°	750.6	62%
LMGD-006	6707720	516610	60° to 273°	477.5	30%
LMGD-007	6710601	517125	61° to 303°	780.3	83%
LMGD-008	6713267	517762	65° to 123°	852.4	47%
<b>TOTAL</b>				<b>5978.3</b>	



**Figure 1 Mt Gibson VHMS System - Geological Model**

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