

ASX Market Announcements  
ASX Limited

## About Legacy Iron Ore

Legacy Iron Ore Limited ("Legacy" or the "Company") is a Western Australian based Exploration Company, focused on iron ore and gold exploration and discovery.

Legacy's mission is to increase shareholder wealth through capital growth, created via the discovery, development and operation of profitable mining assets.

The Company was listed on the Australian Securities Exchange on 8 July 2008. Since then, Legacy has had a number of iron ore, manganese and gold discoveries which are now undergoing drilling and resource definition.

## Board

**Narendra Kumar Nanda**, Non-Executive Chairman

**Sharon Heng**, Executive Director & Managing Director

**Swaminathan Thiagarajan**, Non- Executive Director

**Subimal Bose**, Non-Executive Director

**Timothy Turner**, Non-Executive Director

**Ben Donovan**, Company Secretary

## Key Projects

Mt Bevan Iron Ore Project

Hammersley Iron Ore Project

Robertson Range Iron Ore and Manganese Project

South Laverton Gold Project

East Kimberley Gold, Base Metals and REE Project

## Enquiries

Sharon Heng

Managing Director

Phone: +61 8 9421 2005

## ASX Codes: LCY, LCYOA, LCYOB

LEVEL 5, CITIBANK HOUSE  
37 ST GEORGES TERRACE  
PERTH WA 6000

PO BOX 5768  
ST GEORGES TERRACE WA 6831

Phone: +61 8 9421 2005

Fax: +61 8 9421 2001

Email: [info@legacyiron.com.au](mailto:info@legacyiron.com.au)

Web: [www.legacyiron.com.au](http://www.legacyiron.com.au)

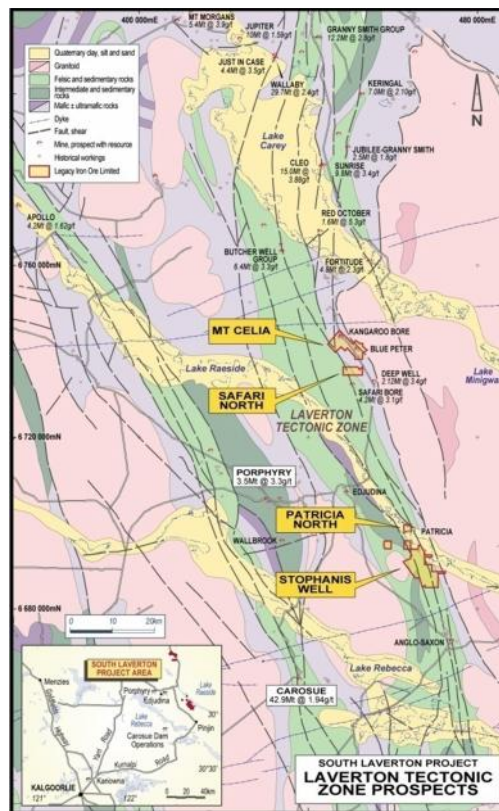
## Via E Lodgement

## MT CELIA GOLD PROJECT UPDATE

Legacy is pleased to provide an update on the Mt Celia Gold Project ("Mt Celia"), located south of Laverton, WA. This update includes the results of:

- Recent RC drilling at the Blue Peter resource and
- Preliminary modelling and pit optimisation study conducted for the Kangaroo Bore resource.

The Mt Celia Project lies within the Laverton Tectonic Zone some 40km south of the Sunrise Dam gold mine (12Moz gold resource), as shown in *Figure 1*.

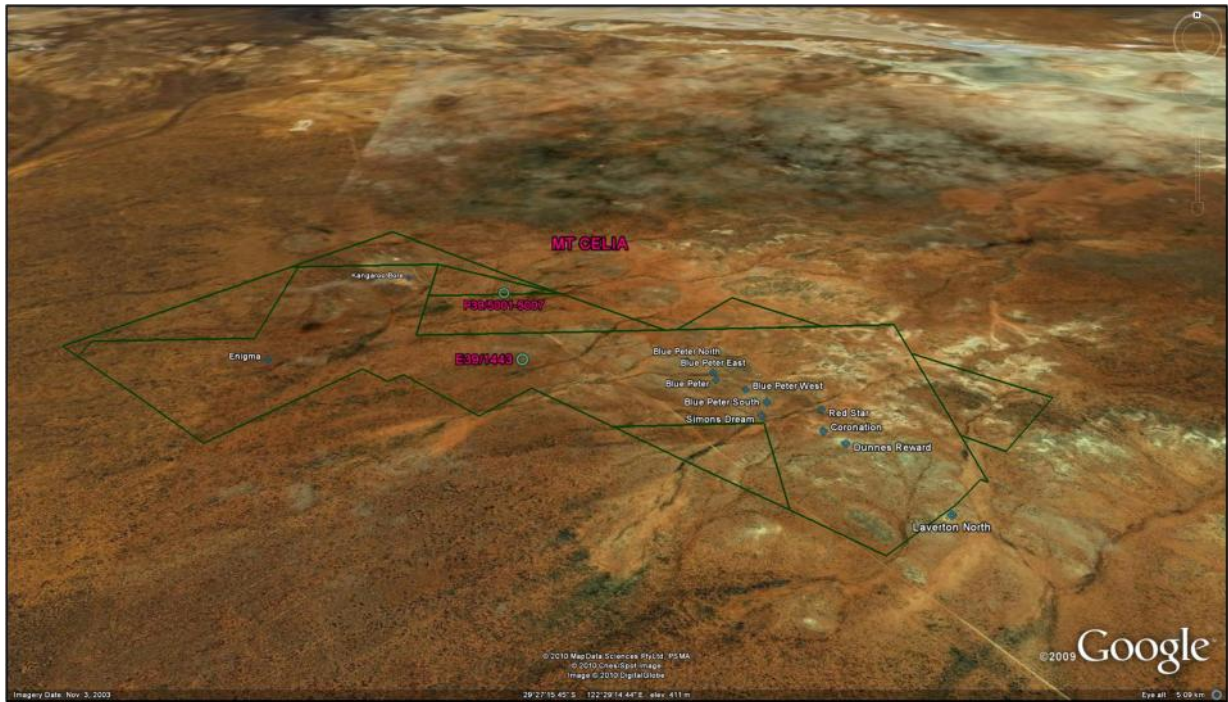


**Figure 1: Location of the Mt Celia Project within the Laverton Tectonic Zone**

The Mt Celia Project contains two JORC compliant gold resources. These are at Kangaroo Bore - Inferred resource of 46,000oz gold (1.04Mt @ 1.4g/t gold using a 0.7g/t cut-off), and Blue Peter – Inferred resource of 30,554oz gold (239,232t @ 3.97g/t gold using a 1.0g/t cut-off).

## 1. BLUE PETER - DRILL RESULTS

Legacy has targeted the gold potential of the Blue Peter shear containing several small historic gold workings (*Figure 2*). The shear system extends over a distance of at least 2 kilometres, and consists of single, parallel or en echelon quartz filled shears within mafic and lesser ultramafic lithologies, that flank an eastern granitoid. This geometry coupled with the widespread gold dry blowing is favourable for a bulk tonnage gold potential for the system.



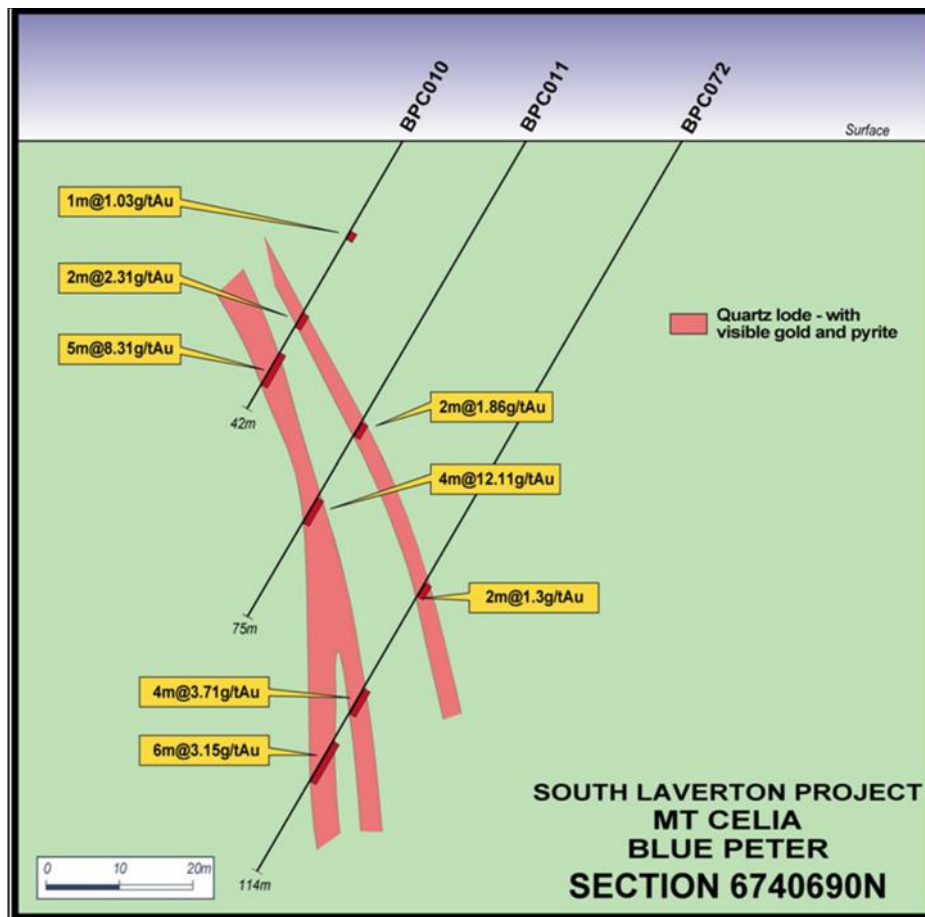
**Figure 2: Mt Celia Project. Aerial image showing the main Kangaroo Bore and Blue Peter prospects**

Previous drilling by Legacy resulted in a substantial number of high grade gold intersections (refer to ASX announcement of 15 December 2010) – summarized in Table 1 below. Figure 3 shows the previously reported drill section through the Blue Peter Lode system.

Drill hole	From – To	Intersections
BPC 069	74 – 80m	6m @ 4.09 g/t gold
BPC 041	54 – 60m	6m @ 3.99 g/t gold
BPC 056	28 – 32m	4m @ 4.54 g/t gold
BPC 071	90 – 94m	4m @ 4.10 g/t gold
BPC 072	84 – 88m	4m @ 3.71 g/t gold

BPC 072	94 – 100m	<b>6m @3.15 g/t gold</b>
BPC 067	72 – 76m	<b>4m @ 3.38 g/t gold</b>
BPC 042	56 – 64	<b>8m @ 2.32 g/t gold</b>
BPC 01	28 – 31m	<b>3m @ 21.71 g/t gold including 1m @ 62.75 g/t gold</b>
BPC 011	56 – 60m	<b>4m @ 12.11 g/t gold including 2m @ 19.67 g/t gold</b>
BPC 010	33 – 38m	<b>5m @ 8.26 g/t gold</b>
BPC 026	25 – 28m	<b>3m @ 11.1 g/t gold</b>
BPC 027	47 – 49m	<b>2m @ 17.12 g/t gold</b>
BPC 029	47 - 51m	<b>4m @ 7.01 g/t gold</b>
BPC 002	23 – 30m	<b>7m @ 3.46 g/t gold</b>
BPC 028	24 - 28m	<b>4m @ 4.23 g/t gold</b>
BPC 035	22 – 25m	<b>3m @ 4.82 g/t gold</b>
BPC 012	31 – 34m	<b>3m @ 4.65 g/t gold</b>

**Table 1: Blue Peter Prospect – Selected Drill Intersections**



**Figure 3: Drill Section 6740690N**

Assay results for a 6 hole, 1200m RC drilling program at Blue Peter have now been received. This drilling program was designed to test below the relatively shallow (to 80m) depths of prior drilling. Significant results are provided in Table 2 below.

**Table 2**

Drillhole	North (m)	East (m)	Azimuth degrees	From (m)	To (m)	Gold g/t	Width #
BPC086	6740219	452096	215	142	143	1.81	6 meters at 4.22
				143	144	5.84	
				144	145	8.03	
				145	146	7.06	
				146	147	1.31	
				147	148	1.27	
BPC090	6741030	451428	215	201	202	8.64	3 meters at 4.72
				202	203	1.08	
				203	204	4.44	

# The true width of intersections is estimated to vary between 60 – 75% of the drilling intersections noted above



Drilling showed continuity of significant gold mineralisation to depths of circa 150m on several sections - as shown in Figure 4. Some drill holes did not intersect significant mineralisation down dip of previous high grade intersections. This is likely due to the high grade mineralisation taking the form of steeply plunging narrow high grade shoots that are difficult to intersect in relatively broadly spaced drilling. A revised resource calculation for Blue Peter will now be made inclusive of this drilling.

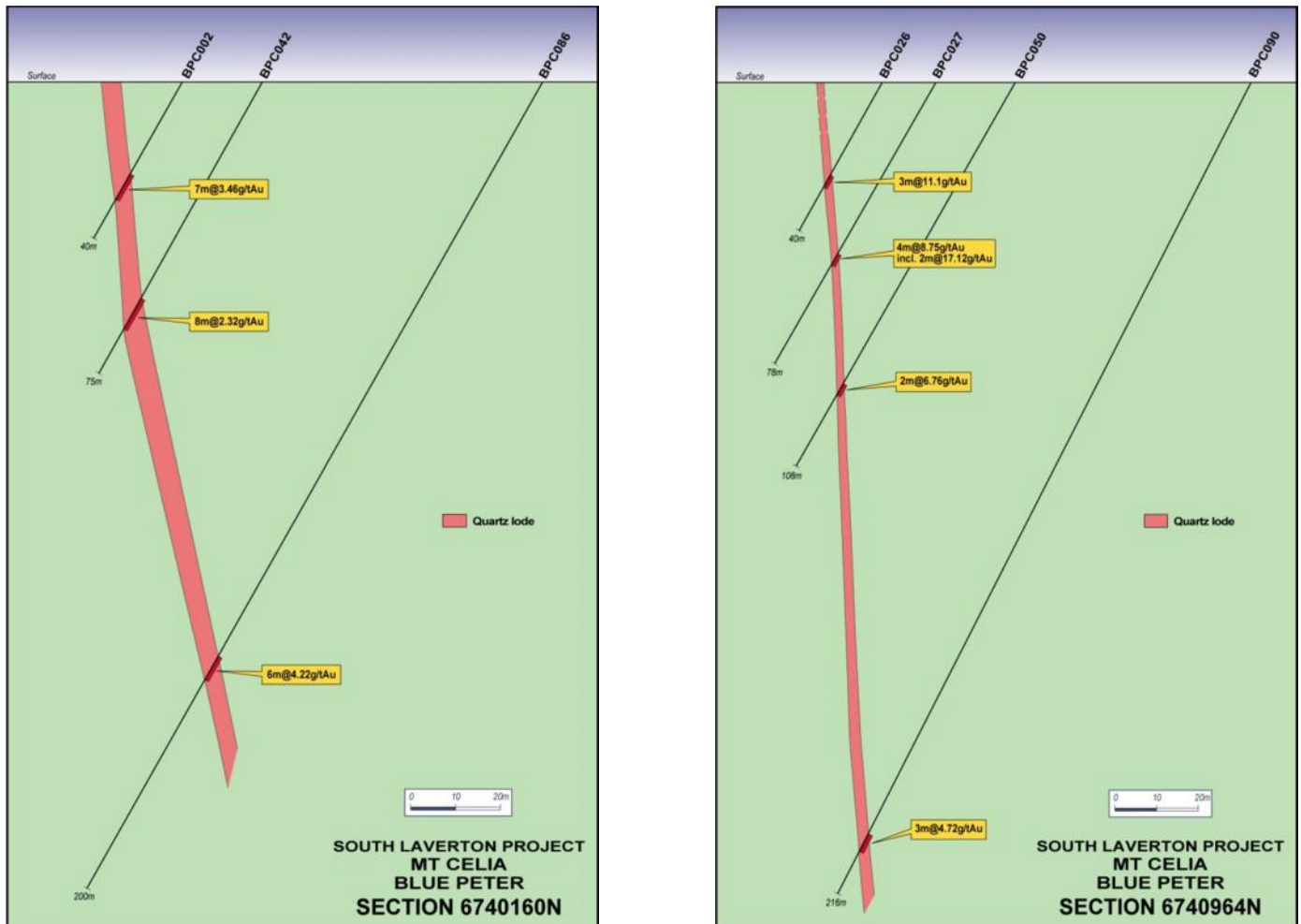


Figure 4 Drill sections incorporating recent drilling

## 2. KANGAROO BORE RESOURCE – MODELLING AND PIT OPTIMISATION STUDY

Modelling and a preliminary pit optimisation study for the Kangaroo Bore gold resource was conducted by Xstract Mining Consultants. This was done to provide an initial commercial assessment of the resource and its sensitivities and to provide a guide to the positioning of further drilling.

Several pit shells were generated for different metal prices and pit slope angles using industry standard parameters for mining, processing costs etc. The pit optimisation is particularly sensitive to gold price and pit slope angles. Table 3 below is a summary of this preliminary pit optimisation in relation to gold price.

	unit	Pit 1	Pit 2	Pit 3	Pit 4
Mining Cost	\$/t	2.5	2.5	2.5	2.5
Processing Cost	\$/t	30	30	30	30
Recovery factor	%	0.8	0.8	0.8	0.8
Selling price	\$/t	1,600	1,400	1,200	1,000
Cost of Mining	\$ M	4.70	2	0.91	0.36
Cost of processing	\$ M	11.99	6	3.44	1.64
Recovered gold	oz	15,383	8,122	4,643	2,393
Revenue	\$ M	25	11	5.57	2.39
Total cost	\$ M	17	8	4.35	2.00
Profit	\$ M	7.9	3.1	1.2	0.4

**Table 3 Profit comparisons for different gold prices\***

(\*pit shell only – does not take into account dilution, ore loss from mining, and a practical pit design that includes ramps etc)

The base case pit optimization indicates that maximum ore tonnes that can be extracted are approximately 400,000t with a 3.7 stripping ratio and an average grade of 1.54g/t gold. This optimization was done using a conservative 45 degree pit slope angle. Optimising at a 65 degree pit slope angle produces a near doubling of profit to \$15M using the same operational parameters.

Several areas were highlighted as having potential to increase the mineable resource with deeper drilling, and this will form part of the continuing exploration at Mt Celia to increase known resources and test numerous other gold targets on the tenements

Yours faithfully,  
**LEGACY IRON ORE LIMITED**

**Sharon Heng**  
Managing Director

---

**END**

**Competent Person's Statement:**

*The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based on information compiled by Steve Shelton who is a member of The Australasian Institute of Geoscientists and a full time employee of Legacy Iron Ore Limited. Mr. Shelton 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Shelton consents to the inclusion in this report of the matters based on his information in the form and the context in which it appears.*

---