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### ASX CODE: ORS

Market Cap.: \$13.8 m (\$0.13 p/s) Shares on issue: 106,048,002 Cash: \$2.0 m (31 December 2012)

### **BOARD & MANAGEMENT**

lan Gandel, Chairman Anthony Gray, Managing Director Bob Tolliday, Director

### MAJOR SHAREHOLDERS

Alliance Resources – 20.7% Abbotsleigh – 18.9% JP Morgan Nominees – 9.0%

# PRINCIPAL OFFICE

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# Pearl Croydon Gold Deposit, Victoria Open Pit Optimisation Study

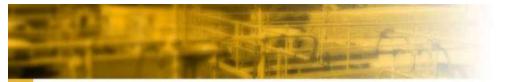
- Conceptual open pit optimisation study completed on the Pearl Croydon Gold Deposit (Inferred Resource: 570,000 tonnes grading 2.9g/t Au for 53,000 ounces of gold)
- Open pit initial mining target of between 135,000 and 219,000 tonnes grading between 3.7g/t and 4.9g/t Au and containing between 15,000 and 32,000 ounces of gold
- Total cash cost of between A\$860/oz and A\$1,050/oz
- Cash surplus of between \$7 million and \$20 million (at A\$1,500/oz gold price)
- Between 12 and 18 months full time feed to the Porcupine Flat Gold Processing Plant at Maldon
- Advanced London Hill open pit target of between 26,000 and 45,000 tonnes grading between 4.5g/t and 7.0g/t Au and containing between 4,000 and 9,400 ounces of gold
- Work Plan to be submitted to mine London Hill Open Pit
- Drilling planned to upgrade the resource and calculate open pit mining reserves

The Directors of Octagonal Resources Limited (ASX: ORS) ("Octagonal" or "Company") are pleased to announce the results of a conceptual open pit optimisation study completed on the Pearl Croydon Gold Deposit by Mining One Pty Ltd.

Octagonal's Managing Director Anthony Gray commented "this open pit optimisation study demonstrates the commercial viability of open pit mining at the Pearl Croydon Deposit".

"We are very encouraged by these results that indicate a significant cash surplus generated from between 12 to 18 months of mining activity".

"Our objective is to bring this mine into production in the shortest possible time frame. Following the positive results of this study, we have commenced design of an open pit in the London Hill area and planning of drilling elsewhere at the deposit to upgrade the resource and calculate mining reserves".





# Project Background

The Pearl Croydon Gold Deposit is located 40 kilometres southwest of Maldon and contains near-surface gold that Octagonal intends to mine and process at the Company's Porcupine Flat Gold Processing Facility at Maldon.

The deposit lies within a 1,600 metre by 300 metre north trending corridor of fault hosted, steep dipping, quartz reefs that have been historically worked by open pit and underground mining methods (Figure 1).

Between 1997 and 2003 81 RC holes were drilled at Pearl Croydon using predominantly 40 metre spaced traverses to define an Inferred Mineral Resource of 570,000 tonnes grading 2.9 g/t Au for 53,000 ounces of gold (Table 1).

In October 2012 Mining Licence MIN5465 that overlies the deposit was granted and paves the way for the commencement of mining.

Table 1.						
Pearl Croydon Mineral Resource Estimate (July 2010)						
Deposit	Reef	Resource	Tonnes	Gold Grade	Gold	
		Category		(g/t)	(ounces)	
Pearl Croydon North	West Reef	Inferred	142,444	2.3	10,702	
	Central Reef	Inferred	293,010	2.4	22,812	
	East Reef	Inferred	20,072	4.6	2,949	
	Sub Total	Inferred	455,526	2.5	36,463	
London Hill	Main Reef	Inferred	49,612	4.4	6,957	
	Hanging wall Reef	Inferred	27,515	4.1	3,665	
	Sub Total	Inferred	77,128	4.3	10,622	
Mullocky	West Reef	Inferred	13,693	2.7	1,188	
	East Reef	Inferred	24,212	6.5	5,091	
	Sub Total	Inferred	37,905	5.2	6,278	
	TOTAL	Inferred	570,559	2.9	53,364	

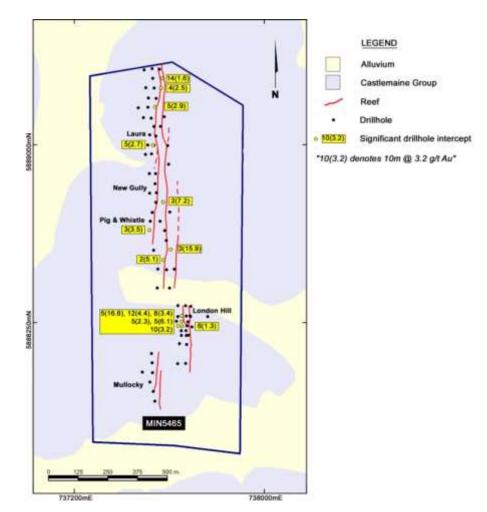
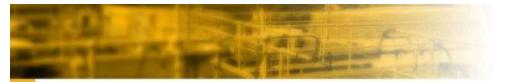


Figure 1. Pearl Croydon: Drill hole location plan





# **Open Pit Optimisation Study**

Following the grant of the Pearl Croydon mining licence, Octagonal engaged Mining One Pty Ltd to complete a conceptual open pit optimisation study of the Pearl Croydon Deposit to estimate likely production volumes and grades and help with the planning of future exploration and mining activities.

The open pit optimisation study was completed using Whittle Four X mining software and is based on the Inferred Mineral Resource of 570,000 tonnes grading 2.9 g/t Au for 53,000 ounces of gold. As this resource is in the Inferred category it must be upgraded to the Indicated resource category before mining Reserves can be estimated. To reflect this underlying geological uncertainty open pit mining targets reported in this announcement are provided in ranges.

The open pit optimisation study was completed based on the following key development concept and mining and ore processing assumptions:

- Mined ore transported to the Porcupine Flat Gold Processing Plant at Maldon for processing.
- Gold price: A\$1,500 per ounce.
- Overall 45 degree pit wall angles.
- Mining dilution 10%.
- Process throughput using existing mill capacity of 150,000 tonnes per annum.
- Processing tailings grade between 0.2 g/t Au and 0.3 g/t Au.

The results of the open pit optimisation study are listed in Table 2

Table 2.					
Pearl Croydon: Open Pit Optimisation Summary					
Parameter	Value				
Ore Tonnes (t)	135,000 - 219,000				
Au grade (g/t)	3.7 - 4.9				
Waste Tonnes (t)	1,350,000 - 2,730,000				
Strip Ratio	10.0 - 12.7				
Gold Produced (oz)	15,100 - 32,300				
Mining Cost (\$)	6,733,000 - 13,026,000				
Transport & Processing Cost (\$)	9,081,000 - 14,725,000				
Gold Revenue (\$)	22,712,000 - 48,400,000				
Cash Surplus (\$)	6,898,000 - 20,649,000				

Results from this study reveal that there is the potential to develop up to eight open pits in the Pearl Croydon area (Figure 2), ranging in depth between 30 and 60 metres to mine between 135,000 and 219,000 tonnes of ore grading between 3.7 and 4.9 g/t Au to produce between 15,100 and 32,300 ounces of gold and a cash surplus of between \$6.9 and \$20.1 million.

At present most of the Pearl Croydon Deposit has been drill defined using 40 metre spaced traverses, however the higher grade London Hill area has already been defined using 20 metre spaced traverses and represents an immediate open pit mining target.

The open pit optimisation study revealed that the London Hill area of Pearl Croydon may contain between 26,500 and 44,500 tonnes of ore grading between 4.7 and 7.1 g/t Au to produce between 4,000 and 9,400 ounces of gold and a cash surplus of between \$2.7 and \$8.0 million (Table 3).

Octagonal's objective is to bring the Pearl Croydon Deposit into production in the shortest possible time frame. To achieve this, the Company will seek regulatory approval to mine an open pit in the London Hill area and at the same time complete drilling elsewhere at the deposit to upgrade the resource and calculate mining reserves.

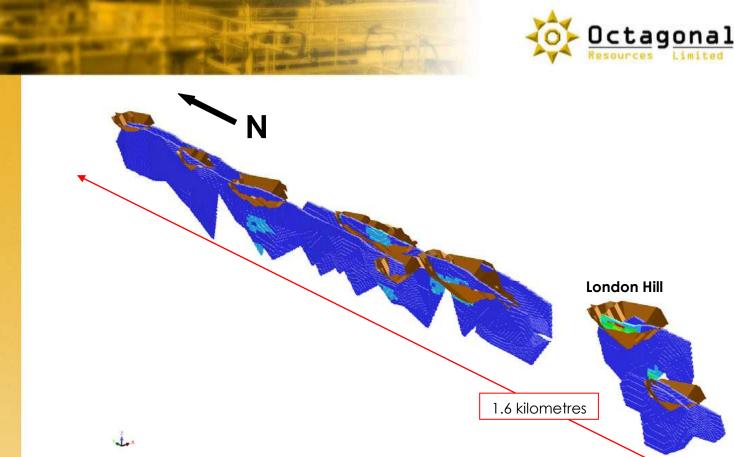


Figure 2. Pearl Croydon: Whittle pit shells generated from open pit optimisation study

Table 3.					
London Hill: Open Pit Optimisation Summary					
Parameter	Value				
Ore Tonnes (t)	26,500 - 44,500				
Au grade (g/t)	4.7 – 7.1				
Waste Tonnes (t)	328,000 - 679,000				
Strip Ratio	12.4 – 15.5				
Gold Produced (oz)	4,000 - 9,400				
Mining Cost (\$)	1,569,000 - 3,139,000				
Transport & Processing Cost (\$)	1,788,000 - 3,006,000				
Gold Revenue (\$)	6,060,000 - 14,113,000				
Cash Surplus (\$)	2,703,000 - 7,968,000				

Additional information relating to Octagonal and its various mining and exploration projects can be found on the Company's website: <u>www.octagonalresources.com.au</u>

# For further enquiries, please contact:

Anthony Gray (Managing Director) +61 3 9697 9088





Historic workings at the Pearl Croydon Deposit

### **Competent Persons Statement**

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Anthony Gray. Anthony Gray is a full-time employee of the Company and is a member of the Australian Institute of Geoscientists. Anthony Gray has sufficient experience which is relevant to the style of mineralization and type of deposits 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' and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.





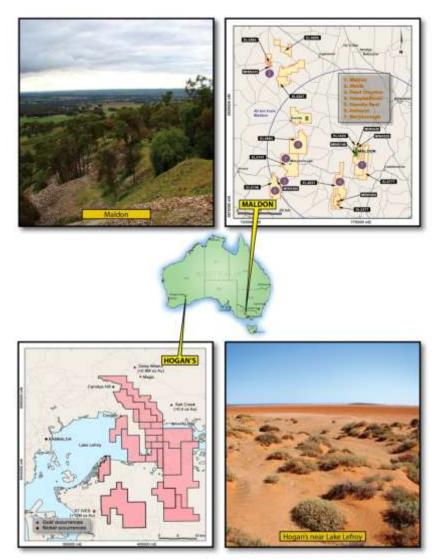
# **About Octagonal Resources**

Octagonal Resources is a gold focused exploration and mining company with projects located in underexplored areas of two of Australia's most significant gold producing regions; the Central Victorian Goldfields and the Eastern Goldfields of Western Australia.

The Company's Victorian operations are centred at Maldon, the third largest historic primary gold producer in Central Victoria after Bendigo and Ballarat. It is here that Octagonal owns a 150,000 tpa CIL gold processing plant, 245,000 ounces of inferred gold resources and a decline that extends to the undeveloped underground resources. Octagonal is currently processing third party ore while it brings its own underground and open pit mines into production.

In Western Australia Octagonal holds a 100% interest in the Hogan's Project where it is exploring for gold deposits in a highly prospective but underexplored area only 70 kilometres from Kalgoorlie. The gold potential of this emerging gold producing district is demonstrated by the recent exploration and mining success achieved by Silver Lake Resources at the Daisy Milano Mine and Integra Mining at the Salt Creek Mine and Lucky Bay Prospect. Octagonal is exploring priority exploration target areas that display the potential to host a major gold deposit.

Octagonal's corporate strategy is to develop a long term sustainable mining operation in Central Victoria to fund the Company's growth through the discovery and development of major gold deposits.



Octagonal Resources Project Locations