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**ASX CODE: ORS**

Market Cap.: \$11.7 m (\$0.11 p/s)  
Shares on issue: 106,048,002  
Cash: \$2.0 m (31 December 2012)

**BOARD & MANAGEMENT**

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

**MAJOR SHAREHOLDERS**

Alliance Resources – 20.8%  
Abbotsleigh – 18.7%  
JP Morgan Nominees – 8.9%

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## 2km Long Copper Anomaly at the Burns Prospect, Western Australia

- Niton XRF analysis of aircore drill samples at the Burns Prospect has identified thick zones of copper anomalism extending over 2 kilometres strike length
- Significant Niton assay results include:
  - ▶ 12 metres @ 1.5% Cu from 24 metres inc. 4 metres @ 3.1% Cu from 24 metres
  - ▶ 21 metres @ 0.5% Cu from 20 metres
  - ▶ 11 metres @ 0.5% Cu from 28 metres
  - ▶ 14 metres @ 0.4% Cu from 20 metres
  - ▶ 8 metres @ 0.6% Cu from 20 metres
- Second copper anomaly identified extending over 700 metres strike length
- Copper anomalies define discrete target areas for surface geophysics
- QAQC analysis indicates Niton analyser underestimating copper grades by 15%

The Directors of Octagonal Resources Limited (ASX: ORS) (“**Octagonal**” or “**Company**”) are pleased announce the results from copper analysis of aircore drill holes completed at the Burns Prospect in Western Australia.

During 2011 272 aircore holes were drilled at the Burns Prospect to test for a “typical” Archaean-style lode-gold deposit, with samples analysed for gold only.

Following the discovery of significant potentially economic gold, copper, and silver in reverse circulation (RC) drilling during 2012 all regolith samples collected from the initial aircore drilling programs were re-analysed for copper.

The results from this work have identified thick zones of copper anomalism in drill holes that define a two kilometre long anomaly which is between 80 and 350 metres wide and not constrained by drilling along its southeast margin.

A second anomaly was also identified that extends over 700 metres and is not constrained by drilling to the northwest.

Octagonal’s Managing Director, Anthony Gray, commented “when we first started exploration out at Burns we felt, given the structural setting of the area, that we had the potential to discover a major gold deposit, and as a result we only analysed our drill holes for gold”.

“Now that we’ve discovered significant gold and copper in RC drilling it was a no-brainer to go back and re-analyse the earlier aircore holes for copper”.

“The results of this work have surprised us. There are broad zones of copper that do not directly correlate with gold and as a result our target area has expanded. What we’ve found is that the copper overlies both magnetic and gravity trends and provides us with a very discrete target for surface geophysical testing”.

“The distribution of copper is in line with what you would expect for a large deposit and our next step is to use surface geophysics to identify copper sulphide targets for testing with our first diamond drilling program that the West Australian Government is supporting with a \$150,000 co-funded drilling grant”.

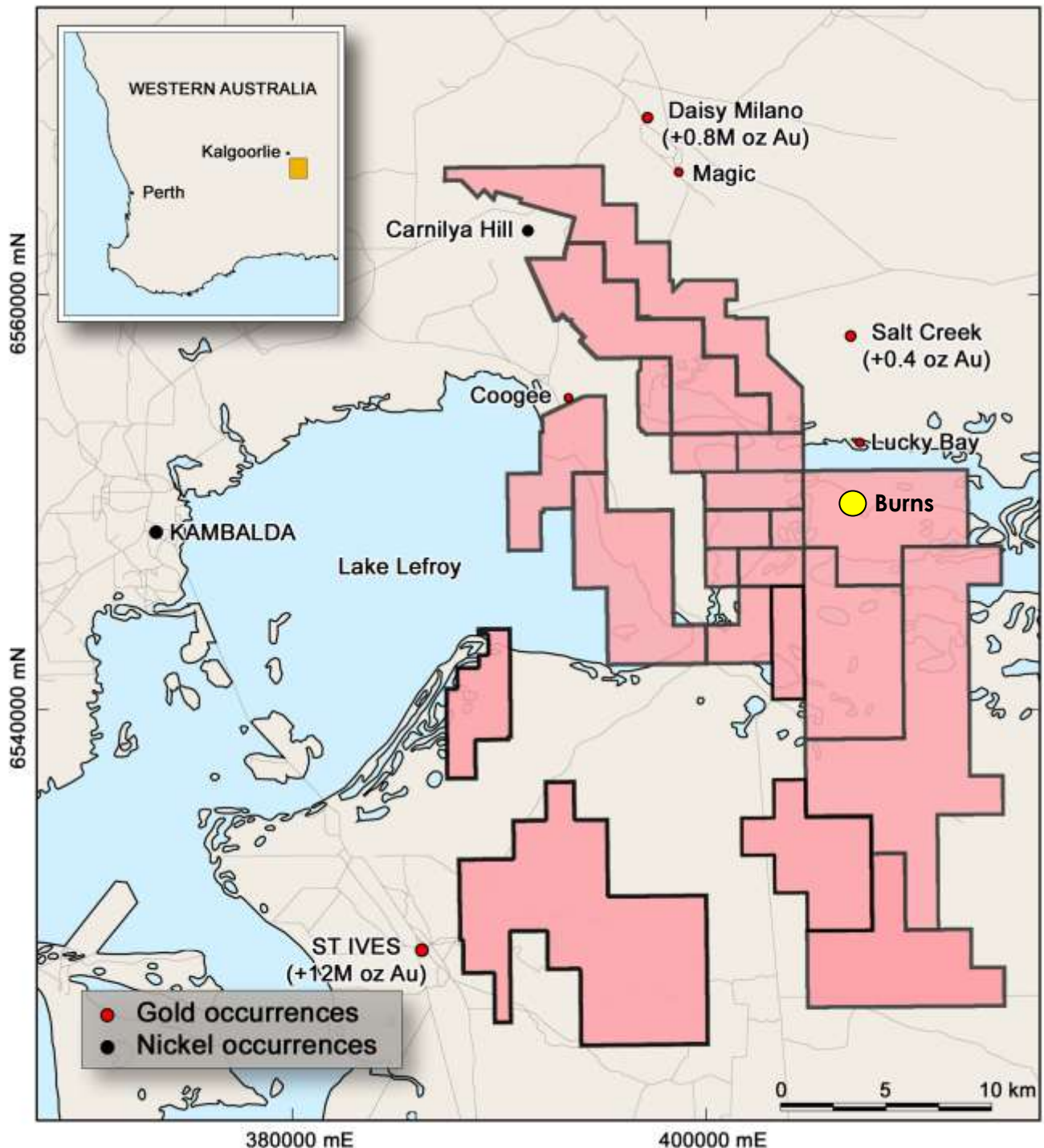


Figure 1. Hogan's Project: Tenement location plan

## **Burns Prospect**

The Burns Prospect is located within the Eastern Goldfields of Western Australia, 70 kilometres southeast of the 70 million ounce Kalgoorlie Super Pit and 8 kilometres south of Silver Lake Resources plus 400,000 ounce Salt Creek Mine (Figure 1).

The Burn's Prospect was initially identified as a conceptual structural Archaean-style lode-gold target located beneath shallow transported cover and defined by a discrete granite intrusive with associated low magnetic and gravity signatures that intrudes a thrust package of mafic, intermediate and metasedimentary rocks. The granite has caused doming of the greenstone sequence, creation of dilational jogs associated with northwest trending structures, and localised lithological and structural complexity that forms ideal sites for the deposition of gold.

Between April and December 2011 Octagonal completed three phases of aircore drilling, totalling 272 holes, using a combination of 160 metre by 640 metre, 80 metre by 320 metre, and 40 metre by 160 metre spaced grids to ultimately define a one square kilometre area of gold in regolith (weathered Archaean rock) anomalism that is not constrained by drilling where it trends beneath salt lake cover. The aim of these drilling programs was to test for low level gold in regolith anomalism that can be used to vector towards a primary gold deposit and consequently all samples were only analysed for gold.

In January 2012 Octagonal completed its first bedrock RC drilling program at the Burns Prospect to test for the primary source of the gold in regolith anomalism and intersected a unique style of mineralisation with no shearing, little quartz veining, and gold associated with magnetite-biotite alteration in fractured high-magnesian basalt and intermediate intrusive rocks.

Recognising the unique style of mineralisation a selection of drill samples were sent off for multi-element analysis to help characterise the type of deposit. These samples returned broad zones of potentially economic copper. The Company subsequently drilled 33 RC holes during 2012 on four 40 metre spaced traverses with significant assay results including:

- ▶ **9 metres @ 1.5 g/t Au, 1.2 g/t Ag & 1.0 % Cu from 58 metres in OBURC002  
inc. 2 metres @ 1.5 g/t Au, 2.7 g/t Ag & 4.2 % Cu from 65 metres**
- ▶ **6 metres @ 4.9 g/t Au, 2.2 g/t Ag & 0.4 % Cu from 23 metres in OBURC003**
- ▶ **12 metres @ 0.8 g/t Au, 4.5 g/t Ag & 1.7 % Cu from 48 metres in OBURC004  
inc. 3 metres @ 2.1 g/t Au, 11.9 g/t Ag & 4.8 % Cu from 53 metres**
- ▶ **4 metres @ 0.7 g/t Au, 2.8 g/t Ag & 2.0 % Cu from 40 metres in OBURC005**
- ▶ **1 metre @ 8.5 g/t Au, 8.7 g/t Ag & 6.7 % Cu from 123 metres in OBURC007**
- ▶ **32 metres @ 1.7 g/t Au, 1.3 g/t Ag & 0.6 % Cu from 76 metres in OBURC011  
inc. 6 metres @ 4.9 g/t Au, 1.9 g/t Ag & 2.1 % Cu from 83 metres**
- ▶ **6 metres @ 4.9 g/t Au, 2.0 g/t Ag & 0.9 % Cu from 24 metres in OBURC012**
- ▶ **50 metre @ 0.9 g/t Au, 0.8 g/t Ag & 0.5 % Cu from 24 metres in OBURC016**
- ▶ **12 metres @ 1.5 g/t Au, 0.5 g/t Ag & 0.5 % Cu from 27 metres in OBURC021**
- ▶ **19 metres @ 0.5 g/t Au, 3.0 g/t Ag & 1.0 % Cu from 44 metres in OBURC022**
- ▶ **9 metres @ 1.0 g/t Au, 1.6 g/t Ag & 0.7 % Cu from 28 metres in OBURC025**
- ▶ **3 metres @ 16.1 g/t Au, 4.5 g/t Ag & 0.5 % Cu from 35 metres in OBURC028**
- ▶ **9 metres @ 1.0 g/t Au, 3.1 g/t Ag & 1.5 % Cu from 115 metres in OBURC031**
- ▶ **12 metres @ 1.3 g/t Au, 2.0 g/t Ag & 0.8 % Cu from 163 metre in OBURC032**



### *Copper Analysis of Aircore Drill Holes*

As the samples collected from the original aircore drilling programs were only analysed for gold and RC drilling has indicated the potential for economic copper, all of the composite regolith sample pulps (dried, crushed, and pulverised drilling samples prepared by a laboratory for analysis) collected from aircore drilling at the Burns Prospect were re-analysed using a Niton XLt 500 Series Portable XRF Analyser for As, Co, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Rb, Se, Sr, Th, U, Zn, and Zr (Analysis completed for 30 seconds using the Bulk Sample Mode – Standard Bulk Mode).

To confirm the accuracy and precision of the Niton Portable Analyser (average error limit: +/-0.02% Cu) 20% of samples returning greater than 0.1% Cu were sent to Inspectorate KalAssay (Perth Laboratory) for copper analysis using a Four Acid Digest with ICP-OES Finish. This quality control analysis revealed that the Niton Portable Analyser used routinely underestimated the copper content of samples by an average of 0.08% Cu (range: 0.02% Cu to 0.33% Cu) or 15% of the metal content (range: 7% to 20%).

A total of 1,186 composite sample pulps ranging in size from 1 to 4 metres width were analysed using the Niton Portable Analyser with 105 samples returning greater than 0.1% Cu and 18 samples returning greater than 0.5% Cu (peak result: 3.1% Cu).

Significant Niton assay results are listed in Table 1 and include:

- ▶ **21 metres @ 0.47% Cu from 20 metres to EOH in OBU022 (all of Archaean)**
- ▶ **14 metres @ 0.43% Cu from 20 metres to EOH in OBU083 (all of Archaean)**
- ▶ **4 metres @ 0.80% Cu from 44 metres in OBU088**
- ▶ **4 metres @ 0.59% Cu from 67 metres to EOH in OBU094 (all of Archaean)**
- ▶ **12 metres @ 0.39% Cu from 20 metres to EOH in OBU105 (all of Archaean)**
- ▶ **8 metres @ 0.64% Cu from 20 metres in OBU150**
- ▶ **10 metres @ 0.40% Cu from 64 metres to EOH in OBU161 (all of Archaean)**
- ▶ **23 metres @ 0.94% Cu from 20 metres to EOH in OBU170 (all of Archaean)  
inc. 12 metres @ 1.53% Cu from 24 metres  
inc. 4 metres @ 3.12% Cu from 24 metres**
- ▶ **8 metres @ 0.46% Cu from 24 metres to EOH in OBU171**
- ▶ **28 metres @ 0.16% Cu from 20 metres in OBU193**
- ▶ **15 metres @ 0.34% Cu from 16 metres to EOH in OBU233 (all of Archaean)**
- ▶ **11 metres @ 0.52% Cu from 28 metres to EOH in OBU254 (all of Archaean)**
- ▶ **18 metres @ 0.22% Cu from 20 metres to EOH in OBU256 (all of Archaean)**

These assay results define two discrete copper anomalies (Figure 2).

The most significant copper anomaly is hosted within high-magnesian basalt and intermediate intrusive rocks, trends to the northwest, extends over two kilometres strike length, is between 80 and 350 metres wide, is not constrained by drilling along its southeast margin, and is coincident with a high-magnetic trend and a gravity gradient.

Significantly;

1. The copper anomalism does not directly correlate with gold anomalism,
2. No significant lead or zinc anomalism was detected (these metals are often associated with porphyry and VMS styles of copper-gold mineralisation), and
3. The copper anomaly defines a discrete target for surface geophysical testing.

The second copper anomaly identified is defined by two 320 metre spaced drill holes and is located 600 metres to the west of the main anomaly. This anomaly extends over 700 metres strike length, is 160 metres wide, and is not constrained by drilling to the north. This anomaly is hosted within intermediate intrusive rocks, is not associated with gold anomalism, and defines a second discrete copper target for surface geophysics and infill aircore drilling.

Ground checking of all copper anomalous samples at Burns has revealed that the copper mineralisation is present as chalcocite with minor chrysocolla. This mineralogy explains why the copper was not initially observed in aircore drilling.

Copper oxide mineralisation often occurs as malachite [dark green] and azurite [dark blue]. These minerals are copper-carbonates and easily identified in drill chips.

Petrological analysis of the mineralisation at Burns has revealed that this deposit is carbonate-poor and consequently copper presents itself as the copper-silicate chrysocolla [light blue] or the secondary copper-sulphide chalcocite [dark grey]. Chalcocite is not easy to identify in weathered drill chips and is especially difficult to identify at the Burns Prospect where magnetite (that has a similar appearance) is also present as an alteration mineral.

The thickness, grade, and widespread distribution of copper in aircore drilling at the Burns Prospect is indicative of a large copper sulphide deposit. Prior to these results Octagonal was using low level gold in weathered rock anomalism to vector towards a primary gold deposit. This exploration technique, while effective, does not provide a discrete target for drill testing and requires a detailed understanding of gold mobility in the regolith.

Exploration for copper sulphide mineralisation can not only utilise copper in weathered rock anomalism to vector towards a primary copper deposit, but also surface geophysical techniques to detect for a conductive or chargeable anomaly that may be indicative of massive or disseminated primary copper sulphide mineralisation. The use of surface geophysics as an exploration tool is significantly more efficient than using regolith anomalism because discrete targets can be identified for drill testing.

Octagonal now intends to use surface geophysical techniques at the Burns Prospect to test for conductive or chargeable anomalies indicative of primary copper sulphide mineralisation for targeted diamond drilling in the second half of 2013.

Additional information relating to Octagonal and its various mining and exploration projects can be found on the Company's website:

[www.octagonalresources.com.au](http://www.octagonalresources.com.au)

**For further enquiries, please contact:**

**Anthony Gray (Managing Director) +61 3 9697 9088**

#### **Competent Persons Statement**

All 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.

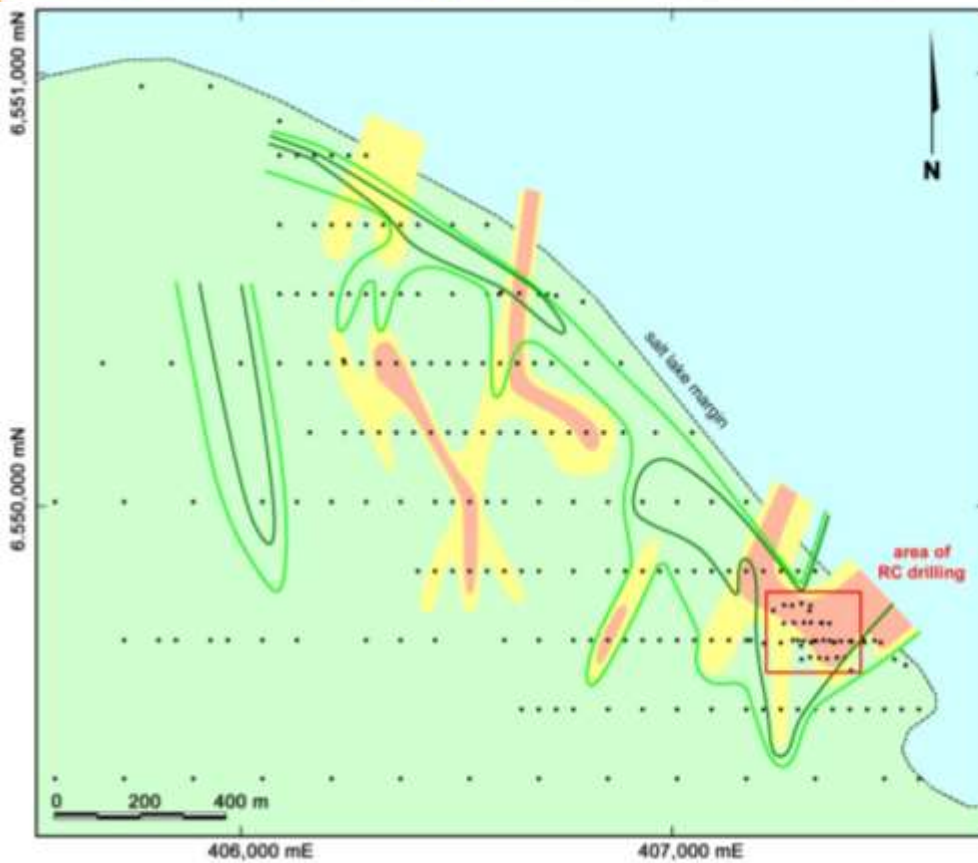


Figure 2. Burns Prospect: Location of gold and copper anomalism in aircore drilling with respect to previous bedrock RC drilling



Analysis of aircore drilling pulp samples using a Niton XLt 500 Series Portable XRF Analyser

Table 1.					
Burns Prospect: Significant Copper in Aircore Drilling Results					
Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Comments
<b>OBU009</b>	<b>72</b>	<b>84</b>	<b>12</b>	<b>0.14</b>	
OBU019	64	65	1	0.10	to EOH.
OBU021	28	32	4	0.22	to EOH.
<b>OBU022</b>	<b>20</b>	<b>41</b>	<b>21</b>	<b>0.47</b>	to EOH. All of Archaean.
OBU082	32	33	1	0.10	
<b>OBU083</b>	<b>20</b>	<b>34</b>	<b>14</b>	<b>0.43</b>	to EOH. All of Archaean.
<b>OBU088</b>	<b>44</b>	<b>48</b>	<b>4</b>	<b>0.80</b>	
<b>OBU094</b>	<b>67</b>	<b>71</b>	<b>4</b>	<b>0.59</b>	to EOH. All of Archaean.
<b>OBU105</b>	<b>20</b>	<b>32</b>	<b>12</b>	<b>0.39</b>	to EOH. All of Archaean.
<b>inc.</b>	<b>24</b>	<b>25</b>	<b>1</b>	<b>1.03</b>	
OBU106	44	45	1	0.16	
OBU108	72	76	4	0.10	to EOH.
OBU110	20	24	4	0.18	
<b>OBU114</b>	<b>32</b>	<b>40</b>	<b>8</b>	<b>0.14</b>	
<b>OBU150</b>	<b>20</b>	<b>28</b>	<b>8</b>	<b>0.64</b>	
<b>OBU160</b>	<b>72</b>	<b>84</b>	<b>12</b>	<b>0.13</b>	
<b>OBU161</b>	<b>64</b>	<b>74</b>	<b>10</b>	<b>0.40</b>	to EOH. All of Archaean.
OBU168	28	32	4	0.17	
<b>OBU169</b>	<b>28</b>	<b>33</b>	<b>5</b>	<b>0.22</b>	to EOH. All of Archaean.
<b>OBU170</b>	<b>20</b>	<b>43</b>	<b>23</b>	<b>0.94</b>	to EOH. All of Archaean.
<b>inc.</b>	<b>24</b>	<b>36</b>	<b>12</b>	<b>1.53</b>	
<b>inc.</b>	<b>24</b>	<b>28</b>	<b>4</b>	<b>3.12</b>	
<b>OBU171</b>	<b>24</b>	<b>32</b>	<b>8</b>	<b>0.46</b>	to EOH.
OBU172	36	40	4	0.10	
OBU181	44	48	4	0.11	
<b>OBU185</b>	<b>40</b>	<b>52</b>	<b>12</b>	<b>0.12</b>	
<b>OBU193</b>	<b>20</b>	<b>48</b>	<b>28</b>	<b>0.16</b>	
OBU204	70	74	4	0.13	
OBU205	60	65	5	0.13	to EOH. All of Archaean.
OBU206	48	52	4	0.13	
OBU207	36	40	4	0.20	to EOH. All of Archaean.
<b>OBU208</b>	<b>24</b>	<b>31</b>	<b>7</b>	<b>0.21</b>	to EOH. All of Archaean.
<b>OBU209</b>	<b>32</b>	<b>47</b>	<b>15</b>	<b>0.15</b>	to EOH.
OBU221	76	80	4	0.12	
OBU225	72	73	1	0.12	to EOH.
OBU226	72	74	2	0.17	to EOH.
<b>OBU230</b>	<b>48</b>	<b>56</b>	<b>8</b>	<b>0.14</b>	to EOH.
OBU232	20	24	4	0.15	
<b>OBU233</b>	<b>16</b>	<b>31</b>	<b>15</b>	<b>0.34</b>	to EOH. All of Archaean.
OBU234	20	23	3	0.20	to EOH.
OBU252	56	58	2	0.16	to EOH.
<b>OBU253</b>	<b>44</b>	<b>50</b>	<b>6</b>	<b>0.17</b>	to EOH. All of Archaean.
<b>OBU254</b>	<b>28</b>	<b>39</b>	<b>11</b>	<b>0.52</b>	to EOH. All of Archaean.
<b>OBU256</b>	<b>20</b>	<b>38</b>	<b>18</b>	<b>0.22</b>	to EOH. All of Archaean.
OBU266	36	40	4	0.11	
OBU284	40	44	4	0.22	to EOH. All of Archaean.
<b>OBU285</b>	<b>44</b>	<b>52</b>	<b>8</b>	<b>0.31</b>	

Notes:

- One to four metre composite scoop sample pulps routinely analysed.
- Sample pulps produced by Inspectorate KalAssay (Kalgoorlie Laboratory) when preparing samples for gold analysis.
- Analysis completed using a Niton XLt 500 Series Portable XRF Analyser. Analysis completed for 30 seconds using the Bulk Sample – Standard Bulk Mode. Analysis completed for As, Co, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Rb, Se, Sr, Th, U, Zn, Zr.
- 20% of samples returning greater than 0.1% Cu sent to Inspectorate KalAssay (Kalgoorlie Laboratory) for copper analysis using a Four Acid Digest with ICP-OES Finish to confirm the accuracy and precision of the Niton Analyser (average copper error: +/- 0.02%Cu). Niton Analyser shown to routinely underestimate copper grades by an average of 0.08% Cu (range: 0.02% Cu to 0.33% Cu) or 15% of the metal content (range: 7% to 20%).
- "inc." denotes "including" and "EOH" denotes "end of hole".



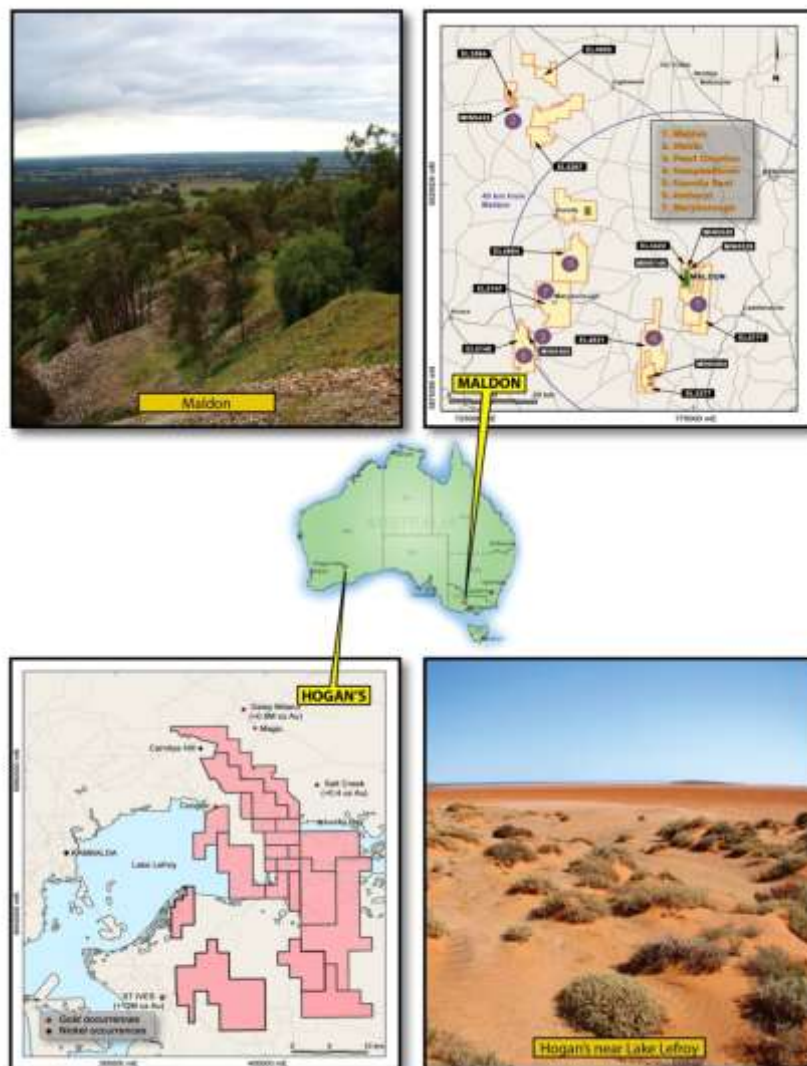
## About Octagonal Resources

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 or copper 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*