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Market Cap.: \$8.8 m (\$0.052 p/s)  
Shares on issue: 169,672,726  
Cash: \$3.0 m (31 March 2014)  
Debt: \$0.0 m (31 March 2014)

**DIRECTORS**

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

**MAJOR SHAREHOLDERS**

Abbotsleigh – 19.5%  
Alliance Resources – 13.5%  
Karl Sabljak – 5.5%

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## **Burns Prospect** **High-Priority Magnetic Target**

- **3D Inversion Modelling identifies priority copper-gold target**
- **Target area positioned beneath previous RC drilling**
- **Broad zones of copper and gold intersected in RC drilling may be leakage from a larger, higher grade & deeper source**
- **Diamond drill hole planned to commence in July**

The Directors of Octagonal Resources Limited (ASX: ORS) (“**Octagonal**” or “**Company**”) are pleased to provide an update on exploration of the Burns copper-gold prospect in Western Australia.

3D inversion modelling of ground magnetic data collected during July 2013 has revealed that the strong magnetic anomaly coincident with copper and gold in regolith (weathered Archaean rock) anomalism defined by aircore drilling has not been effectively tested by reverse circulation (“RC”) drilling.

The RC drilling that has returned broad zones of moderate grade copper and gold associated with magnetite alteration appears to overlie a steep southeast plunging and strongly magnetic body that has been modelled as being 190 metres long and 120 metres wide using a  $90 \times 10^{-3}$  SI isosurface.

A 450 metre deep diamond hole has been planned as an initial test of this target area and will commence during July.

Octagonal’s Managing Director, Anthony Gray, commented “the RC drilling completed at Burns has intersected potentially economic zones of copper and gold, however at this early stage of exploration we don’t understand the structural controls.”

“What we do know is that all of the very magnetic drill samples have returned better than 1.5 g/t Au and 2.5 % Cu, so when we consider targeting tools for exploration magnetic methods are a logical choice in this instance.”

“Prior to this 3D inversion modelling, we felt that the magnetism already intersected in RC drilling might have explained the ground magnetic anomaly. It’s exciting that not only has the RC drilling not tested the target, but the copper and gold that we have intersected may be leakage from a larger, higher grade, and deeper source.”

“We have initially planned one diamond hole to drill into the centre of the magnetic target and will plan further drilling based on the outcome of this hole.”

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.**

## Burns Prospect

The Burns Prospect is located 70 kilometres southeast of Kalgoorlie in Western Australia and 30 kilometres northeast of the 13 million ounce St Ives Goldfield (Figure 1). The deposit is characterised by a discrete granite intrusive with associated low magnetic and gravity signatures that intrudes a thrust package of mafic, intermediate and meta-sedimentary 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. Evidence of intense fluid flow is further supported by a high-magnetic alteration halo that surrounds the granite.

In May 2011 Octagonal discovered significant gold and copper in regolith (weathered Archaean rock) anomalism at the Burns Prospect, with aircore drilling used to define a one square kilometre area of gold anomalism and a two kilometre long copper anomaly using a 40 metre by 160 metre spaced grid (Figure 2). The gold anomalism is unconstrained by drilling where it trends beneath salt lake cover to the north and east.

During 2012 Octagonal completed 33 RC holes, on four 40 metre spaced traverses in the southeast corner of the target area. This drilling intersected broad zones of gold and copper associated with magnetite-biotite alteration and hosted in fractured high-magnesian basalt and intermediate intrusive rocks.

Significant assay results include:

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



*RC Drilling at Burns Prospect*

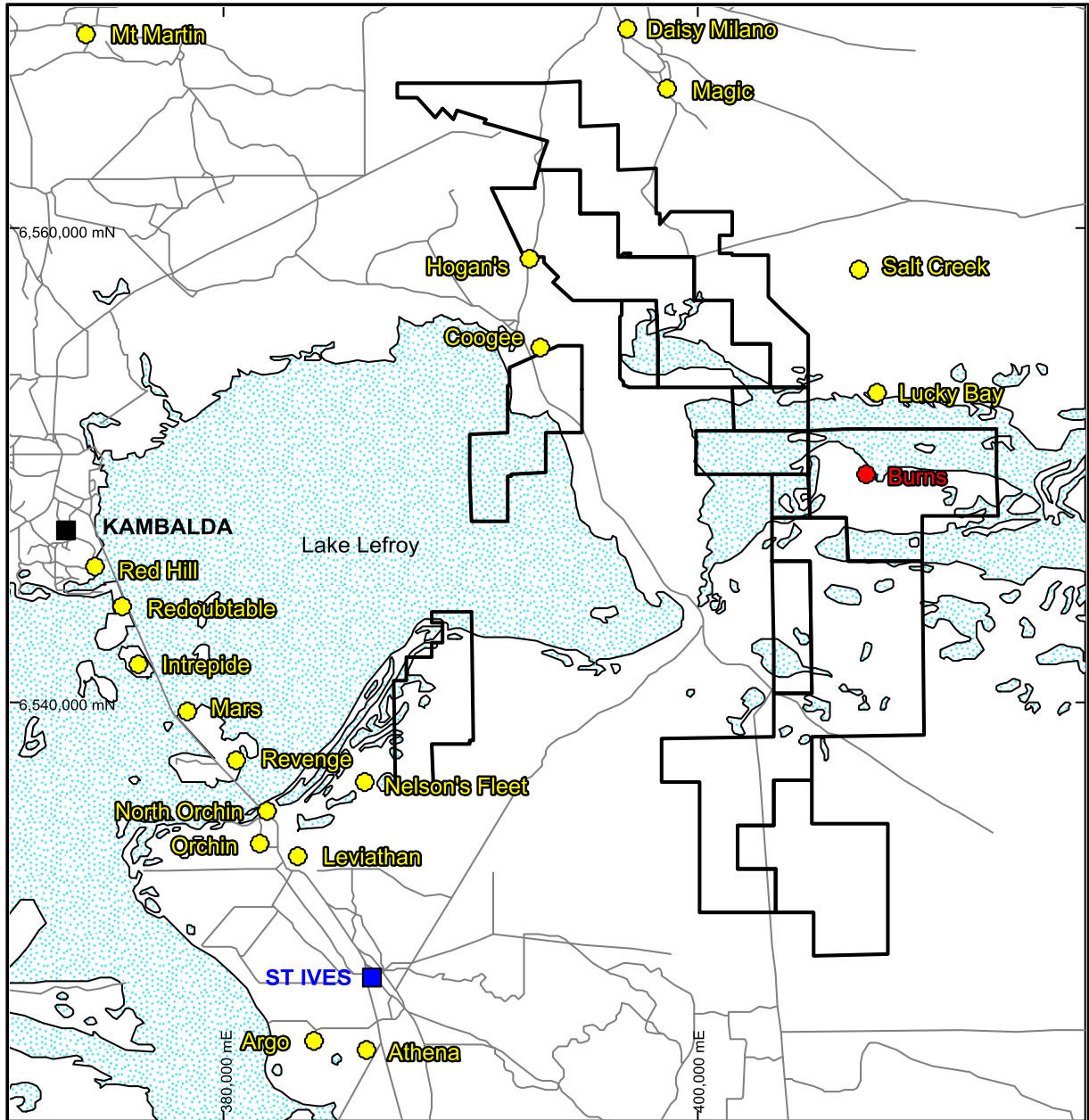


Figure 1: Hogan's Project: Tenement Location Plan



Burns Prospect from Lake Randall

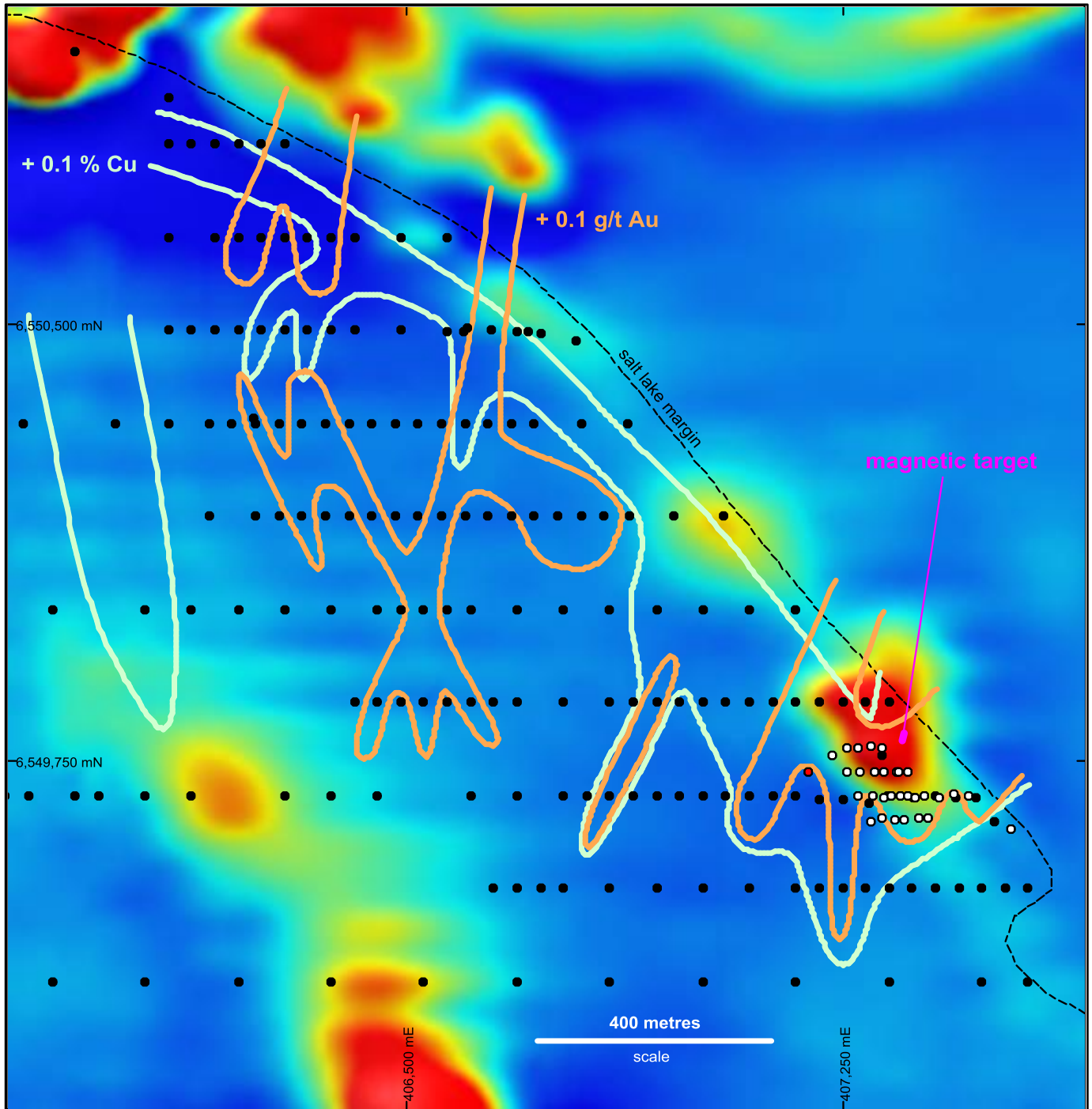


Figure 2: Burns Prospect: Gold and copper in regolith anomalism defined by aircore drilling on an aeromagnetic image

*Legend-*

*Light green contour: + 0.1 % copper in regolith anomalism*

*Orange contour: + 0.1 g/t gold in regolith anomalism*

*Drill Holes*

*Black dots: aircore holes*

*White dots: RC holes*

*Red dot: planned diamond hole*

*Black dashed line: salt lake margin*

### **3D Inversion Magnetic Modelling**

RC drilling completed at the Burns Prospect has intersected broad zones of moderate grade copper and gold associated with magnetite-biotite alteration. Analysis of drilling data for samples collected in fresh rock or saprock (below 100 metres down hole depth) reveals that while there is no direct correlation between copper and gold mineralisation (Graph 1), all very magnetic samples (returning greater than  $250 \times 10^{-3}$  SI units) also contain greater than 1.5 g/t Au and 2.5 % Cu (Graphs 2 and 3).

This clear correlation between magnetite alteration and copper and gold suggests that magnetism could be used as an exploration targeting tool for targeting mineralisation and during April, Southern Geoscience Consultants were engaged to complete 3D inversion modelling of ground magnetic data that was collected over the area in July 2013. The purpose of this modelling was to better understand the three dimensional geometry of the high-magnetic anomaly identified in the ground magnetic survey and its spatial relationship with the existing RC drill holes.

3D inversion modelling of the ground magnetic data was completed using Geosoft VOXI software and constrained using down hole magnetic susceptibility values. Five inversion models were run with varying constraints and a preferred model selected and forward modelled using Potent software to see if the attitude characteristics, as determined by modelling, would match those determined by inversion. The correlation between the preferred model and the Potent modelling was very strong and supported the inversion model result.

This inversion modelling has revealed that the main magnetic anomaly at the Burns Prospect strikes northwest, dips steeply to the west and plunges steeply to the southeast (Figure 3). The highest magnetic part of the anomaly is modelled as being approximately 190 metres long and 120 metres wide using a  $90 \times 10^{-3}$  SI isosurface.

*It should be noted:*

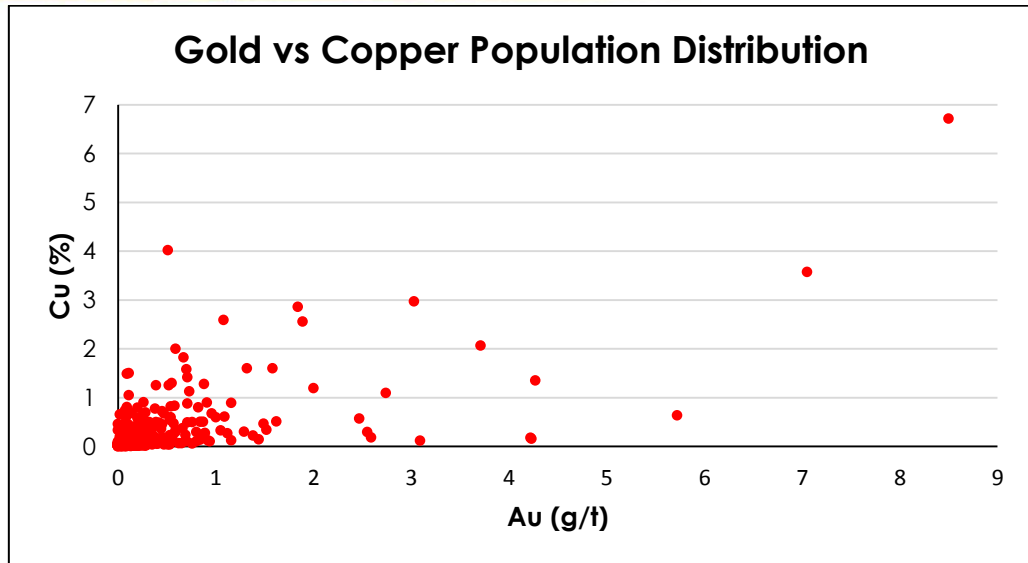
- 1. The inversion model uses a 20 metre by 20 metre mesh size and the actual magnetic target may be smaller and of higher magnetic intensity;*
- 2. Even though the geometry of the modelled magnetic body is ovoid, the actual magnetic body could be composed of multiple and varying oriented magnetic units / structures; and*
- 3. Even though the modelled magnetic body is illustrated to be constrained at depth it is actually unconstrained because ground magnetic surveys can only detect near-surface magnetism (usually up to 200 metres depth).*

The results of this work reveal that the highest magnetic part of the Burns magnetic anomaly has not been tested by RC drilling, with the magnetic body starting at 100 vertical metres depth and positioned to the west and below the existing drilling (Figures 3 and 5).

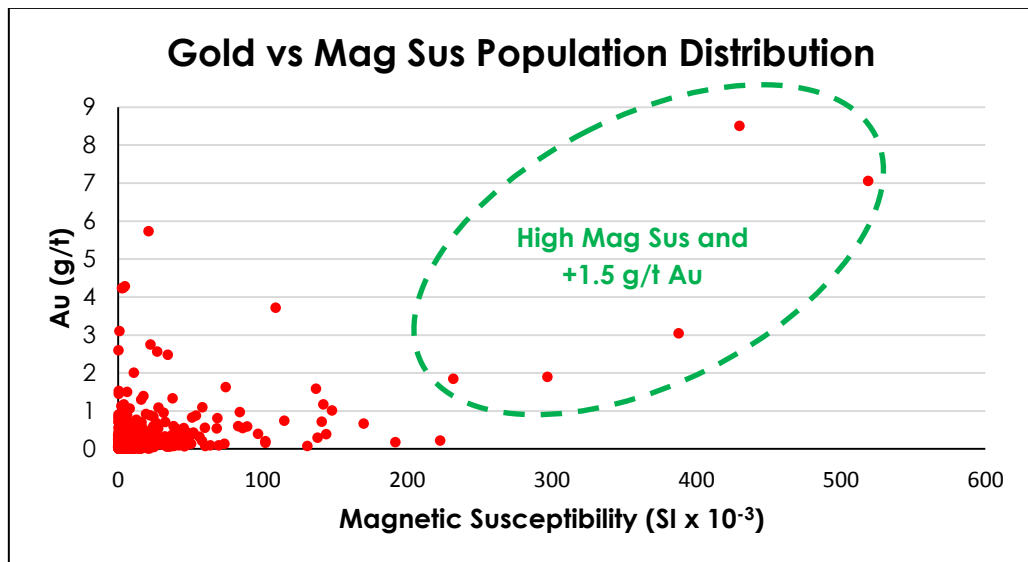
**This modelling suggests that the copper and gold intersected in RC drilling to date may be derived from the leakage of mineralisation from a larger, higher grade, and deeper source.**

Octagonal has planned an initial one hole diamond drilling program to intersect the centre to the modelled high-magnetic anomaly to determine the source of the magnetism and its association with copper and gold mineralisation (Figures 4 and 5). This hole will be drilled to approximately 450 metres depth, take 2.5 weeks to complete, and is planned to commence during July.

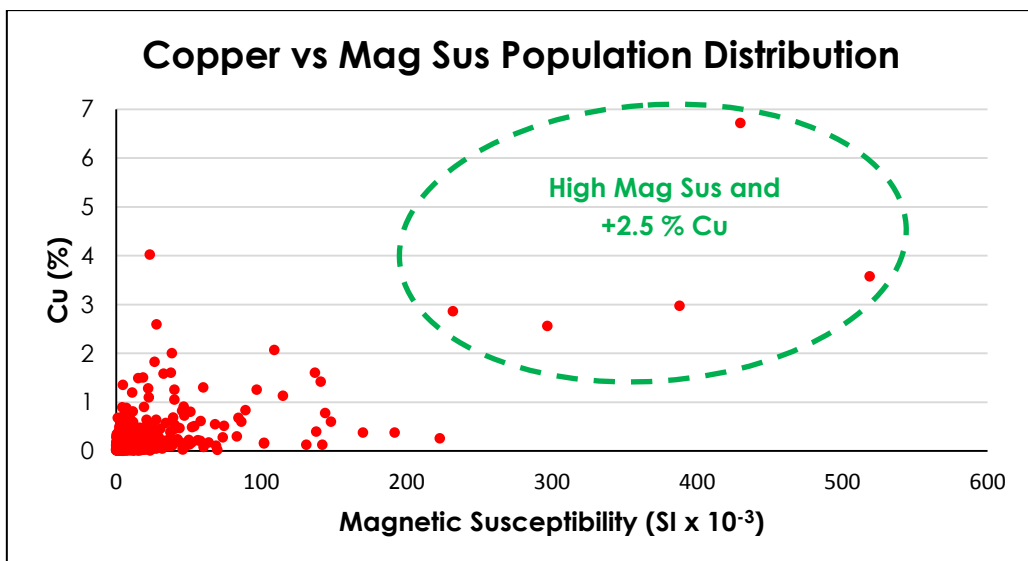
Further drilling may be planned based on the outcome of this drill hole.



Graph 1. Burns Prospect RC Drilling: Gold vs Copper Population Distribution



Graph 2. Burns Prospect RC Drilling: Gold vs Magnetic Susceptibility Population Distribution



Graph 3. Burns Prospect RC Drilling: Copper vs Magnetic Susceptibility Population Distribution

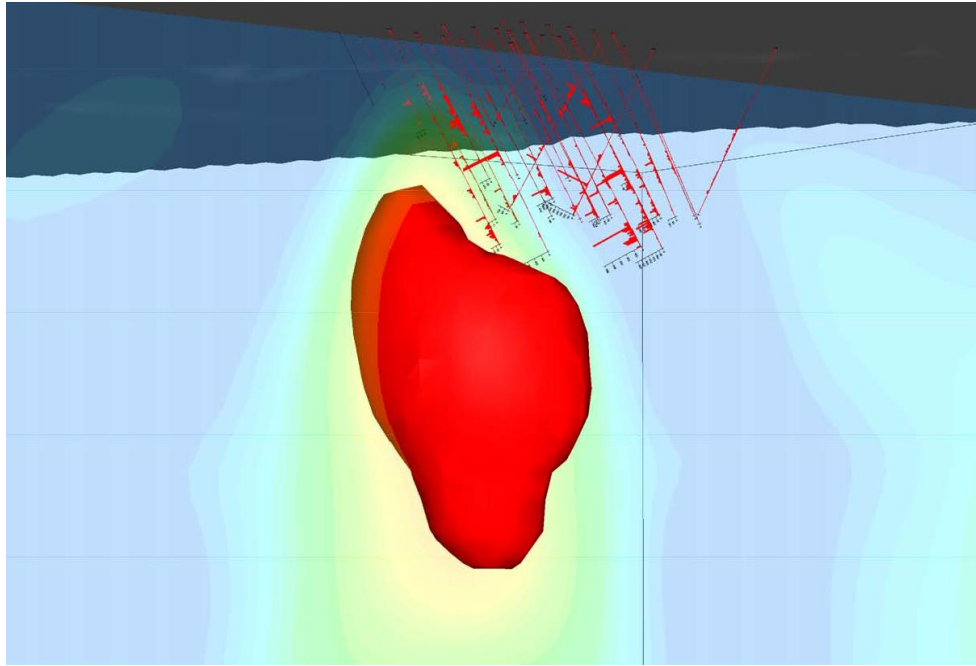


Figure 3: Burns Prospect: 3D Inversion Model of ground magnetic data (red shape:  $90 \times 10^{-3}$  SI isosurface) with RC drilling (view from below surface and to the northeast)

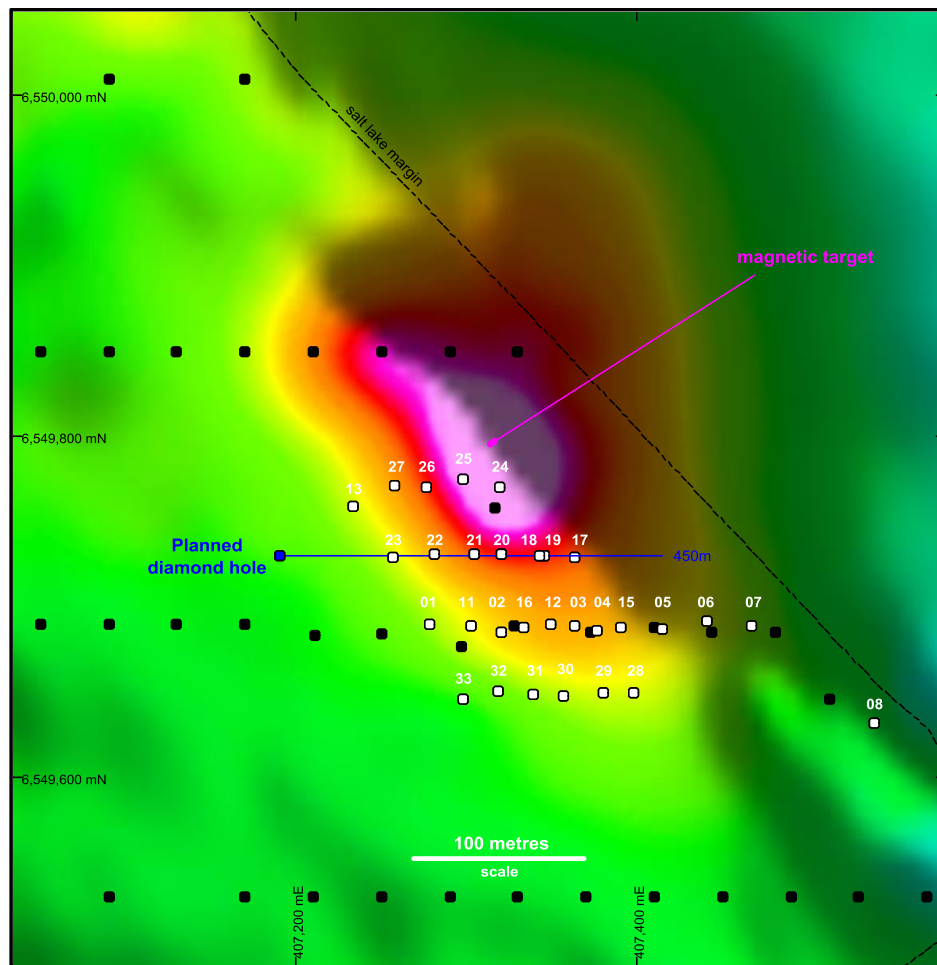


Figure 4: Burns Prospect: Planned diamond hole on a ground magnetic image with previous drilling

Legend-

Blue dot: planned diamond hole  
 Black dots: aircore holes  
 White dots: RC holes

Black dashed line: salt lake margin  
 23 denotes hole number OBURC023

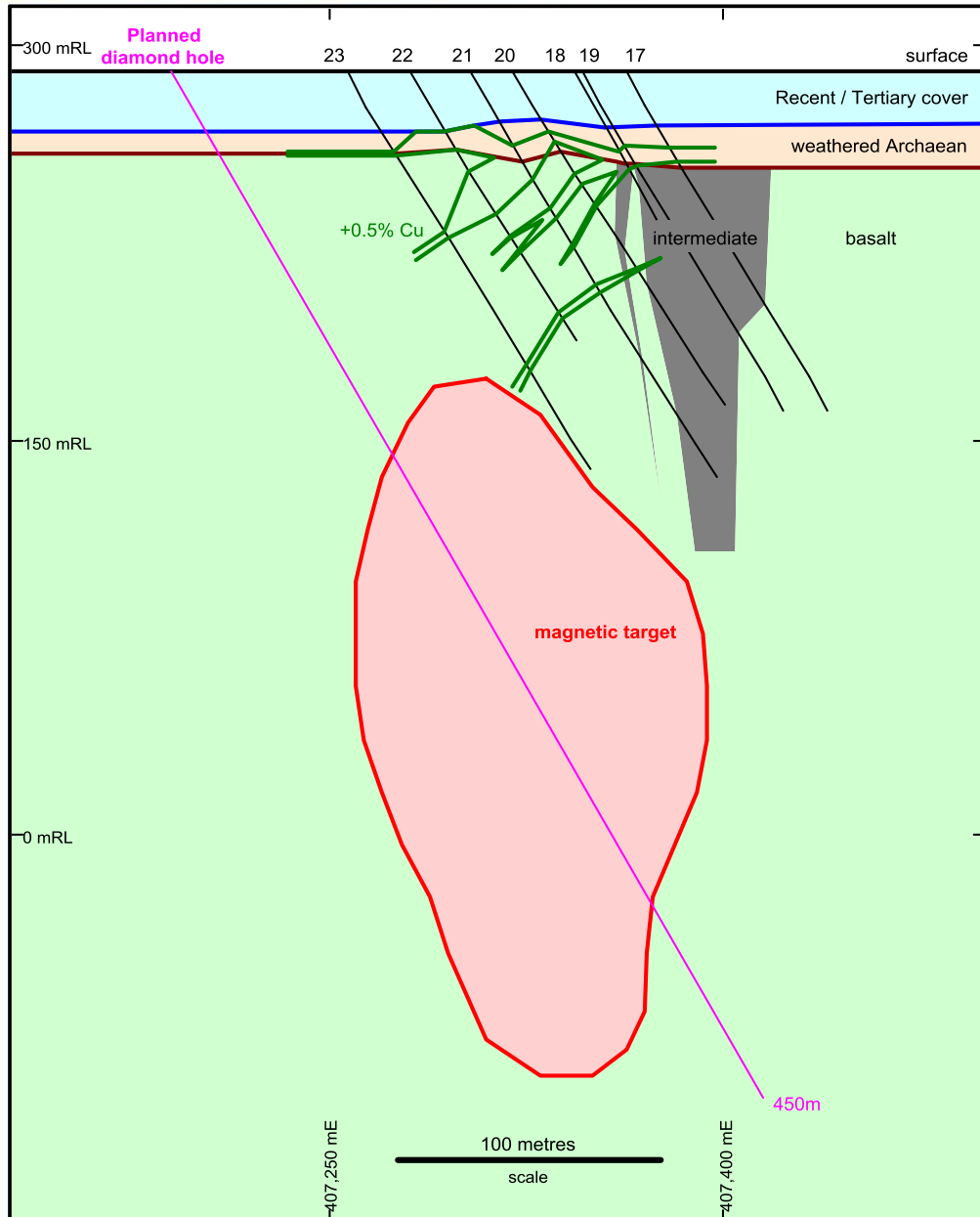


Figure 5: Burns Prospect 6549730mN Section: Location of planned diamond hole

**Legend-**

Geology

Light green: high-magnesian basalt (Archaean)  
 Grey: intermediate intrusive rocks (Archaean)  
 Orange: weathered rocks (Archaean)  
 Light blue: transported cover sediments (Recent and Tertiary)

Pink polygon: high-magnetic target ( $90 \times 10^{-3}$  SI isosurface defined by 3D inversion modelling)  
 Dark green contours: +0.5% copper in RC drilling

Drill Holes

Cyan line: planned diamond hole  
 Black lines: previous RC holes

23 denotes hole number OBURC023

**Competent Persons Statement**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Anthony Gray, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Gray is a full-time employee of the company. Mr Gray has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gray consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



## **JORC Code, 2012 Edition – Table 1 Report: Burns Prospect Ground Magnetic Survey**

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

<b>Criteria</b>	<b>Commentary</b>
<i>Sampling techniques</i>	Ground magnetic survey completed by Outer Rim Exploration Services using a G-858 MagMapper cesium vapour roving magnetometer. Data collected continuously (at less than 5 metre spaced intervals) along 50 metre spaced survey lines oriented east-west.
<i>Drilling techniques</i>	Not applicable as drilling results are not presented.
<i>Drill sample recovery</i>	Not applicable as drilling results are not presented.
<i>Logging</i>	Not applicable as drilling results are not presented.
<i>Sub-sampling techniques and sample preparation</i>	Not applicable as drilling results are not presented.
<i>Quality of assay data and laboratory tests</i>	Magnetic measurements collected using a G-858 Magmapper cesium vapour roving magnetometer. Temporal variation of the main field is estimated using a base station G-856 proto precession Magnetometer and subtracted from the survey data. Digital data is inspected regularly during surveying to ensure data quality and checked by the supervising geophysicist.
<i>Verification of sampling and assaying</i>	Raw data was collected digitally by Outer Rim Exploration Services and checked by Southern Geoscience Consultants before processing. Ground magnetic data was also cross-checked against 50 metre line spaced aeromagnetic data.
<i>Location of data points</i>	Data positions recorded to <1.5m accuracy using a Novatel Smart-V1 GPS.
<i>Data spacing and distribution</i>	Readings taken continuously (at less than 5 metre spaced intervals) along 50 metre spaced east-west oriented lines. This line spacing and sample interval is considered to be sufficient to define anomalies for drill testing.
<i>Orientation of data in relation to geological structure</i>	The main magnetic trend strikes northwest. East-west oriented survey lines run at 45 degrees to the main magnetic trend, but provide the opportunity to identify north-south and northeast oriented structural breaks. There is no known bias in the orientation of this sampling.
<i>Sample security</i>	All data acquired by Outer Rim Exploration Services has been provided to Southern Geoscience Consultants and Octagonal Resources Limited.
<i>Audits or reviews</i>	No audits or reviews of the sampling technique or data have been completed.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	The Burns Prospect is located on exploration licence E15/1097 that is owned 100% by Octagonal Resources (WA) Pty Ltd, a wholly owned subsidiary of Octagonal Resources Limited. The tenement is current and in good standing.
<i>Exploration done by other parties</i>	Modern exploration within the area of exploration licence E15/1097 has been completed by WMC Resource Limited and Newmont Exploration Pty Ltd. The Burns Prospect was discovered by Octagonal Resources Limited in 2011.
<i>Geology</i>	The Burns Prospect is located within the Eastern Goldfields Province of Western Australia and positioned in the southern part of the Norseman - Wiluna Greenstone Belt within the Kalgoorlie Terrane, near the triple junction of three crustal units; the Parker and Boorara domains of the Kalgoorlie Terrane and the Bulong Domain of the Kurnalpi Terrane, each of which is bounded by regionally persistent faults with long histories of reactivation. The deposit is unique in the area, consisting of copper, gold, and silver mineralisation, associated with magnetite-biotite alteration, and hosted in fractured high-magnesian basalt and intermediate intrusive rocks with little quartz veining.
<i>Drill hole Information</i>	Not applicable as drilling results are not presented.
<i>Data aggregation methods</i>	Not applicable as drilling results are not presented.
<i>Relationship between mineralisation widths and intercept lengths</i>	Not applicable as drilling results are not presented.
<i>Diagrams</i>	A diagram illustrating the results of 3D inversion modelling of the ground magnetic data is presented in Figure 3. Figure 4 illustrates a plan view of the processed ground magnetic data.
<i>Balanced reporting</i>	Not applicable as drilling results are not presented.
<i>Other substantive exploration data</i>	The Company's previous ASX announcements have detailed exploration works including aircore drilling, reverse circulation drilling, a ground gravity survey, and a moving loop ground electromagnetic survey.
<i>Further work</i>	A diamond drill hole is planned to intersect the centre to the modelled high-magnetic anomaly to determine the source of the magnetism and its association with copper and gold mineralisation.