

# R3D Resources Limited | ACN: 111 398 040 | ASX: R3D

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# Seven Priority Targets at the Bulimba Project Identified through High Resolution Airborne Magnetic and Gravity Falcon Survey

### **Highlights**

- Seven high priority copper/gold targets have been identified from the geophysical interpretation of Falcon Gravity and Magnetic Survey completed over the West Bulimba (Newcrest) and Beefwood Exploration Permits (EPM)
- Significant gravity and magnetic anomalies, including co-incident features, have been identified within the survey area that may indicate both intrusives and alteration or mineralisation
- R3D has identified one significant structural trend that extends from the survey area to the Tartana Porphyry Copper system using government geophysical and geological structural data
- Planning for a HeliTEM programme for first Half 2022 is well advanced to test these targets and associated structures

R3D Resources Limited (ASX:R3D) is pleased to provide the results of the analysis and interpretation of recently acquired Falcon Gravity/Magnetic survey data on its Bulimba/Beefwood Project.

As reported in R3D's Quarterly Report (ASX: 29 July 2021), R3D commissioned Xcalibur/CGG Aviation Pty Ltd to fly a Falcon Gravity and Magnetic Survey over the Western Bulimba and Beefwood tenements. The 1574-line kilometres were flown at 200 metre (m) spacing on NS Lines.

After data acquisition and processing was completed by Xcalibur, Geodiscovery Pty Ltd was engaged to provide an independent review of potential targets to supplement R3D's inhouse geological expertise. The interpretation of structurally favourable settings and/or areas of intrusion or alteration have delineated potential zones or domains that may host economic mineralisation.

Dr Stephen Bartrop, CEO and Managing Director of R3D observed, "Interpretation of the high-resolution gravity and magnetic data acquired from the Falcon survey, shows very clear geological structures and potential intrusives and/or alteration at depths below more recent cover sediments.

"Our continued processing and interpretation of existing data will continue until we complete the HeliTEM survey in the first half of 2022. The combination of three high resolution geophysical techniques, looking through cover, is unique in Queensland but is utilised elsewhere in industry for pinpointing large mineralising structures."



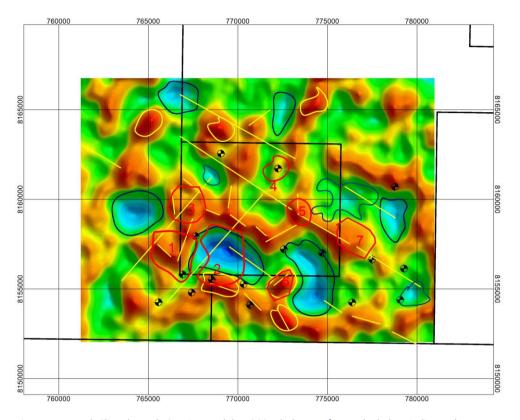


Figure 1 – Depth Slice through Gravity Model at 300m below surface. Black dots indicate the presence of magnetic remanence, low density zones circled in blue, high-density zones circled in yellow and potential structures shown in yellow. Potential zones of interest circled in red and labelled 1-7.

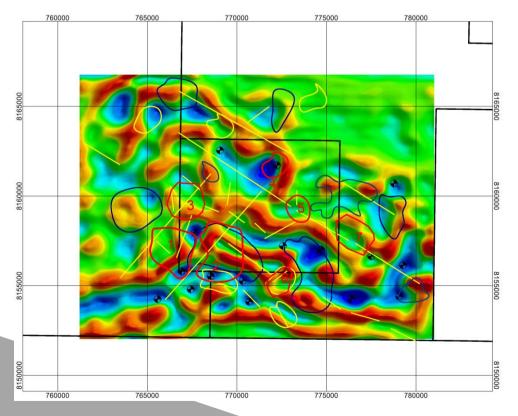


Figure 2 – Depth Slice through Mag Sus model at around 300m beneath surface (150m RL). Black dots indicate the presence of magnetic low density zones circled in blue, high density zones circled in yellow and potential structures shown in yellow.



R3D's geophysical consultants have developed seven high priority targets through the geophysical review and these are:

Table 1: Bulimba Regions of Interest

ROI	Magnetic Response	Gravity Response	Summary
1	Variable high magnetic susceptibility and MVI	Region with relatively higher density	Located proximal to NW and possible NE structure on western edge of low-density zone (possible granitic intrusion).
2	Increased magnetic response	Low density zone	Located on NE structure - low density zone with unusual magnetic response (elsewhere in this region the low density zones are magnetically bland).
3	Depressed magnetic response (possible alteration?)	Variably higher density zone	Located proximal to intersection of NW and NE structures.
4	Remanently magnetised zone	Weak linear response (possible structure?)	Located proximal to NW trend.
5	Depressed magnetic oval (possible alteration?)	Relatively high density	Possible alteration feature on NW structure.
6	Break in magnetic linear response	Area of Relatively high density located between low density regions	Possible alteration feature on NE structure.
7	Depressed magnetic oval (possible alteration?)	Relatively high density	Possible alteration feature on NW structure.

The structural trends, especially the NW-SE structural corridor shown on the Magnetic TMI, are of particular interest as they extend along all the Bulimba tenements as far as the Tartana and King Vol mines.



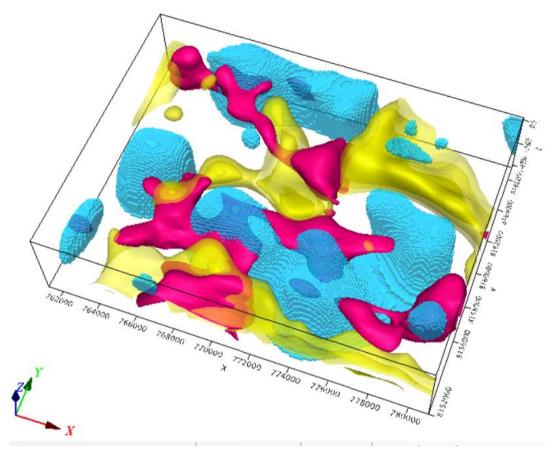


Figure 3 – Isosurfaces from the 3D model output. Low density shown in blue, high density in yellow and high magnetic susceptibility in pink.

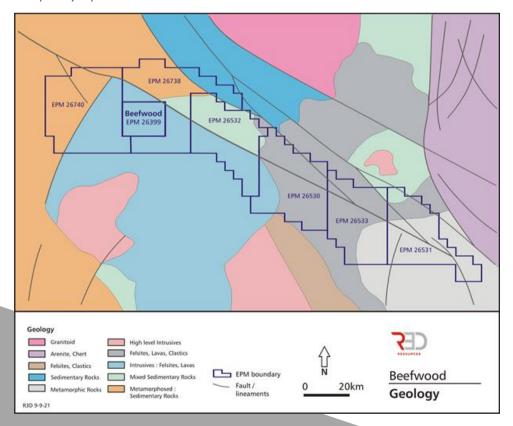


Figure 4 – Bulimba Beefwood Solid Geology and major structural features (GeoResGlobe & Qspatial).



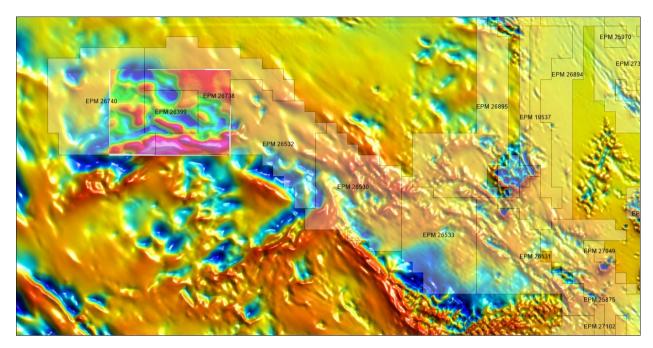


Figure 5 – Bulimba Beefwood High resolution Magnetic TMI combined with Government Magnetic TMI delineating the significant NW-SE structural trend within the Bulimba tenement package.

# **Stephen Bartrop**

**Managing Director** 

## **R3D Resources Limited**

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This announcement has been approved by the Board of R3D Resources Limited.



#### **About R3D Resources Limited**

In July 2021 R3D Resources Limited acquired Tartana Resources Limited, a significant copper-gold explorer and developer in the Chillagoe Region in Far North Queensland. R3D owns several projects of varying maturity, with the most advanced being the Tartana mining leases, which contain an existing heap leach – solvent extraction – crystallisation plant. Work has commenced to restart this plant to provide future cash flow through the sale of copper sulphate. In Tasmania, Tartana has secured permitting to excavate and screen for export low-grade zinc furnace slag/matte from its Zeehan stockpiles in Western Tasmania and is shipping zinc slag to South Korea. These two projects have the potential to generate a cash flow to underpin the R3D's extensive exploration activities in the Chillagoe region.

#### **Competent Person's Statement**

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Wayne (Tom) Saunders who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), and a Member of the Australian Institute of Geologists (AIG). Mr Saunders has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that is being undertaking 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 Saunders is an employee of R3D Resources Limited, and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### **Disclaimer Regarding Forward-Looking Statements**

This ASX announcement contains various forward-looking statements. All statements, other than statements of historical fact, are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors that could cause actual values or results, and performance or achievements to differ materially from the expectations described in such forward-looking statements. R3D does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.



# JORC Code, 2012 Edition

# **Section 1 Sampling Techniques and Data**

Criteria	Commentary
Sampling techniques	Falcon Aerial Geophysical – Magnetics and Gravity
Drilling techniques	No drilling undertaken
Drill sample recovery	No drilling undertaken.
Logging	No drilling undertaken.
Sub-sampling techniques and sample preparation	No drilling undertaken.
Quality of assay data and laboratory tests	Not Applicable.
Verification of sampling and assaying	<ul> <li>Controlled high accuracy GPS systems operational in plane. All survey and geophysical specifications included at end of release (below).</li> </ul>
Location of data points	• 1,574 line km NS lines. Spacing of lines at 200m.
Data spacing and distribution	Continuous readings along line.
Orientation of data in relation to geological structure	<ul> <li>Based on existing government aerial geophysics expected structural trends are expected to be dominated by NNE and NW structures. The design of the programme was not influenced by this early interpretation.</li> </ul>
Sample security	Not applicable.
Audits or reviews	<ul> <li>Xcalibur reviewed all raw and processed data before delivery to R3D</li> <li>Geodiscovery Pty Ltd undertook a review of the data before reprocessing and interpretation.</li> <li>R3D technical staff and contractors have undertaken a first pass review of the geophysical data in relation to known solid geology and projected mineralisation</li> </ul>

# **Section 2 Reporting of Exploration Results**

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

Criteria	Со	mmentary
Mineral tenement and land tenure status	•	EPM 26399 – Granted to Three Rivers Prospecting and Michael Thompson (Beefwood).
	•	EPM 26738, 26740, 26530, 26531, 26532, 26533 – Granted to Newcrest Operations Limited (Bulimba).



Criteria	Commentary
Exploration done by other parties	<ul> <li>Open file company reports (CR) are available for all exploration permits in Queensland.</li> </ul>
	<ul> <li>Open file geochemical data has been compiled by the GSQ and is released in sets of blocks (25 sub-blocks). However, except for the Beefwood results previously released by R3D, no surface geochemistry has been completed within this survey area.</li> </ul>
Geology	<ul> <li>R3D is specifically targeting large scale porphyry copper and intrusive related gold systems associated with large scale alteration and mineralisation. Gravity highs and magnetic highs and lows (magnetic destruction) commonly highlight this style of mineralisation.</li> </ul>
Drill hole Information	No drilling undertaken.
Data aggregation methods	Not applicable.
Relationship between mineralisation widths and intercept lengths	Not Applicable.
Diagrams	See body of ASX release for location and current interpretation.
Balanced reporting	The accompanying document is a balanced report. The geophysical data capture and interpretation are state of the art.
Other substantive exploration	All meaningful information has been reported
data	<ul> <li>As R3D has concentrated on the new geophysical data – only government solid geology interpretation from low resolution aerial geophysics has been completed in the survey area.</li> </ul>
Further work	<ul> <li>Geophysical verification of these geophysical anomalies by the use of airborne Electro Magnetics (EM) is planned for the 2022 field season.</li> </ul>
	<ul> <li>Geological mapping and pXRF soil orientation lines are planned for the south-eastern exploration permits – especially in areas of outcropping or sub-cropping volcanics and possible intrusive complexes.</li> </ul>

## References

Queensland Government Open File Geophysical Data – aerial magnetics and thorium radiometrics and ground gravity data.

Geological Survey of Queensland (GSQ) Open Data Portal – Geochemistry-Open File Compilation sets by Blocks of soil, stream and rock chip data and drill holes.

GSQ 1:100,000 geological and structural mapping – based on existing geophysical data packages.



### **Falcon Survey and Geophysical Specifications**

### Survey

Flight Line Spacing	200m
Flight Line Direction	000 degrees
Tie Line Spacing	NA
Tie Line Direction	NA
Minimum Line Length	14.6km
Flying Height (Dependent on Risk Assessment / Terrain)	80m
NOTE: FLIGHT SPECIFICATIONS ARE SUBJECT TO RI	ECON FLIGHT AND FINAL ONSITE SAFETY ANALYSIS

#### Laser Scanner – for terrain corrections

Description	Specification
Manufacturer/Model	Riegl LMS-Q140i-80 (or equivalent)
Sampling rate	276 samples per line, 20 scans per second
Range	Up to 350m (depending on target reflectivity)
Accuracy	+/- 2.5cm (+/- 10cm worst case)
The laser scanner scans perpendicular to the flight path +/- 40 degrees from	

### **Airborne Magnetometer**

Description	Specification
Manufacturer/Mode	Scintrex / CS-3 cesium vapor (or
Resolution	0.01 nT
Operating Range	15,000 – 105,000 nT
Sampling Rate	10 Hz

### **Base Station Magnetometer**

A Proton Precession or Cesium Vapor magnetometer ground station for diurnal corrections with a 0.01nT resolution, cycle at 1-second intervals. The base station magnetometer will be run during flying hours to monitor the diurnal field.

### Fluxgate Magnetometer

One three-axis fluxgate magnetometer with each sensing axis oriented at approximately 90 degrees to the other two and each with a sensitivity of 1 nT or better sampled at the same rate as the aircraft TMI sensor.

### **GPS Positioning/Navigation Equipment**

Description	Specification
Manufacturer/Mod	NOVATEL OEMV-3G 14 Channel (or equivalent)
Resolution	0.00001 degrees
Accuracy	0.6-1.8m
Sampling Rate	1 Hz