R3D Resources Limited | ACN: 111 398 040 | ASX: R3D
169 Blues Point Road, McMahons Point NSW 2060 Australia | Tel: +61 2 9392 8032

3 August 2021

R3D Resources Secures Prospective EPM and Commences Gravity Survey

R3D Resources Limited, (R3D Resources or Company), a significant copper-gold explorer and developer in the Chillagoe Region in North Queensland, has accumulated a prospective copper/gold tenement package in this region, advises that it has a secured an exclusivity agreement potentially leading to an Option Agreement with Three Rivers Prospecting Pty Ltd and Michael Thompson to purchase the Beefwood project which is defined as EPM 26399.

The Beefwood Project (EPM 26399) is strategically positioned within the Newcrest Mining's Bulimba Project and provides continuity across the western portions of these tenements. As discussed below, while the Beefwood Project is obscured by Cretaceous cover sediments, it is prospective due to several factors. These are:

- Complex basement geology which is close to a major structural zone known as the Gamboola Fault Zone, which itself is interpreted as a potential splay of the northwest trending portion of the Palmerville Fault. These structures are interpreted as a major crustal-scale fault which separates the Forsayth and Yambo Sub-Provinces of the Etheridge Province;
- Co-incident gravity and intense, complex magnetic anomalies;
- Geochemical pathfinder element anomalies at surface and visible gold (up to 2mm flakes) in iron pisoliths which retain goethitic cutans;
- Regolith breccia samples (heavily leached) with haematite and goethite matrix with angular quartz, carbonate and volcanic clasts and quartz-rich breccias with tourmaline and occasional remnant chalcopyrite in the matrix; and
- Areas of previously unrecognised outcropping basement (rhyolitic Ignimbrites).

R3D Resources believes that the area is highly prospective for porphyry, epithermal and intrusion-related mineralisation within the Meso-Proterozoic basement country rock represented as the Staaten River Metamorphics of the Etheridge Province, specifically associated with discordant Palaeozoic (Kennedy Province Magmatism) intruding along dilatant structural junctions, but also associated with long lived magmatic/hydrothermal systems, within a larger complex of nested ash-flow calderas.

The terms of the agreement include:

- A two-week exclusivity period for cash payment of $10,000.
- An Option Price of 1.925 million shares issued at 20 cents per share and equivalent to a payment of $385,000. These shares will be escrowed for 12 months.
- The Option Period to 31 May 2022 within which R3D Resources can exercise the option by paying $385,000 in shares priced at the one-month VWAP immediately prior to the option exercise notification.
- A residual 1% NSR royalty on any production is then payable to the parties and a minimum $125,000 expenditure commitment prior to 31 March 2022.

The Beefwood project provides the Company with a prospective tenement which complements the existing Bulimba package. The area has received little exploration in the past and historical drilling is limited to three shallow holes drilled by North Limited in the early 1990s which were well to the east of EPM26399. The deepest hole was 152 metres in depth but did not intersect basement (Reference: QDEX CR26209 – McInnes, 1994). The limited exploration apppears to reflect explorers being discouraged by Carpentaria Basin sedimentary sequences overlying and obscuring the basement geology. However, the discovery of outcropping basement rocks by Three Rivers Prospecting Pty Ltd within the tenement suggests that the thickness of cover sequences may be historically over estimated and may in fact be quite variable. This is supported by regional AUSAEM 20km survey lines immediate North and South of the tenement and also by 3D modelling of regional magnetic and gravity data, as well as the outcropping ignimbrite formations.

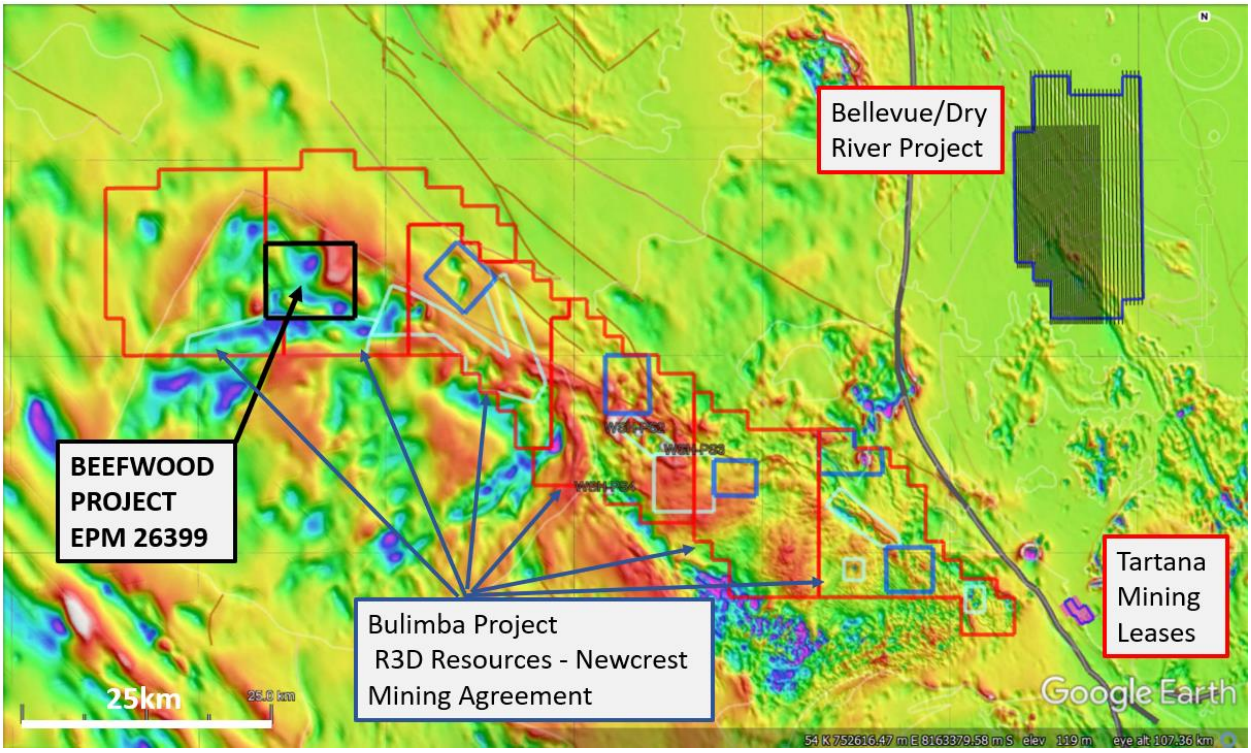


Figure 1. Location of the Beefwood Project in relation to the Bulimba tenements and R3D Resources' Tartana Mining Leases and Bellevue/Dry River Project. Plotted on RTM Mag QLD DNRM.

Bulimba Project – Falcon Gravity Magnetic Survey in Progress

The Bulimba Project covers 1250km^2 of prospective tenements west of the Tartana mining leases and is subject to the Newcrest Mining – R3D Resources agreement whereby:

- R3D Resources agrees to spend $335,000 on exploration activities;
- Newcrest transfers the Bulimba EPMs to R3D Resources and has an ongoing 1.5% to 2% royalty future production from the Bulimba EPMs depending on whether the head grade is above or below 1 g/t Au equivalent; and
- If a resource is discovered greater than 1 million oz equivalent, Newcrest has the right to 'claw back' 75% of the project by spending three times R3D Resources' expenditure to-date.

The Beefwood project described earlier is not subject to the Bulimba agreement with Newcrest Mining.

As part of the expenditure commitment, R3D Resources has commissioned Xcalibur/CGG Aviation Pty Ltd to complete a high-resolution Falcon Gravity and Magnetic Survey of the western EPMs of the Bulimba Project. This survey is also covering the Beefwood project. This follows the successful Falcon Gravity and Magnetic Survey conducted late last week on the Bellevue/Dry River Project.

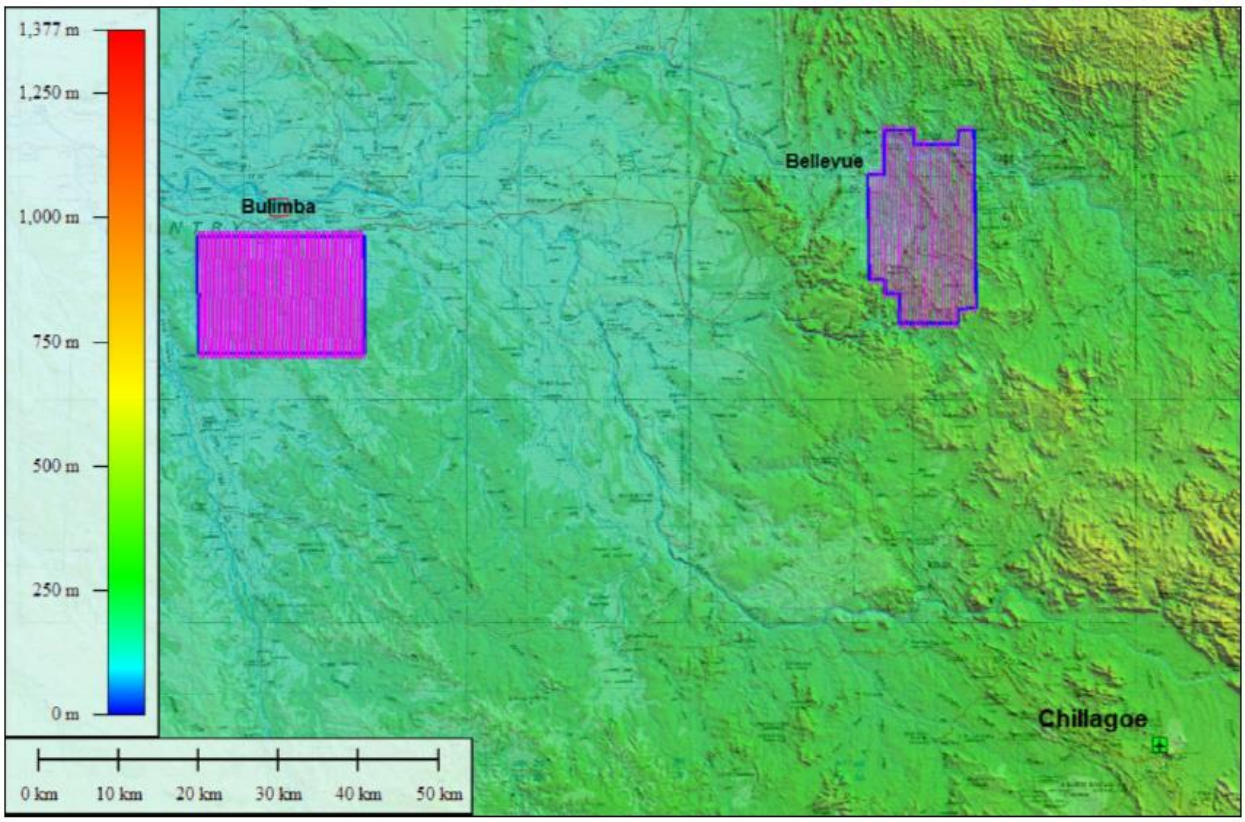


Figure 2. Bulimba Gravity Survey Area.

Both the Bellevue and Bulimba Falcon surveys are expected to be completed today. R3D Resources believes the Falcon survey is appropriate for the western tenements in the Bulimba project as well as the Beefwood project given the geological complexities in this area and likelihood of density contrasts associated with hydrothermal alteration. The Company is planning very low frequency (12.5Hz) Heli EM surveys for select parts of the eastern Bulimba tenements early next year.

Beefwood Project Detail

EPM 26399 is located approximately 150 km northwest of Chillagoe with access to the tenement via the Burke Developmental Road (Figure 1). The project area was originally selected by Three Rivers Prospecting Pty Ltd based on the modelled density anomaly in the middle of the tenure (Figure 3a), in a region of complex magnetics (Figure 3b) and close to the Gamboola Fault zone which has been interpreted as a western extension to the Palmerville Fault zone – a major crustal feature. Newcrest Mining has also targeted this zone with its Bulimba project which is now part of the Bulimba agreement with R3D Resources.

Further south the Tartana copper project, the King Vol Zinc Mine, the Mungana Copper/Gold Mine and Red Dome Gold mine all lie near the north-western trend of the Palmerville Fault.

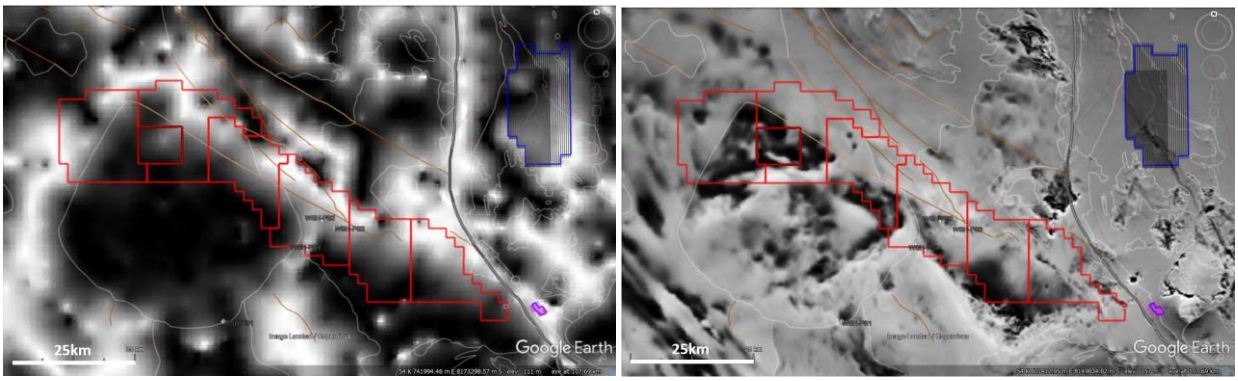


Figure 3. 3a. Gravity (2019 De-Trended Isostatic Residual Gravity 1VD CSCBA (Geoscience Australia). 3b Magnetics 2019 (TMI Magnetic Grid of Australia 40m cells – Geoscience Australia). Note gravity anomaly in the centre of the gravity image within the Beefwood tenement. (Source: TRP)

Figure 4a below is a larger scale image of the gravity high while Figure 4b is the magnetic image but overlain by the gravity anomaly with a coincident gravity high in the centre of the image (pink).

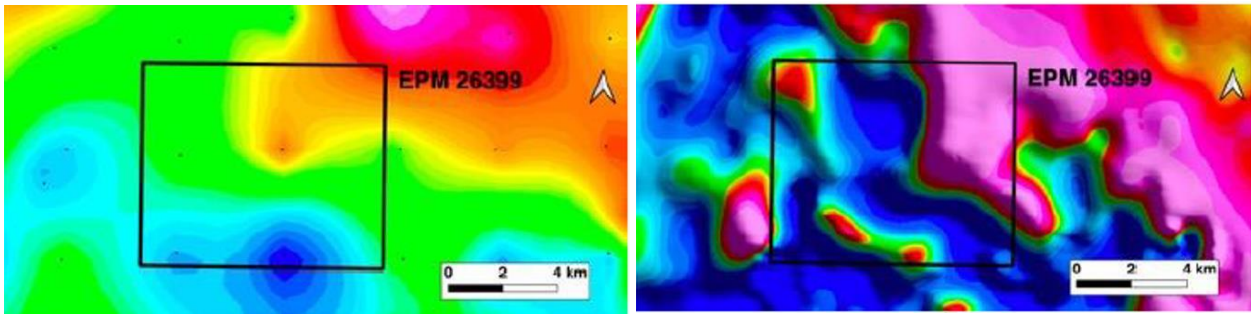


Figure 4. 4a. Bouger Gravity 1VD, 4b. Magnetics – RTP (red – high, blue -low) overlain by Bouger Gravity data which reinforces co-incident gravity/mag high in the centre of the tenement. (Source: TRP).

Landsat imagery combined with the identification of outcropping basement (rhyolitic ignimbrites) supports an interpretation of a series of nested calderas with a later one in the southwest corner of the Beefwood project.

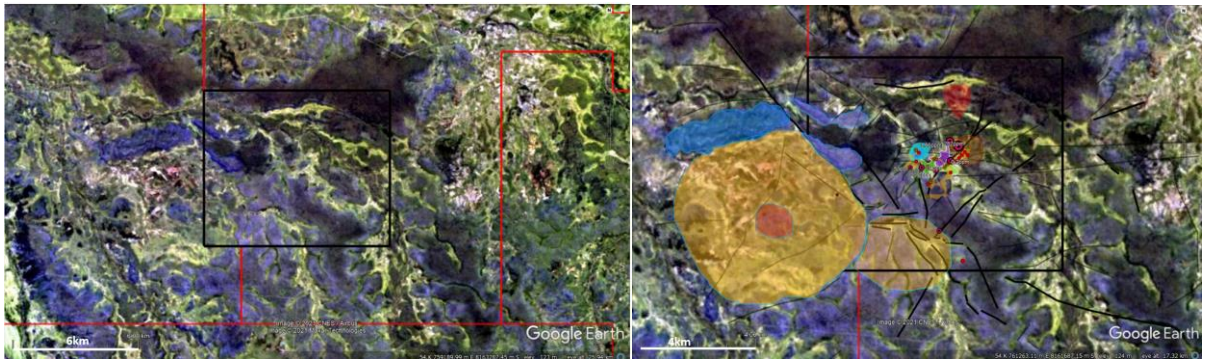


Figure 5. 5a Landsat enhanced bands 7/6/2 'Geology'. 5b. Landsat enhanced bands 7/6/2 Outcrops and inferred sub-cropping ash flow caldera's (yellow/orange). Outcropping rhyolitic ignimbrites overlain as blue polygons in figure 5b. (Source: TRP)

Three Rivers Prospecting Pty Ltd's structural interpretation is presented in Figure 6 and shows the potential later caldera in the southwest and high intensity of faulting proximal to the gravity/mag high complex in the centre of the tenement.

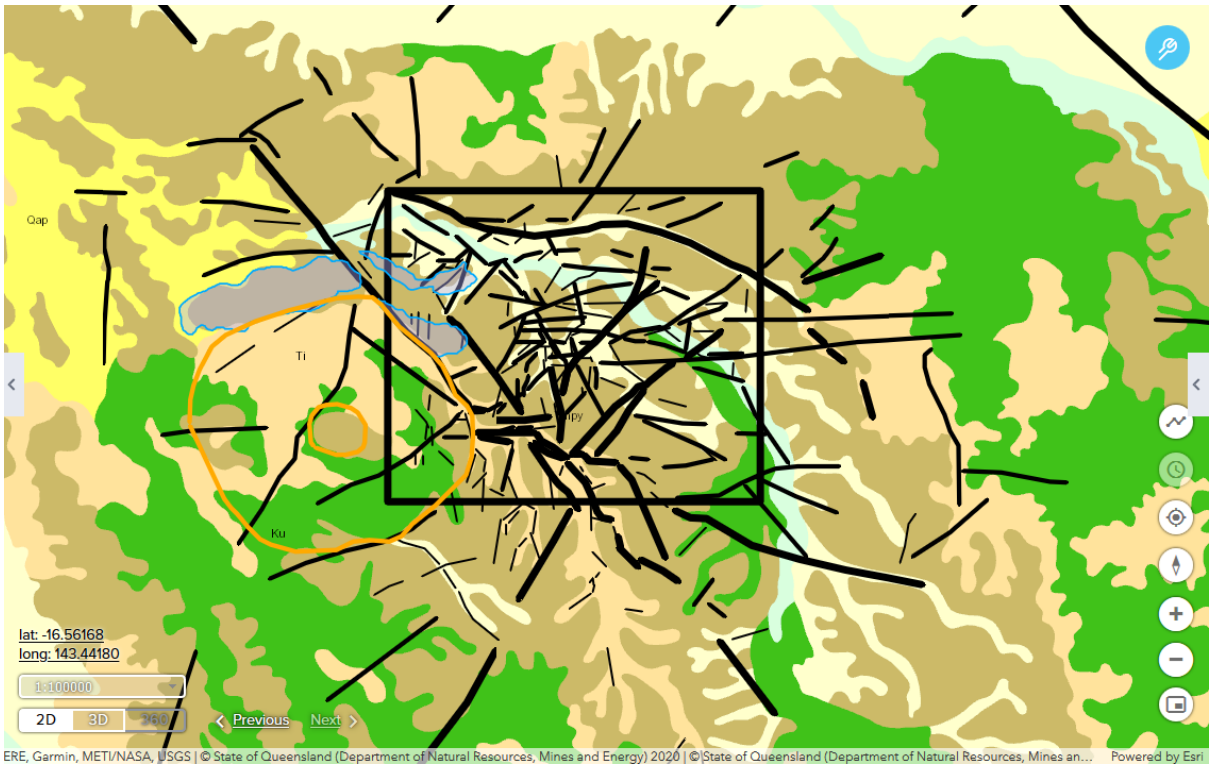


Figure 6. *1:100K GSQ Surface Geology. Overlain polygons (blue) represents mapped extents of outcropping felsic volcanic breccia and ignimbrite. Orange polylines represent sub-cropping (hypothesised) collapse cauldron with possible resurgent dome in centre. Black polylines are hypothesised sub-surface penetrative structures interpreted from combinations of remotely sensed data and field observations – particularly sub-surface influences on cover. The outcropping felsic volcanics may represent a partially exposed and structurally disrupted ring-dyke complex associated with collapse of the sub-circular feature. Landsat bands 7/6/2 and 5/6/2 highlight the outcrops and inferred sub-crops against the more extensive unconsolidated cover (Wyaaba beds and Bulimba formation) particularly well. (Source TRP).*

Soil geochemistry surveys carried out by TRP have identfied anomous gold values and other pathfinder elements (Figue 7) which tend to be higher tenor in the region of the gravity/mag high.

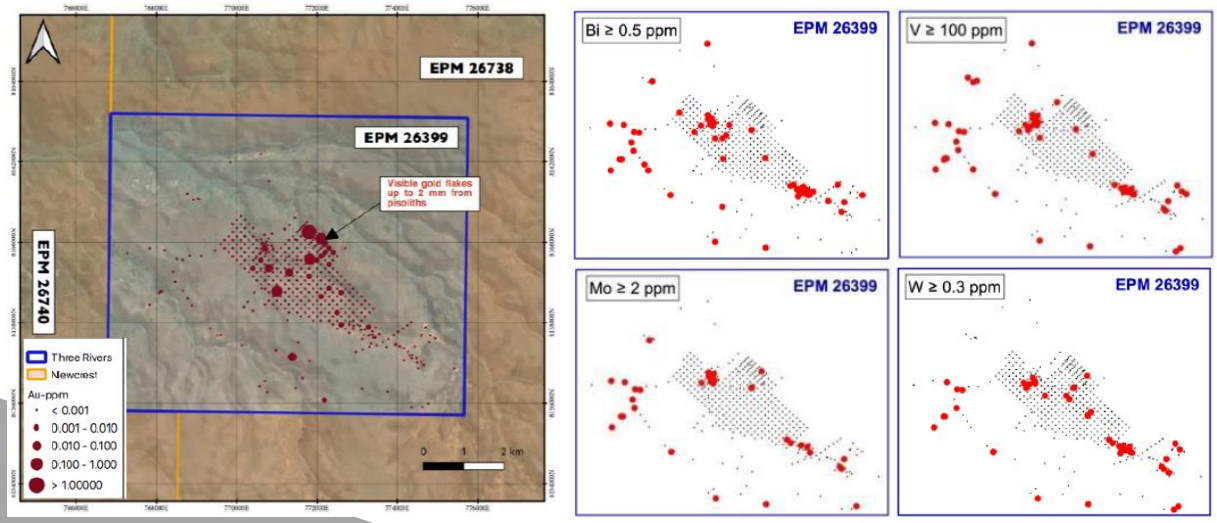
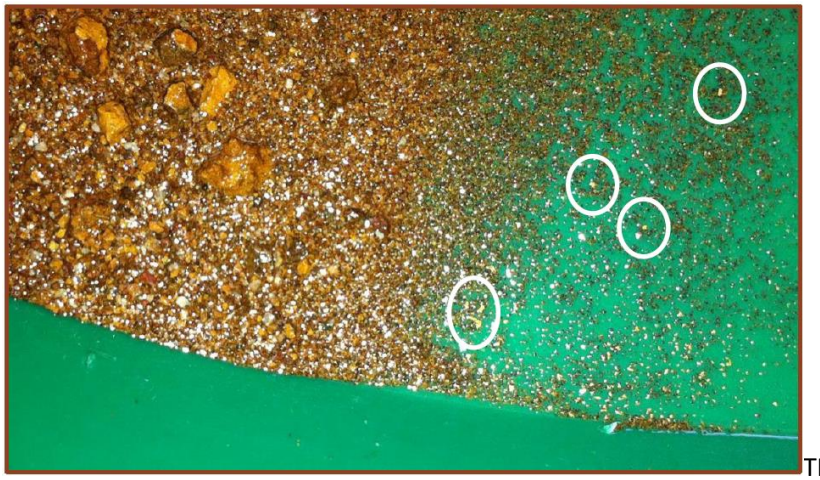


Figure 7. Soil Geochem Survey with anomalous path finder elements including gold. (Source: TRP).

The anomalous gold is particularly encouraging with crushed Iron pisolith gold samples containing ragged visible gold flakes up to 2 mm in length (Figure 8).



TRP

Figure 8. Crushed Iron pisolith sample containing gold grading up to 282 g/t in iron pisolites. (Source: TRP)

TRP has also identifed an array of breccias in regolith samples which are interpreted to be derived from basement lithologies. The regolith contains mineralised breccia clasts. The breccia fragments contain a haematite and goethite matrix with angular quartz and volcanic clasts and in some cases are a quartz-carbonate rich breccia with tourmaline and occasional chalcopyrite in the matrix.

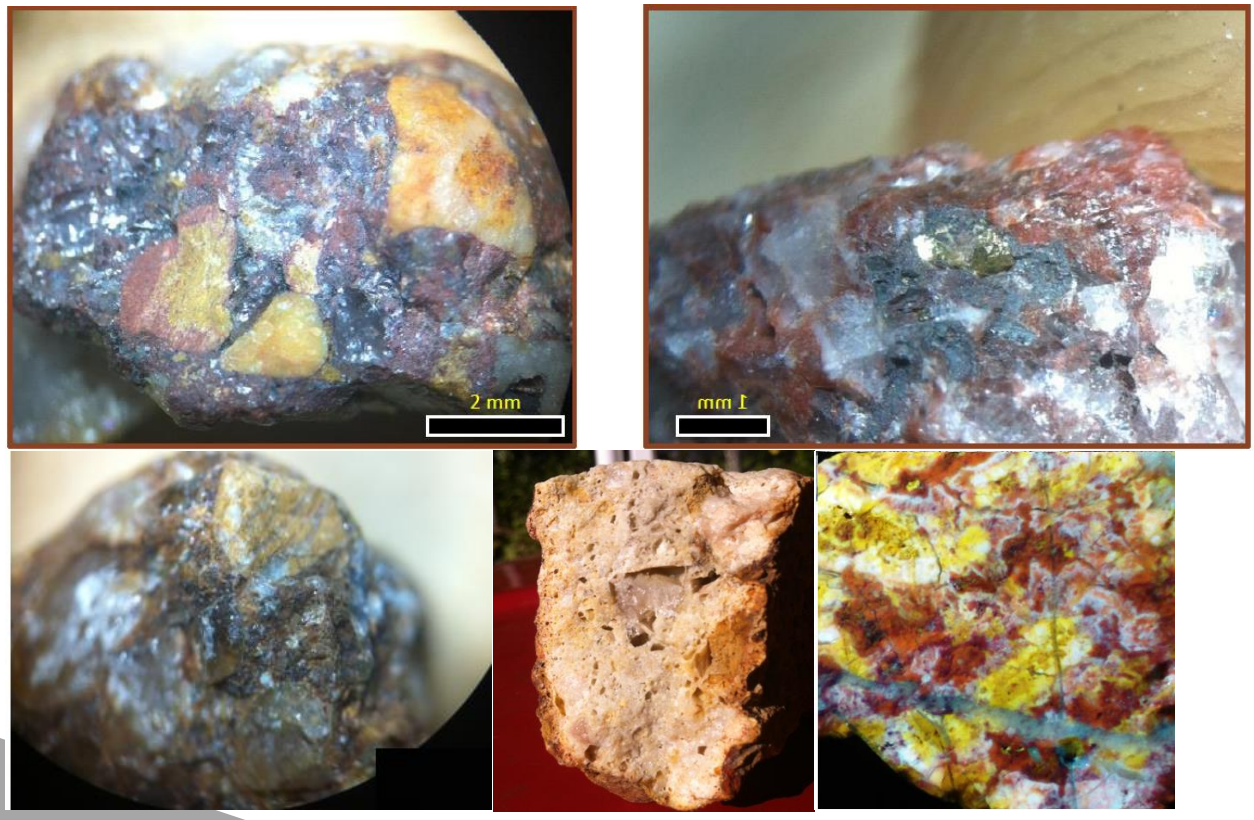


Figure 9. Clockwise from top left. 9a. Breccia framents with haematite and goethite matrix with angular quartz and volcanic clasts. 9b. Quartz-rich breccia with tourmaline and chalcopyrite in the matrix. 9c. Low temp high acid steam alteration of intense silica stockwork breccia 9d. Possible leached cap vuggy silica and specimen (150mm across) with possible alunite growths in cavities. 9e. Epithermal sheeted veining clast in tourmaline shingle breccia fragment (Source TRP).

The distribution and composition of the pathfinder elements, the breccia regolith samples and the presence of outcropping ignimbrites (Figure 10) suggest both the geophysical and geochemical anomalies could relate to mineralisation in the basement rocks which may not be prohibitively deep in the Beefwood project area.

Figure 10. Outcropping ignimbrites, which have previously been mapped as deep (non-prospective) cover by the Geological Survey of Queensland and Geoscience Australia. The volcanic litholgies include brecciated rhyolitic ignimbrite.

In summary, the combined Magnetisation Vector Inversion and Gravity Inversion coincident with soil Geochem (Carpentaria cover removed) for the Beefwood project is presented in Figure 11. Fe/(Fe/Mg) ratios (cool to hot colours reflect low to high ratio). Point sizes small to large (low to high) (Zr/Ti)/(Nb/Y).

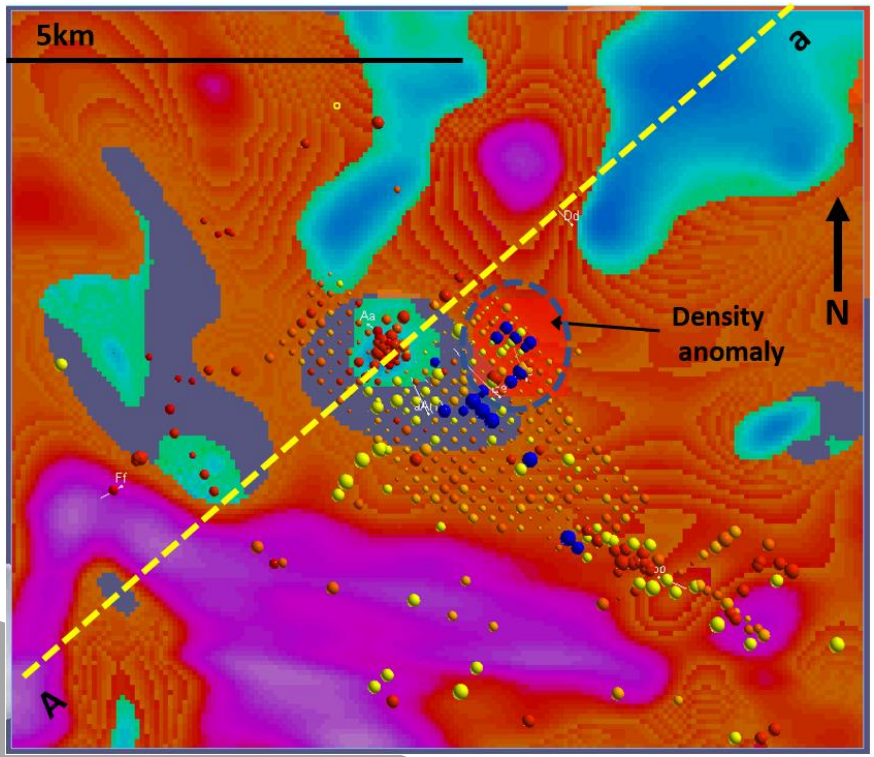


Figure 11. Magnetisation Vector Inversion and Gravity Inversion with soil Geochem (Carpentaria sedidment cover removed) for the Beefwood Project. Fe/(Fe/Mg) ratios (cool to hot is low to high ratio). Point sizes small to large (low to high) (Zr/Ti)/(Nb/Y). (Source: TRP). The yellow line (A-a) in Figure 11 is interpreted in cross section in Figure 12.

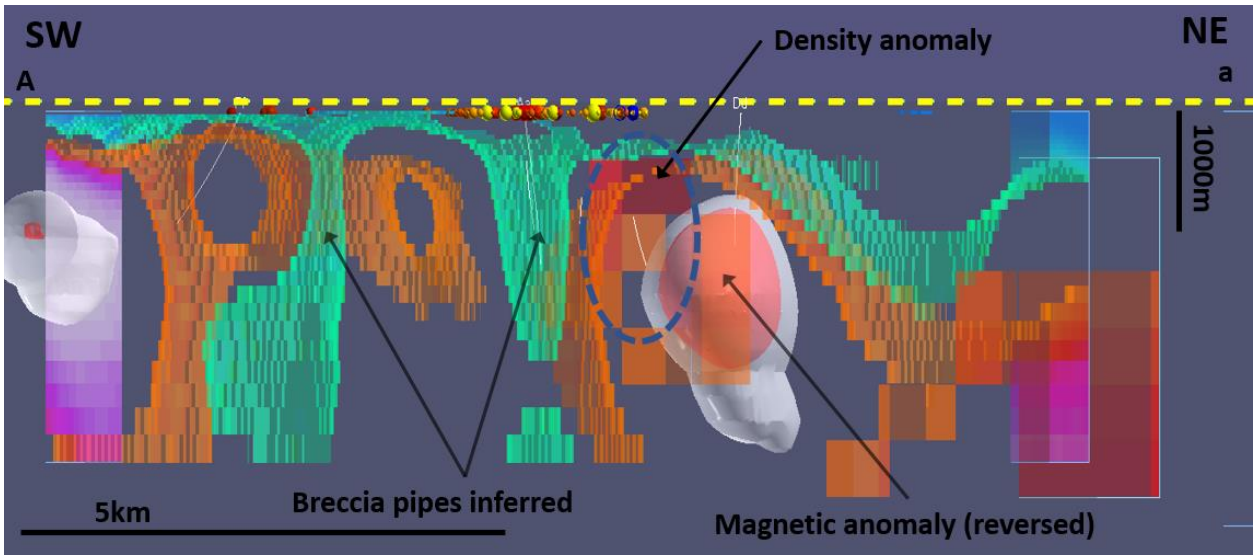


Figure 12. Cross-section derived from Magnetisation Vector Inversion and Gravity Inversion (3D models). Anomalous geochemistry is presented at surface above inferred breccia pipes (Source: TRP).

Figure 12 indicates a depth to crystalline basement appearing to increase to the north and north east corner of the Tenement. However the outcropping ignimbrites in the Western areas of the Beefwood project area constrain the depth of cover to levels that were previously considered to be far deeper. R3D Resources believes that the project area along with parts of the surrounding Bulimba project are highly prospective but have been previously ignored due to expectations that the depth to basement would undermine the economics of any project development. However, this attitude is now changing for many areas.

For further information

Stephen Bartrop
Managing Director

R3D Resources Limited
M: + 61 408486163
P: + 61 2 9392 8032

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

About R3D Resources

R3D Resources Limited (ASX:R3D) recently acquired Tartana Resources Limited, a significant copper-gold explorer and developer in the Chillagoe Region in North Queensland.

The Company 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 begun to restart this plant to provide future cash flow through the sale of copper sulphate. In Tasmania, R3D 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 will provide cash flow which will underpin the Company's extensive exploration programme detailed below and in the R3D 26 May 2021 Prospectus.

Qualifying statement

The information in this Report that relates to Exploration Information is based on information compiled by Dr Stephen Bartrop who is a fellow of the Australian Institute of Geoscientists.

Dr Stephen Bartrop, Managing Director of R3D Resources, 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 JORC Code. Dr Stephen Bartrop is full-time personnel of R3D Resources and consents to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

Disclaimer Regarding Forward Looking Statements

This ASX announcement (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 which could cause actual values or results, performance, or achievements to differ materially from the expectations described in such forward-looking statements.

R3D Resources does not give any assurance that the anticipated results, performance, or achievements expressed or implied in those forward-looking statements will be achieved.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	**Beefwood Project:** 441 surface or near surface lag, sand and termitaria samples have been used. Lag samples were obtained using a 100mm diameter hand auger to a depth of approximately 300mm and then separating the coarse lag +1.6mm-6mm fraction for analysis by ALS Laboratories using ME-MS41 or AuME-ST44 (older ALS method code) for multi-element by Aqua Regia Digest (ARD) and 50g Fire Assay (FA) Au-ST44 for gold prior to that method being included in the AuME-ST44 analysis procedure (a more recent ALS method). In the case where a coarse lag sample could not be recovered in dune sand covered areas a sand sample was retained for the same analyses. One early initial grab sample of Iron pisoliths, was analysed by fusion xrf and Au-AA26 25g FA (plus overlimit where required). The types of sample media and spatial locations using hand-held GPS 9+/- 5m accuracy) were recorded in a master data sheet. Samples were obtained at spacings between 50 and 250m on a regular grid. Several contiguous sampling campaigns were carried out over several years between 2012 and 2019.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond	Not applicable

Criteria	JORC Code explanation	Commentary
	tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not applicable.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.	Not applicable.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples were prepared (weighed, logged, crushed, pulverized, split) according to ALS procedures WEI-21, CRU-32a, PUL-25c, SPL-22y or their prior equivalent methods. Samples were not subsampled prior to submission for preparation and analysis, except for separation of size fractions in the case of coarse lag.

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	Field duplicates were not routinely obtained, except in specific cases. QAQC and sub-sampling for analyses were under ALS protocols. Sample sizes (in field) were in almost all cases between 500g and 2kg. The coarse fraction lag media was preferred where available, due to the possible effect of dilution from aeolian sand. Weights and certification of analyses were provided by ALS laboratories.
		Y
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	ARD (AuME-ST 44) methods are a partial digestion. Four Acid digest were not used due to cost and also the reconnaissance nature of the programs and also due to the fact these are regolith samples and not in-situ rock. Lab Standards, Duplicates, Blanks and checks were undertaken according to ALS protocols. Field Duplicates were not routinely taken, due to the reconnaissance nature of the sampling campaigns.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	N/A

Criteria	JORC Code explanation	Commentary
	The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	Data points (sample locations) were recorded using hand-held GPS to an accuracy of 5m in the vast majority of cases. Sample grids were planned using regular co-ordinates and were approached to the nearest possible accuracy (<5m) in the field. Grid system used was WGS 84 datum UTM/UPS (nearly equivalent to MGA94)
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	Data spacing varies from 50m to 250m within regular grids, but in the case of linear transects across non-gridded areas a single directional dimension of between 50-200m was used. No compositing nor concentration methods were applied to any samples.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to	Orientation of gridded samples is unbiased directionally, as general alignment with assumed direction (structural) trends we obtained using equal grid spacings in the vast majority of cases. In the case of broader linear transects, directions cannot be assured of being appropriate given the uncertainty in covered terranes.

Criteria	JORC Code explanation	Commentary
	have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Samples were delivered to ALS Laboratories in either Brisbane or Townsville, by courier, within days of completion of each field campaign, intermittently over several years.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No formal audit or review of sampling techniques has been undertaken, however, advice has been obtained from several expert geochemists as to how to better improve sampling methodology including field QAQC (Duplicates etc) for forward programs. This has to be considered against the variable depths of cover and potential dilution by aeolian sand. It is the case, that variable depths of aeolian sand have hampered the consistency of media (for example sand dominating areas over lag, where an unconformity could not be reached by hand auger.

Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/ number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Beefwood project consists of EPM26399, which is at the time of this report owned by Three Rivers Prospecting pty ltd (90%) and Mr Michael Thompson (10%). There were no notifiable parties at the date of grant of EPM26399. There is a Native Title claim under consideration by the Federal Court - QUD178/2018, registered on 02/05/2018 on behalf of the Wakaman People (#5).
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All prior exploration work on EPM26399 has been undertaken by Three Rivers Prospecting PTY LTD and/or Mr Michael Thompson.
Geology	Deposit type, geological setting and style of mineralisation.	Potential Magmatic/Hydrothermal Porphyry-Epithermal telescoped systems – inferred predominately from state geophysics and surficial and/or remotely sensed observations.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar	N/A

Criteria	JORC Code explanation	Commentary
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole downhole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	N/A

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	N/A
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	Maps and sections for each project are included in the accompanying report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All relevant information from the available historical data has been presented.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock	Details of other exploration data and supporting information is provided in the accompanying report.

Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Details of intended exploration activities are recorded in the accompanying report.