

ACN 103 367 684

# **ASX ANNOUNCEMENT**

## **29 OCTOBER 2020**

#### **ASX Code: RDM**

Red Metal Limited is a minerals exploration company focused on the exploration, evaluation and development of Australian copper-gold and basemetal deposits.

### **Issued Capital:**

245,591,743 Ordinary shares

11,025,000 Unlisted options

#### **Directors:**

Rob Rutherford Managing Director

Russell Barwick Chairman

Joshua Pitt Non-executive Director

#### **RED METAL LIMITED**

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# THREE WAYS ZINC & COPPER PROJECT DRILLING UPDATE

Proof of concept drill tests on two separate high conductance magnetotelluric targets have been completed on Three Ways. Both holes TWD2001 and TWD2002 intersected mafic intrusive rock types (gabbro and dolerite) that did not explain the source to these very strong and laterally continuous magnetotelluric anomalies.

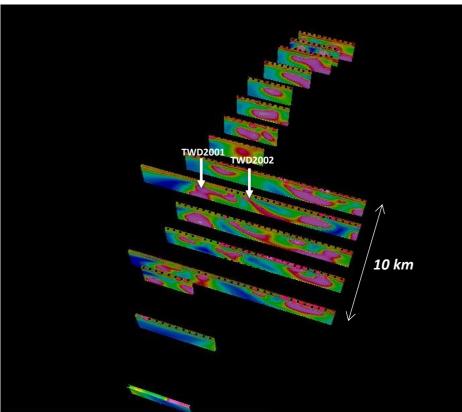
Drill hole TWD2001 intersected a weak foliated gabbro to the end of hole at 717.7 metres. Conductive rock types include a 7.8 metre interval of semi-massive pyrrhotite veins from 665 metres (Figure 2a) and a narrow 0.5 metre interval of pyrrhotite-chalcopyrite veining from 614.4 metres (Figure 2b). Although the veins contain pyrrhotite, a strongly conductive mineral, the intervals are considered too narrow to cause the magnetotelluric anomaly.

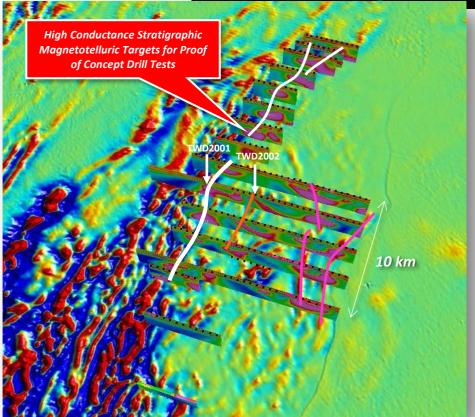
Drill hole TWD2002 intersected dolerite to the end of hole at 534 metres. No potentially conductive source rocks were observed.

No economically significant intervals of copper mineralisation or lead-zinc mineralisation are visible in either of the holes. Assays for base metals, gold and other trace elements are pending.

Geophysical techniques to improve follow-up drill positioning on these unresolved high conductance magnetotelluric anomalies are being assessed. Advanced three dimensional modelling and trials of deeper penetrating, moving loop electromagnetic techniques across the drilled targets are being considered.

The Three Ways program is funded by OZ Minerals (ASX: OZL) under the terms of the Greenfields Discovery Alliance. The project is trialing the use of magnetotelluric surveying to identify previously unrecognised, zinc and copper prospective sub-basins with no past drill history located some 130 kilometres along trend from the Dugald River zinc-lead-silver mine.





[Figure 1] Three Ways Project: Oblique view looking towards the north northwest showing stacked two dimensional conductivity depth inversions of the magneto-telluric data (above) and underlain by vertical gradient magnetic imagery (below). The imagery maps laterally continuous, highly conductive trends in the basement rocks which also follow magnetic trends. Both drill holes TWD2001 and TWD2002 intersected mafic intrusive rock types (gabbro and dolerite) that did not explain the source to these strong and laterally continuous magnetotelluric anomalies.



(a) Semi-massive pyrrhotite veins and breccia



(b) Semi-massive pyrrhotite-chalcopyrite vein zone

[Figure 2] Three Ways Project: Conductive rocks from TWD2001 (a) A narrow 7.8 metre interval of semi-massive pyrrhotite veins from 665 metres (b) A narrow 0.5 metre vein zone from 614.4 metres containing visible pyrrhotite with chalcopyrite.



 $[Figure \ 3] \ \ Northwest \ Queensland \ and \ Northern \ Territory: \ Major \ deposits \ and \ Red \ Metal \ tenement \ locations.$ 

This announcement was authorised by the Board of Red Metal. For further information concerning Red Metal's operations and plans for the future please refer to the recently updated web site or contact Rob Rutherford, Managing Director at:

Phone +61 (0)2 9281-1805 www.redmetal.com.au

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**Rob Rutherford** 

**Managing Director** 

**Russell Barwick** 

Chairman

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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" (the JORC Code). Mr Rutherford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

Table 1 – Three Ways Project: JORC 2012 sampling techniques and data

Criteria	JORC 2012 Explanation	Commentary			
Sampling Techniques	Nature and quality of sampling	TWD2001 and TWD2002 are deep rotary/mud diamond core holes designed to test the source of the regionally significant high conductance magnetotelluric anomalies. TWD2001 comprises of rotary mud chips to 287.6 metres, HQ diamond core to 392.5 metres and NQ2 diamond drill core to the end of hole at 717.7m. TWD2001 comprises of rotary mud chips to 312.9 metres, HQ diamond core to 386.4 metres and NQ2 diamond drill core to the end of hole at 534m. The method of drilling is considered to be of an acceptable quality for evaluating the source of a geophysical target and reporting of visual exploration results.			
	Include reference to measures taken to ensure representativity samples and the appropriate calibration of any measurement tools or systems used.	Sampling for geochemical analysis is in progress. Magnetic susceptibility values were measured using a hand held KT9 susceptibility metre which utilises an air calibration to zero the instrument prior to taking a measurement.			
	Aspects of the determination of mineralisation that are Material to the Public Report.	Visual results were observed by an experienced senior geologist and checked by the Exploration Manager of Red Metal.			
Drilling Technique	Drill type (eg 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 tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	to penetrate through the cover sequences to extract HQ and NQ2 diameter core samples in the basement.  The core was oriented using Reflex Act3. The drill hole was surveyed using an Access Champ north seeking gyro.			
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The length of recovered core and the core rock quality are logged for each core run. Core recovery throughout the fresh basement rocks is very good (100%). Recoveries throughout the weathered zones in the top 20 metres of basement are also very good varying from 80% to 100%			
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond core is reconstructed into continuous runs on an angle iron cradle and marked with orientation lines. Depths are checked against depths marked on the core blocks and rod counts are routinely performed by the drillers.			
	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.	No bias expected as very good core recovery			
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.	Quantitative geotechnical logging including RQD and core recovery are measured for each core run.  Qualitative and quantitative codes and descriptions are used to record geological data such as lithology, mineralisation and alteration prior to sampling. Quantitative structural data is also measured prior to sampling. Magnetic susceptibility is quantified for the total length of the core with measurements taken every 0.5m and averaged over every core run (3 to 6 metres)			
	Core photography	Core is photographed wet and dry.			
	The total length and percentage of the relevant intersections logged.	The total lengths of TWD2001 and TWD2002 have been geologically logged. RDQ and magnetic susceptibility has been measured for the total length of the core.			
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No assay results reported			

	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 representativity 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.	
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.	No assay results reported
	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.	No geophysical tools were used to determine element concentrations at Three Ways
	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.	No assay results reported
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.	No assay results reported
	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.	The collar position for TWD2001 and TWD2002 were surveyed by Handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m
	locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource	Handheld GPS using GDA94, Zone54 datum. GPS locations are
	locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m
	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	Handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m  GDA94_Zone54 datum.  Topographic relief has been extracted using the ELVIS digital terrain
points  Data spacing and	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 spacing for reporting of Exploration	Handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m  GDA94_Zone54 datum.  Topographic relief has been extracted using the ELVIS digital terrain information at Geoscience Australia

	Whether sample compositing has been applied.	No sample compositing has been applied		
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.	Orientation measurements are in progress		
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No assay results reported		
Sample security  The measures taken to ensure sample security.		<ul> <li>Core has been transported to Red Metal core farm at Cloncurry for detailed logging and core cutting</li> </ul>		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits have been undertaken at this early stage.		

# Table 2 Three Ways Project: JORC 2012 reporting of exploration results

Criteria	JORC 2012 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 Three Ways drilling is located within EPM 26941 situated in the Gulf region of north-west Queensland. EPM 26941 is owned 100% by Rea Metal Limited. OZ Minerals have an option to earn 51% of the tenement under the terms of the Greenfield Discovery Alliance (refer to RDM ASX announcement lodged 30 January 2019). An ancillary exploration access agreement has been established with the native title claimants and a standard landholder conduct and compensation agreement has been established with the pastoral lease holder at Lorraine Station.		
	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 tenements are in good standing and no known impediments exist		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous drilling by other parties		
Geology	Deposit type, geological setting and style of mineralisation.	The project is trialing the use of magnetotelluric surveying to identify previously unrecognised, zinc and copper prospective sub-basins with no past drill history located some 130 kilometres along trend from the recently commissioned Dugald River zinc-lead-silver mine. There is no past drill history on Three Ways and no understanding of the geological setting other than what is inferred from interpretation of regional magnetic and gravity imagery.		
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of survey information for all Material drill holes:	Refer to Table 3 for a summary of drill hole collar data for TWD2001 and TWD2002.		
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.	No assay results reported		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No assay results reported		
Relationship between	These relationships are particularly	True widths are estimated by measuring the alpha and beta values		

Criteria	JORC 2012 Explanation Commentary				
mineralisation widths and intercept lengths	important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	relative to the oriented core axis for bedding, banding or veining hole. At this stage of exploration insufficient data exists to confidently estimate true widths using the detailed orientation data.			
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 drill hole collar locations and appropriate sectional views.	No significant discovery to date			
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.	No assay results reported			
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 characteristics; potential deleterious or contaminating substances.	TWD2001 and TWD2002 intersected mafic intrusive rocks types (gabbro and dolerite) that fail to explain the source to these strong anomalies.  Drill hole TWD2001 intersected a weak foliated gabbro to the end of hole at 741 metres. Conductive rock types include a 7.8 metre interval of semi-massive pyrrhotite veins from 665 metres (Figure 2a) and a narrow 0.5 metre interval of pyrrhotite-chalcopyrite veining from 614.4 metres (Figure 2b). Although the veins contain pyrrhotite, a strongly conductive mineral, the intervals are considered too narrow to cause the magnetotelluric anomaly.  Drill hole TWD2002 intersected dolerite to the end of hole at 541 metres. No potentially conductive source rocks were observed.			
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).	Geophysical techniques to improve follow-up drill positioning on these unresolved high conductance magnetotelluric anomalies are being assessed. Advanced three dimensional modelling and trials of deeper penetrating, moving loop electromagnetic techniques across the drilled targets are being considered.			

Table 3 – Three Ways Project: Drill collar summary

Hole ID	Easting	Northing	Dip	<b>Grid Azimuth</b>	Depth	RL
TWD2001	421098	7890157	-75	254	717.7	72
TWD2002	424711	7890005	-75	264	534	79