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The Manager Company Announcements Office Australian Stock Exchange Limited Level 4, Exchange Centre 20 Bridge Street SYDNEY NSW 2000

**Electronic Lodgement** 

# DRILLING OF EM TARGET HIGHLIGHTS POTENTIAL FOR A LARGE MINERALISED SYSTEM AT WEST MUSGRAVE PROJECT

### **Highlights:**

- √ 5 RC holes completed with all holes intersecting zones of disseminated pyrite and specular hematite, some over 200m (downhole), in a sequence of volcanic rocks.
- ✓ The northern-most hole, RWMEM1\_5 intersected disseminated sulphide for over 210m (downhole).
- ✓ The presence of large volumes of sulphides may represent added exploration potential outside of the known Cu mineralisation at Tollu.
- ✓ The airborne EM (VTEM<sub>max</sub>) identified 10 other EM anomalies within Redstone's 100% owned West Musgrave Project and this result has increased their prospectivity.
- ✓ Multi element geochemical assay results are pending and will be assessed to establish the next phase of exploration.



The EM1A target is situated 3.5km to the north west of Redstone's Tollu Copper Project. The initial 5 hole drill program has defined an extensive occurrence of disseminated sulphide mineralisation (predominantly pyrite) including specular haematite of at least 100m thick and over 400m in strike length and remains open (Figure 1). EM1A was defined by an isolated late time electromagnetic (EM) anomaly and was modelled as a 25° north dipping plate with a depth extent of 145m and strike extent of 685m (refer to ASX release of 2 August 2017 for further information and Table 1).

In the recent RC drilling program five holes were drilled into the modelled plate at a 60 degree angle to the south, three central to the plate along strike 200m apart, and two targeting the plate approximately 50m to the north and south of the central drill hole. All drill holes intersected sulphides, continuously for at least 100m downhole, starting from between 79-92m downhole depth. The northern-most hole, RWMEM1\_5 intersected disseminated pyrite over 210m downhole, from 87m through to the end of hole at 300m. The zone of alteration and sulphide mineralisation identified remains open in all strike directions.

Geological logging indicates a pile of alternating mafic and felsic volcanic rock with occasional feldspar porphyry intercalated with layers of volcaniclastic breccia of mixed mafic and felsic clasts (Figure 1). There is an increase in concentration of sulphides related to the breccia unit. The sulphides occur as disseminations in breccia matrix, as stringer veinlets and as minor stockwork in the zones of highest sulphide concentrations which were visually estimated at up to 7% pyrite (outside this zone <1% pyrite).

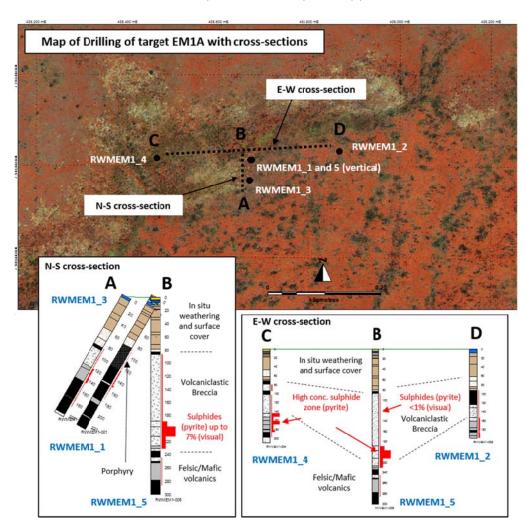


Figure 1 EM1A Cross-sections



Results of multi-element geochemical analysis of drill samples at EM1A are pending, and any defined pathfinder elements will be used to assess the potential of this newly defined target in conjunction with results of the on ground inspection.

A further 3,232m of drilling was completed at the Tollu Copper Project, which was focused on the Forio Prospect (**Forio**) and additional Induced Polarity (**IP**) geophysical targets identified as part of the recent project review. Geological logging has indicated the presence of chalcopyrite associated with quartz veins at Forio in a number of holes. Assay results are anticipated to be available in the next 2 weeks. Redstone Chairman Richard Homsany said

"We are very excited by this new development in the potential of the West Musgrave Project, which has seen immediate success as a result of the Company's recent review of the geological potential from a ground up re-assessment. This review identified the potential to not only expand the footprint of the known Tollu Copper Project but also identified the prospectivity for defining additional discoveries in the broader West Musgrave Project area. We look forward to updating investors on the potential of the EM1A target and the 10 other associated EM anomalies, as well as the follow up drilling on the Forio prospect as results become available and are interpreted."

HOLEID	EASTING	NORTHING	ELEV	GRID	COORD_QUALITY	ЕОН	AZI	DIP
RWMEM1-001	435671.5	7109813.8	562.8	MGA52	RTK_GPS0.1	228	180	-60
RWMEM1-002	435865.8	7109833.2	561.7	MGA52	RTK_GPS0.1	199	180	-60
RWMEM1-003	435670.0	7109769.4	563.0	MGA52	RTK_GPS0.1	206	180	-60
RWMEM1-004	435464.2	7109816.9	562.3	MGA52	RTK_GPS0.1	210	180	-60
RWMEM1-005	435675.0	7109813.7	562.5	MGA52	RTK_GPS0.1	300	0	-90
TLC147	438699.6	7109201.9	553.5	MGA52	RTK_GPS0.1	75	270	-60
TLC148	438724.5	7109151.7	553.1	MGA52	RTK_GPS0.1	100	270	-60
TLC149	438749.9	7109101.8	553.3	MGA52	RTK_GPS0.1	175	270	-60
TLC150	438724.3	7109051.0	553.9	MGA52	RTK_GPS0.1	100	270	-60
TLC151	438749.0	7109001.0	554.4	MGA52	RTK_GPS0.1	175	270	-60
TLC152	438699.1	7108951.5	555.1	MGA52	RTK_GPS0.1	100	270	-60
TLC153	438674.3	7108901.4	555.9	MGA52	RTK_GPS0.1	150	270	-60
TLC154	438649.8	7108800.8	557.1	MGA52	RTK_GPS0.1	150	270	-60
TLC155	438624.2	7108700.7	558.5	MGA52	RTK_GPS0.1	180	270	-60
TLC156	438579.4	7108601.6	559.6	MGA52	RTK_GPS0.1	200	270	-60
TLC157	438546.6	7108501.0	560.2	MGA52	RTK_GPS0.1	230	270	-60
TLC158	438782.2	7108501.8	556.9	MGA52	RTK_GPS0.1	225	270	-60
TLC159	438871.9	7108601.2	555.1	MGA52	RTK_GPS0.1	200	270	-60
TLC160	438879.5	7108701.1	554.7	MGA52	RTK_GPS0.1	200	270	-60
TLC161	439129.5	7109301.7	549.0	MGA52	RTK_GPS0.1	225	270	-60
TLC162	438649.8	7108751.6	558.0	MGA52	RTK_GPS0.1	174	270	-60
TLC163	438649.4	7108851.5	557.1	MGA52	RTK_GPS0.1	125	270	-60
TLC164	438724.6	7108901.7	555.5	MGA52	RTK_GPS0.1	250	270	-60
TLC165	438862.0	7108802.0	554.6	MGA52	RTK_GPS0.1	200	270	-60

**Table 1 - Drill Hole Collar Locations** 



#### **Competent Persons Statement**

The information in this document that relates to exploration results was authorised by Dr Greg Shirtliff, who is employed as a Consultant to the company through Zephyr Professional Pty Ltd. The information in this report that relates to Geophysical Exploration Results is based on information compiled by Mr Barry Bourne, who is also employed as a Consultant to the Company through geophysical consultancy Terra Resources Pty Ltd. Mr Bourne is a fellow of the Australian Institute of Geoscientists and a member of the Australian Society of Exploration Geophysicists and Dr Shirtliff is a Member of the Australian Institute of Mining and Metallurgy. Both Mr Bourne and Dr Shirtliff have sufficient experience of relevance to the tasks with which they were employed to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Both Mr Bourne and Dr Shirtliff consent to the inclusion in the report of matters based on information in the form and context in which it appears.

#### **ABOUT REDSTONE RESOURCES**

Redstone Resources Limited (ASX: RDS) is a Perth-based company focused on highly prospective exploration properties in the West Musgrave region of Western Australia.

Redstone's 100% owned West Musgrave tenement (E69/2450), which includes the Tollu Copper Project, is located in the southeast portion of the West Musgrave region of Western Australia. The Company has also identified the potential for a number of other prospects on the West Musgrave Project in addition to the Tollu Copper Project.

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# JORC Code, 2012 Edition - Table 1 report West Musgrave Project

### Section 1 Sampling Techniques & Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature &amp; quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity &amp; the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>No geochemistry has been detailed in this ASX release, all geochemical results are still pending. As such details of sampling techniques for geochemical analysis are not stated here.</li> <li>All RC-recovered samples were passed through a cone splitter at 1m intervals to obtain a 1m sample for logging. A small (1-2 teaspoon sized) representative sample was kept of each metre for record purposes.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) &amp; details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented &amp; if so, by what method, etc.).</li> </ul>	<ul> <li>Reverse Circulation drilling was used to obtain 1m samples for the purpose of geological logging.</li> <li>RC sampling completed using a 5.5" diameter drill bit with a face sampling hammer. RC drilling rigs were equipped with a booster compressor.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording &amp; assessing core &amp; chip sample recoveries &amp; results assessed.</li> <li>Measures taken to maximise sample recovery &amp; ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery &amp; grade &amp;</li> </ul>	<ul> <li>RC Drillers were advised by geologists of the ground conditions expected for each hole and instructed to adopt an RC drilling strategy to maximize sample recovery, minimize contamination and maintain required spatial position.</li> <li>Sample recovery is approximated by assuming volume and rock</li> </ul>

Criteria	JORC Code explanation	Commentary
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	densities for each metre of the drill hole and back referencing to this for individual metres coming from the cone splitter.
		<ul> <li>Actual metal grades are not detailed in the ASX release. No correlation was observed between the amount of sample passing through the cone splitter and the geology or amount of sulphides observed.</li> </ul>
Logging	Whether core & chip samples have been geologically &	Geological logging is qualitative and quantitative in nature.
	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies & metallurgical studies.	<ul> <li>RC holes are logged on a 1m interval basis. Where no sample is returned due to voids or lost sample, it is logged and recorded as</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or	such.
	costean, channel, etc.) photography.	Visual estimations of sulphides and geological interpretations are
	The total length & percentage of the relevant intersections logged.	based on examination of drill chips from a reverse circulation (R drill rig using a hand lens during drilling operations. Chips are wash and sieved prior to logging.
		<ul> <li>It should be noted that whilst % mineral proportions are based on standards as set out by JORC, they are an estimation only and can be subjective to individual geologists to some degree.</li> </ul>
		<ul> <li>Details of the sulphides, type, nature of occurrence and general % proportion estimation are found within the text of the release.</li> </ul>
Sub-sampling	If core, whether cut or sawn & whether quarter, half or all core taken.	Not applicable for what is presented in this ASX release.
techniques & sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc.&amp; whether sampled wet or dry.</li> </ul>	
	<ul> <li>For all sample types, the nature, quality &amp; appropriateness of the sample preparation technique.</li> </ul>	
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
	<ul> <li>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.</li> </ul>	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	

Criteria	JORC Code explanation	Commentary
Quality of assay data & laboratory tests	<ul> <li>The nature, quality &amp; appropriateness of the assaying &amp; laboratory procedures used &amp; whether the technique is considered partial or total.</li> </ul>	Not applicable for what is presented in this ASX release.
	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make &amp; model, reading times, calibrations factors applied &amp; their derivation, etc.</li> </ul>	
	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) &amp; whether acceptable levels of accuracy (i.e. lack of bias) &amp; precision have been established.</li> </ul>	
Verification of sampling &	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Not applicable for what is presented in this ASX release.
assaying	The use of twinned holes.	
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical &amp; electronic) protocols.</li> </ul>	
	Discuss any adjustment to assay data.	
Location of data points	<ul> <li>Accuracy &amp; quality of surveys used to locate drill holes (collar &amp; down-hole surveys), trenches, mine workings &amp; other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>All drill hole collars referenced in this ASX release have been surveyed for easting, northing &amp; elevation using an RTK GPS system which was left to calibrate for 1.5 hours prior to recording survey data</li> </ul>
	Specification of the grid system used.	for each project location. The accuracy according to the GPS unit averaged approximately 10cm for all recordings (north, south and
	Quality & adequacy of topographic control.	elevations). Data was collected in MGA94 Zone 52 & AHD.
Data spacing	Data spacing for reporting of Exploration Results.	Drilling has been for exploration only, spacing varies between targets.
& distribution	<ul> <li>Whether the data spacing &amp; distribution is sufficient to establish the degree of geological &amp; grade continuity appropriate for the Mineral Resource &amp; Ore Reserve estimation procedure(s)&amp;classifications applied.</li> </ul>	AT EM1A the spacing varies between 200m (E-W), 50m (N-S) and the final hole was drilled directly over the first, but vertical (refer to Table 1 in the ASX release for actual locations)
	Whether sample compositing has been applied.	
Orientation of data in relation to geological	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures &amp; the extent to which this is known, considering the deposit type.</li> </ul>	<ul> <li>Drill angle details are given in the text of the release and in the table in the release. Orientation is according to the exploration target (see text of release for further details).</li> </ul>

Criteria	JORC Code explanation	Commentary
structure	<ul> <li>If the relationship between the drilling orientation &amp; the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed &amp; reported if material.</li> </ul>	
Sample security	The measures taken to ensure sample security.	Not applicable – no geochemistry in this release.
Audits or reviews	The results of any audits or reviews of sampling techniques & data.	Not applicable

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement&lan d tenure status	<ul> <li>Type, reference name/number, location &amp; 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 &amp; environmental settings.</li> <li>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.</li> </ul>	<ul> <li>The EM1A target and Tollu project are located within E69/2450 (Western Australia). This exploration license is held by Redstone Resources.</li> <li>The tenements are in good standing &amp; no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment & appraisal of exploration by other parties.	<ul> <li>There has been limited recent exploration undertaken by other parties at Tollu and no previous exploration at EM1A.</li> </ul>
Geology	Deposit type, geological setting & style of mineralisation.	<ul> <li>The genetic origin is currently under review as outlined in the release.</li> </ul>
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 drill holes:	See the table in the ASX release.
	<ul> <li>Easting &amp; northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	o dip & azimuth of the hole	

Criteria	JORC Code explanation	Commentary
	o down hole length & interception depth	
	o hole length.	
	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Material &amp; this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)&amp;cut-off grades are usually Material &amp; should be stated.</li> </ul>	<ul> <li>Not applicable for this ASX release – all observations based on 1m intervals as explained above, no compositing prior to geological logging has taken place.</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results &amp; longer lengths of low grade results, the procedure used for such aggregation should be stated &amp; some typical examples of such aggregations should be shown in detail.</li> </ul>	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	No true widths have been stated in this release, just downhole intercept lengths. However, the angle of the modelled plate from the
mineralisation widths & intercept	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	EM anomaly and the angle of the drill hole targeting the plate has meant that most drill holes intercept the target at a near perpendicular angle.
lengths	<ul> <li>If it is not known &amp; 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').</li> </ul>	
Diagrams	<ul> <li>Appropriate maps &amp; sections (with scales)&amp;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 &amp; appropriate sectional views.</li> </ul>	See ASX release
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low & high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Only observations are reported, see data details above for further information
Other substantive exploration	<ul> <li>Other exploration data, if meaningful &amp; material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples –</li> </ul>	<ul> <li>No other exploration data collected is considered material to this announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
data	size&method of treatment; metallurgical test results; bulk density, groundwater, geotechnical & rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature &amp; scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul> <li>The details of the nature of future work at EM1A are currently being assessed but also awaiting the results of geochemical analysis.</li> </ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations &amp; future drilling areas, provided this information is not commercially sensitive.</li> </ul>	

Section 3 Estimation & Reporting of Mineral Resources

NOT APPLICABLE