TODD RIVER RESOURCES

ASX Announcement
3 September 2018

STRONG DOWN-HOLE EM CONDUCTOR PLATES AT MT HARDY

ADJACENT TO HIGH-GRADE BASE METALS DISCOVERY

Highlights from Mt Hardy Program:

- **First drill hole into the main mineralisation intersected 9.15m @ 8.8% Zn, 7.6% Pb, 4.5% Cu and 162g/t Ag (MHDD0031A)**
- **Second drill hole into the main mineralisation (120m down-plunge) intersected 13.45m @ 15.9% Zn, 5.75% Pb, 0.9% Cu and 82g/t Ag (MHDD0021A)**
- **Just received: Strong down-hole EM conductor plates confirm potential extensions of massive sulphide mineralisation:**
  - ***The interpretation of down-hole EM from MHDD0021A indicates potential massive sulphide mineralisation extensions both down-dip and along strike (Figure 1);***
  - ***Additional targets from down-hole EM have also been identified, both above the main mineralised position and to the north of the area drilled to date (Figures 2 and 4).***
- **Additional drilling (up- and down-dip and along strike) is expected to commence in late September, with drilling planned to continue until late 2018**

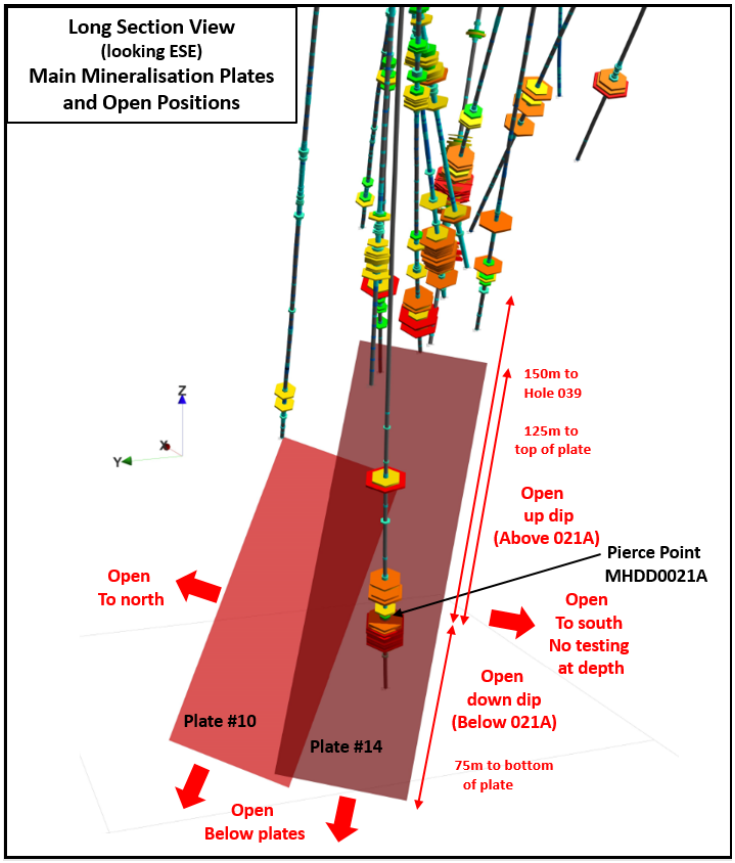

Figure 1 – Mt Hardy Copper-Zinc Project, EM1 Prospect Long Section: Main mineralised zone DHEM plates adjacent to drill-hole MHDD0021A showing the areas to be tested.

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Todd River Resources Limited (ASX:TRT) (**Todd River** or the **Company**) is pleased to advise that it has identified several high-priority drilling targets with the potential to significantly extend the known high-grade base metal mineralisation at the 100%-owned **Mt Hardy Copper-Zinc Project** in the Northern Territory (**Mt Hardy**) (Figure 7) and unlock additional discoveries in the broader area.

The targets were identified following a recently completed review of both down-hole and surface geophysics at Mt Hardy, including a detailed review of data from down-hole electromagnetic (DHEM) surveys completed on recent diamond drill-holes.

Todd River Chief Executive Officer Will Dix said the results of the geophysical review significantly enhanced the prospectivity of the Mt Hardy Project, building on the successs of recent diamond drilling and providing the Company with strong momentum ahead of the restart of drilling next month.

> "*We are very pleased with the outcome of the review of both our new down-hole EM data and the re-processed surface and airborne EM data from previous exploration programs. We believe that the targets identified from this work are compelling and we look forward to drill testing them, commencing in September and continuing until the end of this year.*
>
> *"We will continue to rigorously review our geophysics to optimise our interpretation of the data, maximising the opportunity to identify extensions to the exciting EM1 mineralisation and to discover new zones of mineralisation in other areas.*
>
> *"As soon as the rig has completed drilling at McArthur, we will recommence drilling at Mt Hardy and I am excited by what the next few months of drilling can deliver for our shareholders."*

Down-Hole EM Conductors

Down-hole EM surveying was completed on most holes drilled during the first phase of exploration at Mt Hardy in July. The data has been processed and interpreted in the context of the geology and mineralisation identified in each hole (see Appendix One). The geophysical interpretation and modelling also incorporated the DHEM data acquired from drilling in previous years, data from the Fixed-Loop EM ground survey completed in 2013, and data from the HeliTEM aerial survey flown in 2012.

The Company's geophysical consultant has **modelled a total of 18 conductor plates in the EM1 area**. All of the modelled plates are shown on Figure 3, together with the drill hole traces. Some have been sufficiently tested and 5 prioritised as high priority with the remaining conductors to be further evaluated and constrained by additional downhole geophysical surveys in new holes.

The plates all consistently dip steeply to the west-north-west. Modelled dips vary from 68 to 80 degrees, averaging 73 degrees, while dip direction averages 290 degrees (270 to 310 degrees). Plate depth ranges from near surface (centroid depth <50m below ground level) in the east, to around 350m below the surface.

The modelled plates range in size from 25m x 25m to 200m x 250m sheets, while conductivities range from 300 to 1600 Siemens. Plates have initially been assessed by the geological team based on plate conductivity and size, and then interrogated in 3D, relative to the existing drilling and analytical results.

Some of the plates are in-hole and therefore at least partially tested by existing drilling, while others are off-hole and essentially untested – offering significant **scope for further growth in the mineralised system** at EM1.

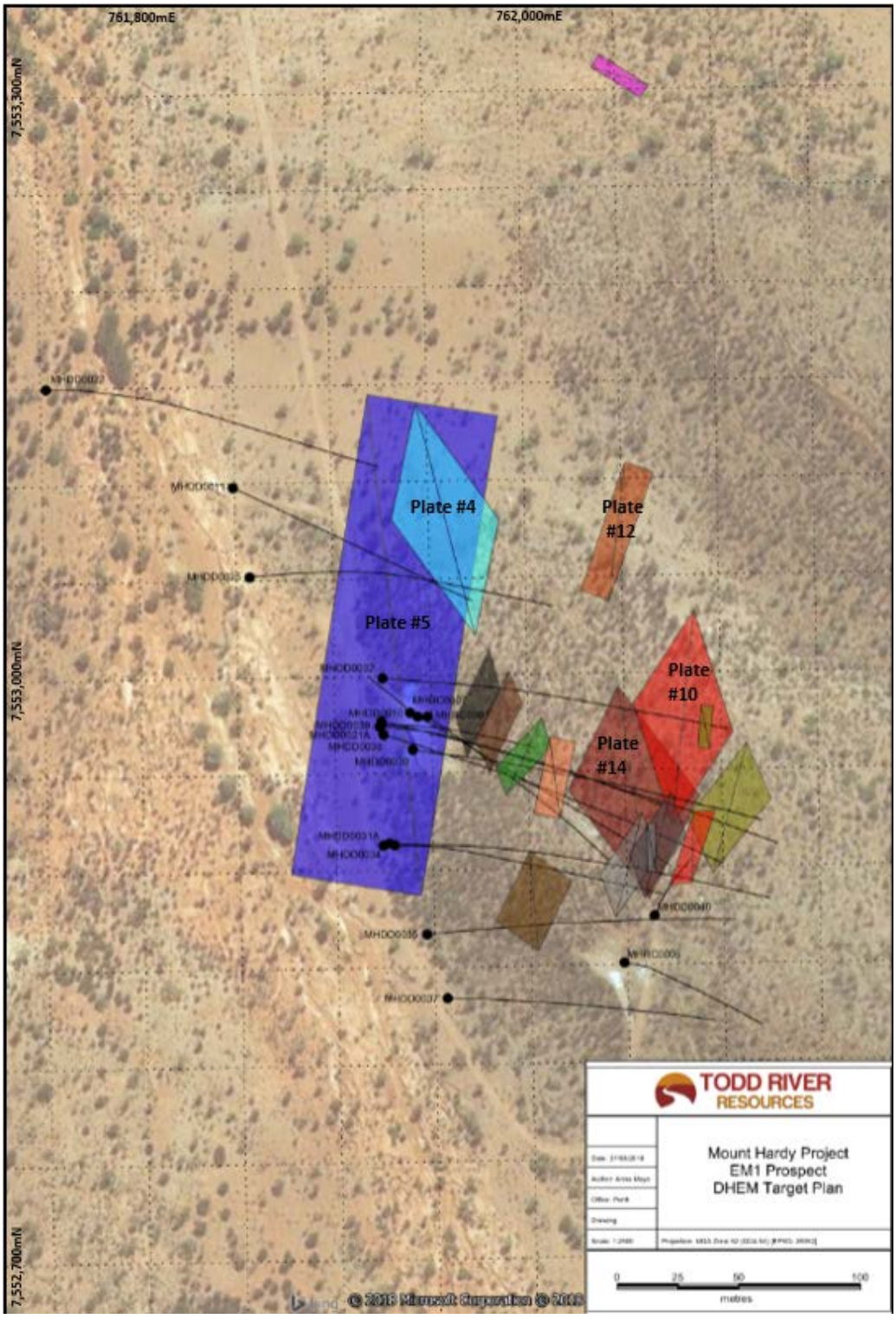

Figure 2 – EM1 Prospect area drill hole location plan. Showing drill hole traces and all modelled DHEM plates. The ones discussed in the text are labelled.

The top five ranked plates are summarised in more detail below:

EM1 Plates #10 and #14

Plate	Position			Orientation		Size		Strength
Number	Easting	Northing	RL (AHD)	Dip	DipDirn	Across	Depth	(Siemens)
10	762090	7552945	370	71	298	60	150	1500
14	762075	7552910	420	72	294	60	200	1500

Plates #10 and #14 (Figures 1, 3 and 4) are both **large and high conductivity modelled conductor sheets**, with a depth extent of 150m and 200m respectively.

They **extend from just below the strong mineralisation seen in holes MHDD0010 and MHDD0031A through hole MHDD0021A – the main zone of base metal mineralisation identified to date.**

Plate #14 was modelled from hole MHDD0021A while Plate #10 was modelled from DHEM data in hole MHDD0032, the only other intersection below ~400m RL (more than 250m below surface).

They partially overlap and both dip and dip direction are within 5 degrees of each other – giving confidence that the two plates relate to the same mineralised sheet.

Hole MHDD0021A pierces Plate #14 in the lower third and near the centre laterally. This position corresponds with the strong mineralisation reported in this hole (see ASX Announcement – 2 August 2018) – **13.45m @ 15.9% Zn, 5.75% Pb, 0.90% Cu and 89 g/t Ag** from 358.55 to 372.00m.

The depth of the hole MHDD0021A pierce point in plate #14 is at 355m, while the southern extension of Plate #10 would intersect the hole at around 370m.

Plate #14 offers scope to better delineate the mineralisation both up-dip of hole MHDD0021A and down- dip (**the plate extends for a further 75m below the pierce point**). The bottom of Plate #14 represents the limit of the technique, and so the signature – and by inference the mineralisation – remains open at depth.

Plate #10 is untested, with hole MHDD0032 being just above the top corner of the plate. This plate lies to the north of Plate #14 and further drilling in this area should extend the mineralisation to the north.

The upper edge of Plate #14 almost reaches, and is right in position to intersect, the mineralised portion of hole MHDD0039 (**9.27m @ 0.7% Cu, 2.6% Pb, 5.4% Zn, and 80 g/t Ag** from 260.2m).

These two plates illustrate both the close and strong association of the modelled EM geophysics with the high-grade base metal mineralisation seen in drill holes, and the modelled plate orientation also closely matches the known mineralisation orientation.

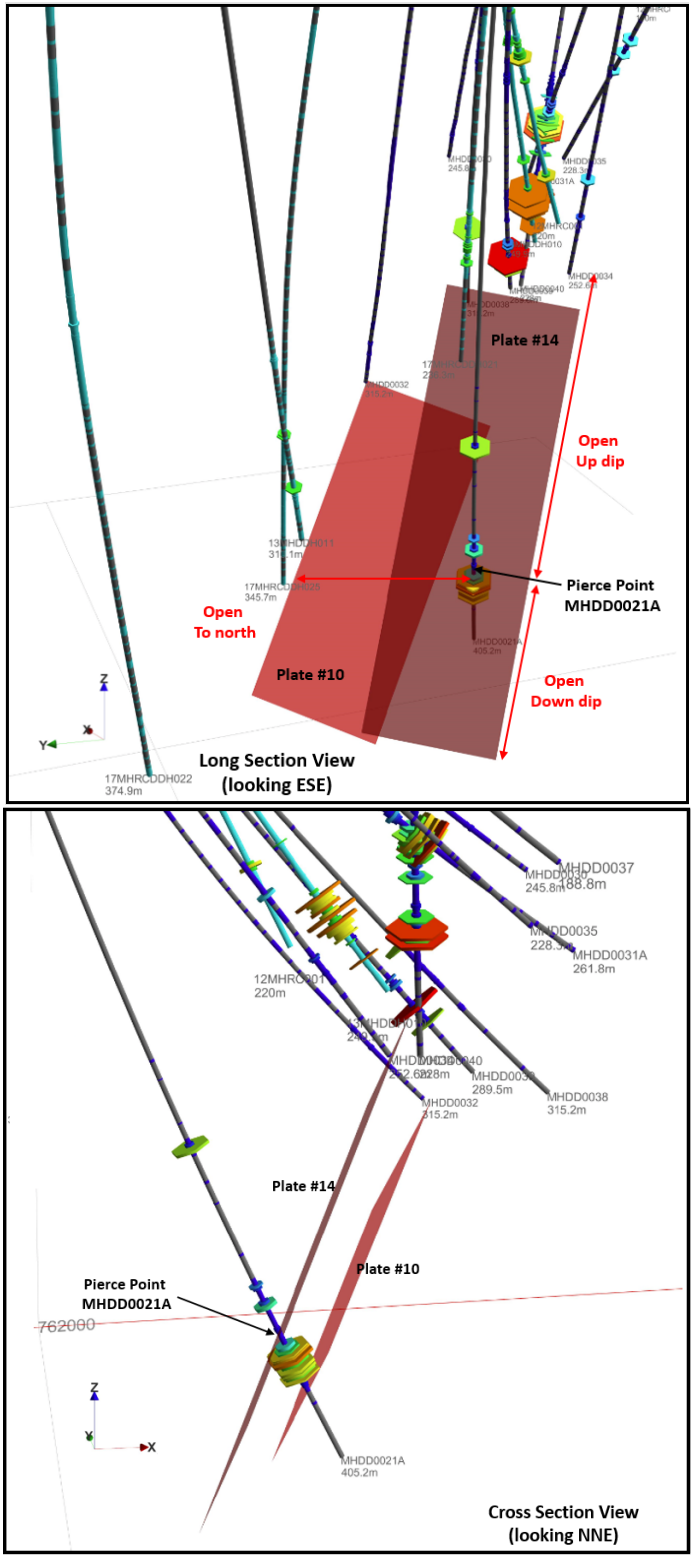

Figure 3 – EM1 prospect long and cross section through drilling area showing DHEM plates around hole MHDD0021A.

Note: **Other modelled DHEM plates have been removed from these sections for clarity. In Figure 1 hangingwall drill holes (shown here) that do not test the main mineralised horizon, have been removed for clarity.**

EM1 Plates #4 and #5

Plate	Position			Orientation		Size		Strength
Number	Easting	Northing	RL (AHD)	Dip	DipDirn	Across	Depth	(Siemens)
4	761980	7553050	445	70	275	65	150	1600
5	761965	7553010	430	70	280	250	200	300

Plates #4 and #5 have similar orientations and partly overlap, and represent a **new target position for testing within the EM1 area**. Each modelled plate is large, with **Plate #4 having the highest conductivity of all modelled plates.**

Figure 5 shows the position of the plates, and it can be seen in cross-section that the pair have a similar orientation to the main zone, and are over 100m above the main EM1 mineralised sheet (through holes MHDD0031A and 021A).

Existing holes in the vicinity are MHDD0011 and MHDD0025, which pierce only the top edge of the two plates. These two holes returned modest grades right at the plate pierce point position:

- MHDD0011 pierce point Plate #4 @ 280m, 1.5m @ 0.8% combined base metal from 278.9m
- MHDD0025 pierce point Plate #4 @ 250m, 5.5m @ 0.9% combined base metal from 253.5m

The plate centroids and lower extents have not been tested and warrant an additional two targeted drill holes. Existing hole MHDD0022 stopped just ~20m short of the Plate #5 position, and if able to be opened up, could be extended to test the lower northern part of Plate #5.

EM1 Plate #12

Plate	Position			Orientation		Size		Strength
Number	Easting	Northing	RL (AHD)	Dip	DipDirn	Across	Depth	(Siemens)
12	762055	7553070	540	75	290	70	60	950

This plate has been recognised in the recent geophysical assessment, based on modelling of the combined 2013 ground FLEM survey data together with 2018 DHEM data, and is located some 70-140m to the north of all existing drilling (as shown on Figures 2 and 6).

The modelled plate has a similar orientation to the plates described above, and is along strike to the north from the main zone of mineralisation.

At 70-130m below surface, it is above much of the main mineralised zones identified to date. This shallow, reasonably sized strong plate has no holes through it and could be readily tested by a single 150m RC hole.

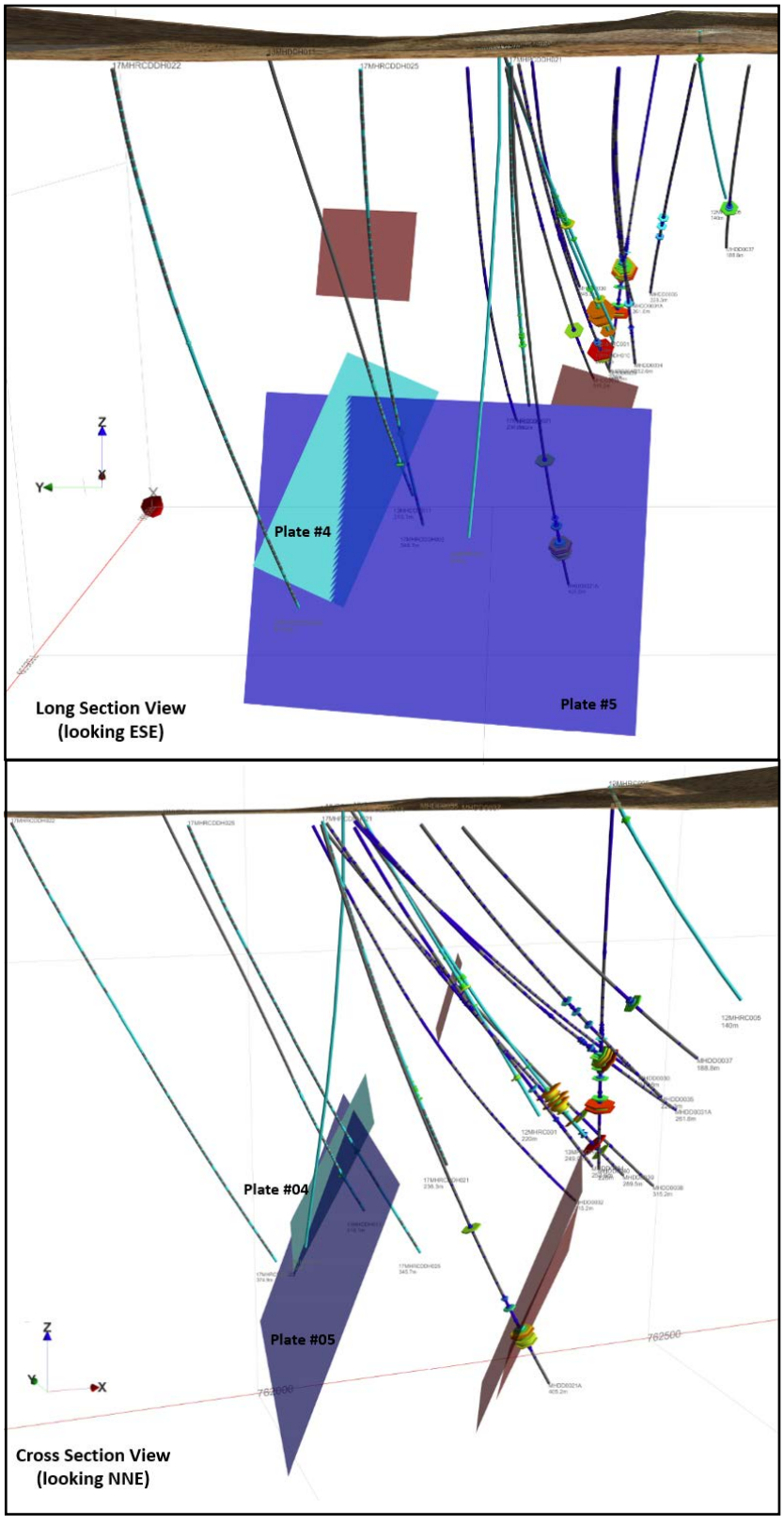

Figure 4 – EM1 prospect long and cross section through drilling area showing DHEM plates #4 and #5.
Note: Most other modelled DHEM plates removed from these sections for clarity.

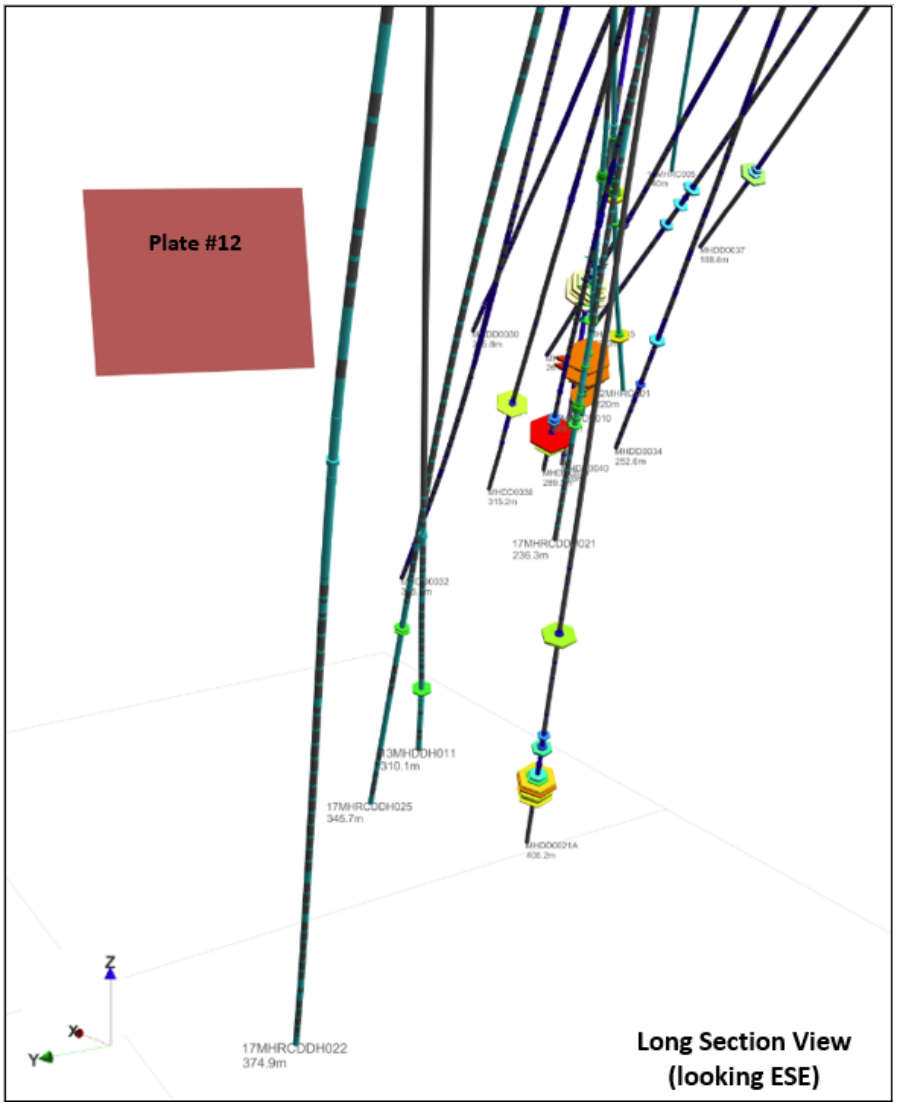

Figure 5 – EM1 prospect long section through drilling area showing DHEM plate #12.
Note: Other modelled DHEM plates removed from the section for clarity.

New Geophysical acquisition

Following this geophysical review, Todd River will obtain new airborne geophysics over the main target zones in the coming months. Detailed aeromagnetics together with EM will be flown both at closer line spacing and at a better orientation to highlight expected mineralisation.

Will Dix, CEO – Todd River Resources

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Competent Person Statements

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Exploration Manager Mr Kim Grey B.Sc. and M. Econ. Geol. Mr Grey is a member of the Australian Institute of Geoscientists, and an employee of Todd River Resources Limited. Mr Grey has sufficient experience 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'. Mr Grey consents to the inclusion in the report of the matters based on his information in the form and context in which it appear.

About Todd River Resources

Todd River Resources (ASX: TRT) is an Australian-based resources company that holds a large, highly prospective zinc and base metals exploration portfolio in the Northern Territory. The Company was formerly a subsidiary of ASX-listed strategic metals company TNG Ltd (ASX: TNG), and was spun-out of TNG in 2016 to advance and develop TNG's significant portfolio of non-core base metals assets.

With a strong management team and tight capital structure, Todd River is well placed to pursue exploration activities across its exploration portfolio, which are aimed at establishing the Company as a leading force in Australian zinc exploration and development.

Todd River's extensive base metal portfolio includes the large Manbarrum Zinc Project, the Mt Hardy Copper-Zinc Project, the Stokes Yard Zinc Project and the McArthur Copper-Zinc project, as well as a number of other exploration projects covering base metals and other commodities.

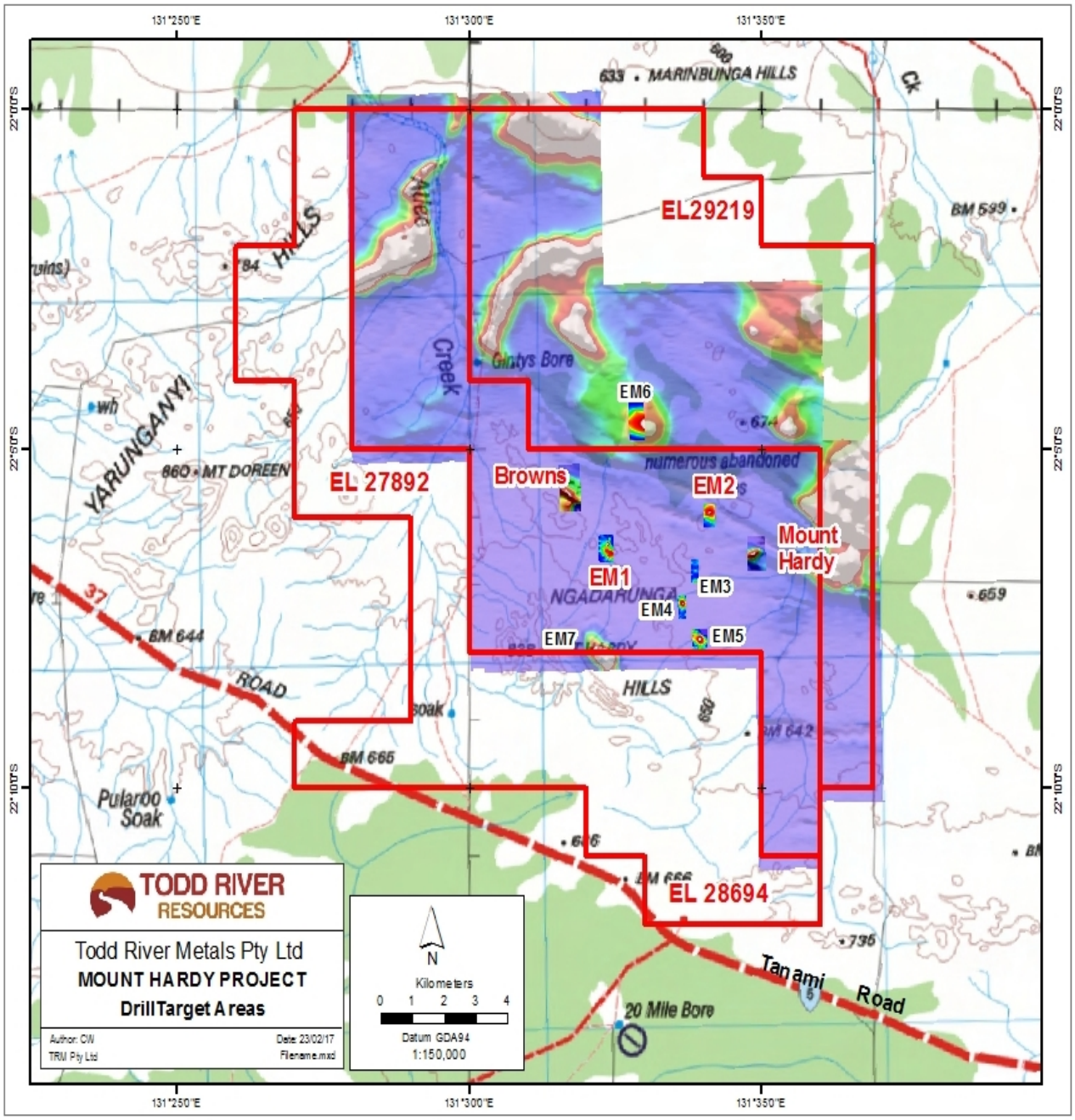

Figure 7 – Mt Hardy Project showing the location of the EM1 Prospect area.

Appendix One - JORC Table One - Sampling Techniques and Data
Mt Hardy DHEM Geophysical Surveying

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg 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. 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.	Gap Geophysics conducted the down hole electromagnetic surveys on 2018 drilled holes at Mount Hardy in July 2018. A Geopak HPTX-80 transmitter @ 2.5 Hz frequency, together with a DigiAtlantis Probe 142 was used to acquire data in each hole. Three component data was then interpreted by a consultant geophysicist;, incorporating all available DHEM data from 2018 and previous holes, and 2013 FLEM data.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	Not relevant to this release. All drilling results have been reported previously – see ASX Announcements 20 August, 2 August, 10 July, 3 July, 22 June, 20 June, 7 June, and 26 April.
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 relevant
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 relevant
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. 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.	Not relevant
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Not relevant
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not relevant

	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.	
Locations 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.	All sampling locations were located up using a standard GPS unit to an accuracy of ca. 3-5m for Easting, Northing and RL. All coordinate data for the Mount Hardy project are in MGA_GDA94 Zone 52.
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.	Drill sample spacing is not to the density required to outline Mineral Resources as yet.
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 have introduced a sampling bias, this should be assessed and reported if material.	Not relevant
Sample security	The measures taken to ensure sample security.	Not relevant
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling audits have been conducted at the Mount Hardy project to date.

Section 2 Reporting of Exploration Results

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 drilling at Mount Hardy is located on tenement EL 27892 held by Todd River Metals Pty Ltd, which is wholly-owned subsidiary of Todd River Resources Limited. All tenements are in good standing with no know impediments
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Mount Hardy Copper Field has been controlled by TNG (2012-2017) and then Todd River (since April 2017). Refer to TNG work reported since 2012 and TRT ASX releases in 2017-8.
Geology	Deposit type, geological setting and style of mineralisation.	Base metal mineralisation encountered at Mount Hardy appears to be structurally controlled and is hosted by the Lander Rock Formation Paleoproterozoic schists and gneisses.
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: o Easting and northing of the drill collar o Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar o Dip and azimuth of the hole o Down hole length and interception depth o Hole length	Not relevant
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.	Not relevant

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
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 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 (eg 'down hole length, true width not known').	No new drill intersections are reported here. The orientation of the EM1 mineralisation is interpreted as parallel with the DHEM plates modelled and reported here. True thicknesses are variable but range from 0.5x to 0.8x drill intersection thicknesses.
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.	See Figures 1 through 6.
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.	Not relevant
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.	No substantial new information is available other than that reported above.
Further work	The nature and scale of planned further work (eg 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.	The results and assessment provided here are being used to plan further drill testing (to commence once approvals are in place).