

## SEPTEMBER 2018 QUARTERLY ACTIVITIES REPORT

### Further drilling at Mount Hardy Copper-Zinc Project expands the exciting new base metals discovery in the Northern Territory

#### HIGHLIGHTS

#### EXPLORATION

- Drilling during the Quarter has identified further mineralisation down-dip and along strike from the discovery hole MHDD0031A, at the 100%-owned Mount Hardy Copper-Zinc Project as part of the first field program for 2018.
- Significant drill intersections from the EM1 Prospect at Mt Hardy include:
  - MHDD0021A - 13.45m @ 15.9% Zn, 0.9% Cu, 5.75% Pb and 83g/t Ag from 358.55m;
  - MHDD0040 - 55.75m @ 1.0% Cu, 1.5% Pb 3.3% Zn and 43.5 g/t silver from 131.5m, including:
  - 7.92m @ 1.4% Cu, 5.0% Pb, 13.8% Zn and 212.3 g/t silver from 179.38m;
  - MHDD0039 - 9.27m @ 0.7% Cu, 2.6% Pb, 5.4% Zn and 80.5 g/t Ag from 260.2m including:
  - 1.12m @ 2.1% Cu, 14.4% Pb, 27.7% Zn, and 473 g/t Ag from 216.28m.
- Down-hole geophysics has identified numerous additional positions that are potentially mineralised including a number adjacent to the current mineralisation.
- Drilling at Mt Hardy re-commenced late in the Quarter focussing on expanding the footprint of mineralisation both along strike and further down-dip
- At the McArthur Cu-Zn Project, phase 1 drilling has been completed, successfully intersecting minor base metal sulphides in a position corresponding to SkyTEM conductor in hole MCDD0004.

#### CORPORATE

- Cash balance at the end of the Quarter of \$920,000.
- During the Quarter, funds were received from tranche 1 of the Company's capital raising and non-renounceable rights issue. This comprised \$342,000 from the placement of 4,270,000 fully paid ordinary shares at an issue price of \$0.08 per share to qualified institutional and sophisticated investors from an overall commitment of 12,500,000 ordinary fully paid shares. Tranche 2 of the placement (8,250,000 to raise \$638,000) subject to Shareholder approval at the Company's AGM on 2 November 2018.
- In addition to the placement, the Company has also undertaken a pro-rata non-renounceable entitlement offer on the basis of 1 new share for every two ordinary fully-paid shares to raise up to A\$3.2 million (before costs). Acceptances for shares and shortfall from existing



shareholders raised approximately \$393,000 with the shares being issued post quarter end. The Company is working with lead broker, Hartleys Limited, to place the remaining shortfall shares. The funds raised will be used to continue drilling at the Mt Hardy Copper-Zinc Project and general working capital.

The September Quarter was an active and successful period for Todd River Resources Limited (ASX: TRT), with the continuation of its 2018 exploration field season in the Northern Territory (Figure 1). The Mt Hardy project continued to deliver outstanding results and work progressed at both the McArthur copper-zinc Project and Stokes Yard base metals projects.



Figure 1. Todd River Resources project portfolio in the Northern Territory.

## EXPLORATION

### Mount Hardy Copper-Zinc Project (100% TRT)

During the Quarter, the Company's exploration activities accelerated at the 100% owned Mt Hardy Project (Figure 2), with the completion of the first phase of drilling at the EM1 target. Drilling focussed on following the mineralisation down dip by testing geophysical targets and down dip positions. drilling a number of down-hole geophysical EM targets generated in 2017 at



its 100%-owned Mt Hardy Copper-Zinc Project (Figure 2).

During the September quarter, three diamond drill holes had been completed for a total of 686.42m at the EM1 Prospect. Table 1 provides the collar information for these holes.

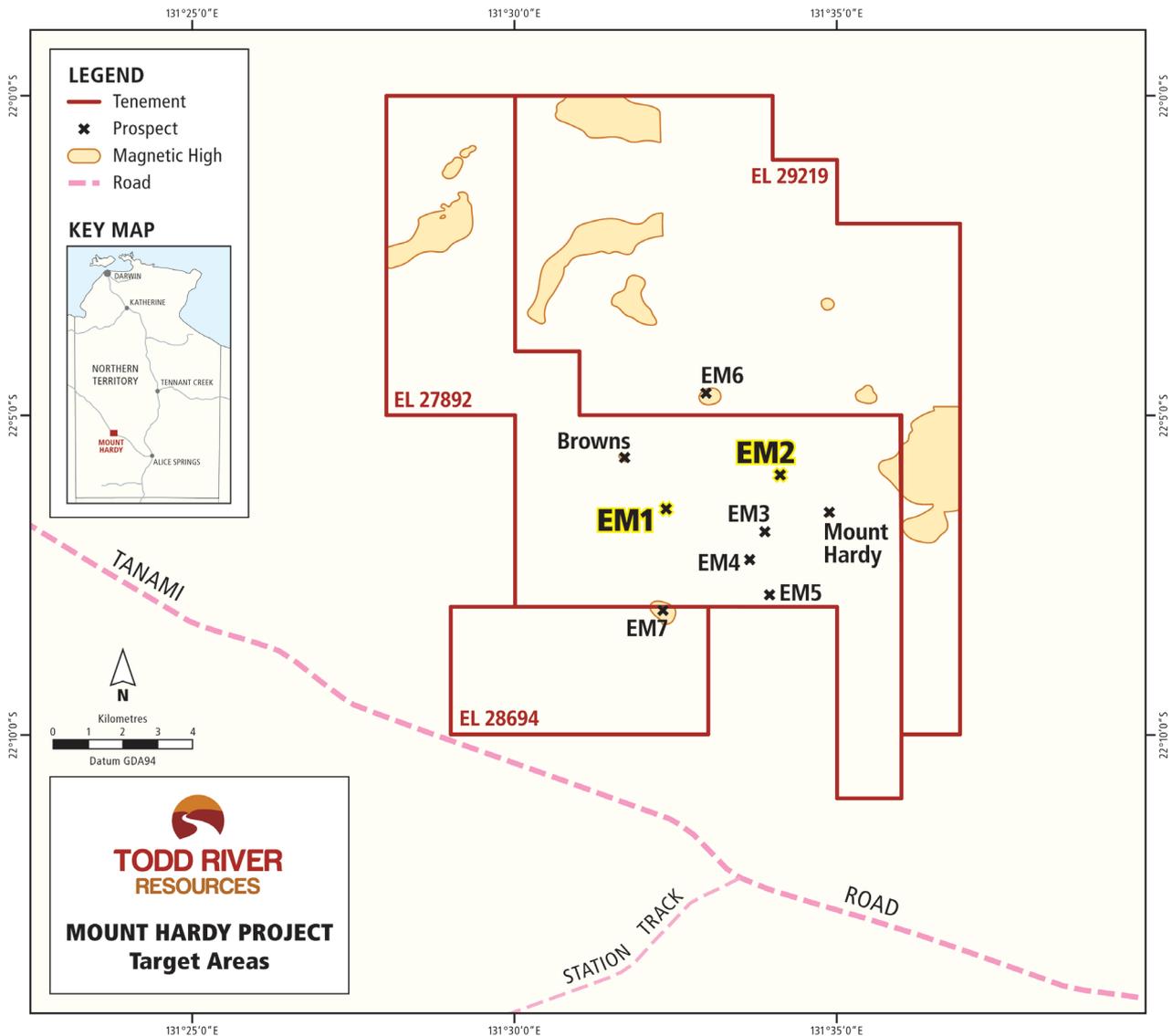


Figure 2. Location plan for the Mt Hardy Project showing EM1 target areas.

Table 1 – Mt Hardy 2018 June Quarter Drilling Collar Details

Hole_ID	Easting (GDA94Z52)	Northing (GDA94Z52)	AHD (m ASL)	Dip	Azimuth (True)	Depth Drilled (m)	Total Depth (m)
MHDD0039	761925	7552970	637	-60	107.9	289.52	289.52
MHDD0040	762064	7552875	648	-80	27.3	228	228
MHDD0021A	761923	7552974	636	-73	93.5	168.9	405.2



## Results

Assay results continued to be received during the quarter and reported in ASX releases on 2 August and 20 August. The highlights of the intersections are listed below:

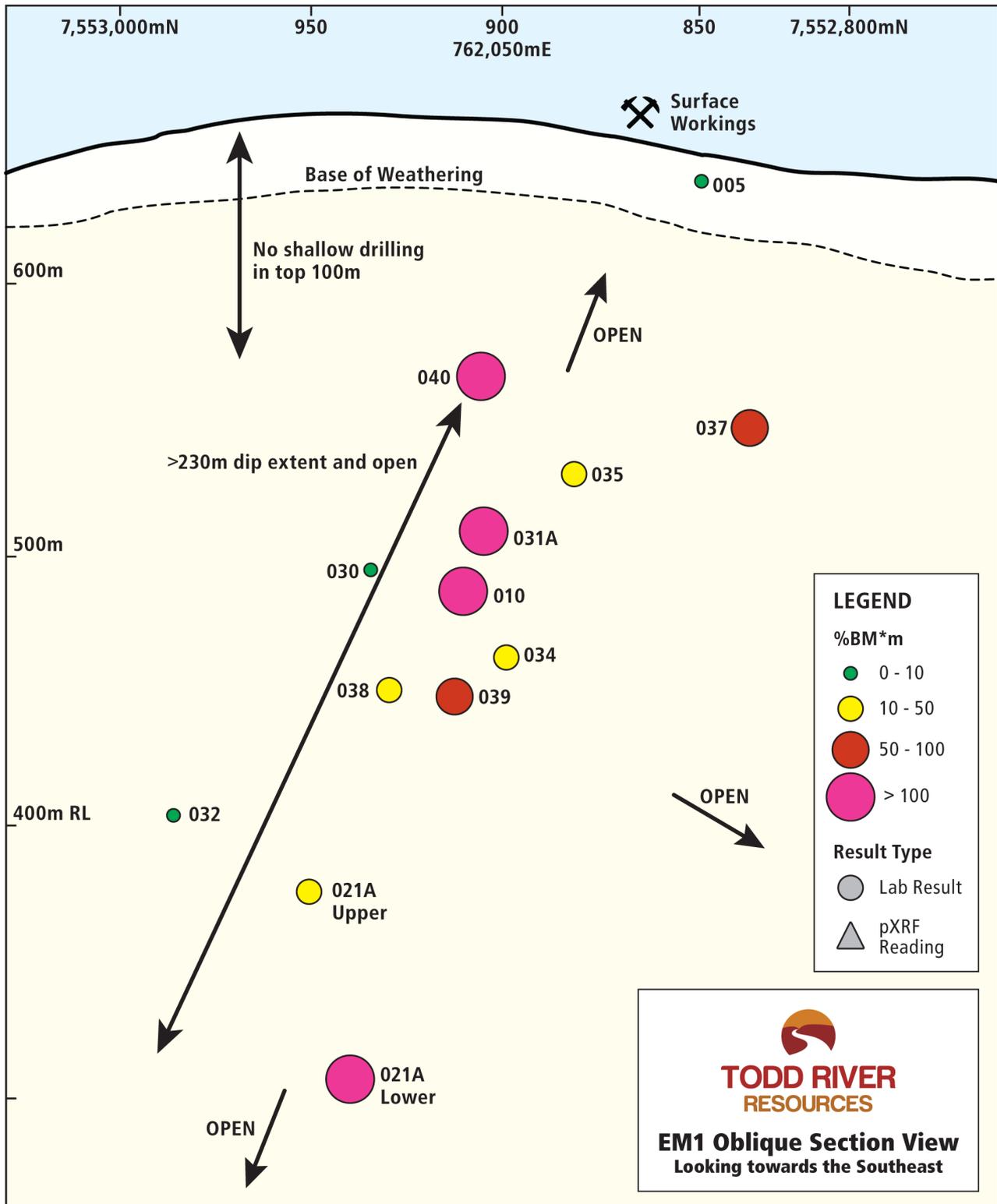
- MHDD0021A - 13.45m @ 15.9% Zn, 5.75% Pb, 0.90% Cu and 89 g/t silver from 358.55m down-hole (Figure 3).
- MHDD0040 - 55.75m @ 1.0% Cu, 1.5% Pb 3.3% Zn and 43.5 g/t silver from 131.5m, including:
  - 7.92m @ 1.4% Cu, 5.0% Pb, 13.8% Zn and 212.3 g/t silver from 179.38m
- MHDD0039 - 9.27m @ 0.7% Cu, 2.6% Pb, 5.4% Zn and 80.5 g/t Ag from 260.2m including:
  - 1.12m @ 2.1% Cu, 14.4% Pb, 27.7% Zn, and 473 g/t Ag from 216.28m



**Figure 3. Showing the mineralised intersection in hole MHDD0021A.**



The overall broad zone of base metal mineralisation has been extended to approximately 300m below surface and drilling has since re-started at Mt Hardy to test both along strike and up-dip positions as well as continue to confirm the continuity of mineralisation down dip.



**Figure 4. Showing a plan view of the EM1 mineralisation as at 30 September 2018.**



## MOUNT HARDY GEOPHYSICAL REVIEW

Following completion of drilling and down hole surveying at Mount Hardy in early July a comprehensive review of all down hole electromagnetic survey data was completed. Several outstanding targets were outlined for further drill testing to extend the mineralisation outlined to date at the EM1 prospect.

Down-hole EM surveying was completed on most holes drilled during the early 2018 phase of exploration at Mt Hardy. The data has been processed and interpreted in the context of the geology and mineralisation identified in each hole. 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.**

Plates are shown on Figure 5 below. 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 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.

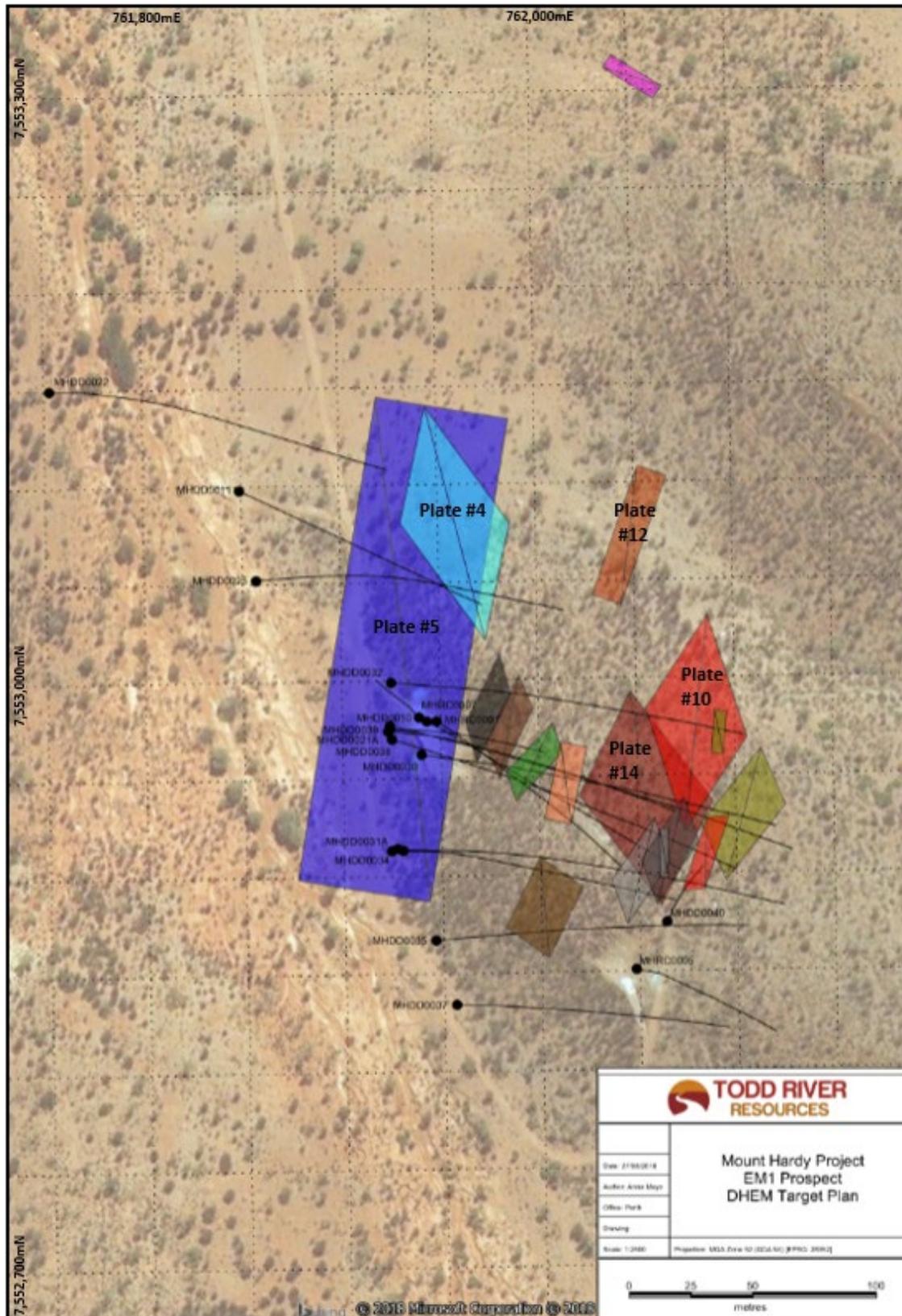


Figure 5 – EM1 Prospect area drill hole location plan. Showing drill hole traces and all modelled DHEM plates



Plates #10 and #14 (Figure 6) represent the down dip extension of the mineralisation reported from hole MHDD0021A (see above), and 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 MHRCD0010 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 MHDDH0021A 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 MHDDH0021A 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 MHDDH0021A 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 MNDD0032 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. They outline significant scope to extend the mineralisation both down dip and along strike from the deepest intersection to date in hole MHDD0021A (Figure 7).

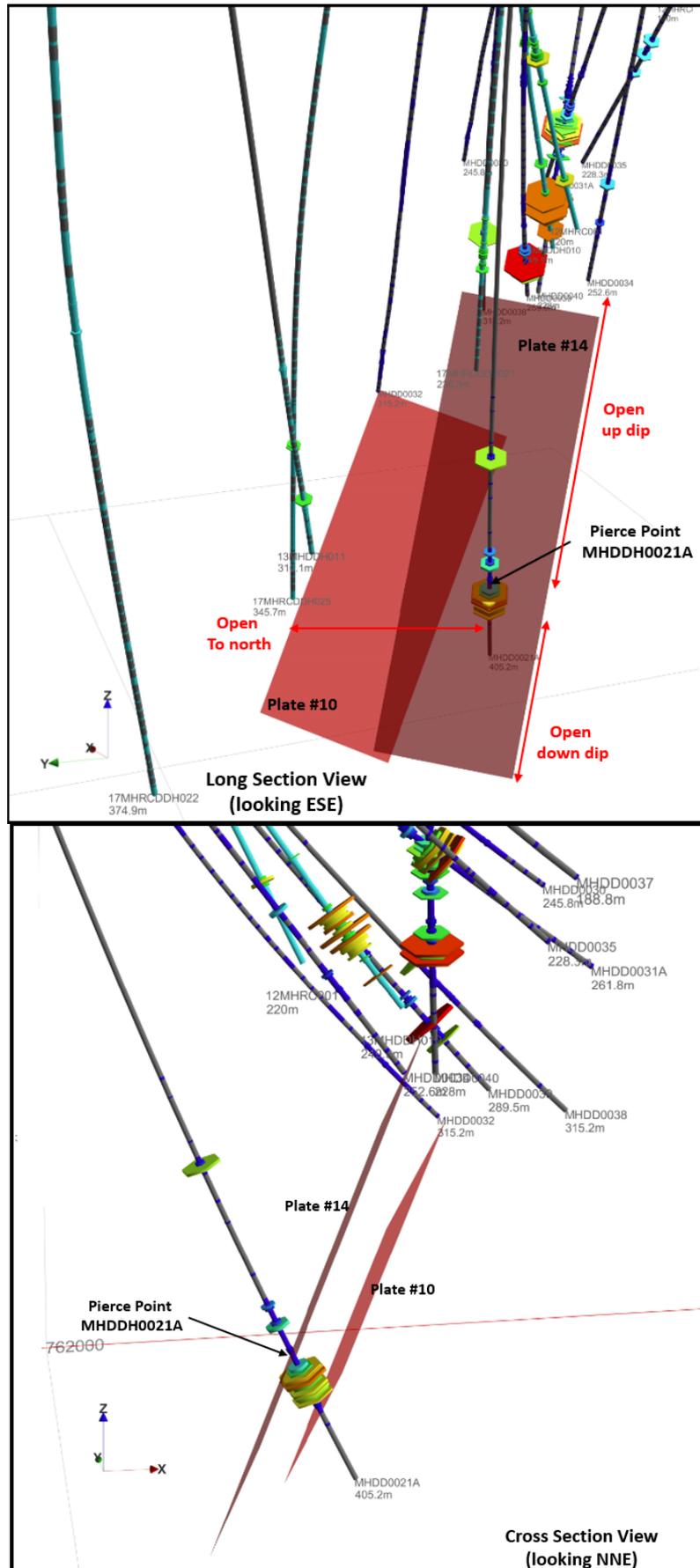


Figure 6 – EM1 prospect long and cross section through drilling area showing DHEM plates around hole MHDDH021A.

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.

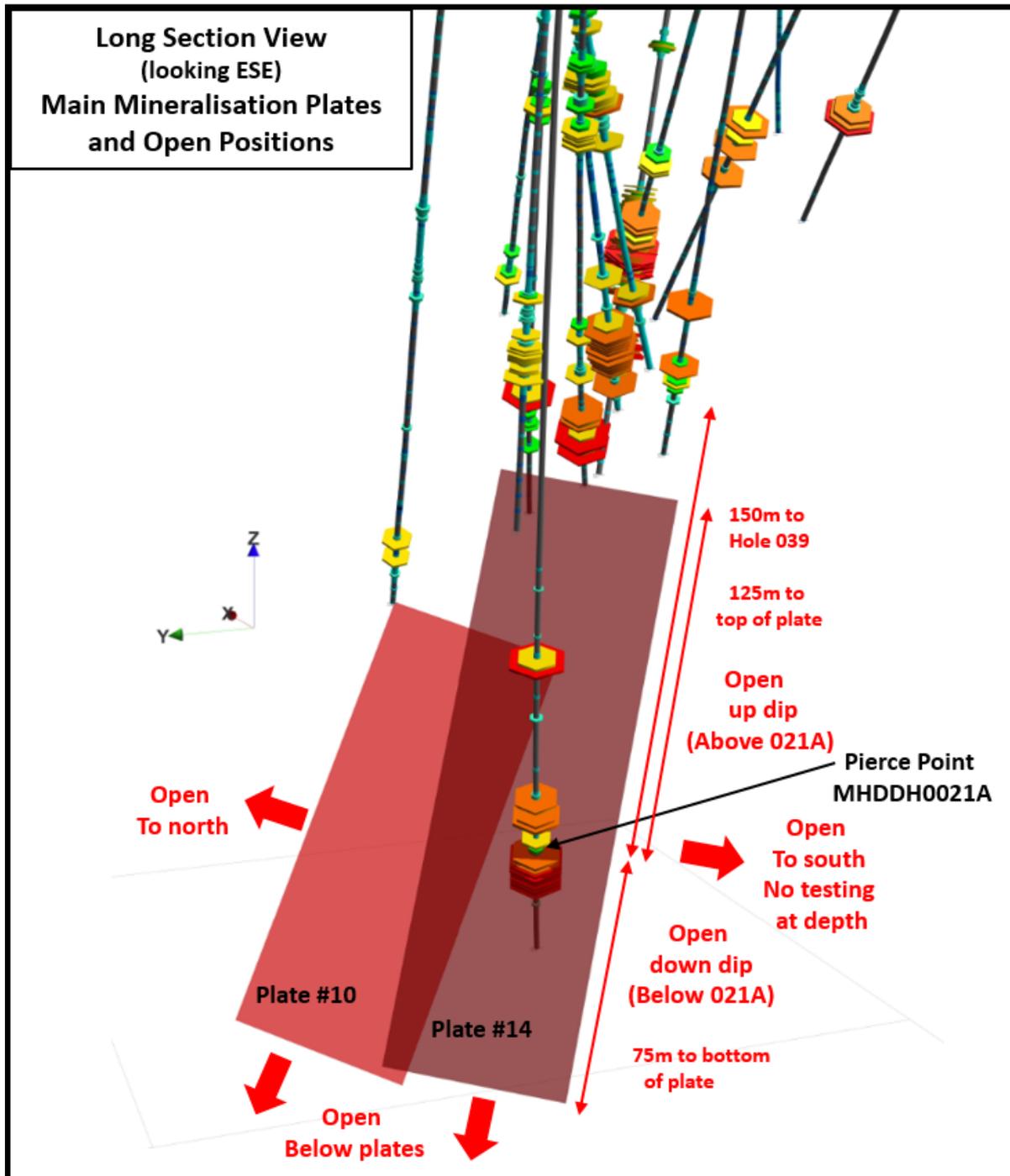


Figure 7 – Mt Hardy Copper-Zinc Project, EM1 Prospect Long Section: Main mineralised zone DHEM plates adjacent to drill-hole MHDD021A showing the areas to be tested.

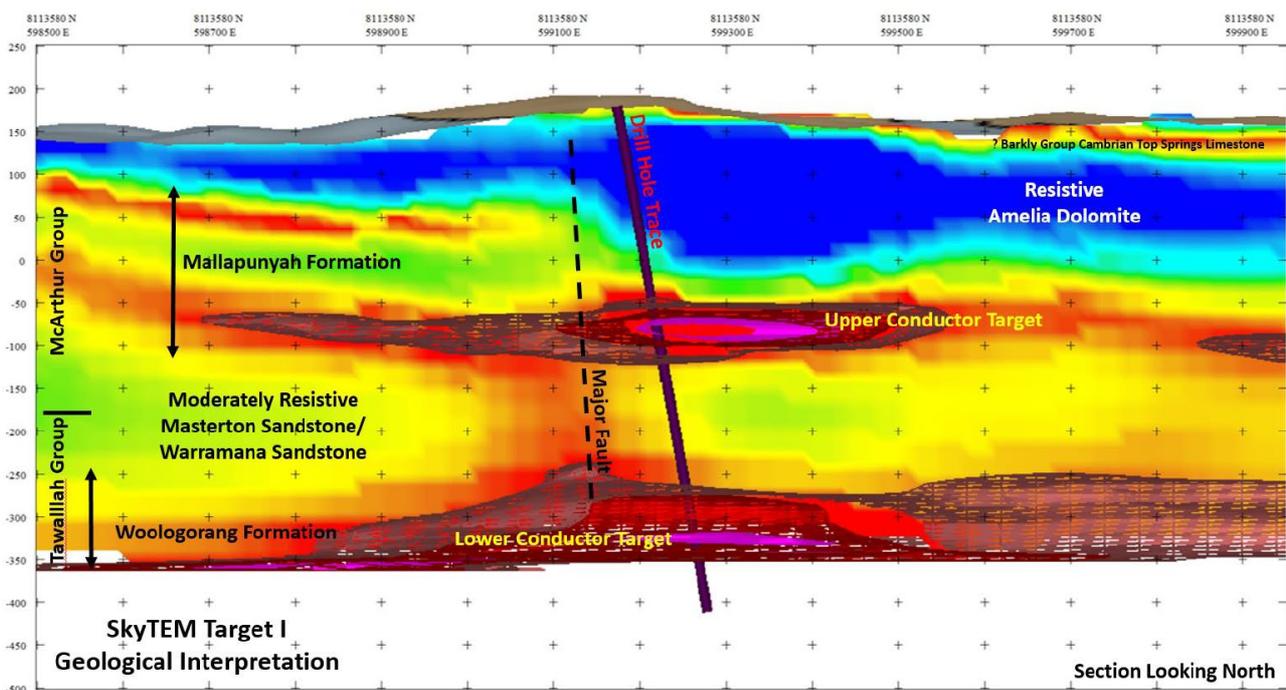


## McArthur Project (100% TRT)

A program of three diamond holes for a total of 1393.1 metres was completed in August/September. Holes were placed to test geophysical anomalies outlined from the 2017 SkyTEM airborne EM survey. Figure 5 below shows the conductor units that hole MCDD0005 was targeting, which were in both the Mallapunyah Formation and the underlying Wollgorang Formation.

Core has been logged and modest base metal sulphide intersections were noted. Two holes were granted NTGS collaborative funding, and all core it at the NTGS Core Library in Darwin, where it has been Hylogged. Samples for petrophysical measurements and analysis will be submitted shortly, and reported when available.

A full assessment will await all analytical results. CSIRO is also about to commence a research project on the McArthur Project, assessing the SkyTEM geophysics in light of the drill results and assisting with further drill targeting for early in 2019.



**Figure 8. Conductor targets in the Mallapunyah and Wollgorang Formations for Hole MCDD0005.**

**Table 2. Details of holes completed at the McArthur River project during the Quarter.**

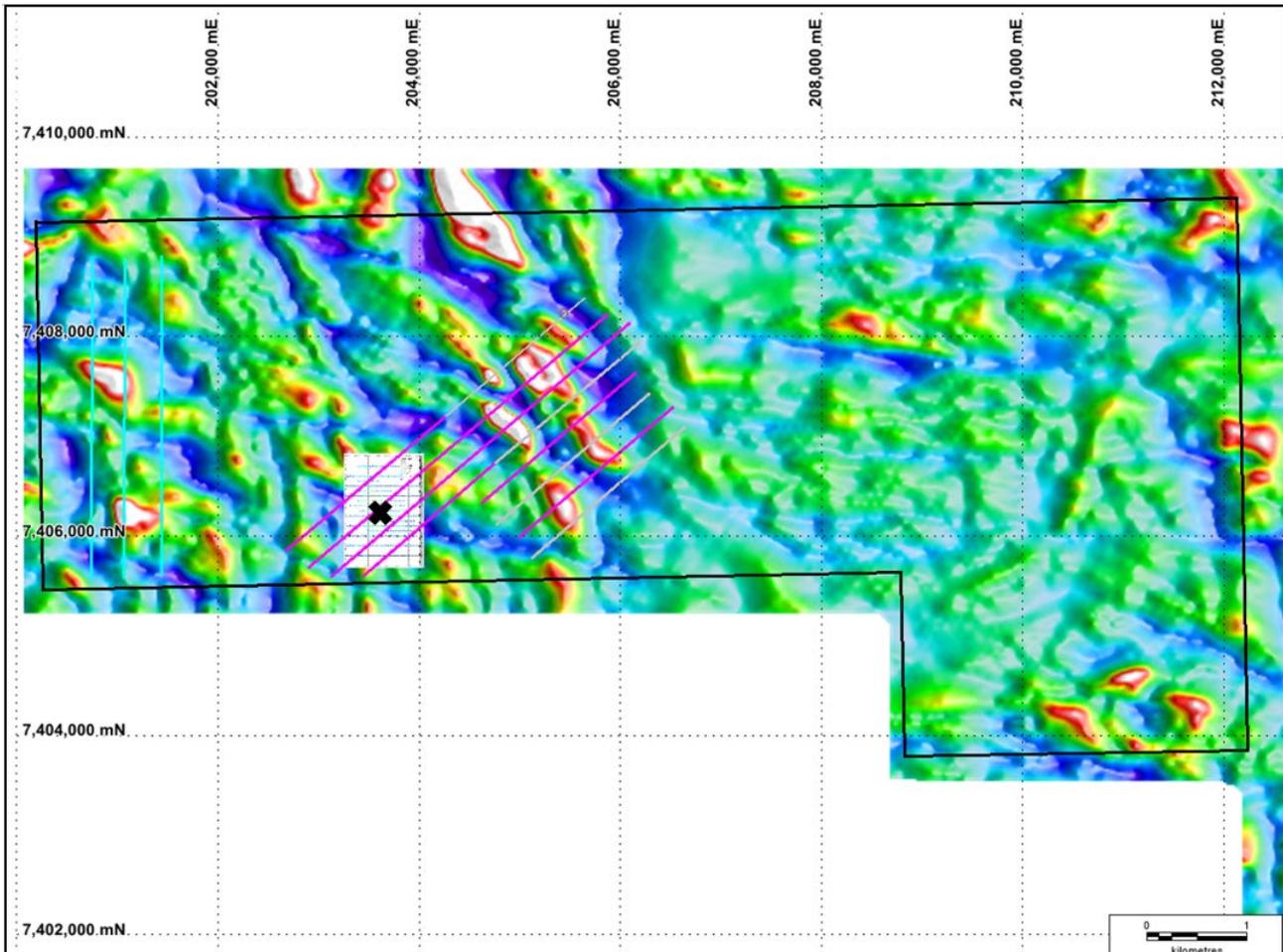
Hole_ID	Easting (GDA94Z53)	Northing (GDA94Z53)	RL (m)	Dip	Azimuth (True)	Total Depth (m)
MCDD0003	591370	8106448	192	-81	275	513.4
MCDD0004	599252	8110618	180	-81	270	324.4
MCDD0005	599179	8113578	190	-81	104	555.3



## Stokes Yard Copper-Zinc Project (100% TRT)

### SEPTEMBER QTR

A detailed review and assessment of the existing geophysical data over the Stokes Yard project tenure (EL30131) was completed during the September Quarter. Based in this interpretation, a program of moving loop electromagnetics (MLEM) has been planned and will commence early in the December Quarter. Figure 6 shows reprocessed aeromagnetic data over the tenement, the location of the Stokes Yard base metal workings, and the planned MLEM lines.



**Figure 9. Stokes Yard project with planned MLEM geophysical survey shown on the reprocessed aeromagnetic imagery.**



## **CORPORATE**

### **Cash Position**

Todd River Resources had total cash reserves of \$920,000 at Quarter-end.

### **Capital Raise**

During the Quarter, funds were received from tranche 1 of the Company's capital raising and non-renounceable rights issue. This comprised \$342,000 from the placement of 4,270,000 fully paid ordinary shares at an issue price of \$0.08 per share to qualified institutional and sophisticated investors from an overall commitment of 12,500,000 ordinary fully paid shares. Tranche 2 of the placement (8,250,000 to raise \$638,000) subject to Shareholder approval at the Company's AGM on 2 November 2018.

In addition to the placement, the Company has also undertaken a pro-rata non-renounceable entitlement offer on the basis of 1 new share for every two ordinary fully-paid shares to raise up to A\$3.2 million (before costs). Acceptances for shares and shortfall from existing shareholders raised approximately \$393,000 with the shares being issued post quarter end. The Company is working with lead broker, Hartleys Limited, to place the remaining shortfall shares. The funds raised will be used to continue drilling at the Mt Hardy Copper-Zinc Project and general working capital.

### **Will Dix**

Chief Executive Officer

31 October 2018



## **Competent Person Statements**

The information in this announcement that relates to exploration results is extracted from ASX announcements titled:

- “Multiple Strong and Extensive Base Metal Geophysical Targets Generated from Recent SkyTEM Survey at McArthur River Project, NT”, lodged on 20 November 2017;
- “Rock Chip Results Confirm High Grades at Stokes Yard”, lodged on 14 June 2018;
- “High Grade Assays confirm Base Metal Discovery at Mt Hardy”, lodged on 2 August 2018;
- “Infill Drilling Results Confirm Continuity of Mineralisation at Mt Hardy”, lodged on 20 August 2018;
- “Geophysics Point to Additional Mineralisation at Mt Hardy”, lodged on 3 September 2018;
- “Todd River to Undertake Capital Raise of up to \$4.2M”, lodged on 10 September 2018.

which are available to view at [www.trrltd.com.au](http://www.trrltd.com.au) and [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

The information in this report that relates to estimation and reporting of the Sandy Creek Mineral Resource estimate is extracted from the Independent Geologists Report included in the Prospectus lodged on 31 January 2017 and the Supplementary Prospectus lodged on 10 February 2017 which are available to view on the company’s website [www.trrltd.com.au](http://www.trrltd.com.au) and [www.asx.com.au](http://www.asx.com.au). The company confirms that it is not aware of any new information or data that materially affects the information included in the Independent Geologists Report included in the Prospectus and Supplementary Prospectus, and that all material assumptions and technical parameters underpinning the estimates in the Independent Geologists Report included in the Prospectus and Supplementary Prospectus continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the Independent Geologists Report included in the Prospectus and Supplementary Prospectus.

## **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 Mount 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.



## Tenement Schedule

The Group holds an interest in the following tenements or tenement applications at 30 September 2018:

Project	Tenements	Equity
McArthur River	EL27711, ELA28509, EL30085, ELA31703, ELA31704	100%
Croker Island	ELA29164	100%
Mount Hardy	EL27892, EL29219, EL28694	100%
Manbarrum JV	MA24518, MA26581, EL24395, EL25646, MLA27357	100%
Sandover	ELA29252, ELA29253	100%
Tomkinson	EL30348, EL30359, EL31265	100%
Soldiers Creek	EL31209	100%
Stokes Yard	EL30131	100%
Walabanba Hills	EL26848,	100%
Warramunga/Rover JV	EL25581, ELA25582, ELA25587, MLC647	100%
Peterman Ranges	ELA26383, ELA25564, ELA26384, ELA25562, ELA26382	100%
Goddard's	ELA24260	100%

### Forward-Looking Statements

This announcement has been prepared by Todd River Resources Ltd. This announcement is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained.

This is for information purposes only. Neither this nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of Todd River Resources Ltd shares in any jurisdiction.

This does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this report are not intended to represent recommendations of particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.

To the fullest extent permitted by law, Todd River Resources Ltd, its officers, employees, agents and advisers do not make any representation or warranty, express or implied, as to the currency,



accuracy, reliability or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this announcement. No responsibility for any errors or omissions from this arising out of negligence or otherwise is accepted.

This may include forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Todd River Resources Ltd. Actual values, results or events may be materially different to those expressed or implied.

For more information please see the company's website at [www.trrltd.com.au](http://www.trrltd.com.au)

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Todd River Resources Limited

### ABN

45 600 308 398

### Quarter ended ("current quarter")

30 September 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(1,088)	(1,088)
(b) development		
(c) production		
(d) staff costs	(131)	(131)
(e) administration and corporate costs	(217)	(217)
1.3 Dividends received (see note 3)		
1.4 Interest received	6	6
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other - Other Debtor TNG Ltd	15	15
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,415)</b>	<b>(1,415)</b>

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(1)	(1)
(b) tenements (see item 10)		
(c) investments		
(d) other – Security deposit	(62)	(62)
2.2 Proceeds from the disposal of:		
(a) property, plant and equipment		
(b) tenements (see item 10)		
(c) investments		
(d) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(63)</b>	<b>(63)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	1,157	1,157
3.2 Proceeds from issue of convertible notes		
3.3 Proceeds from exercise of share options		
3.4 Transaction costs related to issues of shares, convertible notes or options		
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (Received for shares issued in July 2018)		
<b>3.10 Net cash from / (used in) financing activities</b>	<b>1,157</b>	<b>1,157</b>

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	1,241	1,241
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(1,415)	(1,415)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(63)	(63)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	1,157	1,157
4.5 Effect of movement in exchange rates on cash held		
<b>4.6 Cash and cash equivalents at end of period</b>	<b>920</b>	<b>920</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	920	920
5.2 Call deposits		
5.3 Bank overdrafts		
5.4 Other (provide details)		
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>920</b>	<b>920</b>

<b>6. Payments to directors of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to these parties included in item 1.2	69
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

<b>7. Payments to related entities of the entity and their associates</b>	<b>Current quarter \$A'000</b>
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	(890)
9.2 Development	
9.3 Production	
9.4 Staff costs	(134)
9.5 Administration and corporate costs	(118)
9.6 Other (provide details)	
<b>9.7 Total estimated cash outflows</b>	<b>(1,142)</b>

## Mining exploration entity and oil and gas exploration entity quarterly report

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:



Date: 30 October 2018

Print name: Simon Robertson  
(Company secretary)

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.