



# POSITIVE CONCEPTUAL MINING STUDY COMPLETED ON MANBARRUM ZINC-LEAD PROJECT, NT

Base case results pave way for next stage of evaluation of large base metal resource

### **HIGHLIGHTS**

- Positive results returned from the recently completed Conceptual Mining Study on the advanced Manbarrum Zinc-Lead Project, located near Kununurra in the NT.
- Manbarrum contains one of the largest undeveloped zinc-lead resources in Australia.
- Further work recommended to be undertaken on specific aspects of the Manbarrum project including pre-concentration processes, cost optimisation and the potential for underestimating the grade in RC and diamond drilling.
- Strong market conditions and outlook for base metals provide a favourable backdrop for consideration of a potential future Scoping Study to be considered on the Manbarrum Project.
- Preparations underway for the Company's 2018 field season in the NT, which is planned to commence shortly with a 2,000m RC drilling program at the Mt Hardy Copper-Zinc Project.

Todd River Resources Limited (ASX: TRT; "Todd River" or "the Company") is pleased to announce that the Conceptual Mining Study on its 100%-owned Manbarrum Zinc-Lead Project in the Northern Territory ("Conceptual Study") has been completed with positive results at a base-case level.

The Conceptual Study also identified several potential areas where returns might be improved, providing a clear pathway for Todd River to progress the project this year in parallel with planned exploration activities across its broader NT portfolio as part its upcoming 2018 exploration field season.

Located 70km north-east of Kununurra and 40km from the large-scale Sorby Hills Base Metal Project just across the WA border, the Manbarrum Project is one of the largest undeveloped zinc projects in Australia.

The Project includes the Sandy Creek deposit, which has a JORC 2012 compliant Mineral Resource of 22.5Mt @ 1.81% Zn, 0.44% Pb and 4.6g/t Ag (comprising an Indicated Resource of 5.1Mt @ 1.94% Zn, 0.82% Pb and 5.8g/t Ag and an Inferred Resource of 17.4Mt @ 1.77% Zn, 0.33% Pb and 4.2g/t Ag).

Numerous additional targets are located along strike from the Sandy Creek resource on the south-eastern margin of the Bonaparte Basin, including the Djibitgun prospect and the Browns prospect (Figure 1).

The nearby Sorby Hills deposit also contains a large lead, zinc and silver resource.



The Conceptual Study, which was undertaken by independent global consultant CSA Global Pty Ltd and focused on mining the Sandy Creek resource in an open pit mining scenario and was designed to identify the circumstances required to support the potential future development of the project.

A high level summary of the results of the Conceptual Study key results are set out below:

- The base case scenario assumed under the Conceptual Study resulted in a positive cash flow for the Sandy Creek mineral resource.
- The base case assumes a simple open cut mining operation and 500ktpa throughput utilising an onsite processing facility. Other options reviewed included the potential for toll-treatment should a plant be available at the nearby Sorby Hills Project.
- The Conceptual Study assumes a contract mining model.
- A number of areas were identified where significant operational improvements could potentially be realised, including:
  - An investigation into suitable processing strategies to determine an optimal process flowsheet and the grade and characteristics of the concentrates produced;
  - o The creation of geo-metallurgical models to understand mineral domains and mineral types;
  - A study on the potential for pre-concentration of the ore to improve plant feed grades, thereby reducing total plant throughput requirements and resulting in capital and operating cost reductions; and
  - o A review of potential grade bias in both diamond drilling (under-calling) and reverse circulation drilling (over-calling) to determine the impact, if any, on the resource grade.

The Board considers that the results from the Conceptual Study are positive and that this justifies the Company committing to the next stage of exploration and study work, with a view to undertaking a Scoping Study in due course.

Commenting on the outcomes of the Conceptual Study, Todd River's new Chief Executive Officer, Will Dix, said:

"Over the past 10 months, our work at Manbarrrum has been focused on developing a clear understanding of the key sensitivities and the work required to optimise the Project. The positive outcomes and key recommendations of the Conceptual Study provide us with a clear pathway to move the project forward. This work will initially focus on optimising key study inputs, particularly through the understanding and refinement of the mineral processing options and further work on the reduction of both capital and operating costs. We will also continue to pursue other opportunities in the region.

"This work will commence immediately and continue over the coming months. In the meantime, we are looking forward to the imminent start of our 2018 exploration field season, which is set to kick off with drilling of some exciting EM targets at the Mt Hardy copper-zinc project. We will update the market further on these upcoming programs in the near future."

## Will Dix, CEO – Todd River Resources

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## **Competent Person Statement**

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 <a href="https://www.trrltd.com.au">www.trrltd.com.au</a> and <a href="https://www.trrltd.com.au">www.asx.com.au</a>. 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 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.

## Cautionary Statement concerning Conceptual Mining Study Results including Inferred Resources

The Conceptual Mining Study referred to in this announcement has been undertaken by Todd River Resources (the "Company") to ascertain whether a business case can be made for proceeding to more definitive studies. It is a preliminary technical and study of the potential viability of the Manbarrum Zinc-Lead Project in the Northern Territory. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. More than 75% of the current Mineral Resource at Sandy Creek is in the inferred category. For this reason, in accordance with Section 8.5, ASX Guidance Note 31, the Company cannot disclose production targets, forecast financial information or income-based valuations related to the Conceptual Mining Study, but instead discloses appropriate information of a technical nature to ensure the market is properly informed of the company's prospects. The Company instead makes aspirational statements and discloses parts of the study that do not contain production targets. The aspirational statements are based on the entity's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further drilling and evaluation work and appropriate studies are required before the Company will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

To achieve the outcomes indicated in the Conceptual Mining Study, additional funding will likely be required. Investors should note that there is no certainty that the Company will be able to raise the necessary amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise effect the value of the Company's existing shares. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Conceptual Mining Study.

The Australian Securities and Investments Commission (ASIC) released Information Sheet 214, which concerns forward-looking statements by mining and resource companies (INFO 214). One of the matters raised is that forward-looking statements should only be made if the entity has reasonable grounds for concluding that funding will become available to the entity as and when required by the project's development or production schedules. As noted above, additional funding will be required by Todd River Resources to further advance the Project.

The Company notes that it has a current market capitalisation of  $^{A}$ 57 million and has successfully raised  $^{A}$ 56 million at IPO in April 2017. The Board confirms that the results from the Conceptual Mining Study are positive and that this justifies the Company committing to the next stage of exploration and study work.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Conceptual Mining Study.

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of additional indicated mineral resources or reserves.



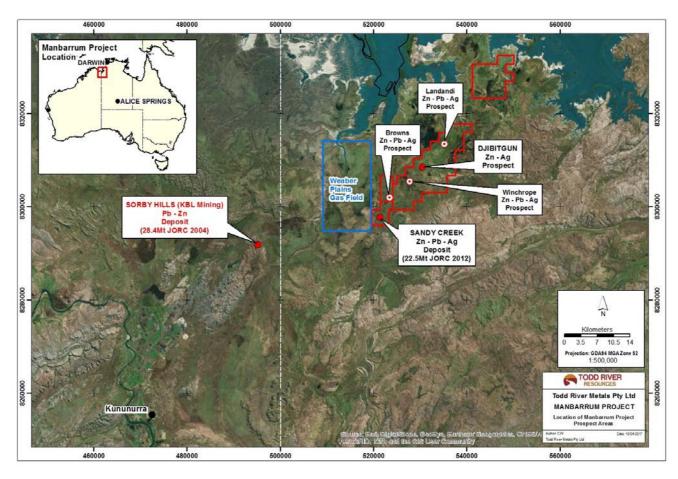


Figure 1. Location plan for the Manbarrum Project and proximity to the Sorby Hills project.