

## THICK ZONE OF MASSIVE SULPHIDES IN FIRST NEW EXTENSIONAL DIAMOND HOLE AT EM1 PROSPECT

First diamond tail intersects 21metres of massive sulphide north of and below hole MHDD0021A

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- Significant additional base metal intersection returned from below and to the north of hole MHDD0021A which intersected 13.45m @15.9% Zn, 0.9% Cu, 5.75% Pb and 83g/t Ag
  - Extends the mineralisation to >350m down-dip
  - Visual intersection only with pXRF and full analytical results to come as soon as they are available
  - Second diamond hole already pre- collared to target mineralisation at a similar depth to the south of MHDD0021A
  - Entitlement Offer extended to close 5pm AWST, Wednesday 17 October.
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Todd River Resources Limited (ASX: TRT; “Todd River” or “the Company”) is pleased to provide an update on the visual outcomes of the first diamond tail completed at its 100%-owned **Mt Hardy Copper-Zinc Project** in the Northern Territory, (Figure 1) prior to the close of its 1:2 pro-rata non-renounceable entitlement issue at 5pm AWST today.

Diamond drillhole MHDD0043 has to date intersected 21m of massive sulphide comprising largely sphalerite with subordinate galena and chalcopyrite from 433m downhole in a position some 40m north and 45m below the previously announced intersection of **13.45m @15.9% Zn, 0.9% Cu, 5.75% Pb and 83g/t Ag** in hole MHDD0021A. Table 1 shows the collar information for the hole.

Figure 2 shows the holes side by side for comparison (with only the top 16m of hole MHDD0043) and Figure 3 shows the spatial position of the intersection relative to previously announced drillholes, showing that the mineralisation at the EM1 prospect has now been extended to >350m down-dip. A second diamond tail to the south of MHDD0021A will commence immediately with additional holes planned to extend the mineralisation both down-dip and along strike.

As previously announced, the Company has planned approximately 3,500m of drilling split between Reverse Circulation (RC) and diamond drilling, predominantly targeting extensions to the new EM1 high-grade copper-zinc discovery.

Todd River’s Chief Executive Officer, Will Dix, said:

*“We are pleased to have intersected massive sulphide mineralisation in our first new diamond hole at Mt Hardy and we are looking forward to receiving ongoing results from this compelling exploration program which aims to grow this emerging base metals discovery over the 2 months”*

*With drilling now in full swing, Shareholders can look forward to plenty of news flow in the weeks ahead.”*



## **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 appears.

### **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.

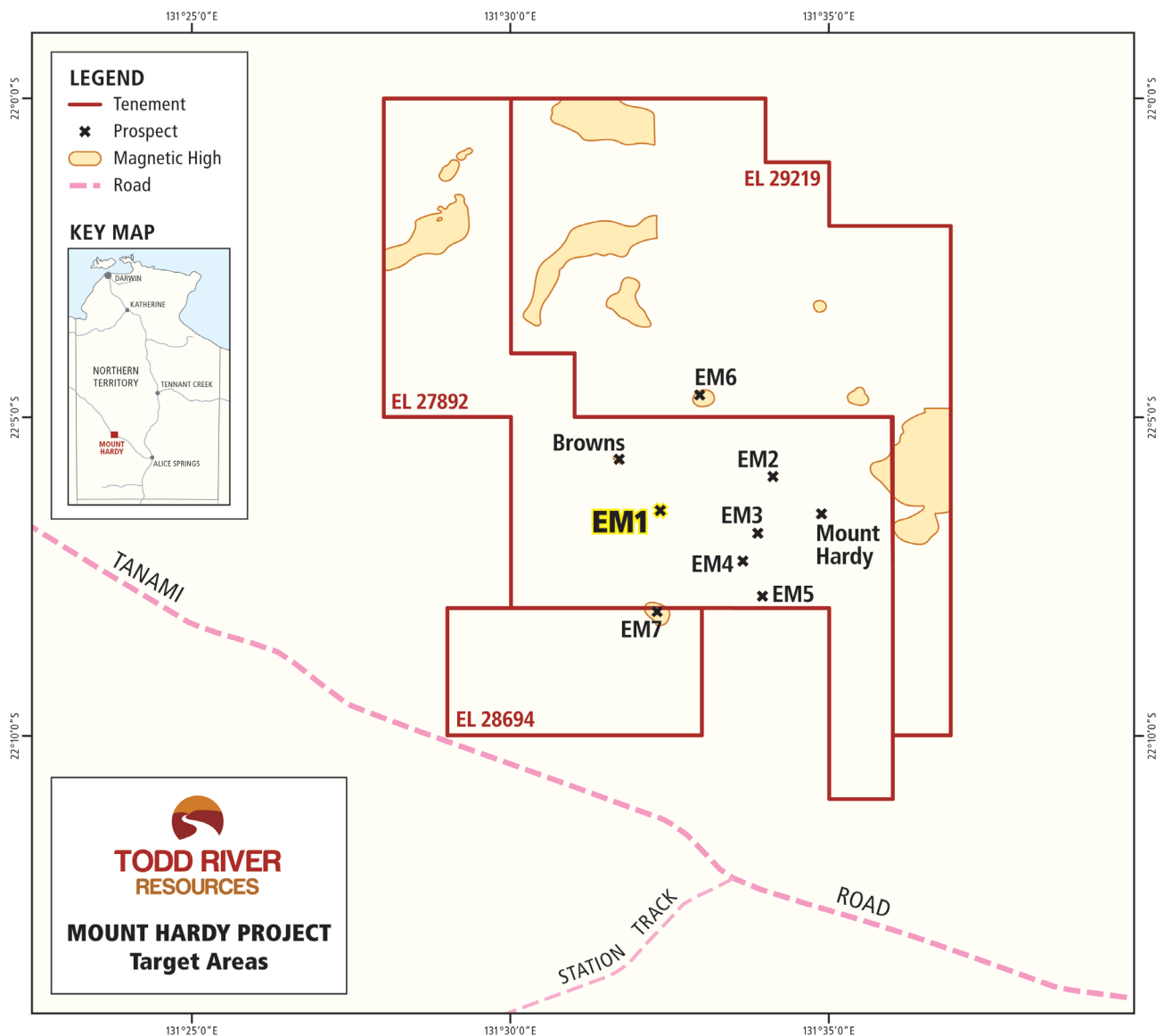


Figure 1 – Mt Hardy Project showing the location of the main drill target area, EM1 and additional prospects in the project area.

Table 1 – Drill hole collar location.

| HOLE_ID  | EASTING<br>(GDA94Z52) | NORTHING<br>(GDA94Z52) | RL<br>AHD | DIP | AZIMUTH<br>(Magnetic) | DEPTH                | RC<br>Precollar |
|----------|-----------------------|------------------------|-----------|-----|-----------------------|----------------------|-----------------|
| MHDD0043 | 761922                | 7553064                | 642       | -72 | 108.2                 | 454.5<br>(Currently) | 156             |

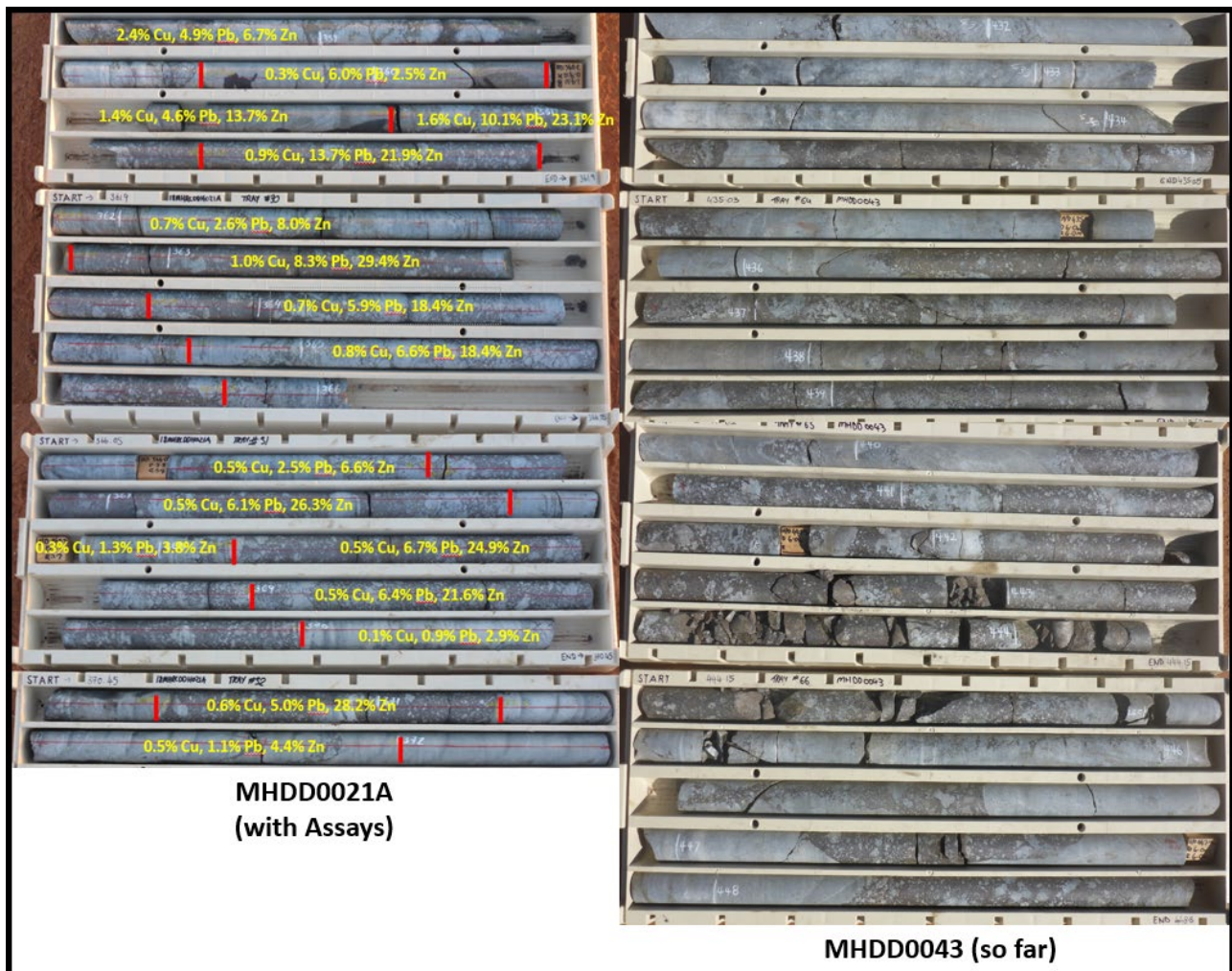


Figure 2 – Portion of the mineralisation intersected in MHDD0043 at the EM1 Prospect in comparison to the intersection in MHDD0021A.

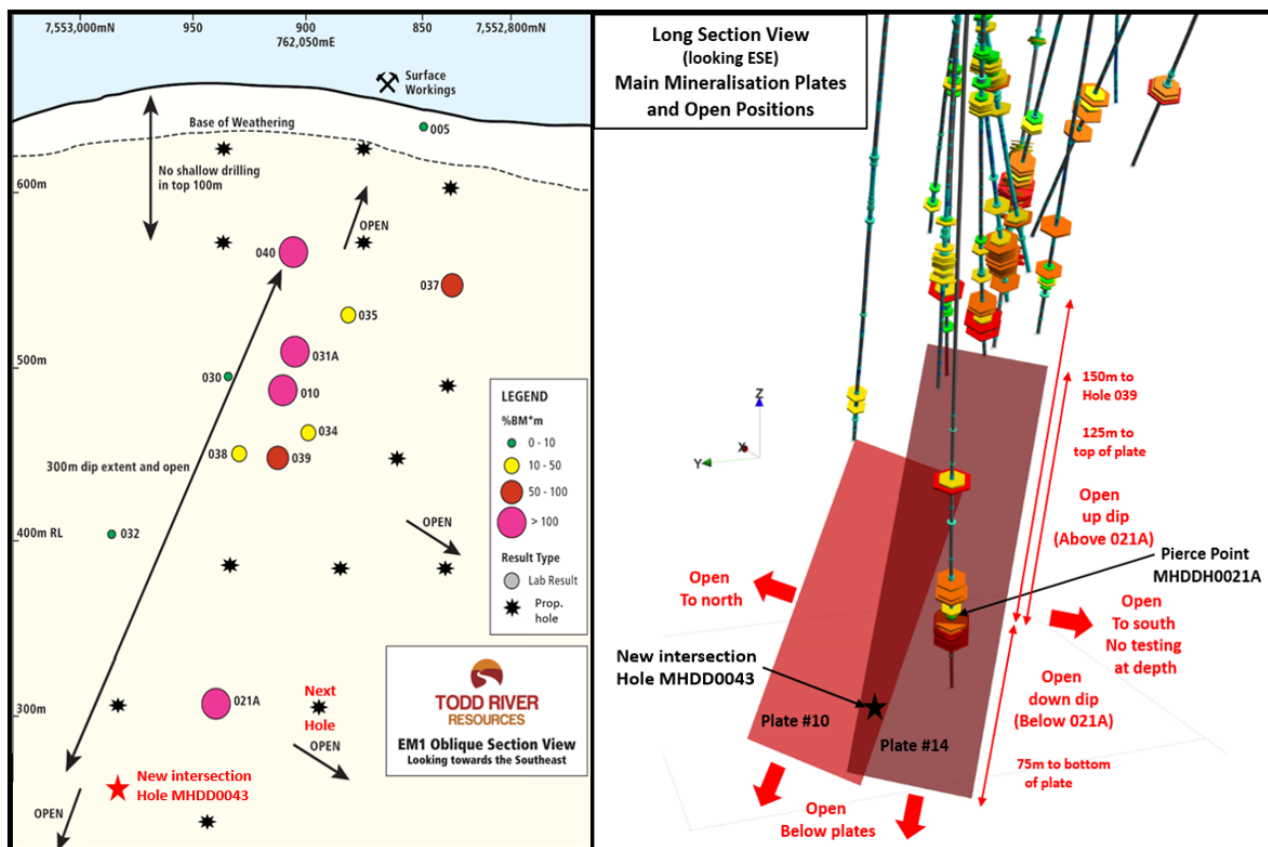


Figure 3 – Mt Hardy Project, EM1 Prospect area oblique long projection and location of the new pierce point for MHDD0043 and additional planned holes.



## Appendix A JORC Table One – Section One. Sampling Techniques and Data Mount Hardy Drilling – Reverse Circulation and Diamond Drilling

| 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.                                                                               | No sampling from the mineralised interval of MHDD0043 has been completed as yet. Reverse Circulation (RC) drill samples were taken from the rotary splitter mounted on the rig cyclone. Diamond drill samples were half core cut and sampled on 1m intervals. All samples from 2018 drilling have been submitted to Genalysis/Intertek Laboratories for industry standard preparation (whole sample crushed to >85% <75um) and analysis by both ICP for base metals and Fire Assay for precious metals. Portable XRF results reported here are taken from whole core analyses at 0.5m intervals.                                                                                                                                                                                               |
| 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).                                                                                                                                                                                                                                                                                                                                                             | Reverse Circulation (RC) drilling of pre-collars with NQ sized diamond drill tails. Most intervals has been oriented, except where broken ground in encountered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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.                                                                                                                                                                                                                                                                                            | Average of >90% recovery in all intervals. No issues of fines loss were observed. No issues relating to preferential loss/gain of grade material have been noted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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.                                                                                                                                                                                                                                                                  | RC chips and core was geologically logged for lithology, mineralogy, colour, weathering, alteration, structure and mineralisation. All holes were logged in full.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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. | No sampling from the mineralised interval of MHDD0043 has been completed as yet. All RC holes were sampled from the rotating splitter under the drill cyclone, taking a 2-4kg split from the bulk 15-25kg 1m interval. All sampled core was sawn and half core submitted. The sample preparation for all samples follows industry best practice, with oven drying of samples prior to coarse crushing and pulverization (to >85% passing 75 microns) of the entire sample. Field duplicates have been taken every 50 <sup>th</sup> sample. Further sampling (second half, lab umpire assay) will be conducted if it is considered necessary. The sample size (2-5 kg) is considered to be adequate for the material and grainsize being sampled and the style of mineralisation being drilled. |



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|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.<br>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. | All samples are to be analysed at Genalysis Intertek by ICP technique, lab codes 4A/OE33 and FA25/OE04. The four acid digest for the ICP data is considered a "total" result. Base metal standards and Blanks were inserted into the laboratory batch, results are awaited.                                                                                                                                             |
| Verification of sampling and assaying                   | The verification of significant intersections by either independent or alternative company personnel.<br>The use of twinned holes.<br>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.                                                                                                                                                                                                                                                                                            | Sampling was conducted by the field geologist and verified by the senior geologist on site prior to cutting/dispatch.<br>All data was entered into standardized spreadsheets on field laptops and uploaded into the company database.<br>No adjustments have been made to the primary 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.<br>Quality and adequacy of topographic control.                                                                                                                                                                                                                                                                                                                                | All drilling collars were located up using a standard GPS unit with accuracy of ca. 5m for Easting, Northing and RL<br>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.<br>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.<br>Whether sample compositing has been applied.                                                                                                                                                                                                                                                                | At this early stage of exploration hole spacings vary as dictated by target size and position. No compositing has been applied to the exploration results.<br>Sampling was of an exploratory and reconnaissance nature and spacings are insufficient to establish continuity or define Resources.                                                                                                                       |
| 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.<br>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.                                                                                                                                                                                                                          | Drilling intersections at Mount Hardy vary in the relationship to the mineralisation orientation. All holes were designed to give the best possible (as close to perpendicular) intersection, however most drilled prospects only have a few holes and so the orientation is not well defined. In practise the intersections are at worst oriented at 45 degrees to the plane of the mineralisation (when it is known). |
| Sample security                                         | The measures taken to ensure sample security.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All core and samples were under company supervision at all times prior to delivering to Genalysis/Intertek laboratories in Alice Springs                                                                                                                                                                                                                                                                                |
| Audits or reviews                                       | The results of any audits or reviews of sampling techniques and data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No sampling audits have been conducted at Mount Hardy                                                                                                                                                                                                                                                                                                                                                                   |

## 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.<br>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 Mount Hardy prospects are located on tenement EL 27892 held by Todd River Metals Pty Ltd, which is wholly-owned by Todd River Resources Limited.<br>All tenements are in good standing with no known impediments               |
| Exploration done by other parties       | Acknowledgment and appraisal of exploration by other parties.                                                                                                                                                                                                                                                                                                                                                            | Between 2012 and 2016 significant work was conducted by TNG Limited, and has been reported to the ASX in several ASX Releases. In 2017 Todd River completed one drilling program and has reported results in several ASX releases. |



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|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geology                                                          | Deposit type, geological setting and style of mineralisation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Exploration at Mount Hardy conducted by Todd River Resources has aimed to identify structurally controlled base metal mineralisation, similar to that already outlined at Mount Hardy and elsewhere in the Arunta at Jervois or Barrow Creek. These areas are underlain by the Paleoproterozoic Lander Rock Beds schists and gneisses and have been intruded by Mesoproterozoic granites and are cut by major shear zones. |
| Drill hole Information                                           | <p>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:</p> <ul style="list-style-type: none"> <li>○ Easting and northing of the drill collar</li> <li>○ Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>○ Dip and azimuth of the hole</li> <li>○ Down hole length and interception depth</li> <li>○ Hole length</li> </ul>                                                              | <p>Five RC precollars have been drilled to date in the current program at Mount Hardy. Each will be extended with diamond core through the target zone.</p> <p>Hole MHDD043 is currently being drilled. Hole location details are shown in Table 1. Laboratory analyses will be reported as available.</p>                                                                                                                 |
| Data aggregation methods                                         | <p>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. The assumptions used for any reporting of metal equivalent values should be clearly stated.</p> | <p>No grade results are reported here.</p> <p>No maximum or minimum cuts applied.</p>                                                                                                                                                                                                                                                                                                                                      |
| Relationship between mineralisation widths and intercept lengths | <p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>                                                                                                                                                               | <p>Orientation yet to be defined.</p> <p>Expected true thickness ca. 60-80% or drill/intercept interval.</p>                                                                                                                                                                                                                                                                                                               |
| 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.                                                                                                                                                                                                                                                                                             | Detailed diagrams and sectional views of the mineralisation will await final laboratory results                                                                                                                                                                                                                                                                                                                            |
| 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 results reported here.                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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.                                                                                                                                                                                                                         | Drilling will continue at EM1 at Mount Hardy over the coming several weeks, with sample submission and analytical results reported as available.                                                                                                                                                                                                                                                                           |