

## **New areas of base metal anomalism identified at Mt Hardy from resampling of historical RAB gold drilling**

*Resampling program opens up new areas for exploration to the north of the Hendrix deposit and other recently drilled shallow targets*

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### **Key Points**

- **Several areas of base metal anomalism under cover identified in the north of the Project area by the resampling of 386 historical RAB holes drilled for gold**
- **Linda-Jane anomaly is the largest – 850m long x 350m wide and open to the NW**
- **Large areas under cover in the north of the Project remain untested**
- **Shallow drilling to test bedrock will form part of the 2020 exploration program**

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Todd River Resources Limited (ASX: TRT) is pleased to advise that it has identified further exploration opportunities its 100%-owned **Mt Hardy Copper-Zinc Project** in the Northern Territory (Figure 1) after receiving encouraging base metal results from the systematic resampling of historical RAB and vacuum drilling originally assayed largely for gold only in the northern part of the Project.

The resampling has identified a number of new areas of shallow base metal anomalism in bottom-of-hole samples taken during the re-sampling of Rotary Air Blast (RAB) holes drilled primarily to test for gold at the top of bedrock between 2002-2003 by Tanami Gold (Figure 2). The anomalous target areas are located to the north of the Inferred Resource at the Hendrix deposit and other recently drilled shallow targets as reported in SX announcements lodged on 25 October and 8 November with assays still pending for reconnaissance RC drilling at several additional prospects.

The Company was able to locate and collect material from 386 out of a possible 404 holes (96%). The holes are generally wide at 100m spacing with small areas of in-fill to 50m, and the drill lines are up to 1.2km apart.

This drill spacing is considered generally too broad in the context of the base metal mineralisation at Mt Hardy. The Hendrix Resource, for example, has a surface footprint much smaller than this wide-spaced drilling.

The historical holes were originally systematically assayed for precious metals and sporadically assayed for arsenic, copper and lead (no zinc assays were completed) on an approximate 1 in 20 ratio. The new assays cover a suite of base metals and pathfinder elements to build a comprehensive geochemical database.



A number of geochemical maps are shown in Appendix A which highlight the anomalies identified.

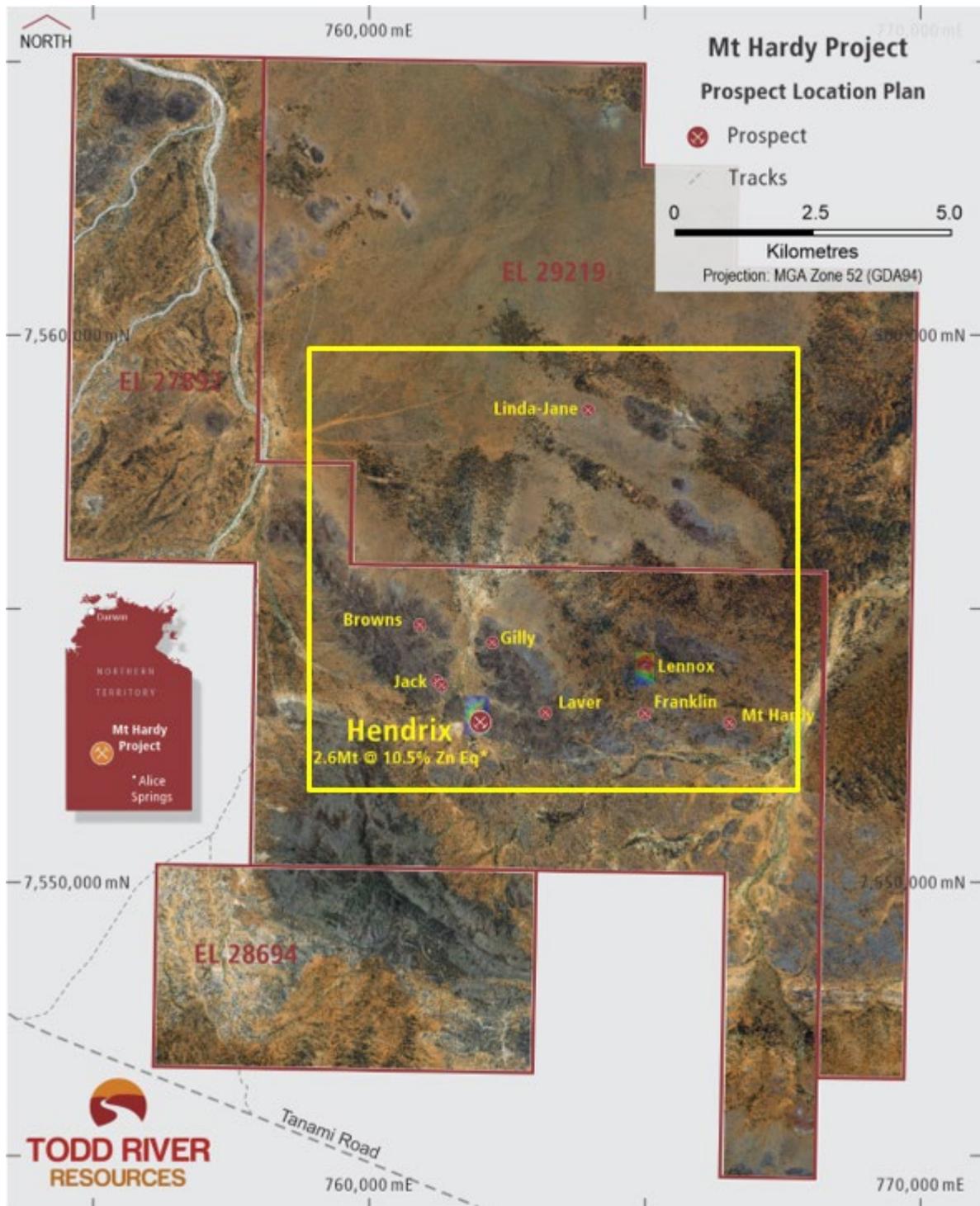
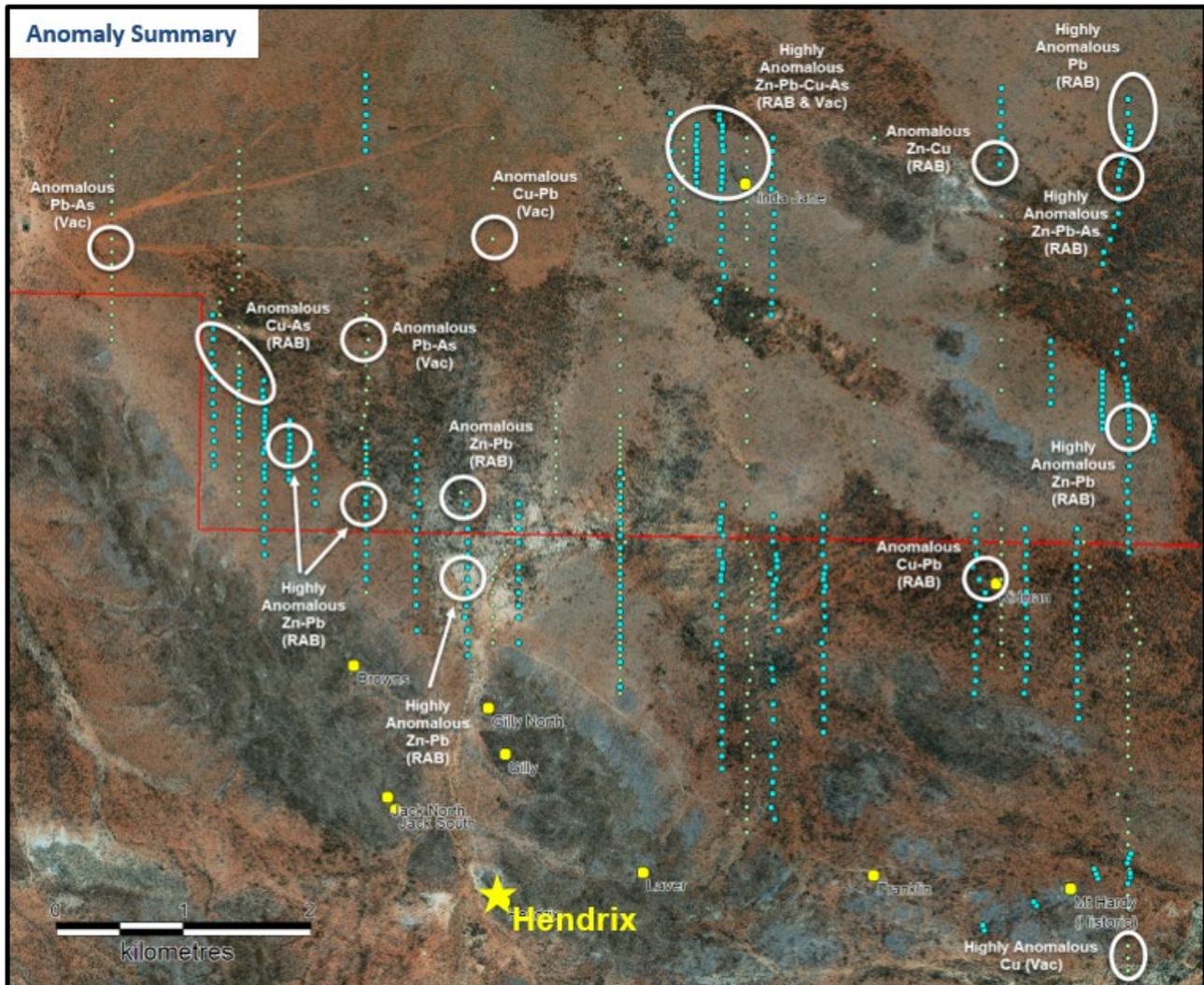


Figure 1 – Project location plan showing the area of the plans included in Appendix's A and B where the RAB resampling was completed



**Figure 2, showing a summary of the anomalies identified through the RAB re-sampling. Base metal element plans and detailed plans of Linda-Jane can be found in Appendix's A and B**

The best developed area of base metal anomalism is to the north-west at the Linda-Jane Prospect, where recent reconnaissance RC drilling has also been completed (assays pending). This anomaly, which is coincident in copper, lead and zinc, extends under cover for some 600m north-west of the Linda-Jane outcropping gossan and, in total, covers an area of approximately 850m X 350m.

This area also contains the highest individual assays for copper (496ppm) and one of the highest for zinc (1,344ppm) of the samples collected. Linda-Jane images that show the anomalous area on an individual copper, lead and zinc basis are contained in Appendix B. The northern end of the highlighted anomaly in these images is a function of the drilling completed to date and this is one area where additional drilling will be completed in 2020 to test for further anomalism.

In addition, there is a broad north-west trending anomaly that extends under cover from the northern edge of the Gilly prospect for approximately 2.5km. Overall it is lower grade than the Linda-Jane anomaly but it is coherent and present on all but one line, with lines spaced at a distance of 1.2km. This area also contains the highest recorded zinc grade of 2,019ppm.



Todd River Managing Director Will Dix said the results from this work provided an opportunity to leverage off data obtained from historical wide-spaced exploration drilling to vector into new base metal discoveries, further expanding the potential of the Mt Hardy Project to the north.

*“Re-sampling of the historical RAB spoils is something that could be viewed as a first-pass ‘free hit’ look at some of the geology undercover in the northern part of the project. Having been able to identify 96% of the holes drilled has provided us with a comprehensive geochemical map of a portion of the Mt Hardy Project.*

*“The Linda-Jane and Gilly Extension anomalies are the obvious areas that we will follow up in 2020, but we are also planning to extend the bedrock drilling program across additional parts of the project area along trend from where we have identified base metal mineralisation in the recently completed reconnaissance RC drilling program.*

*“The last couple of months have delivered outstanding exploration results and we are excited about the opportunities we will be able to chase in 2020 in an area that is fast becoming a stand-out base metal exploration play.”*

### **Next Steps at Mt Hardy**

Todd River intends to complete a down-hole EM survey on the deepest holes drilled on each prospect from the recently completed reconnaissance RC drilling program. This work will be completed in late November and is expected to enable more targeted drilling, focussing on accumulations of massive sulphides, during the 2020 drilling campaign.

The commencement of the 2020 field season will focus on the expansion of the current RC program in areas of known mineralisation, selected deeper drilling of the highest priority prospects and expansion of the shallow bedrock drilling areas discussed in this release.

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**Managing Director – Todd River Resources**

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### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Anthony Goddard, Principal of Intellex Geoscience, employed as a consultant to Todd River Resources. Mr Goddard is a member of the Australian Institute of Geoscientists (MAIG) and is a Registered Professional Geoscientist (RPGeo) in the fields of practice of Mineral Exploration and Regional Geology. Mr Goddard has sufficient experience of relevance to the style of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Goddard consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

### **About Todd River Resources**

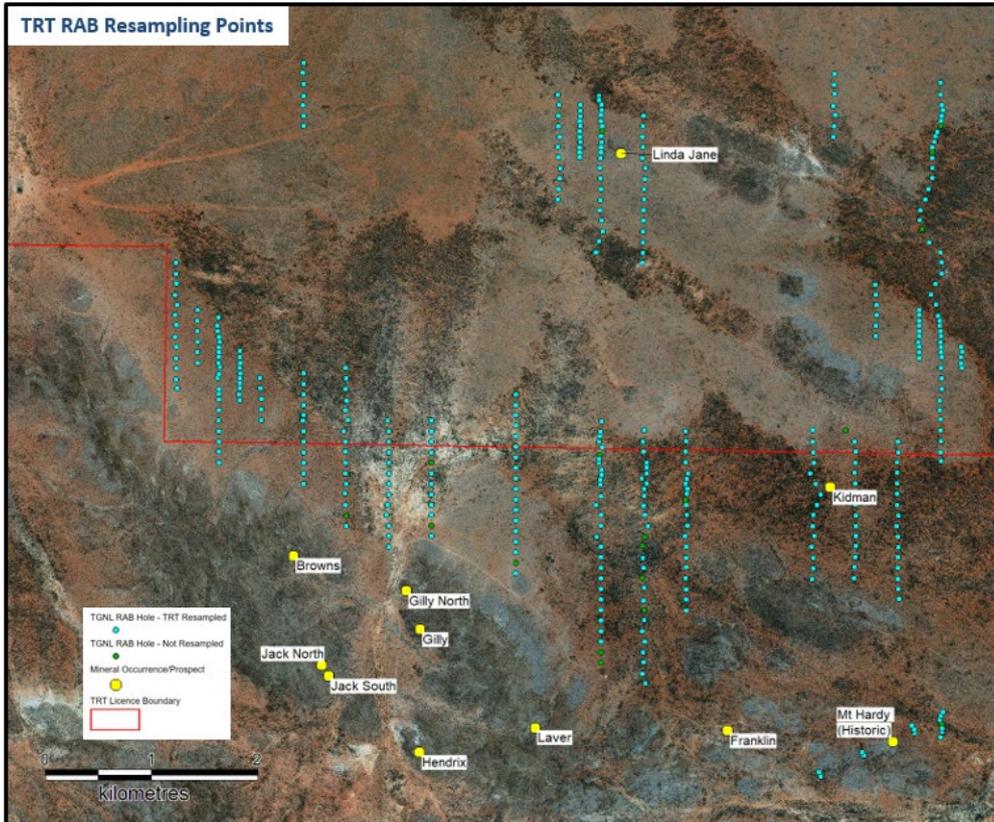
Todd River Resources (ASX: TRT) is an Australian-based resources company that has recently announced a maiden zinc-copper Mineral Resource estimate at Hendrix, within its 100% owned Mt Hardy Project, located 300km north west of Alice Springs.

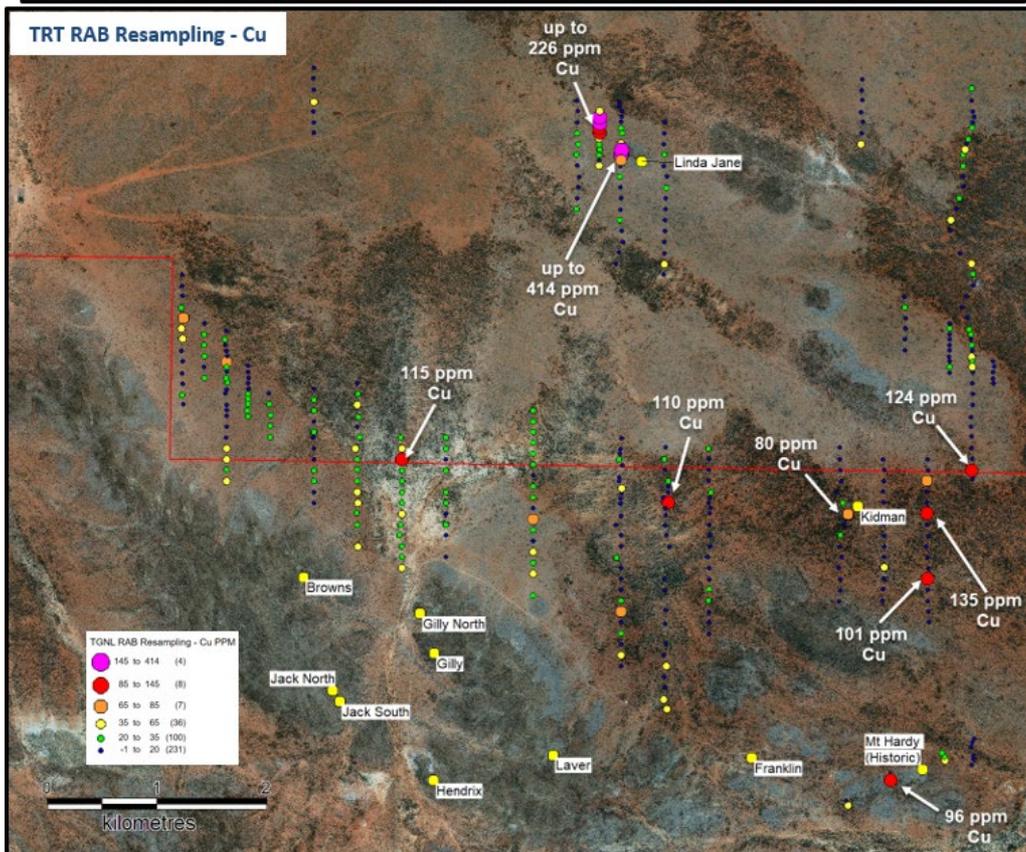
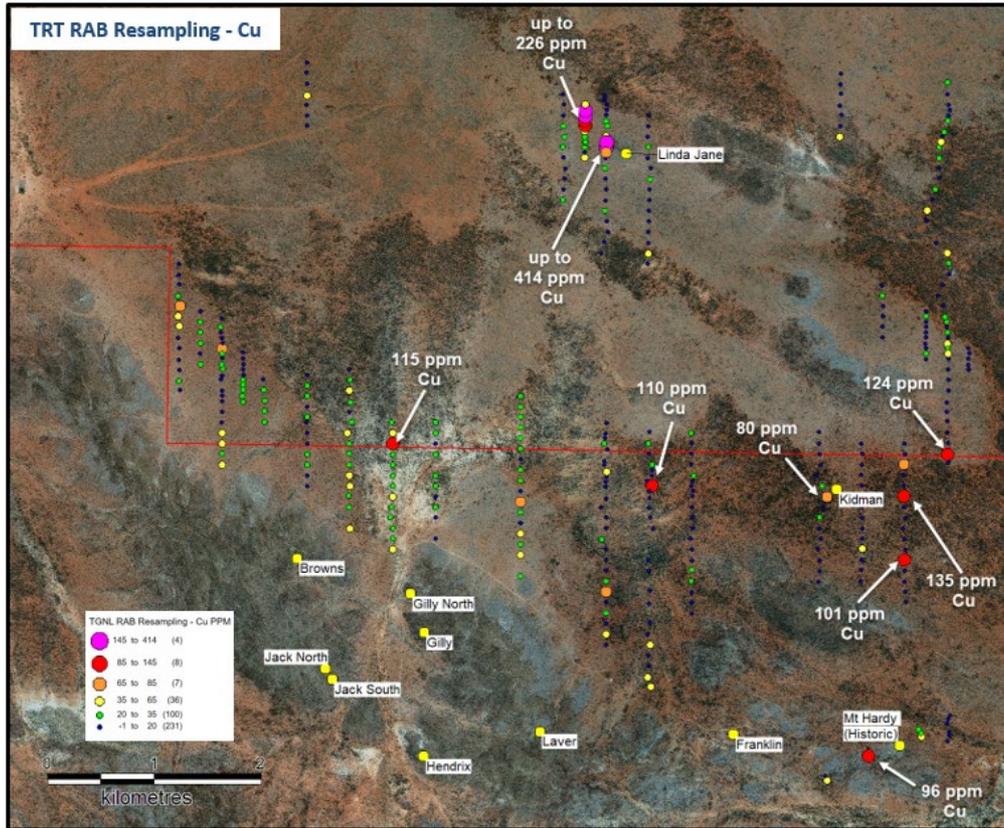
With a strong management team, tight capital structure and well funded for exploration in 2019, Todd River is well placed to pursue additional base metal mineralisation at Mt Hardy and progress exploration activities across its exploration portfolio.

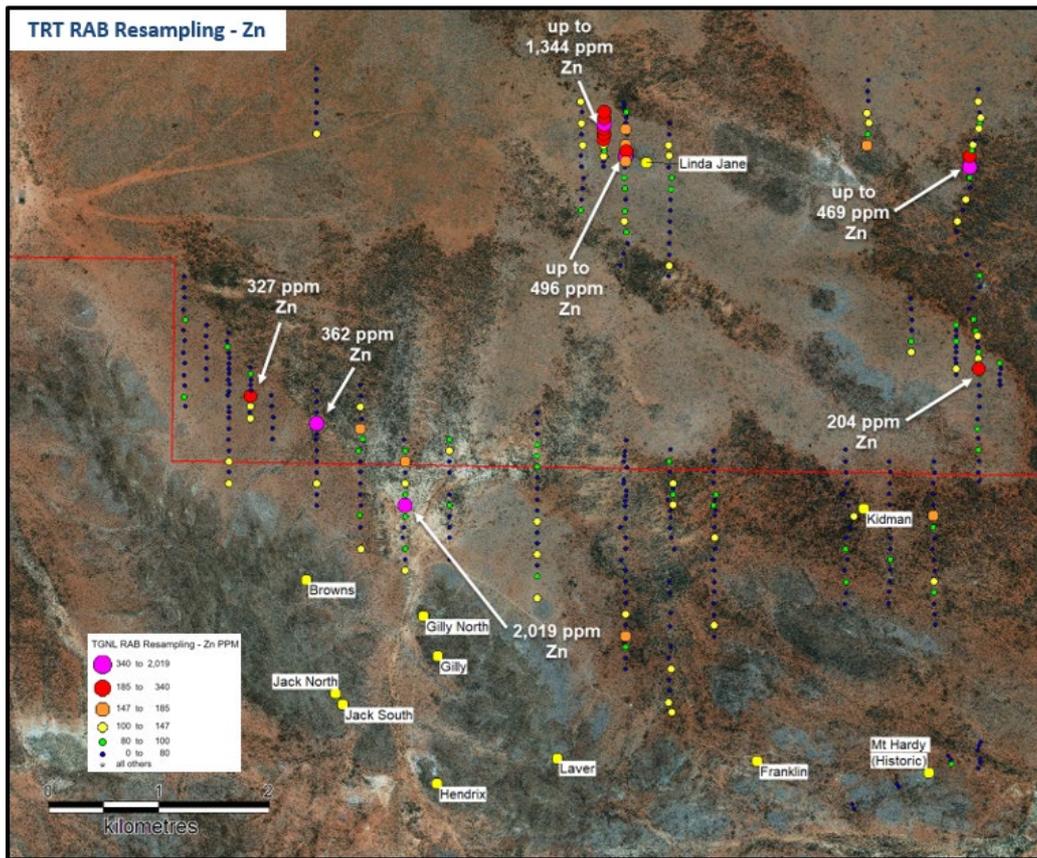
While Todd River's main focus is at Mt Hardy, the Company holds an extensive precious and base metal project portfolio which includes the Rover gold project, the McArthur Copper-Zinc project and the large Manbarrum Zinc resource.



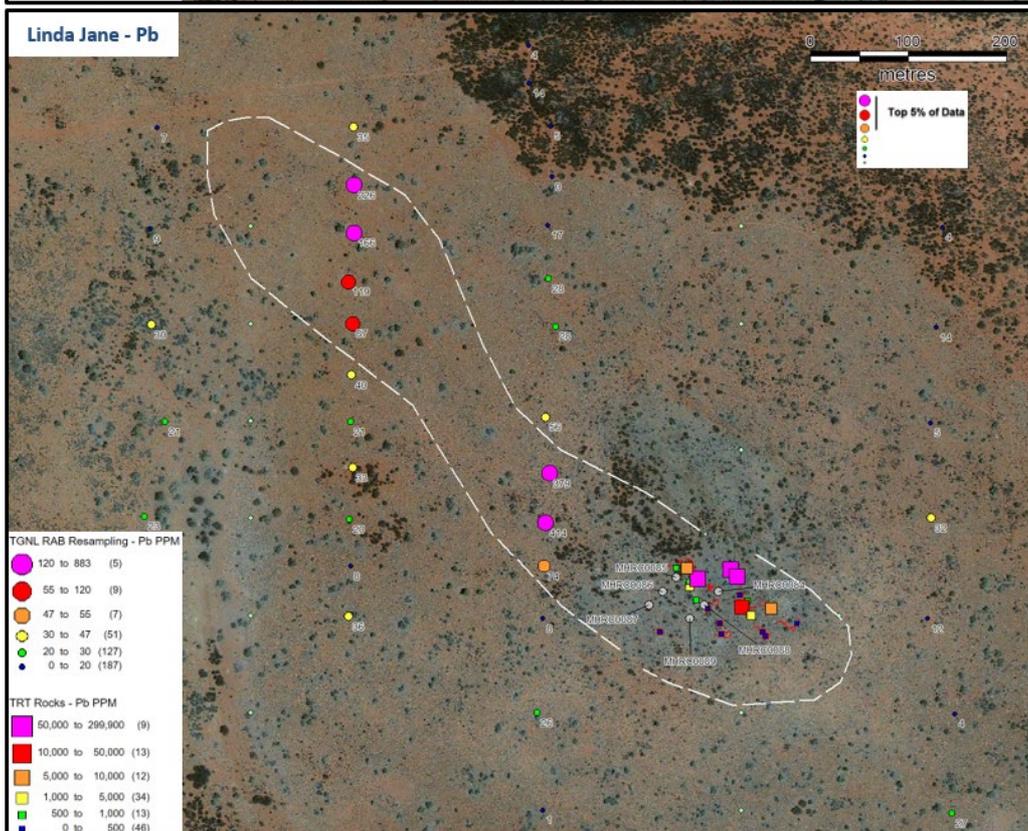
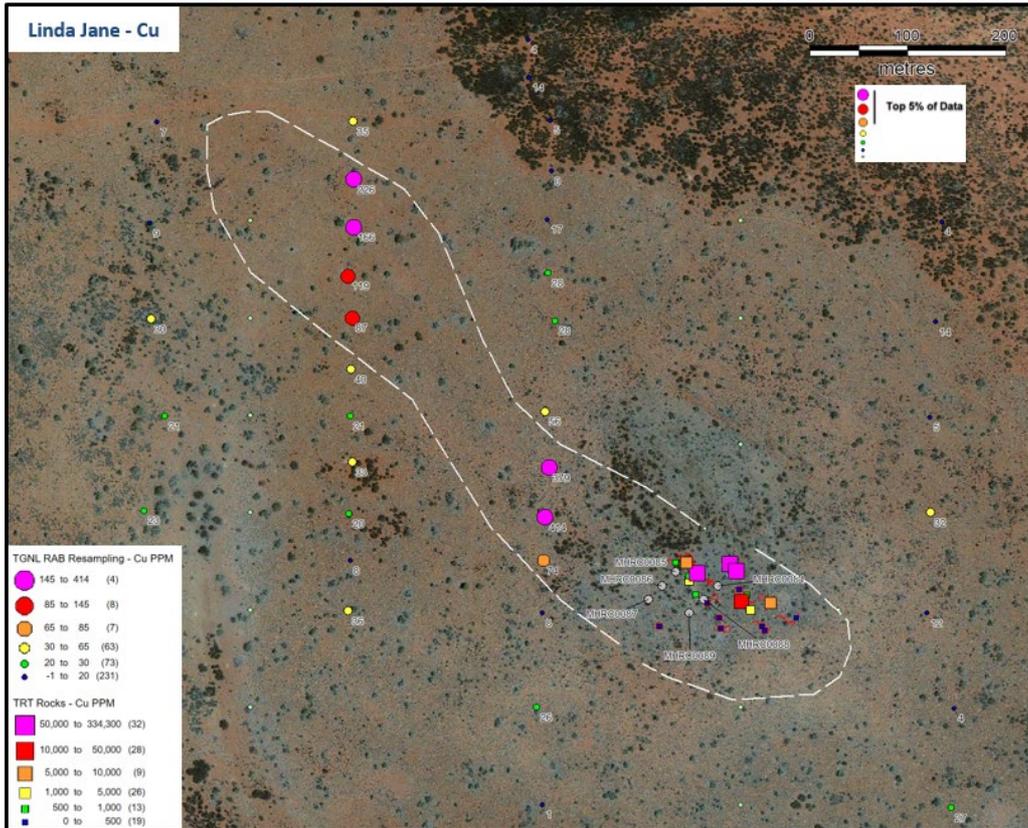
## Appendix A – Base Metal RAB resampling Assay Data – Mt Hardy Project

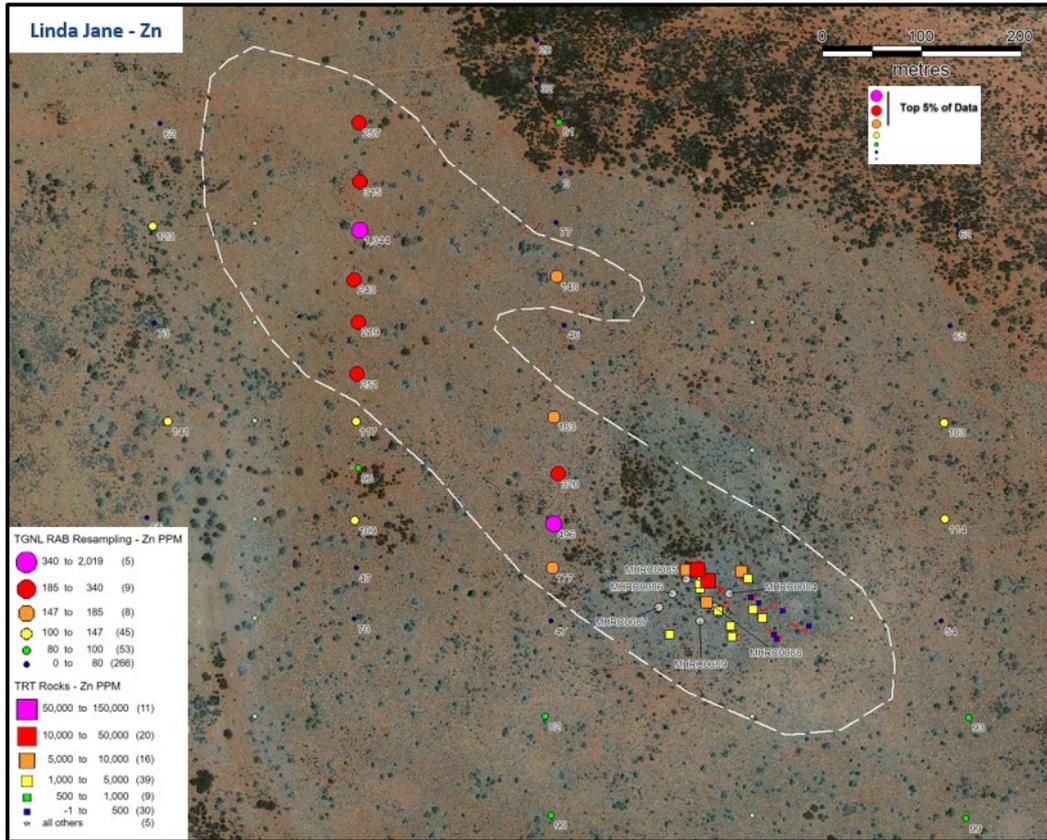






**Appendix B – Base Metal RAB resampling Assay Data – Linda-Jane Prospect**







## Appendix C - JORC Table One - Sampling Techniques and Data Mt Hardy RAB drilling Re-sampling

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p>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.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p>	<p>50-300g RAB spoil samples collected by experienced field geologists.</p> <p>All samples have been submitted to Genalysis Laboratories for industry standard preparation (whole sample crushed to &gt;85% &lt;75um) and analysis by 4A/MS and FA25/OE(gold plus multi-element ICP) for a broad element suite.</p>
Drilling techniques	<p>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).</p>	Not relevant
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	Not relevant
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>Samples were geologically logged for lithology, mineralogy, colour, weathering, alteration, structure and mineralization where possible.</p>
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>Sample preparation for all samples follows industry best practice, with oven drying of samples prior to coarse crushing and pulverization (to &gt;85% passing 75 microns) of the entire sample.</p> <p>The sample size (2-5 kg) is considered to be adequate for the material and grain size being sampled and the style of mineralisation being assessed.</p>
Quality of assay data and laboratory tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and</p>	<p>All samples reported here were analysed at Intertek Laboratories in Perth by technique 4A/MS – four acid</p>



	<p>whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<p>digest ICPMS finish for a suite of 60 elements (considered a "total" digest result) and by FA25/OE 25g fire assay for gold. Certified base metal standards were inserted into the laboratory batch, results were acceptable.</p>
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<p>Sampling was conducted by senior geological staff and consultants.</p> <p>All data was entered into standardized spreadsheets on field laptops and uploaded into the company Access database.</p> <p>No adjustments have been made to the primary assay data</p>
Locations of data points	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>All sampling locations were located up using a standard GPS unit to an accuracy of ca. 3-5m for Easting, Northing and RL.</p> <p>All coordinate data for the Stokes Yard project are in MGA_GDA94 Zone 52.</p>
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<p>Sampling was of an exploratory and reconnaissance nature and spacings are insufficient to establish continuity or define Resources.</p>
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>Samples were point sampled and so do not relate to the orientation of the mineralisation noted.</p>
Sample security	<p>The measures taken to ensure sample security.</p>	<p>All samples were under company supervision at all times prior to delivering to Intertek laboratories in Alice Springs</p>
Audits or reviews	<p>The results of any audits or reviews of sampling techniques and data.</p>	<p>No sampling audits have been conducted at the Mt Hardy project to date.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>The Mount Hardy prospects are located on tenements EL 27892, EL 28694 and EL 29219 held by Todd River Metals Pty Ltd, which is wholly-owned by Todd River Resources Limited. All tenements are in good standing with no know impediments</p>



Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All significant previous work is outlined in NTGS open file reports and in TRT ASX releases from 2018 and 2019, with all new work conducted by TRT reported herein.
Geology	Deposit type, geological setting and style of mineralisation.	There is insufficient information to define the style of base metals mineralisation noted from the sampling at this stage (given the weathered outcrop and significant deformation and metamorphism noted).
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: <ul style="list-style-type: none"> <li>o Easting and northing of the drill collar</li> <li>o Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>o Dip and azimuth of the hole</li> <li>o Down hole length and interception depth</li> <li>o Hole length</li> </ul>	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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	No aggregation or averaging was conducted on the data reported here.
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').	The true orientation (dip and strike) of the mineralisation is not known, however as all data is point data no widths are reported.
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 collated in Appendix A and Figures 1 and 2.
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.	All samples are shown on the diagrams in Appendix A.
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.	A ground geophysical program and shallow drilling of selected targets is planned for the following field season.

