

New Shallow Base Metals Discovery at the Mt Hardy Project in the NT

Initial RC drilling at Gilly North, 1.5km from the Hendrix deposit, returns thick, highgrade base metal intercepts demonstrating prospectivity of the field and potential for a cluster

Key Points:

- New phase of reconnaissance RC drilling intersects high-grade base metal mineralisation in all holes drilled to date at the Gilly North prospect.
- In addition, assay results are due over the coming weeks for RC drilling undertaken at Hendrix South, Hendrix North West and Gilly Prospects.
- RC drilling continuing at the Linda Jane and Laver prospects and to test for further mineralisation at Gilly North.
- Down-hole EM survey crews to be mobilised to site in November for all Prospects
- Ongoing exploration underpinned by recently completed \$2.9M capital raising.

Todd River Resources Limited (ASX: TRT) is pleased to advise that it has made a new shallow base metal discovery in initial drilling being undertaken as part of the new phase of reconnaissance Reverse Circulation (RC) drilling underway at its 100%-owned Mt Hardy Copper-Zinc Project in the Northern Territory (Figure 1).

The current drilling program is targeting new prospects identified through mapping and surface sampling and is designed to build on the robust maiden Inferred base metal Resource of **2.6Mt @ 10.5% Zn equivalent** at Hendrix¹ announced earlier this year.

First RC drilling at the Gilly North Prospect, located 1.5km north of Hendrix, returned the following assay results in the first three holes completed:

- 10m @ 1% Cu, 0.4% Pb, 3.6% Zn and 24g/t Ag (5.0% combined base metals) from 5m, including:
 - 7m @ 1.4% Cu, 0.6% Pb, 4.7% Zn and 36.4g/t Ag (6.7% combined BM) from 8m (MHRC0067)
- 9m @ 0.6% Cu, 0.1% Pb, 5.5% Zn and 7g/t Ag (6.2% combined base metals) from 36m, including:
 - 7m @ 0.7% Cu, 0.1% Pb, 6.1% Zn and 8g/t Ag (6.9% combined BM) from 37m (MHRC0068);
 and

¹ Refer ASX announcement of 12 July 2019.



- 14m @ 1.1% Cu, 0.1% Pb, 3.4% Zn, 8.7g/t Ag (4.6% combined base metals) from 42m, including:
 - **7m @ 1.4% Cu, 0.1% Pb, 6.3% Zn and 12.6g/t** Ag (7.8% combined BM) from 46m (MHRC0069).

Todd River's Managing Director Will Dix said the outstanding results from the first drilling into a series of newly identified regional targets represented a significant exploration breakthrough for the Company at Mt Hardy.

"Since we discovered the Hendrix deposit last year and began to better understand the type of deposit and structural controls of the system, we always had a strong belief that we would find more high-grade mineralisation at Mt Hardy and be able to grow the Resource base through successful exploration. This discovery, at an early stage of our new drilling program, strongly vindicates that view and validates our systematic and focused exploration model.

"The current drilling program has already been expanded within our existing drilling permit parameters to expand the zone of mineralisation identified at Gilly North and follow-up work is also already being planned for subsequent programs. Outside of Gilly North, at the Gilly, Linda Jane and the Hendrix Prospects we have assay results due over the coming weeks.

"We are experiencing an outstanding exploration strike rate with the drilling undertaken at Mt Hardy and we look forward to continuing this in future programs. With drilling continuing and a large number of assays still outstanding, shareholders can look forward to continued strong news-flow right up until the end of the year and beyond."

Geological Setting and Drilling Outcomes

As previously reported, the Company has been focussed on expanding the pipeline of potential targets within the Mt Hardy Project area. To that end, reconnaissance mapping and rock chip sampling was completed to follow up several historic Cu ± Pb mineral occurrences mapped by the Bureau of Mineral Resources (BMR – now Geoscience Australia) in 1968.

Many of the recently identified drilling targets stemmed from this follow-up work, together with systematic mapping, prospecting and sampling.

Gilly North - Figures 3 and 4

Holes were targeted on a number of high-grade base metal rock chip results and the mapping completed in August and September. Base metal sulphides (sphalerite, chalcopyrite and galena), together with pyrrhotite (iron sulphide) were intersected over varying widths in the holes drilled. The zones of sulphide breccia, and sulphide stringers are hosted within the sediments of the Lander Rock Formation.

The weathering profile is very thin at the Gilly North prospect, where drilling is collared in very weakly oxidised to fresh rock. Some minor oxidation of the sulphides was observed in hole MHRC0067 but otherwise the sulphides in both hole MHRC0068 and MHRC0069 are fresh sulphide. Sulphides observed



in the RC chips are coarse grained with both sphalerite and galena occurring in centimetre-sized aggregates.

The drill rig has now returned to Gilly North where a number of follow-up RC holes will be completed.

Gilly, Linda Jane and the Hendrix Prospects

RC drilling at the Hendrix South (3 holes), Hendrix North West (3 holes) and Gilly Prospects (7 holes) have also been undertaken and assay results are due in early November.

Next Steps at Mt Hardy

Drilling is continuing at Mt Hardy, with the RC rig currently back at the Gilly North Prospect where additional holes are being completed to test for further mineralisation. Up to an additional 6-8 holes will be drilled as part of the current campaign, prior to re-assessing the outcomes of the drilling and planning the next exploration program.

The deepest holes drilled on each prospect have been cased for down-hole EM surveying and it is expected that this work will be completed in November and will greatly assist with planning future drilling.

In parallel with the current drilling program, the Company has completed re-sampling the end-of-hole (fresh rock) sample from a significant number of historical RAB holes drilled through sand cover in the northern half of the project area. These holes were drilled in the 1990's and largely assayed solely for gold with a limited number of gold pathfinder elements.

Assay results from this work are expected to be received shortly and the data will then be assimilated into the project database and analysed to identify additional areas af base metal anomalism

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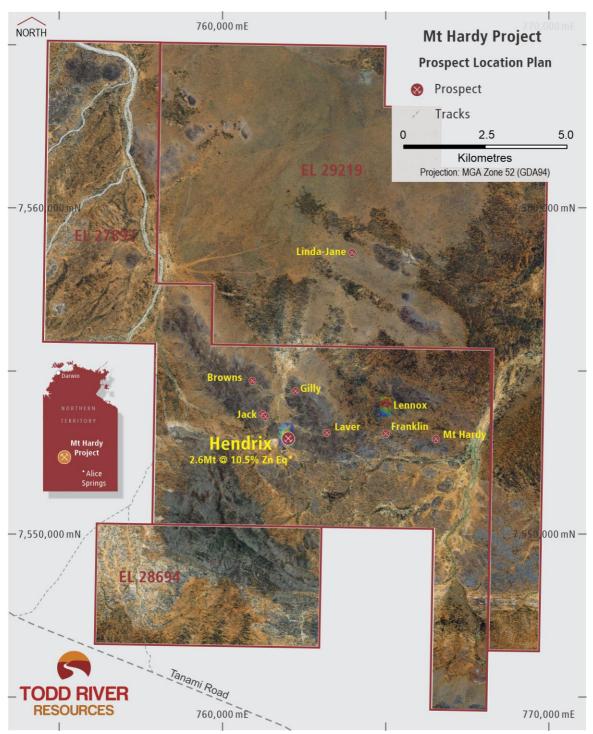


Figure 1 – Mt Hardy Project – Prospect Location plan



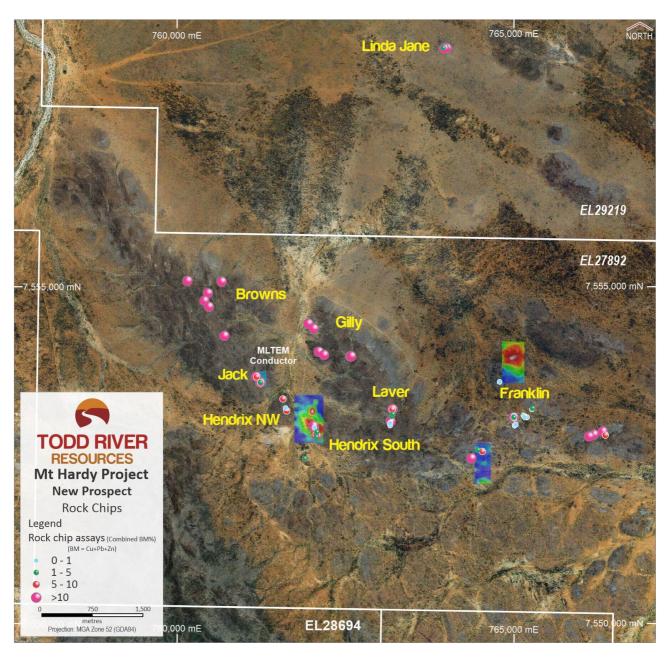


Figure 2 – Mt Hardy Project showing the location of the recently identified prospects and combined base metal rock chip sample results.





Figure 3 – Mt Hardy Project showing the location of Drill Collars for the holes completed to date at the Gilly North and Gilly Prospects.



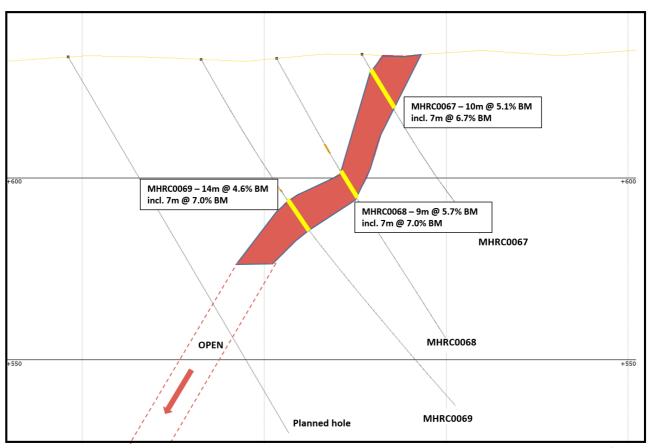


Figure 4 – Gilly North X-section showing combined base metal grades – individual grades can be found on Page 12 of this announcement and in Appendix A.

Table 1 – Collar information for the completed RC holes at Mt Hardy to date

					Depth		
hole_id	Prospect	GDA_EAST	GDA_North	GDA_RL	(m)	Dip	Azimuth
MHRC0067	Gilly North	762009	7554367	640	60	-60	48
MHRC0068	Gilly North	761995	7554353	640	90	-60	48
MHRC0069	Gilly North	761981	7554339	640	120	-60	48
MHRC0070	Gilly	762095	7554018	640	60	-60	46
MHRC0071	Gilly	762095	7554018	640	74	-60	47
MHRC0072	Gilly	762067	7553990	340	122	-60	51
MHRC0073	Hendrix South	762043	7552786	340	60	-60	122
MHRC0074	Hendrix South	762025	7552796	340	90	-60	122
MHRC0075	Hendrix South	762008	7552806	640	126	-60	124
MHRC0076	Gilly	762124	7553990	640	89	-60	47
MHRC0077	Gilly	762109	7553976	640	121	-60	49
MHRC0078	Gilly	762166	7553976	640	60	-60	50
MHRC0079	Gilly	762138	7554004	640	83	-60	48
MHRC0080	Gilly	762137	7553954	640	120	-60	48



MHRC0081	Hendrix NW	762007	7552905	640	59	-60	64
MHRC0082	Hendrix NW	762042	7552925	640	90	-60	238
MHRC0083	Hendrix NW	762059	7552935	640	105	-60	240
MHRC0084	Linda Jane	763977	7558525	640	59	-60	47

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Andrew Thompson, who is an employee of S2 Resources and carrying out work for Todd River Resources under a Shared Services Agreement between the companies. Mr Thompson is a member of the Australian Institute of Mining and Metallurgy (MAusIMM) and 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 Thompson 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 and a new base metals discovery at Gilly North, within its 100%-owned Mt Hardy Project, located 300km north west of Alice Springs.

With a strong management team, solid capital structure and well-funded for ongoing exploration, 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 – Analytical Results MHRC0067, MHRC0068, MHRC0069

hole_id	depth_from	depth_to	Ag ppm	Cu_pc	Pb_pc	Zn_pc	T BM _pc
MHRC0067	0	1	0	0.0	0.0	0.1	0.1
MHRC0067	1	2	0	0.0	0.0	0.1	0.2
MHRC0067	2	3	1	0.0	0.0	0.3	0.3
MHRC0067	3	4	2.1	0.0	0.1	0.3	0.4
MHRC0067	4	5	1.8	0.1	0.1	0.6	0.7
MHRC0067	5	6	4	0.2	0.1	0.8	1.1
MHRC0067	6	7	4.8	0.3	0.1	1.1	1.4
MHRC0067	7	8	13.6	0.6	0.3	0.6	1.4
MHRC0067	8	9	162.7	0.6	2.9	1.0	4.4
MHRC0067	9	10	24.9	0.3	0.5	2.5	3.2
MHRC0067	10	11	19.2	3.3	0.5	5.1	8.8
MHRC0067	11	12	22.7	2.0	0.1	11.3	13.4
MHRC0067	12	13	7.2	1.1	0.1	6.5	7.6
MHRC0067	13	14	9.7	1.6	0.0	3.9	5.5
MHRC0067	14	15	8.4	1.3	0.0	2.8	4.1
MHRC0067	15	16	1.3	0.1	0.0	0.2	0.3
MHRC0067	16	17	0.6	0.0	0.0	0.2	0.2
MHRC0067	17	18	1	0.1	0.0	0.3	0.3
MHRC0067	18	19	0.7	0.1	0.0	0.1	0.2
MHRC0067	19	20	0	0.0	0.0	0.1	0.1
MHRC0068	21	22	0	0.0	0.0	0.2	0.2
MHRC0068	22	23	0.6	0.0	0.0	0.1	0.2
MHRC0068	23	24	0	0.0	0.0	0.1	0.1
MHRC0068	24	25	0	0.0	0.0	0.1	0.1
MHRC0068	25	26	0	0.0	0.0	0.1	0.1
MHRC0068	26	27	0	0.0	0.0	0.2	0.2
MHRC0068	27	28	2	0.1	0.0	0.9	1.0
MHRC0068	28	29	5.1	0.9	0.0	2.0	3.0
MHRC0068	29	30	3.5	0.6	0.0	1.2	1.8
MHRC0068	30	31	2	0.3	0.0	0.4	0.7
MHRC0068	31	32	3.5	0.7	0.0	2.0	2.7
MHRC0068	32	33	0	0.0	0.0	0.1	0.1
MHRC0068	33	34	0	0.0	0.0	0.0	0.1
MHRC0068	34	35	0	0.0	0.0	0.0	0.0
MHRC0068	35	36	0	0.0	0.0	0.8	0.8



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MHRC0068	36	37	3.3	0.5	0.1	0.7	1.3
MHRC0068	37	38	15.2	1.7	0.1	2.6	4.3
MHRC0068	38	39	8.1	1.0	0.1	1.3	2.3
MHRC0068	39	40	2.6	0.1	0.1	0.5	0.8
MHRC0068	40	41	6.2	0.4	0.2	3.2	3.8
MHRC0068	41	42	7	0.5	0.1	28.2	28.8
MHRC0068	42	43	11.8	0.7	0.2	5.9	6.9
MHRC0068	43	44	3.2	0.3	0.1	2.0	2.3
MHRC0068	44	45	2.8	0.3	0.0	0.5	0.8
MHRC0068	45	46	0	0.0	0.0	0.2	0.2
MHRC0068	46	47	0	0.0	0.0	0.2	0.2
MHRC0068	47	48	0	0.0	0.0	0.1	0.1
MHRC0069	40	41	0.9	0.1	0.0	0.1	0.2
MHRC0069	41	42	1.8	0.1	0.0	0.2	0.3
MHRC0069	42	43	12.2	1.8	0.0	0.3	2.1
MHRC0069	43	44	2.1	0.3	0.0	0.1	0.4
MHRC0069	44	45	4	0.7	0.0	0.2	0.9
MHRC0069	45	46	1.9	0.3	0.0	0.1	0.4
MHRC0069	46	47	11.2	1.6	0.0	3.3	5.0
MHRC0069	47	48	24.8	1.2	0.4	4.4	6.0
MHRC0069	48	49	10.5	0.9	0.1	18.7	19.7
MHRC0069	49	50	3.8	0.3	0.1	3.7	4.0
MHRC0069	50	51	18.3	3.3	0.1	9.0	12.4
MHRC0069	51	52	11.2	1.7	0.1	2.3	4.1
MHRC0069	52	53	8.4	0.5	0.1	2.9	3.5
MHRC0069	53	54	3.1	0.6	0.0	1.0	1.6
MHRC0069	54	55	6.7	1.2	0.0	0.8	2.0
MHRC0069	55	56	4	0.7	0.0	0.8	1.6
MHRC0069	56	57	1.9	0.2	0.0	0.4	0.7
MHRC0069	57	58	0.5	0.1	0.0	0.1	0.2
MHRC0069	58	59	0	0.0	0.0	0.1	0.1
MHRC0069	59	60	1.1	0.2	0.0	0.6	0.9
MHRC0069	60	61	0	0.0	0.0	0.0	0.0



Appendix B JORC Table One – Section One. Sampling Techniques and Data Mount Hardy Drilling – Reverse Circulation 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.	Reverse Circulation (RC) drill samples were taken from the rotary splitter mounted on the rig cyclone. All samples from 2019 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.
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 with samples collected at 1m intervals
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 >95% 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 were geologically logged for lithology, mineralogy, colour, weathering, alteration, 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.	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. 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 50th 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
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether	Three certified base metal standards and a certified blank sample were analysed during at a rate of 1 in 25 samples. Standards were GBM399-7, GBM399-2, and GBM908-10 – low, medium and high grade for base metal respectively. Blank GLG312-2 was used. pXRF results for the standards and the blank were acceptable, and no calibration factors have been applied.



	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.
		Given the above QA/QC work the data is considered to be a total result for the base metals reported (Cu, Pb, Zn), and to have acceptable levels of accuracy and precision.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Sampling was conducted by the field geologist and verified by the Exploration Manager on site prior to dispatch. All data was entered into standardized spreadsheets on field laptops and uploaded into the company database. 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. Quality and adequacy of topographic control.	All drilling collars were located up using a DGPS unit with accuracy of ca. 1m for Easting, Northing and RL All coordinate data for the Mount Hardy project are in MGA_GDA94 Zone 52.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	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. 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. 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 RC 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. 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 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
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 (Mentioned in the text). In 2017 Todd River



		completed one drilling program and has reported results in several ASX releases (such as
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. Both areas are underlain by the Paleoproterozoic Lander Rock Beds schists and gneisses and have been intruded by Mesoproterozoic granites and are cut be major shear zones.
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:	Hole location details for the current program are shown in Table 1.
	 Easting and northing of the drill collar Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar Dip and azimuth of the hole Down hole length and interception depth Hole length 	Interval and grade values reported here have been determined from averages of multiple portable XRF results and so approach a representative result. Laboratory analyses will be reported as available.
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 grade results are reported here. No maximum or minimum cuts applied.
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').	Orientation not well defined. Expected true thickness ca. 70-80% or drill/intercept interval.
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 are contained in the release.
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 received results are reported here. ALL data used is included 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.	Samples from the ongoing drilling have been submitted for analysis and will be reported when available. Drilling will continue at Mount Hardy over the coming few weeks, with sample submission and analytical results reported as available.