

High Grade Rock Chip Results Confirm New Areas of Prospectivity at the Mt Hardy Copper-Zinc Project

Multi-element results show strong continuous copper-lead-zinc anomalies over extensive strike lengths at multiple undrilled prospects

Key Points

- Several new areas of base metal anomalism validated by high grade rock chip sampling over extensive strike extent
- The Stardust-AB-Jack trend to the north west of the Hendrix Resource* covers approximately 2.8 kilometres of untested strike
- Additional new prospect areas confirmed at Lehmann and Pacquiao
- Large areas under cover in the north of the Project remain untested
- RC drilling to test these targets is planned on the commencement of the Northern Territory field season at the beginning of Q2 2023

Todd River Resources Limited (**ASX: TRT**) is pleased to advise that high grade rock chip assay results have confirmed new areas of extensive prospectivity at its 100%-owned **Mt Hardy Copper-Zinc Project** in the Northern Territory (Figure 1). The Company plans to commence drilling these new target areas around the start of Q2 2023 following completion of work on the wheatbelt projects in Western Australia and the receipt of statutory approvals.

Todd River's Managing Director Will Dix said "it's highly encouraging to see such outstanding numbers away from the Hendrix Resource and this confirms our belief that there are multiple zones of mineralisation to be identified to augment the existing Resource. The COVID event and associated travel restrictions has meant that Mt Hardy sat dormant for around two years and it has been really satisfying to get back in there with a refreshed approach and immediately verify and validate our model. We are really excited to start drilling these new areas as soon as we can next year and begin to build an extensive mineral inventory at Mt Hardy."

The systematic sampling of multiple prospective horizons has returned significant results from the Stardust-AB-Jack trend, the Lehmann trend and the Pacquiao area (**Figures 2, 3, 4 and 5**). Rock chip sampling followed up initial work completed earlier in the year that had defined broad surface geochemical base metal anomalies from the approximately 5,000 XRF soil samples taken on a grid pattern over amenable terrane. None of the new areas have been drilled at this point and all reflect new opportunities at Mt Hardy.



Figure 1 – Todd River Resources Projects highlighting the location of the Mt Hardy Cu-Zn Project





Figure 2 – Prospect locations at Mt Hardy Cu-Zn Project with recent rock chip sampling overlying previously announced surface geochemistry

Stardust-AB-Jack Trend (Figure X)

The Stardust-AB-Jack (SABJ) Trend covers a north west – south east trending strike extent of approximately 2.8Km and is located 1.5 kilometres to the north west of the previously published Hendrix Resource (see ASX announcement lodged July 10 2019). The SABJ high grade results include **37.9% Cu, 17.8% Cu, and 16.8% Cu** from gossanous zones up to 5m wide at surface.—The dominantly malachite mineralisation is hosted in numerous sub-parallel brecciated quartz veins. In parts, significant Zn-Pb oxide mineralisation are associated with the quartz veins. A full table of results is included as Table 1.

Lehmann Trend (Figure Y)

The Lehman Trend covers an extensive area to the north east of Hendrix that also trends NW-SE similarly to the SABJ Trend. The surface expression of the mineralisation at Lehmann is patchy, as it is at the base of a large hill and is obscured by scree. Results from the Lehmann Trend include **55.3% Pb+928 ppm Ag**, **5.5% Cu+16.4% Pb+21% Zn**, **and 25.5% Cu+15.2% Zn**. The massive Cu-Pb-Zn oxide mineralisation is hosted in a milled quartz breccia, which is footwall to an extensive silicified fault that can be traced for well over one kilometre.



Pacquiao Area (Figure Z)

The Pacquiao Area returned results including 19.6% Cu, 10.4% Cu, 6% Cu from a small areas of malachite mineralisation associated with minor breccia and faulting in psammite host rock.



Figure 3 – Stardust-AB-Jack Trend highlighting the high grade rock chip results and mineralised trends that will be drilled in early 2023





Figure 4 – Recently identified Lehmann Trend highlighting the high grade rock chip results and mineralised trends that will be drilled in early 2023





Figure 5 – Pacquiao and Lennox prospect areas highlighting the high grade rock chip results and mineralised trends and also the ineffective previous drilling at Lennox. These prospects will be drilled in early 2023

In addition to the prospectivity identified by recent rock chip sampling, previously announced areas of shallow base metal anomalism that were identified from bottom-of-hole sampling of historic drilling remain untested and are in areas of transported cover in the north of the project area (see ASX announcement lodged 29 July 2019). Figure 6 shows the areas of prospectivity under cover and drilling of these targets will also be completed as part of the extensive drilling program at Mt Hardy in Q2 2023.





Figure 6 showing prospective corridors in the north of the project area under cover

Next Steps at Mt Hardy

It is expected that RC and aircore drilling at Mt Hardy will commence following the completion of exploration work at the Company's projects in the Western Australian wheatbelt around the end of March and the receipt of all statutory approvals for the drilling.

Mt Hardy Project Background

Following the successful delination of mineralisation and the resource estimate at Hendrix in 2019, the Company's focus shifted to exploring additional prospects at Mt Hardy. Initially these included several isolated prospect areas where limited drilling was completed. Results from this drilling summarised in the Company's December 2019 Quarterly Activities Report released on 30 January, 2020. Highlights include:



Gilly North Prospect:

- 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
- 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).

Laver Prospect:

- 15m @ 0.4% Cu, 1.7% Pb, 5.4% Zn and 29g/t Ag (7.5% combined base metals) from 111m, including:
 - 3m @ 0.6% Cu, 1.5% Pb, 11.7% Zn and 39.4g/t Ag (13.8% combined BM) from 111m (MHRC0091) and:
- 4m @ 0.9% Cu, 1.4% Pb, 2.9% Zn and 30g/t Ag (**5.1% combined base metals**) from 49m, **including**:
 - 2m @ 1.3% Cu, 2.0% Pb, 4.5% Zn and 41.5g/t Ag (7.8% combined BM) from 50m (MHRC0090).

Gilly Prospect:

- 7m @ 0.4% Cu, 0.3% Pb, 4.1% Zn and 15.4g/t Ag (4.8% combined base metals) from 23m, including:
 - 4m @ 0.5% Cu, 0.6% Pb, 5.9% Zn and 7g/t Ag (7.0% combined base metals) from 23m, (MHRC0071).

All Mineralisation noted to date at the Mt Hardy Project, including in drilling at Hendrix and other prospects and from surface sampling is hosted by the Lander Rock Beds Palaeoproterozoic metasediments of the Aileron Province of the Arunta Region, and is found within quartz veins and shear zones together with mineralised and altered Lander schists.

Copper at is found in chalcopyrite in fresh rock (drill samples, >30 metres below surface) but all surface exposures are oxidised with malachite, azurite, and chrysocolla dominant. Lead and zinc occur as galena and sphalerite in fresh material and cerrusite and hemimorphite or smithsonite (respectively) in weathered surface samples.



Table	e 1 –Rock chi	p assay resi	lits from a	li samples t	aken from	prospecti	ng and ma	pping in 20)22
Prospect Name	SampleID	Northing	Easting	Cu %	Pb %	Zn %	Ag ppm	Au ppm	Pb+Cu+Zn %
Lehmann	R00126	7553593	763128	2.93	55.30	0.90	928	0.03	59.13
Lehmann	R00163	7553563	763134	5.48	16.38	21.72	353	0.04	43.58
Stardust	R00156	7554750	760440	37.92	0.01	3.99	456	0.06	41.92
Lehmann	195406	7553921	762961	25.49	0.17	15.21	22	0.17	40.87
Lehmann	R00120	7553931	762961	20.23	0.28	17.71	51	0.05	38.22
Pup	R00158	7552654	762330	3.88	9.62	19.32	168	0.22	32.82
Jack	R00172	7553789	761091	14.15	14.47	1.25	607	0.11	29.86
Ruth	R00124	7553199	762741	1.90	0.08	23.97	16	0.07	25.95
Lehmann	R00164	7553592	763124	3.09	21.03	1.08	420	0.02	25.20
Ruth	R00123	7553114	762940	3.15	17.05	4.69	247	0.03	24.90
AB	R00153	7554610	760739	17.80	4.09	2.12	412	0.09	24.01
Pacquiao	R00121	7554531	765433	19.58	0.01	0.15	45	0.09	19.74
AB	R00150	7554448	760979	16.76	0.08	0.86	98	0.09	17.70
Stardust	R00170	7554944	760453	14.66	0.01	1.68	87	0.22	16.35
Pup	R00160	7552654	762369	13.63	0.81	0.20	119	0.16	14.63
Franklin	R00181	7552910	765086	2.90	6.54	4.20	50	0.01	13.65
AB	R00148	7554260	760915	6.94	2.85	2.64	57	0.08	12.43
AB	R00151	7554408	761015	11.46	0.01	0.19	20	0.09	11.66
Gilly	R00144	7553904	762352	8.39	1.04	1.75	53	0.00	11.18
Stardust	R00157	7554845	760419	9.90	0.38	0.76	21	0.03	11.04
Stardust	R00169	7555062	760460	10.01	0.01	0.43	48	0.08	10.45
AB	R00152	7554588	760746	6.84	2.23	1.37	90	0.03	10.44
Pacquiao	R00132	7554538	765437	10.35	0.00	0.05	20	0.08	10.41
Gilly North	195399	7554406	761976	9.37	0.04	0.37	101	0.68	9.78
Gilly	R00142	7553941	762276	7.95	0.24	1.00	17	0.01	9.19
Gilly	195401	7553979	762193	2.32	0.20	5.31	57	0.01	7.84
Lehmann	R00128	7553582	763127	1.08	5.36	1.30	56	0.01	7.74
AB	R00174	7554125	761284	0.32	5.76	1.64	19	0.00	7.72
Lehmann	R00127	7553589	763126	4.73	0.93	1.18	85	0.13	6.84
Gilly	195405	7553800	762353	5.55	0.12	1.13	265	0.04	6.80
AB	R00145	7554333	761085	5.72	0.10	0.22	40	0.10	6.05
Pacquiao	R00134	7554539	765444	5.99	0.00	0.03	44	0.09	6.02
Hendrix	R00161	7552800		4.56	0.90	0.07	5	0.01	5.53
Pacquiao	R00135	7554547	765416	5.31	0.02	0.04	12	0.54	5.37
Pup	R00159	7552660	762335	1.47	2.14	0.98	28	0.04	4.59
Gilly	R00143	7553904	762332	1.00	0.23	2.94	31	0.01	4.18
AB	R00149	7554407	760946	3.78	0.02	0.29	9	0.12	4.09
Stardust	R00168	7555163	760477	4.03	0.01	0.01	9	0.03	4.04
Lehmann	R00162	7553591	763127	1.35	2.13	0.50	18	0.01	3.98
Stardust	R00154	7554572	760608	3.91	0.02	0.02	10	0.12	3.95
Browns	R00176	7554696	760936	2.13	0.13	0.12	12	0.04	2.38
Jack	R00171	7553691	761154	2.00	0.18	0.09	12	0.07	2.28
AB	R00146	7554331	761090	1.60	0.42	0.11	8	0.01	2.12
Browns	R00175	7554679	760969	1.36	0.15	0.34	26	0.10	1.84
Pacquiao	R00133	7554533	765436	1.81	0.00	0.02	7	0.02	1.84
Franklin	R00177	7553102	765226	1.28	0.52	0.01	78	0.01	1.80
Stardust	R00155	7554626	760570	1.49	0.02	0.15	18	0.11	1.66

Table 1 – Rock chip assay results from all samples taken from prospecting and mapping in 2022



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Pacquiao	R00131	7554543	765439	1.05	0.00	0.01	0	0.00	1.07
AB	R00179	7554062	761409	0.06	0.61	0.24	13	0.00	0.90
Lennox	R00136	7553821	764913	0.06	0.70	0.01	12	0.01	0.78
Jack	R00173	7553743	761136	0.62	0.05	0.05	8	0.17	0.72
Laver	195404	7552787	763197	0.36	0.09	0.15	2	0.01	0.60
AB	R00147	7554272	760915	0.09	0.27	0.19	9	0.00	0.55
Ruth	R00165	7553066	762955	0.07	0.23	0.16	3	0.00	0.47
Mt Hardy	R00178	7552425	767171	0.45	0.01	0.00	3	0.16	0.45
Lennox	195403	7553833	764900	0.07	0.17	0.17	29	0.01	0.41
Mt Hardy	R00180	7552629	766821	0.36	0.00	0.04	0	0.00	0.41
Gilly	195402	7554060	762091	0.18	0.04	0.14	3	0.13	0.36
Ruth	R00166	7553172	762751	0.04	0.14	0.03	12	0.05	0.22
Lennox	R00139	7553546	764811	0.04	0.12	0.02	10	0.02	0.18
Lennox	R00137	7553799	764899	0.06	0.09	0.01	16	0.01	0.16
Lennox	R00138	7553558	764809	0.02	0.07	0.01	4	0.00	0.10
Ruth	R00167	7553215	762733	0.02	0.02	0.05	1	0.00	0.09
Gilly	R00141	7554088	762069	0.01	0.00	0.01	1	0.00	0.02

Release authorised by the Board of Todd River Resources

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About Todd River Resources

Todd River Resources (ASX: TRT) is an Australian-based resources company that has base and precious metal projects in Western Australia and the Northern Territory. The Company has a base metal resource at its Mt Hardy Project and several exciting Ni-Cu-PGE and base metal projects in Western Australia including Berkshire Valley in the south west Yilgarn.

With a strong management team and tight capital structure, Todd River is well placed to pursue additional base metal opportunities across its extensive exploration portfolio that also includes the large applications in the Bangemall Region of Western Australia.

Forward Looking Statements

This announcement includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same.

The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person, gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or otherwise.

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by William Dix, who is a full time employee of Todd River Resources. Mr Dix is a member of the Australian Institute of Mining and Metallurgy. Mr Dix 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 Dix consents to the inclusion in this report of the matters based on information in the form and context in which it appears.



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

	wit Hardy KAB drilling Re-sampl	•
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.	All samples reported are 1-3kg rock chip samples collected from surface mineralisation. Samples were prepared and analysed at Intertek Laboratories with industry standard four acid and fire assay methods.
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).	No drilling data reported
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.	No drilling data reported
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.	Rock samples were briefly described for mineralogy
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.	Samples were collected from surface mineralisation via hand picking across the mineralisation. The samples are not considered representative of the mineralisation. Sample preparation for all samples follows industry standard practice, with oven drying of samples prior to coarse crushing and pulverization (to >85% passing 75 microns) of the entire sample. The sample size (1-3 kg) is considered to be adequate for the material and grainsize being sampled and the style of mineralisation being assessed.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	All samples reported here were analysed at Intertek Laboratories in Perth by method 4A/MS48 – four acid



	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 acceptable levels of accuracy (ie lack of bias) and precision have been established.	digest ICP-MS/ICP-OES finish for a suite of 48 elements and by FA25/MS 25g fire assay for gold. These methods are a total digestion for the mineralisation targeted. Certified base metal standards were inserted into the laboratory batch, results were acceptable.
Verification of sampling	The verification of significant intersections by	No drilling intersections reported
and assaying	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.	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 sampling locations were located up using a standard GPS unit to an accuracy of 3-5m for Easting & Northing. All coordinate data for the project are in GDA94 MGA 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.	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.	Samples were point sampled and so do not relate to the orientation of the mineralisation noted.
Sample security	The measures taken to ensure sample security.	All samples were under company supervision at all times prior to delivering to 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 the Mt Hardy project to date.

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 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.	All significant previous work is outlined in NTGS open file reports and in TRT ASX releases from 2018 and 2019, with all new
Geology	Deposit type, geological setting and style of mineralisation.	work conducted by TRT reported herein. 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: 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	No drilling data reported
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of hi 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 equivaler values should be clearly stated.	igh d
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 and sample details tabled in Table 1
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
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 of selected targets is planned for the following field season.

