

RC drilling commences at the Nerramyne Project

RC drilling will target known geochemical anomalies prior to Fixed Loop Electromagnetic surveying during August

Key Points:

- Reverse Circulation (RC) drilling has commenced at the Nerramyne Project targeting strong geochemical anomalies associated with mapped or interpreted mafic-ultramafic intrusions;
- Several bedrock conductors identified in a recently completed SkyTEM survey are also associated with the intrusions being tested;
- A Fixed Loop TEM (FLTEM) survey to establish the depth and orientation of five SkyTEM conductors is planned to commence mid August 2022.
- Infill soil geochemistry at Conductor A in the south of the project confirms strongly anomalous copper assay values (up to 0.2% Cu) coincident with mafic-ultramafic outcrop adjacent to an interpreted SkyTEM bedrock conductor;
- At the Mt Hardy Base Metal Project in the Northern Territory, several new areas of surface mineralisation have been identified north east of the Hendrix Resource;
- Land access discussions are ongoing with landholders at the Pingrup Ni-Cu-PGE Project in the south west Yilgarn.

Todd River Resources Limited **(ASX: TRT) (Todd River** or the **Company)** is pleased to announce that RC drilling has commenced at its 100% owned **Nerramyne Project** located approximately 130 kilometres north east of Geraldton in the Murchison region of Western Australia (Figure 1). The program of approximately 2,000m is designed to test a number of areas where prospective mafic-ultramafic intrusions and associated geochemical and geophysical anomalies.

In addition, the Company has recently recommenced work at the 100% owned **Mt Hardy Base Metal Project** in the Northern Territory with a broad surface sampling program undertaken within the "Hendrix-Gilly-Laver" area of the project.

Todd River Resources' Managing Director Will Dix said *"we're excited to be drilling some compelling targets in what is the first drilling program to be undertaken at Nerramyne. The combination of the right rocks and some very encouraging geochemistry and geophysics ranks Conductors A and B as high priority targets. We*



expect the drilling to be completed in late July with further work planned in August before a second round of drilling early in Q4 and we look forward to sharing the outcomes of this work with our shareholders".



Nerramyne Cu-PGE Project

Reverse Circulation (RC) drilling has commenced over previously unexplored mafic and ultramafic intrusions in the south and north of the project area (Figure 2). The program of around 2,000 metres is designed to test several areas where bedrock conductors were identified in the recent SkyTEM survey, and in the case of Conductor A, strongly anomalous surface geochemistry.

The drilling is subject to funding assistance from the state government of Western Australia through a successful application in Round 24 of the Exploration Incentive Scheme.

As previously reported, Conductor A sits in the south eastern area of the tenement. It is significant in that it is located within a large 3 kilometre x 1 kilometre intrusion and is associated with a more magnetic part of that intrusion. The intrusion is largely obscured by a thin laterite cover, although some pyroxenite is present as subcrop and outcrop in places. In addition, additional infill surface geochemical sampling has returned values of up to 0.2% copper within an overall anomalous zone spanning approximately 1 kilometre (Figures 3a and 3b).



Conductor B in the north of the tenement remains a high priority drilling target and the area will also be drilled in the current drilling campaign. The drill holes are designed to provide geological context to the SkyTEM data and also for the follow up FLTEM survey. The drilling area is associated with a concealed maficultramafic intrusion. (Figure 4).

Several additional conductors that are under cover and deemed to be lower priority at this stage will also form part of a select Fixed Loop TEM (FLTEM) survey that is due to be completed during August. It is expected that once all of the nominated conductors are accurately defined and constrained, further drilling will be undertaken early in the December 2022 quarter.

Further adding to the geological credentials of the prospectivity of the region containing the Nerramyne project, S2 Resources (ASX:S2R) has recently announced the discovery of disseminated nickel and copper sulphides in their initial drilling program at the Woodrarung Prospect within their West Murchison Project, which is adjacent to the northern boundary the Nerramyne Project (Figure 5).

Background

The Nerramyne Project covers an 8-10 kilometre wide, 45 kilometre long position along the margin of the Yilgarn Craton where it is juxtaposed against the Narryer terrane. The Yilgarn and Narryer rocks are mapped predominantly as gneisses, with mafic rocks (hornblendite) in the south. The craton-bounding north-south Darling Fault transects the project area. A portion of the project area is covered by wind-blown sands and alluvial sediments which potentially mask any surface expression of mineralisation and render simple soil geochemistry unreliable.

Limited previous exploration has concentrated entirely in the northern portion of the tenement, where a total of 5 soil sampling lines and 11 lag sampling lines were completed. More than half the soil samples collected were reported as being transported sand, suggesting that this shallow soil sampling completed was ineffective.

Regional regolith surface sampling by the Geological Survey of Western Australia (GSWA) on a 4 kilometre x 4 kilometre grid over the area has identified a broad low level copper-platinum-palladium anomaly that stretches over a 40 kilometre x 6 kilometre area (*See ASX Announcement 13 July 2021*). This style of regional sampling that has been widely utilised across the Nerramyne Project was also used extensively in the Fraser Range and identified an anomaly that led, in part, to the target generation and discovery of the Nova-Bollinger Ni-Cu orebodies by Sirius Resources in 2012.



Figure 2 – Nerramyne Project Showing the Location of the main interpreted bedrock conductors from the SkyTEM Survey, areas for follow up FLTEM and RC drill lines over Regional Magnetics





Figure 3a – Conductor A showing the location of the interpreted conductor and surface Copper geochemistry associated with the intrusion adjacent to the conductor



Figure 3b – Conductor A showing the location of the interpreted conductor and surface PGE geochemistry associated with the intrusion adjacent to the conductor





Figure 4 - Conductor B showing the location of the interpreted conductor over magnetics – note the absence of geochemistry is due to the transported surface material being unsuitable for sampling





Figure 5 – Nerramyne Project Showing Competitor Tenure



Mt Hardy Base Metal Project

The Company has recently concluded the first program of fieldwork at the 100% owned Mt Hardy Copper-Zinc Project in the Northern Territory since prior to the onset of the Covid pandemic in late 2019. The recent work has concentrated on a more detailed approach to areas of exposure or residual soil profiles where surface sampling is deemed to be effective. This includes a large relatively underexplored area immediately north east of the Hendrix resource (Figure 6), where several isolated areas were subject to limited RC drilling in late 2019 with 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).





Figure 6 – Mt Hardy Project work areas with

Figure 7 – Mt Hardy Project recent sampling showing portable XRF results for Zinc and highlighting 6 new areas of anomalism for follow up work in August 2022.

New work, which is designed to follow up anomalous stream sampling identified in 2019 within the "Hendrix-Gilly-Laver" target area has focused on close spaced sampling to identify further zones of prospectivity.

Sampling and readings with a portable XRF unit were generally completed on a 100m x 20m sample grid and defined new Zn-Cu-Pb in soil anomalies, leading to the discovery of numerous outcrops of Zn-Cu-Pb oxide mineralisation or gossans. Figure 7 shows the Zn in soil results from the portable XRF readings.

In addition, further stream samples have been collected, extending stream sampling completed in 2019, with assay results for base metal and lithium mineralisation from these stream samples pending.

With the success of portable XRF soils in quickly identifying new mineralisation, further work is planned (3000-4000 samples) to cover the 8 kilometre x 3 kilometre trend from Mt Hardy to Browns shown on Figure 6 as well as additional work to fully define the recently identified prospects/targets. This work will be carried out in August 2022.

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.

JORC Table One – Sampling Techniques and data – soil geochemistry – Nerramyne Project

Critoria	IOPC 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.	Soil sampling – 200g sample sieved to -2mm in the field collected from 5- 10cm below surface
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 completed
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 completed
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.	No logging completed
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 sieved to -2mm in the field to 200g. Sampling methodology is typical for soil sampling.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	Samples were analysed at LabWest laboratory using the UltraFine method

	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.	(UFF-PE). Samples were processed to a -2 micron fraction and analysed by aqua regia ICP-MS/OES. Certified standards were analysed every 50 samples to test for laboratory accuracy and precision. Results support accuracy and precision of the laboratory analyses.
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.	No drilling completed
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 soil samples were located with GPS – the project falls in projection zone 50
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.	Various spacing but generally 200 x 80m and 100 x 40m
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.	Orientation of geological structures is currently unknown.
Sample security	The measures taken to ensure sample security.	Soil samples were delivered by company personnel to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted

Section 2 Reporting of Exploration Results – Nerramyne Project

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 Nerramyne project is located on tenements E70/5289, E70/5825, and E 70/6133 100% owned by Moore River Metals Pty Ltd, which is a wholly-owned subsidiary of Todd River Resources Limited. The tenements are in good standing with no know impediments.

Further	The nature and scale of planned further work (eg
work	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 to test three targets will commence this month. Fixed Loop EM is planned this quarter over 5 conductors.

JORC Table One – Sampling Techniques and data – handheld XRF geochemistry – Mt Hardy Project

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.	Soil sampling from surface and read on handheld XRF
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).	N/A
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.	N/A
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.	All sample points were noted for their geomorphology and amenability to surface sampling.
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 with a scoop for XRF analysis Portable XRF analyses reported here are taken with CRM Standard samples and Blanks samples inserted into the sequence at 1 in 25 and 1 in 50 samples respectively. Results reported here are averages of multiple pXRF analyses to give a reasonable representative result.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	Portable XRF results reported here are taken with an Olympus Vanta with

	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.	a 60 second read time (30 seconds beam 1 and 30 seconds beam 2) in GEOCHEM mode. Three certified base metal standards and a certified blank sample were analysed during pXRF sampling, 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.
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.	Certified standards, read every 25 samples to test for pXRF accuracy and precision.
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 sample points were located with GPS – the project falls in projection 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.	Various spacing but generally 100 x 20m
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.	soil samples are point samples
Sample security	The measures taken to ensure sample security.	samples were read directly in the field
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling audits have been conducted

Section 2 Reporting of Exploration Results – Mt Hardy

Critoria	IOPC Code explanation	Commontary
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.	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: 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	Not relevant
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 hig 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. gh
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 6 and 7.
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	No substantial new information is available other than that reported above.

	survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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.	Further sampling followed by drilling is planned for later in 2022 and 2023.