

# Significant Pt-Pd-Cu-Ni anomaly confirmed and extended with additional results at Berkshire Valley Project

Eastern Trend extension and infill sampling results confirm larger robust geochemical anomalies for expanded follow up work programs

Key Points:

- Further results from auger geochemical sampling along 7 kilometres of prospective strike on the Eastern Trend of mafic and ultramafic intrusions has expanded two significant Pt-Pd-Cu-Ni anomalous areas;
- These anomalies overlie targeted mafic and ultramafic intrusions that are coincident with strong magnetic high features;
- The northern anomaly has been expanded to cover a 2.8 kilometre long zone where Pt+Pd values are consistently above 20 ppb (or 10-15 times background) and up to 53ppb associated with strongly anomalous Cu (100-900ppm) and Ni (100-300ppm);
- Expanded southern anomaly that now covers over 5 kilometres of strike with several zones of Pt-Pd and Cu anomalism along the north eastern flank of the anomaly;
- Land access agreements in place ready for moving Loop EM and drilling to be undertaken as next steps on the eastern trend;
- Elsewhere, RC drilling will commence this week at the Nanutarra Ni-Cu-PGE project.

Todd River Resources Limited (ASX: TRT) (Todd River or the Company) is pleased to provide an update on the infill and extension results from the Eastern Trend auger geochemical sampling program at its 100% owned Berkshire Valley Pt-Pd-Cu-Ni Project (the Project) in Western Australia (Figures 1 and 2).

Analytical results received from additional sampling have expanded both the northern and southern anomalous zones associated with magnetic features that are interpreted to be intrusive gabbro-norite bodies. Figure 3 shows updated results for Pt+Pd, Cu and Ni and Appendix 1 contains separate images for each element at a larger scale.

The southern anomalous zone has been extended to the north and south and now covers approximately five kilometres of strike, with several strong Ni anomalies within it and a broad Cu and Pt+Pd anomaly along the north eastern flank of the magnetic trend. The Pt+Pd anomaly has been expanded further to the east and



now covers an area of approximately 3 kilometres x 1.2 kilometres. The discrete coincident Pt-Pd-Cu-Ni feature in the south west corner of the anomalous zone has strengthened but as reported previously is truncated by an alluvial channel where auger sampling is ineffective – this leaves the anomaly open to the south west under alluvial cover.

The strongest Ni anomalism is offset from other elements and suggests the magnetic features do indeed reflect the presence of ultramafic intrusives.

In the northern zone the strong coincident Pt-Pd-Cu anomaly that was identified over 1.8 kilometres of strike has been extended by around 1 kilometre to 2.8 kilometres. Maximum values within this 2.8 kilometre long zone are 53.9ppb Pt+Pd and 0.09% Cu with anomalous Ni values of between 200-300ppm. This anomaly is located along the eastern side of a strong magnetic feature and is consistently up to 300 – 400 metres wide along the length of the feature suggesting a significant intrusion underlies the auger geochemistry.

As previously reported, the Company will continue to take a systematic approach to exploration at Berkshire Valley with the work programs on the Eastern Trend now expanded to cover the larger anomalous zones. The next steps for the Eastern Trend will include moving loop electromagnetics (MLEM) over both the northern and southern anomalous trends and a combination of aircore and RC drilling. It is expected that the northern zone MLEM program will be able to be completed over the next few months as a significant portion of the anomalous area is not under crop. In the southern area it is expected that both geophysics and drilling can commence immediately following the harvest in the second half of October 2021.

## Nanutarra Ni-Cu-PGE Project

RC drilling will commence at the Nanutarra Project this week with around 8 RC holes for a total of 1,200 – 1,400 metres of drilling to be completed.

The drilling will target an area of the layered intrusion along a contact between peridotite and pyroxenite rock units where historical shallow drilling intersected +1g/t PGE values in two adjacent 30m deep holes without follow up.

It is expected the drilling will take around 10 days with analytical results to follow several weeks later.



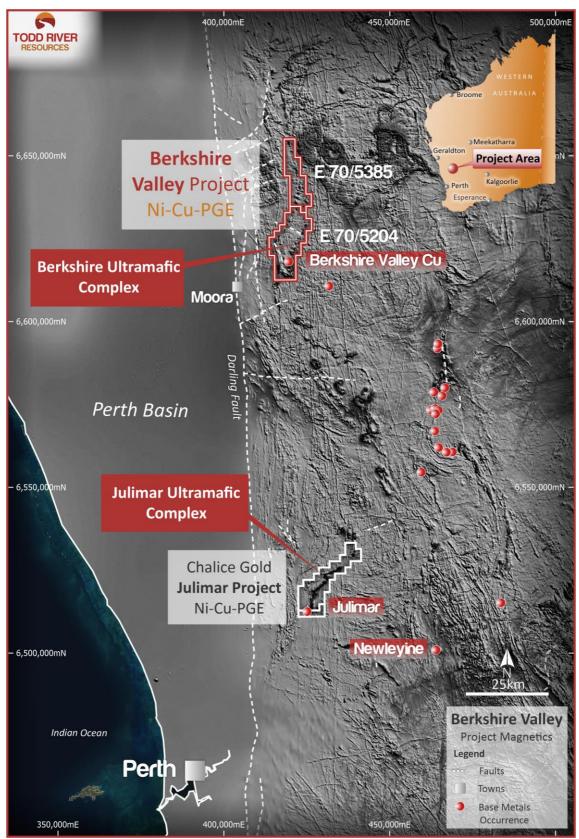


Figure 1 – Berkshire Valley Project Location Map

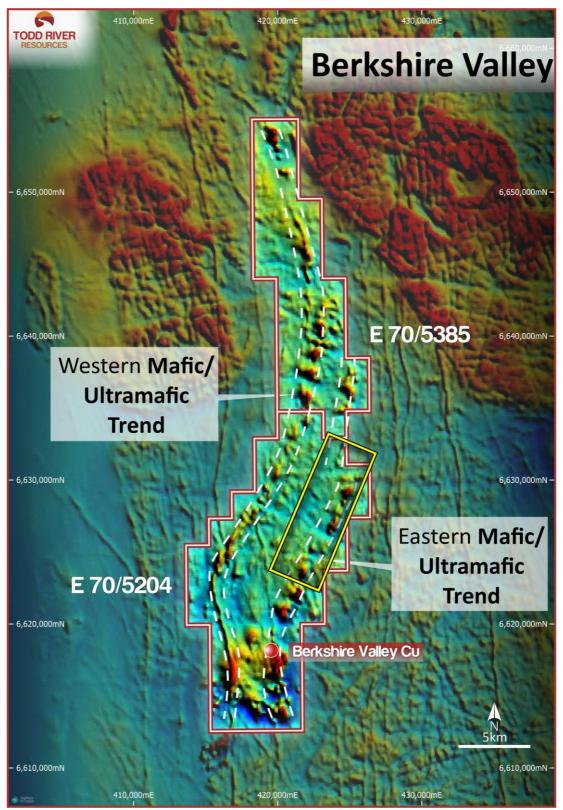


Figure 2 – Berkshire Valley Project Magnetics showing the two prospective trends of interpreted mafic and ultramafic intrusions with the yellow box highlighting the work area for the auger geochemical sampling.



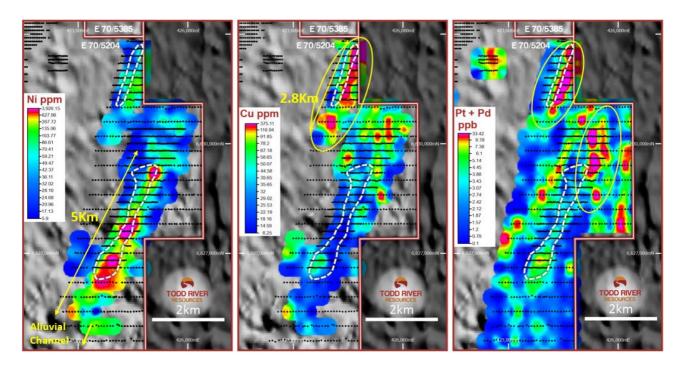


Figure 3 – Eastern Trend gridded geochemistry showing from left to right Ni, Cu and PGE data. The black dots represent sample locations where assays are still pending.

## 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.

Having an experienced management team and strong funding position, Todd River is well placed to pursue base and precious metal opportunities across its extensive exploration portfolio that includes the Berkshire Valley and Petermann Range Projects.

The Company also has resources at both its Mt Hardy and Manbarrum Projects and a number of exciting early stage nickel-copper-PGE exploration projects in Western Australia.



#### **Forward Looking Statements**

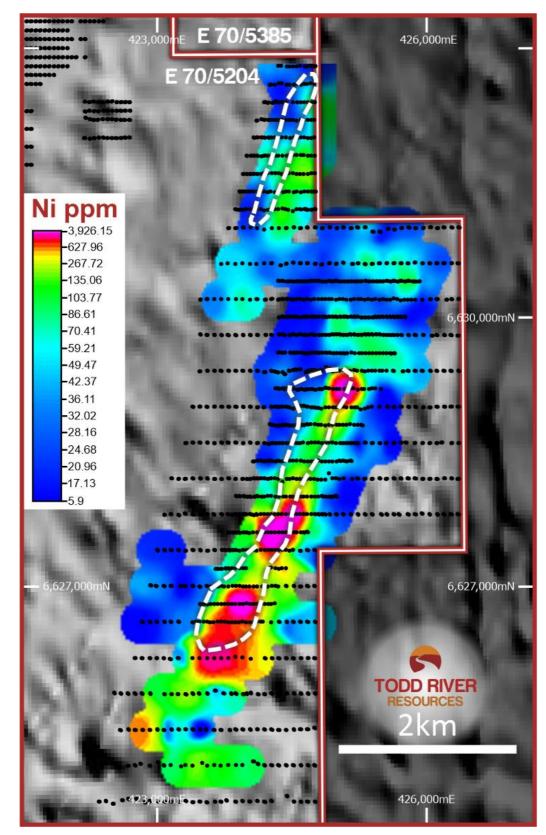
This announcement includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards",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

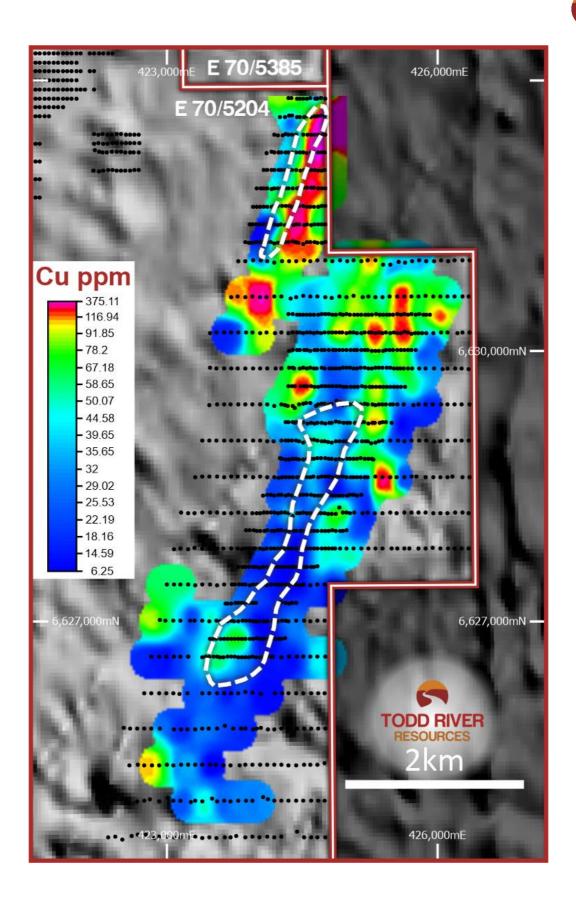
#### **Competent Person Statement**

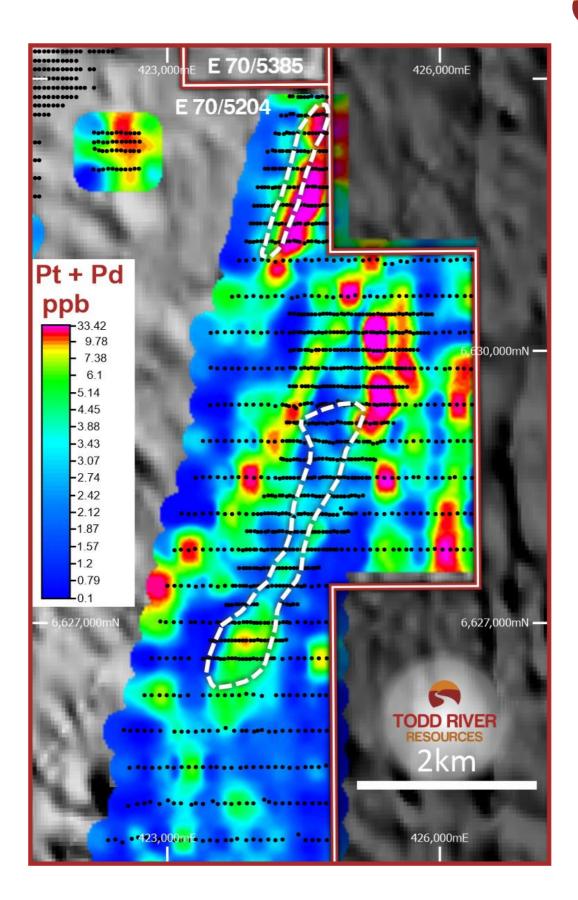
The information in this report that relates to Exploration Results is based on information compiled by William Dix, who is a full time employee of Todd River Resources. Mr Dix is a member of the Australian Institute of Mining and Metallurgy. Mr Dix has sufficient experience of relevance to the style 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 One – Separate Ni, Cu and PGE images







**Appendix Two** – The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results. **JORC Table One – Sampling Techniques and data** 

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels,	Auger sampling – a single 200g bulk
	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.	sample from 1-1.5m down hole was collected from each hole
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).	Auger drilling – Standard auger drill mounted on the rear of a utility vehicle
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.	Auger - Sample recoveries excellent unless hard rock outcrop prevented the penetration of the bit (less than 1%)
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 aircore holes were logged for lithology by TRT geologists and recoded digitally.
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.	Auger samples were collected on the rig by a scoop. Samples are then crushed using a mortar and pessle and sieved using -80 mesh with the fine fraction collected for XRF analysis and assay
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	Selected anomalous auger samples have been sent to Intertek Genalysis



	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.	for multi-element assay by aqua regia and fire assay
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, field duplicates and blanks and inserted every 25 samples to test for laboratory 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 drillholes have accompanying collar and survey files and 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 50m and 400 x 50 for auger
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.	Auger samples are point samples
Sample security	The measures taken to ensure sample security.	Auger samples were delivered directly to the company and then delivered by company personnel to the laboratory
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

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 Berkshire valley Project is located on tenements E70/5204(Moonknight Pty Ltd) and E70/5385 (Moore River Metals Pty Ltd)
	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.	Both tenements are in good standing and are not subject to any joint ventures



Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All significant previous work is outlined in WAMEX open file reports.
		TRT has accessed and reviewed all of this work and compiled our own database on the project from the available open file data. The WAMEX reports used for the purpose of this work include:
		A088939
		A076527
		A085553 A079982
		All of these reports are compiled by IGO Limited and contain comprehensive written descriptions of their work and associated .txt files of all drilling and sampling completed.
		The documents appear correct and the geo-spatial data recorded matches with images produced when verified independently
Geology	Deposit type, geological setting and style of mineralisation.	Not relevant
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:	Auger samples are point samples which are shown in Figure 2
	<ul> <li>Easting and northing of the drill collar</li> <li>Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul>	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations	Not Relevant
	cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of h	
	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 equivale values should be clearly stated.	nt
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Not Relevant
mineralisation widths and intercept lengths	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').	
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 Figure 2 in the document for sample locations
Balanced	Where comprehensive reporting of all Exploration Results	All locations are shown on Figure 2.
reporting	is not practicable, representative reporting of both low	-



	and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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.	Additional drilling and geophysics will be completed once the results from the current program and reviewed, assessed and interpreted.