TODD RIVER RESOURCES

ASX Announcement
21 December 2022

Nerramyne Drilling Update and New Project in South Australia

Reverse Circulation (RC) drilling to test previously identified targets at Trix and Chandler and aircore drilling to explore untested intrusions

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Key Points:

- **Reverse Circulation (RC) drilling at Chandler confirmed widespread platinum + palladium anomalism at Chandler**
- **Aircore drilling at Chandler North confirmed the extension of the prospective intrusion;**
- **Semi-massive iron sulphides intersected over 3 metres at the Trix Prospect in line with the interpreted EM conductor;**
- **Additional aircore drilling of new areas confirms the presence of mafic rocks where intrusions have been interpreted opening up new areas for further exploration in 2023;**
- **New Project, Tapanappa, in South Australia expected to be granted in early 2023;**
- **Geophysics and follow up drilling at the Pingrup project are scheduled to commence in late January 2023.**

Todd River Resources Limited **(ASX: TRT) (Todd River** or the **Company)** provides the following update on recent exploration activities. Analytical results have been received from recently completed drilling at the 100% owned **Nerramyne Project** located approximately 130 kilometres north east of Geraldton in the Murchison region of Western Australia (Figure 1). Results from the Chandler Prospect confirm widespread anomalous platinum (Pt) and Palladium (Pd) associated with the gabbroic intrusion and new aircore drilling 1300m to the north confirms the intrusion extends under cover as expected. In addition, new areas of mafic intrusions have been identified in reconnaissance drilling elsewhere on the project providing a pipeline of areas to test during subsequent exploration campaigns in 2023.

RC drilling of the Fixed Loop EM conductor at the Trix Prospect in the northern part of the project intersected 3 metres of semi-massive iron sulphides in line with the position of the interpreted conductor.

Todd River Resources' Managing Director Will Dix said: *"Completing exploration for the year at Nerramyne has provided us with additional target areas heading into 2023. Whilst the conductor at Trix hasn't delivered the mineralised intersection we were all hoping for, it is encouraging to see consistently anomalous PGE numbers at Chandler and that these continue to the north under cover. Further, there are additional areas that will be opened up in 2023 following the confirmation of mafic intrusive rocks in reconnaissance aircore drilling.*

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We're excited to shift our attention back into the wheatbelt over the coming months and look forward to hitting the ground hard at our Pingrup Project in Late January where a number of compelling targets will be tested.

Following detailed examination of recently released heavy mineral analysis data from Geoscience Australia we have pegged an area in South Australia that we expect to be able to commence exploring in 2023.

Finally I'd like to take this opportunity to thank my fellow directors and all employees and contractors that have helped the company complete our exploration programs in 2022 and I look forward to working towards a discovery in 2023."

Figure 1 – Todd River Resources Project Location Plan

<u>Nerramyne Cu-PGE Project</u>

Analytical results have been received for the three drilling programs completed at Nerramyne in October.

Reverse Circulation (RC) drilling at the Trix prospect was designed to test a specific EM conductor plate that had been modelled as ~100 x 100 metres with a conductance of 2700- 3300 Siemens. The drilling intersected 3 metres of semi-massive iron sulphides in amphibolite at the modelled depth however no nickel, copper or PGE mineralisation is associated with the sulphides.

RC drilling at Chandler was designed to follow up previously identified anomalous PGE's associated with a large gabbro intrusion proximal to a granite contact. Drilling successfully expanded the footprint of strongly anomalous PGE's with intersections over 100ppb Pt+Pd intersected on all sections drilled. Figure 3 shows section XX and Table 1 contains all RC collar information.

In addition, the aircore traverse drilled 1300m north of Chandler intersected two separate zones of mafic intrusive gabbros both zones also containing anomalous PGE's (Figure 4). Further work is required in 2023 to expand the drilling to the north and south to determine where the best concentrations of PGE's are located. Table 2 summarises the anomalous drilling assays returned from Chandler.

Elsewhere at Nerramyne, a number of reconnaissance aircore drilling traverses were completed across a several interpreted mafic intrusions with prospective geology identified in the north of the project. This provides a pipeline for further exploration in 2023 following the completion of heritage clearance work.

Table 1 – RC hole collar information

Hole ID	Prospect	Type	Depth	Easting	Northing	RL	Dip	Azimuth
NERC0013	Trix	RC	154	347360	6934560	274	60	260
NERC0014	Chandler	RC	34	350776	6900759	305	60	270
NERC0015	Chandler	RC	76	350854	6900760	305	65	270
NERC0016	Chandler	RC	88	350799	6900585	309	65	270
NERC0017	Chandler	RC	60	350700	6900438	312	60	270
NERC0018	Chandler	RC	100	350779	6900436	313	60	270

Table 2 – significant intersections

Hole ID	From (m)	To (m)	Cu (ppm)	Ni (ppm)	Pd (ppb)	Pt (ppb)	Pd+Pt (ppb)
NERC0002*	27	28	500	60	76	34.5	110.5
NERC0002*	29	30	532	63	77.2	24.2	101.4
NERC0002*	30	31	540	63	87.4	27	114.4
NERC0002*	32	33	447	62	85.4	28.4	113.8
NERC0002*	33	34	487	67	90.2	26.1	116.3
NERC0002*	34	35	521	67	121.2	48.8	170
NERC0002*	35	36	503	48	74.2	29.2	103.4
NERC0002*	36	37	477	43	93.9	37.2	131.1
NERC0002*	37	38	538	43	105.3	37.6	142.9
NERC0002*	38	39	558	46	89.1	34.4	123.5
NERC0002*	39	40	591	51	72.1	28.2	100.3
NERC0002*	40	41	609	54	80.9	32.1	113
NERC0002*	41	42	603	57	76.5	32.6	109.1
NERC0002*	42	43	447	65	80	30	110
NERC0002*	43	44	387	75	92.3	28.9	121.2
NERC0002*	44	45	363	76	89.2	37.2	126.4
NERC0002*	45	46	374	78	86.1	33.3	119.4
NERC0002*	61	62	489	61	86.8	45.2	132

NERC0014	4	7	480	68	84.7	33.5	118.2
NERC0015	43	46	351	73	87.6	35	122.6
NERC0016	49	50	462	59	96.4	28.8	125.2
NERC0016	50	51	486	61	91.3	29.2	120.5
NERC0016	51	52	519	68	98.2	34	132.2
NERC0016	52	53	640	78	91.4	34.9	126.3
NERC0016	53	54	642	67	83.8	32.2	116
NERC0016	54	55	627	59	91.3	37.7	129
NERC0016	55	56	425	62	97.6	34.8	132.4
NERC0016	56	57	323	82	94.1	34.4	128.5
NERC0016	57	58	377	78	97.5	33.6	131.1
NERC0018	73	76	482	63	130.5	37.9	168.4
NERC0018	76	79	581	65	82.2	32.2	114.4
NERC0018	79	82	361	78	70.7	30.7	101.4

**Assay of 1m split sample, composite samples previously reported in ASX announcement lodged September 5, 2022*

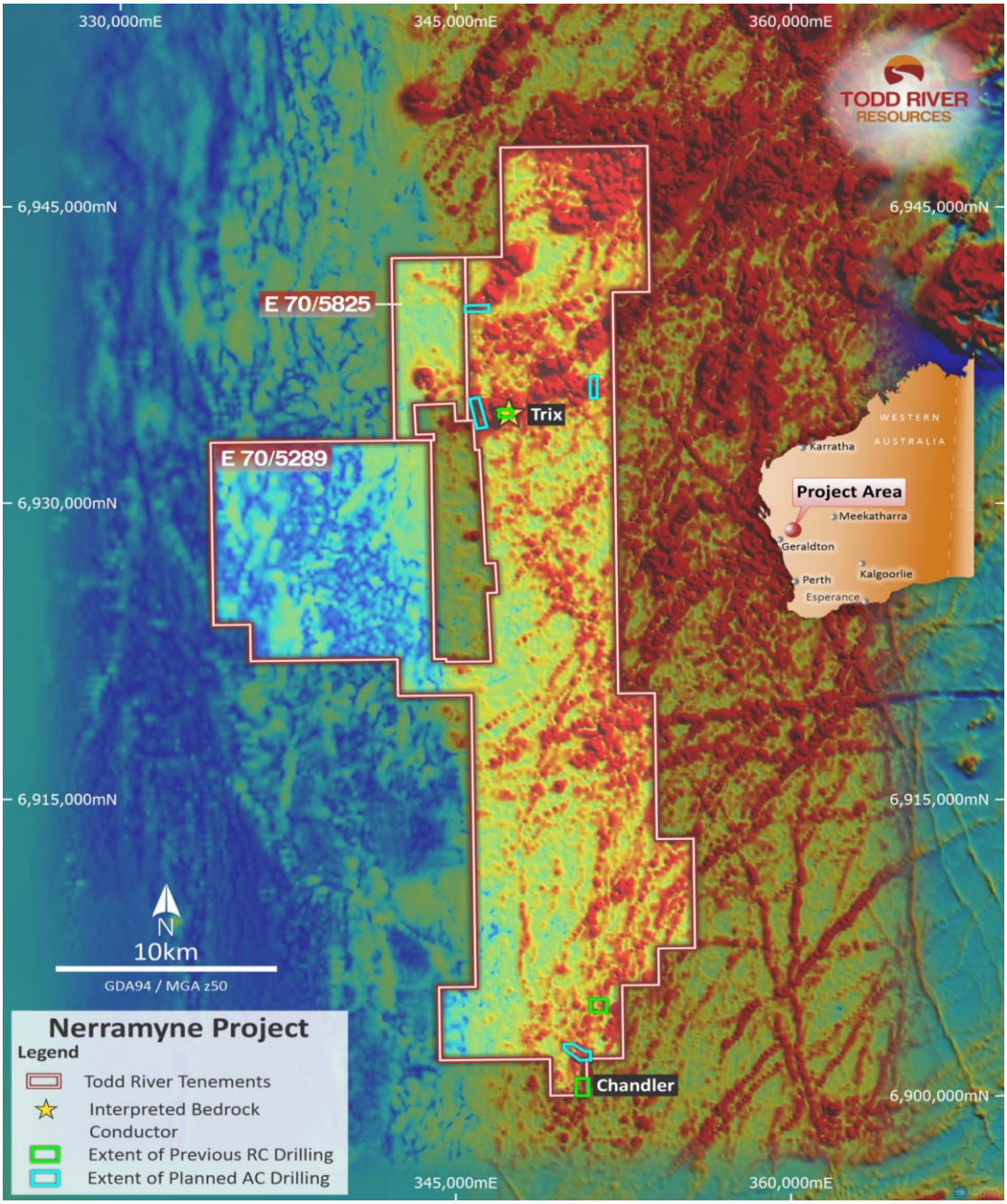

Figure 2 – Nerramyne Project showing the Location of the Trix and Chandler Prospect areas as well as the traverses covered in the reconnaissance aircore drilling

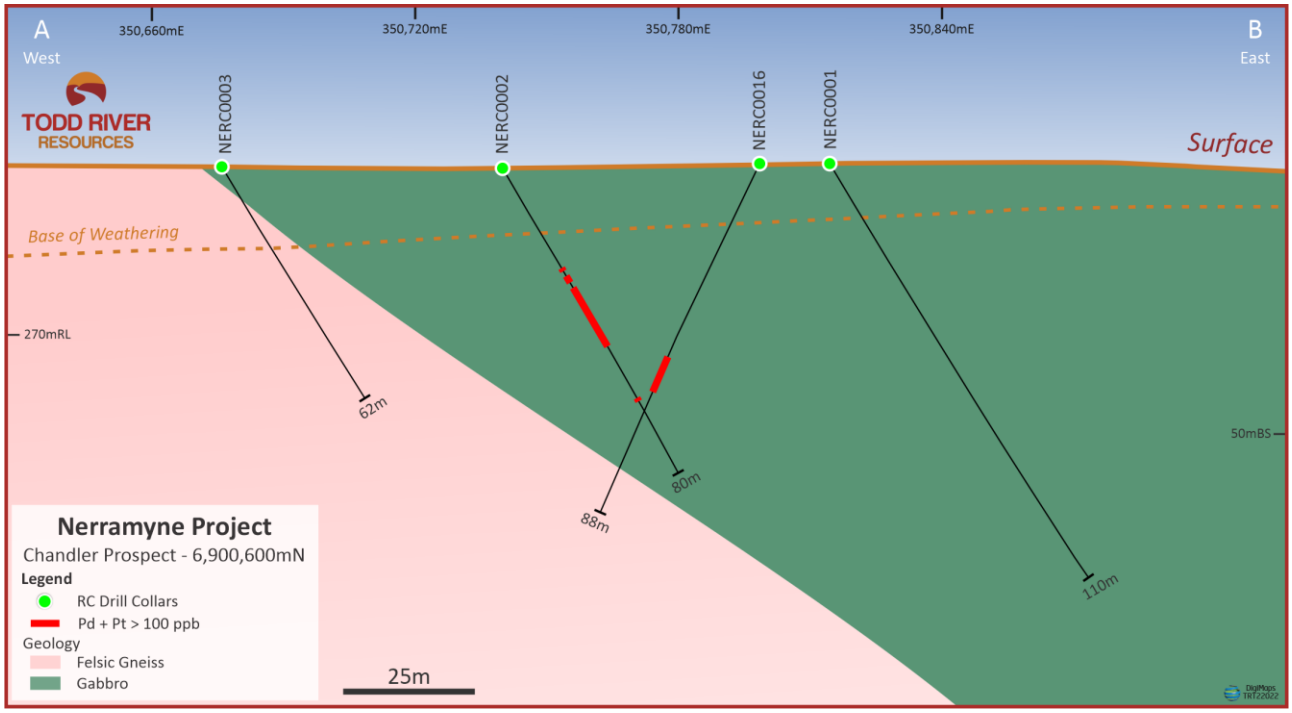

Figure 3 –Chandler RC drilling section 6,900,600mN

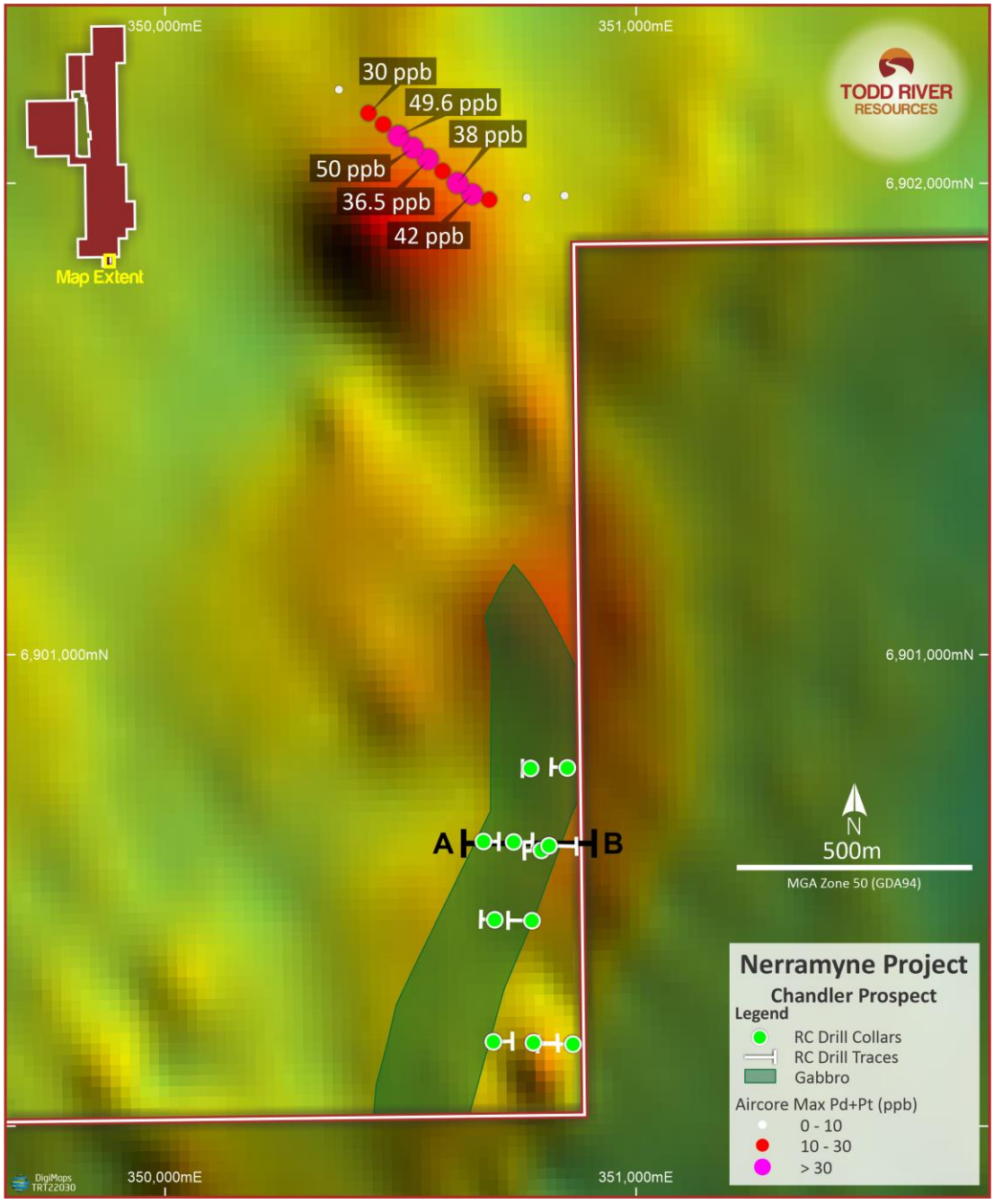

Figure 4 – Chandler reconnaissance aircore drilling showing anomalous zone of PGE's 1300m north of the original RC drilling

Tapanappa Project, South Australia

The Company has recently applied for an exploration licence covering 400 square kilometres of an under explored section of Tapanappa Fm, (Figures 5 and 6) which regionally hosts numerous base metal deposits including the 3.0 Mt (8% Zn 3.1% Pb 34 g/t Ag) Angas deposit and the 28 Mt (0.9% Cu, 0.2 g/t Au) Kanmantoo deposit.

The Angas deposit, like Broken Hill, has gahnite (zinc spinel) alteration proximal to ore and within the host lode horizon. Recently, GA published Data Release 1 of the Heavy Mineral Map of Australia Project, which has results of automated heavy mineral analyses across the Darling-Curnamona-Delamerian region. Of interest is a sample with anomalous grain counts of gahnite (25 vs background of 0-5) from a sample draining in the middle of the project area. The gahnite indicates the Angas style of mineralisation is likely present within the project area.

The project area is dominated by thin (5-50m) transported cover and has limited outcrop, therefore historical surficial exploration such as soils were ineffective. Limited RAB drilling completed within the project area commonly did not penetrate the cover and effectively test the targets. The cover is not expected to be challenge for any future drilling, as aircore will be used that will penetrate the cover easily. While the deposit style is associated with magnetic anomalies, therefore it is possible to define targets through the cover.

The company expects early stage sampling and heavy mineral analytical studies to be able focus further exploration on key areas of prospectivity during 2023.

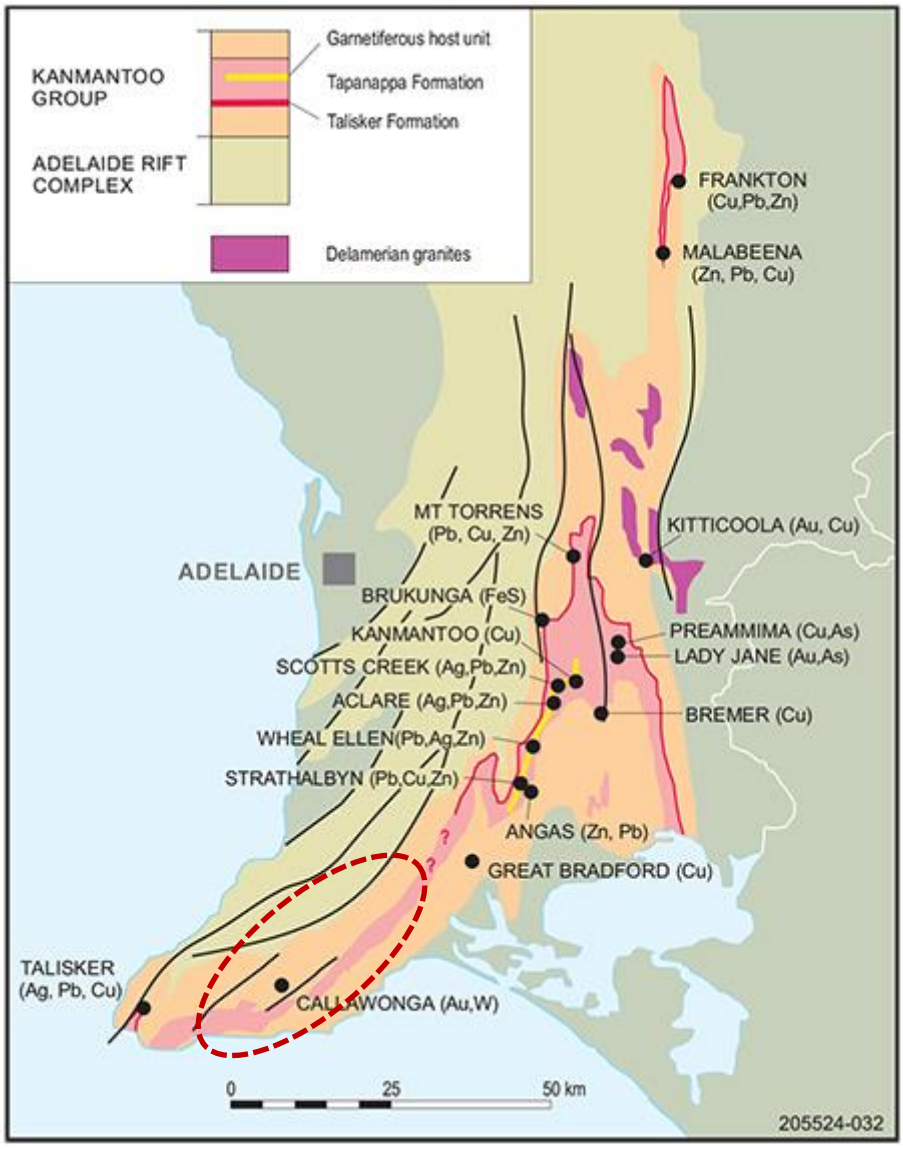

Figure 5 - Modified from Ogierman, 2021. Distribution of base and precious metal (Cu–Au, Pb–Zn–Ag, Fe sulphide deposits) in the Tapanappa Formation of the Cambrian Kanmantoo Trough. The Tapanappa EL application is in the area highlighted by the dashed red ellipse.

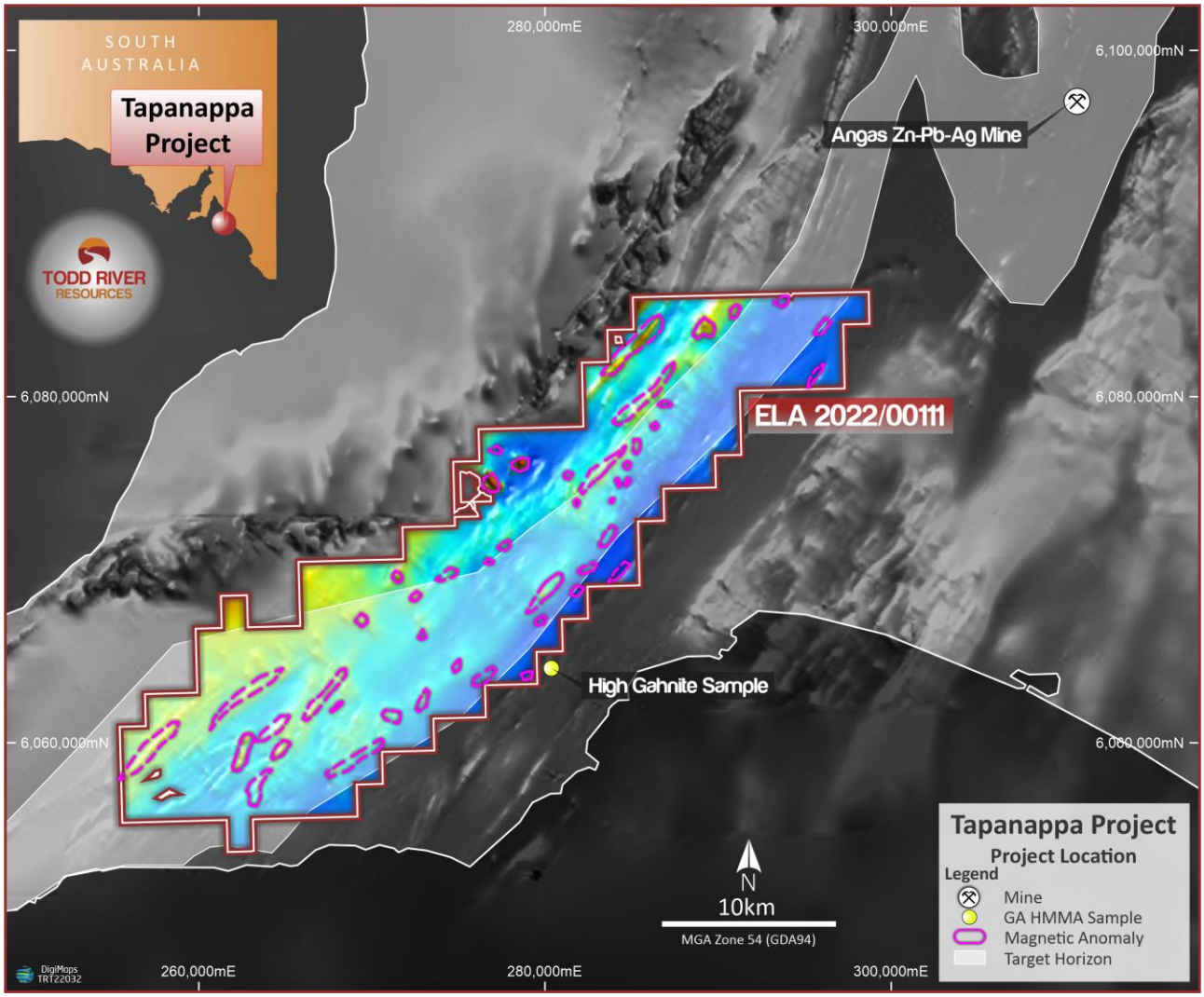

Figure 6 – Tapanappa project area showing interpreted magnetic anomalies and prospective stratigraphy

Exploration – Next Steps

Following the Christmas break, the Company will focus on the 100% owned Pingrup and Berkshire Valley Projects before the 2023 grain crop is planted. Towards the end of the March quarter it is expected that exploration will re-commence at Mt Hardy targeting exciting new exploration targets generated during 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 results 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 Fellow 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 – RC and Aircore Sampling Techniques and data (Nerramyne 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.	RC drilling produced a 1m bulk where a representative sample (nominally a 12.5% split) was collected using a cone splitter. Bulk samples were composited over 3m, with selected intervals of 1m splits submitted. Average sample submitted for analysis was between 2-3 kg. Samples were analysed by fire assay and four acid ICP-MS digest.
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).	RC drilling consisted of RC with face sampling bit (140 to 130 mm in diameter) ensuring minimal contamination during sample extraction
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.	Recoveries were visually estimated from bulk sample volume. Not enough drilling has been completed to determine relationship between grade and recovery.
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 RC holes were logged for lithology and minerals including sulphides 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.	RC drilling was sampled at 1 m intervals by a fixed cone splitter with a representative sample (nominally 12.5% of the total sample) taken. In selected intervals, the 1m split sample was submitted to the laboratory. While all other sampling was 3m composites collected from the bulk sample by a spear. Aircore samples were collected as 3m composites with sub-sampling from the bulk sample using a scoop. A bottom of hole sample was collected from the last drill metre using a scoop. Drill sample sizes are considered appropriate for the style of mineralisation sought and the nature

		of the drilling program. Sample preparation at the laboratory is industry standard, with oven drying, crushing, and pulverisation to 85% passing 75 microns.
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 acceptable levels of accuracy (ie lack of bias) and precision have been established.	All samples underwent preparation and analysis at Intertek Genalysis, Perth. All RC samples were analysed for Au, Pd, Pt by 50g fire assay with a ICP-MS finish (FA50/MS). And for 33 elements with a four acid digestion and ICP-MS finish (4A/OE33). Certified standards and blanks were inserted every 25 samples to test for laboratory 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.	Significant intersections were reviewed internally by 2 different geologists. No twinned holes have been completed. No adjustments to assay data has been 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 drillholes have accompanying collar and survey recordings and were located with handheld GPS. Down-hole surveys were completed by a digital gyro tool every 30m. The coordinate system used is GDA94 MGA Zone 50. Drillhole elevation is from publicly available SRTM DEM data with no elevation data collected in the field.
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.	RC drilling is spaced at 80x160m. AC drilling is spaced at 40-80m along the line. Work completed is exploratory in nature; therefore spacing/distribution is not sufficient for estimation purposes.
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.	Limited RC drilling so far indicates the host geology and mineralisation appears to dip east.
Sample security	The measures taken to ensure sample security.	Samples were bagged on site and sent to the laboratory via a 3rd party freight company.

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 – 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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There is next to no previous work done on the tenement apart from a single soil geochemical sampling program by Bodicea Resources in 2012
Geology	Deposit type, geological setting and style of mineralisation.	The main target for this project is intrusion related Ni-Cu-PGE mineralisation of a similar style to that found at the Julimar Project close to Toodyay.
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	See Table 1 and Table 2
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.	All intervals above 100 ppb Pd+Pt were reported. No averaging has been completed. No metal equivalent values have been reported.
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 geometry of the mineralisation is not known and results are down hole length.

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 2, 3 and 4.
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 intervals above 100 ppb Pd+Pt were reported.
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.	Further work is planned on the mafic intrusions identified in the aircore drilling.