

Todd River Resources Limited (ASX: TRT)

Update - March 2019

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Contents

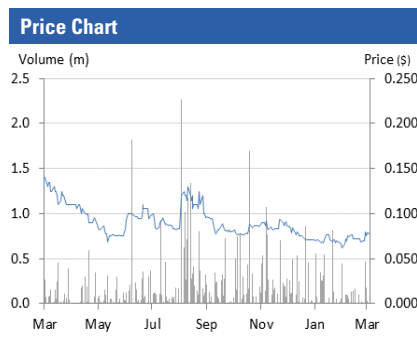
2019 Drilling Programme Underway at Mount Hardy	1
Key Points	1
Activities Update	2
Introduction and Background	2
Summary of Exploration Activities by TRT	2
Corporate activities	3
Project Updates	3
Mount Hardy - TRT 100%	3
Rover - TRT 100%	7
Petermanns - TRT 100%	8
McArthur River - TRT 100%	9
Manbarrum - TRT 100%	11
Planned Activities	13
Peer Group Analysis.....	13
Risks	15

Note: This report is based on information provided by the company as at March 5, 2019.

Investment Profile	
Share Price as at March 4, 2019	\$0.078
12 month L/H (\$)	\$0.065/0.19
Issued Capital (Includes Escrowed Securities)	
Ordinary Shares	151.4 m
Listed Options	24.5 m
Unlisted Options	24.5 m
Fully Diluted	200.4 m
Market Capitalisation	A\$11.8 m
Cash - December 31, 2019	A\$4.69 m

Board and Management	
Mr Eddie Fry: Non-Executive Chairman	
Mr Will Dix: Managing Director	
Mr Mark Bennett: Non-Executive Director	
Mr Geoffrey Crow: Non-Executive Director	
Mr Simon Robinson: Company Secretary	

Major Shareholders	
S2R Group	19.99%
TNG Limited	4.62%
Directors and Management	1.58%
Top 20	34.77%



Senior Analyst – Mark Gordon

The investment opinion in this report is current as at the date of publication. Investors and advisers should be aware that over time the circumstances of the issuer and/or product may change which may affect our investment opinion.

2019 DRILLING PROGRAMME UNDERWAY AT MOUNT HARDY FOLLOWING EXPLORATION SUCCESS TO DATE

Northern Territory focussed explorer Todd River Resources (ASX: TRT, "Todd River" or "the Company") has enjoyed significant exploration success in the two years since their early 2017 listing on the ASX and our initiation note. The Company, which is a spin-out from TNG Limited (ASX: TNG, "TNG"), has concentrated activities on the Mount Hardy Project ("Mount Hardy"), some 300km NW of Alice Springs, with this resulting in the discovery of high grade poly-metallic structurally controlled mineralisation.

Drilling activities have concentrated on the EM1 target, and have returned excellent results, including an intersection of 35.54 m @ 14.7% Zn, 2.92% Pb, 0.91% Cu and 59 g/t Au from 431.54 m in MHDD0043, with mineralisation defined from surface to a depth of 500 m (and still open). Initial metallurgical testwork has also returned excellent results, indicating that separate high quality Cu, Pb and Zn concentrates can be produced through sequential flotation.

Limited drilling at three other targets (EM2, Mount Hardy and Browns) has returned encouraging results, as have electromagnetic ("EM") and induced polarisation ("IP") geophysical surveys, which have identified a number of targets that are yet to be drill tested. The Company has a comprehensive exploration programme planned for the 2019 field season, which will include significant drilling (which has now commenced) and further geophysical surveys.

Drilling is also planned for geophysical targets identified at the Rover Project ("Rover"), located ~70 km SW of the historical Tennant Creek Mineral Field ("TCMF"), which was a producer from very high grade gold and copper deposits, notably by Geopeko. Exploration by other parties in the Rover area (which is under-explored, partly due to cover and also historic land access issues) has identified mineralisation similar to that at the TCMF - these systems include Westgold Resources (ASX: WGX, "Westgold") Rover 1 Project, which has returned drill intersections of up to 20.87 m @ 14.5 g/t Au and 6.0% Cu.

With A\$4.7 million in the bank as of December 31, 2018, the Company is well cashed up to fund these planned exploration programmes, as well as work on other projects in the quality exploration portfolio - results from planned activities should lead to a steady news flow.

KEY POINTS

Exploration success at Mount Hardy: Results of drilling and geophysical surveying at Mount Hardy highlight the potential for this project to host significant and material resources of poly-metallic mineralisation - it is still early days at this quality project.

Positive metallurgy: The results of initial metallurgical testwork at Mount Hardy are very encouraging, in that separate Cu, Pb and Zn concentrates were produced that are potentially saleable - this is very positive in that the metallurgy of poly-metallic mineralisation can commonly be very tricky, and potentially a fatal flaw, or else significantly decrease returns from any future project through having to produce bulk concentrates.

Exploration potential at other projects: We see the potential for positive exploration results from other projects, particularly Rover.

Cashed up: Having raised ~A\$7 million before costs in late 2018, and with A\$4.7 in the bank as of December 31, 2018, Todd River is well cashed up to pursue an aggressive exploration programme, with activities set to commence immediately on Mount Hardy, and soon thereafter on Rover. Having significant cash in the bank has the added benefit that management can concentrate on their core business of exploration (and not on walking the major cities rattling the can) - this also means that exploration can be planned around what is right for the project, and not around what is in the bank.

Key cornerstone: A fair chunk of the money raised in the December quarter came from a placement to S2R Resources (ASX: S2R, "S2R"), which now holds 19.99% of Todd River - this is a vote of confidence in the company, projects and their quality directors and management.

Leveraged to exploration success: With an EV of just over A\$7 million, the Company is well leveraged to exploration success - examples of companies with similar styles of mineralisation include KGL Resources (ASX: KGL, "KGL" market capitalisation of A\$78 million) and Peel Exploration (ASX: PEX, "Peel" market capitalisation of A\$107 million).

ACTIVITIES UPDATE

INTRODUCTION AND BACKGROUND

- ◆ This report is an update to our April 2017 initiation report for Todd River (coincident with their IPO), and describes activities carried out in the subsequent period.
- ◆ Todd River, a spin-out from TNG Limited, listed on the ASX on April 6, 2017 - the rationale of the spin-out was to allow TNG to focus on the Mount Peake Vanadium-Titanium-Iron Project, whilst giving the portfolio of other highly prospective Northern Territory projects a home and the attention that they deserve.
- ◆ The Company raised A\$6.000 million at A\$0.20/share (before costs) in the IPO, with the existing TNG shareholders receiving an in-specie distribution of one TRT share for every 28.73 TNG shares held at the time of the TRT listing.
- ◆ Todd River has a portfolio of base and precious metals (and some lithium) properties throughout the Northern Territory, with these shown in Figure 1 and which are detailed in our April 2017 report - significant exploration activities have been carried out on these since listing.

Figure 1: Todd River key project location map



Source: Todd River

SUMMARY OF EXPLORATION ACTIVITIES BY TRT

- ◆ The most significant result has been the high discovery of high grade mineralisation at Mount Hardy (Figure 1), which will be the focus of activities in the 2019 field season - field work to date has included drilling, downhole EM ("DHEM") and moving loop time-domain EM ("MLTEM") surveying on the structurally hosted poly-metallic mineralisation - initial metallurgical testwork has also been successfully completed.

- ◆ The Company acquired 100% of the Rover Project, which was originally a JV between TNG and WDR Base Metals, a subsidiary of Western Desert Resources, which entered into voluntary administration - the tenements are prospective for high grade Tennant Creek-style gold and copper mineralisation, being one kilometre along strike from Westgold Resources' (ASX: WGX) Rover 1 Project, with the Company also completing remodelling of geophysical data over a key section of the tenement package.
- ◆ The Petermann tenements, which were applications at the time of listing, have also been approved for grant by the Traditional Owners, dependent upon negotiation of an exploration agreement.
- ◆ The target mineralisation style at McArthur River is SEDEX Zn-Pb-Ag mineralisation, similar to that at the nearby McArthur River mine and red-bed copper mineralisation - drilling of SkyTEM targets in 2018 intersected sulphidic sediments anomalous in base metals, confirming the prospectivity for the mineralisation styles.
- ◆ A conceptual mining study was completed at the Manburrum Zn-Pb-Ag Project, with generally positive results, however this is considered a relatively low priority project.
- ◆ Early stage work at the Wallabanba Project identified lithium-caesium-tantalite ("LCT") pegmatites, with very encouraging results, however the Company is considering divestment options and thus this will not be discussed further.
- ◆ Work at the early stage Stokes Yard project has identified zones of anomalous base metals in soils and rock chips - this was followed up by a moving loop time-domain EM ("MLTEM") survey in late 2018, however no compelling targets have been reported, and thus this will not be discussed further.
- ◆ Selected projects will be discussed in more detail below.

CORPORATE ACTIVITIES

- ◆ On the personnel side, experienced geologist Mr Will Dix was appointed to the Company as CEO in early 2018; he was subsequently appointed as Managing Director in November 2018 - this is part of an overall refreshment of the Board.
- ◆ The Company welcomed S2 Resources (ASX: S2R, "S2R") as a cornerstone investor in November 2018 - as part of this S2R MD/CEO Mr Mark Bennett was appointed to the TRT Board.
- ◆ The S2R investment of 30.27 million shares (19.99% of the Company) was part of an A\$7.072 million capital raising at A\$0.08 and A\$0.084/share completed in late 2018; this included a pre-rights placement, 1 for 2 rights issue and the investment by S2R - S2R's investment included 8.9 million rights shortfall shares at A\$0.08/share and 21.3 million new shares at A\$0.084/share.
- ◆ All 35.7 million rights shortfall shares were placed - given the state of the junior resources' markets at the time of the rights issue only ~12% of the rights were originally taken up.

PROJECT UPDATES

MOUNT HARDY - TRT 100%

Location and Tenure

- ◆ Mount Hardy comprises three granted exploration licences ("ELs") for 74 sub-blocks (234 km²), located over the historic Mount Hardy copper field – two tenements, EL27892 and EL29219 are in the process of being renewed, with EL29694 being in good standing.
- ◆ The project is located some 300 km to the NW of Alice Springs, and is readily accessible from the Tanami Road (Figure 1).

Geology and Mineralisation

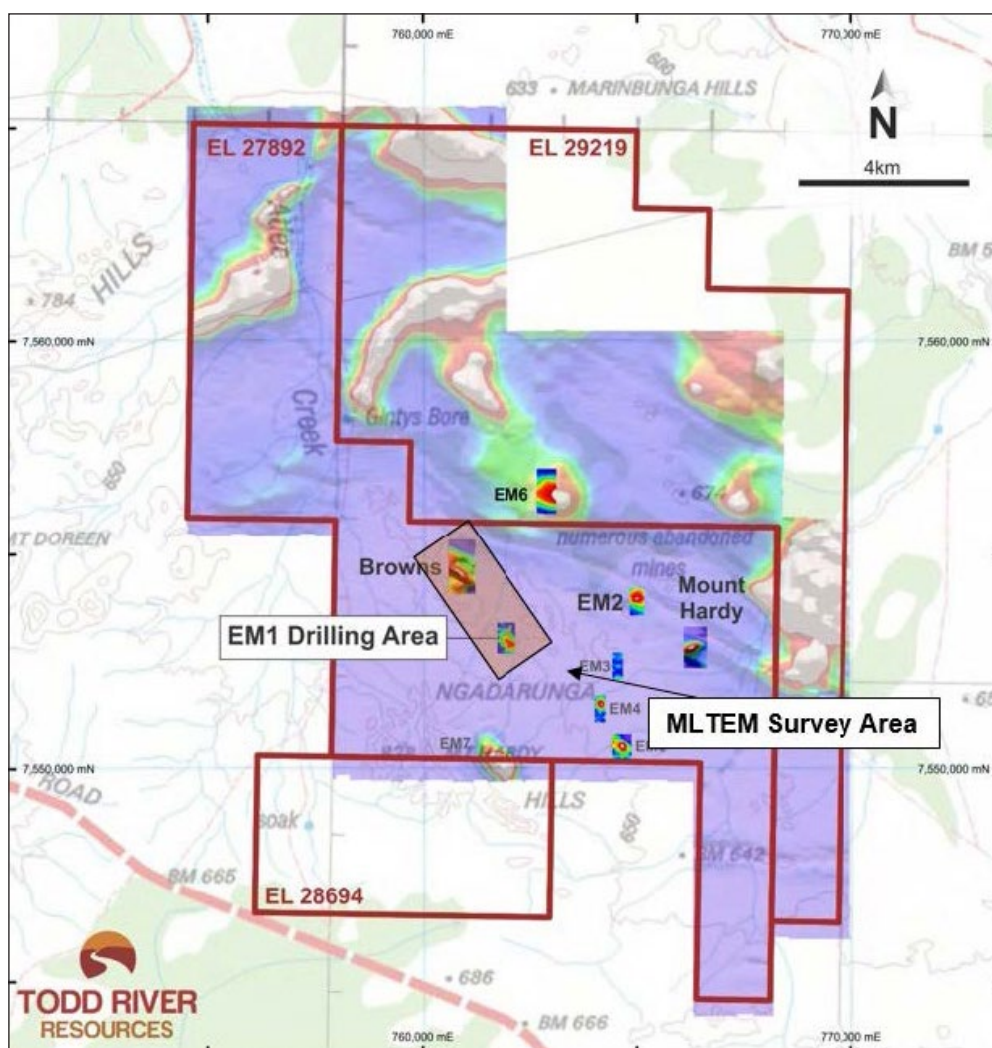
- ◆ The project covers units of the Aileron Province of the Paleo to Mesoproterozoic Arunta Block - the oldest units are strongly deformed and metamorphosed siliciclastic sediments of the Lander Group – this is interpreted as being stratigraphically equivalent to the Tanami Group which hosts significant gold mineralisation at The Granites, Coyote and Dead Bullock Soak.
- ◆ Mineralisation at Mount Hardy is strongly structurally controlled, hosted in tabular quartz veins within the Lander Group, which include psammite and lesser pelite, mica schist and andalusite schist.

- ◆ The quartz veins have strike lengths of 10's to 100's of meters, with two structural trends being evident – NW to WNW and ENE – the first is parallel to the trans-Tanami regional structures - further structural work is required however to determine the controls on the mineralised shoots.
- ◆ Mineralisation is associated with sericite/pyrite/silica alteration and semi-massive to massive sulphides, including chalcopyrite, pyrite, sphalerite and galena - it is interpreted that the mineralising event is associated with the intrusion of the nearby Mt Doreen Granite with two main styles of mineralisation being intersected in recent drilling - Pb-Zn rich and Cu rich.

Work by Todd River

- ◆ Activities by TNG and previous operators (including miners) are covered in our Initiation Report, with modern exploration largely including drilling, EM and IP surveying - EM surveying has highlighted the historic workings as well as identifying a number of other targets (Figure 2).
- ◆ Work to date by Todd River has mostly included drilling (37 RC and DD holes for 9,921 m), DHEM and MLTEM geophysical surveying - the EM surveying has identified a number of additional targets, some of which have been successfully tested by drilling, and some of which remain to be tested.
- ◆ The drilling by Todd River has concentrated on two strong EM targets (EM1 and EM2) and two strong IP anomalies (Browns and Mount Hardy), as shown in Figure 2 - Pb-Zn rich mineralisation tends to be associated with EM anomalism whereas the Cu-rich mineralisation is reflected more in the IP.

Figure 2: Mount Hardy HelITEM and ground EM, showing prospects and planned MLTEM

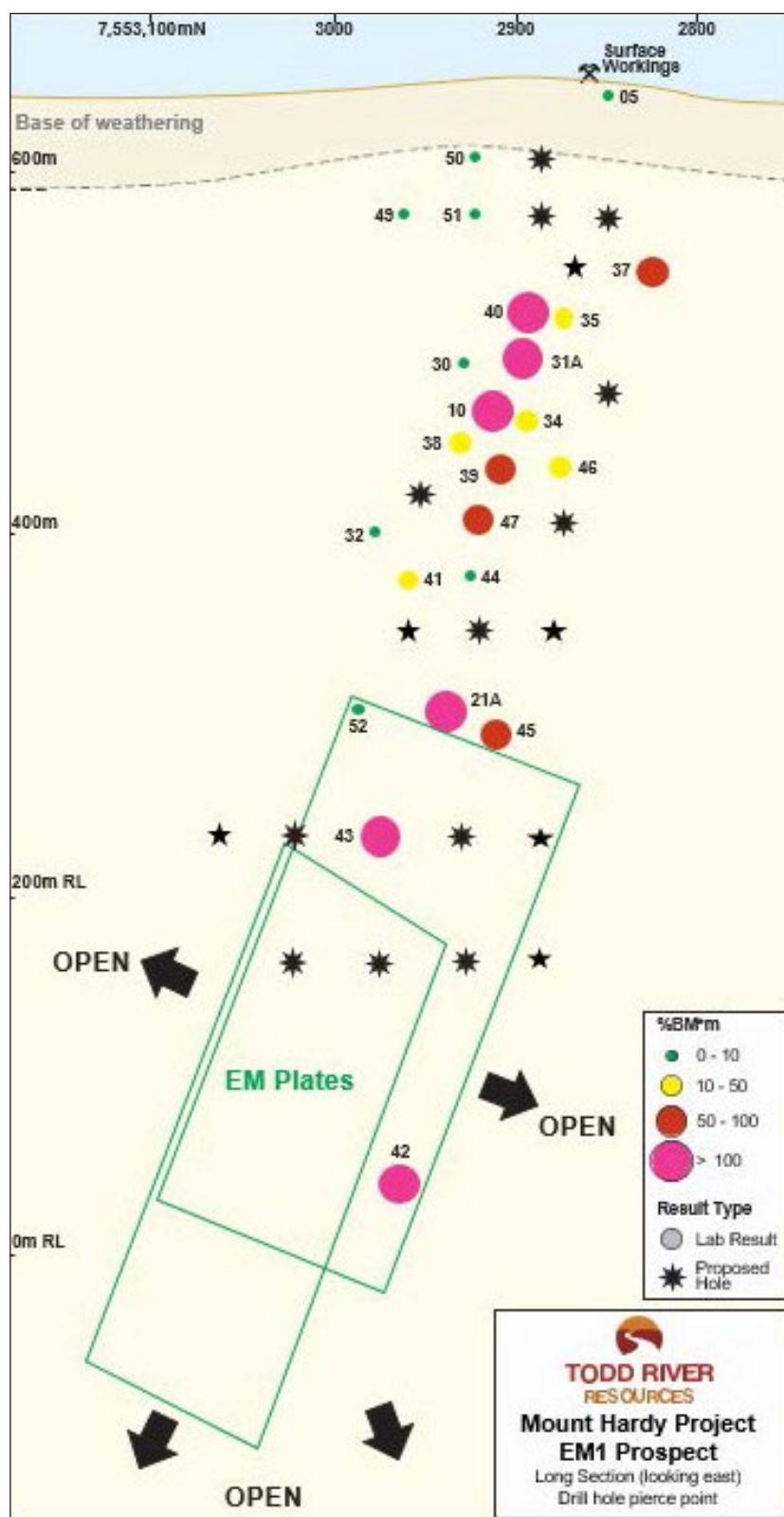


Source: Todd River

- ◆ Following on from some exceptional drilling results, the focus in the latter part of 2018 was the EM1 target (25 holes for 7,629 m in all programmes by Todd River), with this returning high grade, thick intersections, including:

- MHDD0043 - 35.54 m @ 14.7% Zn, 2.92% Pb, 0.91% Cu and 59 g/t Au from 431.54 m,
 - MHDD0040 - 55.75 m @ 1.0% Cu, 1.5% Pb, 3.3% Zn and 43.5 g/t silver from 131.5 m, including 7.92 m @ 1.4% Cu, 5.0% Pb, 13.8% Zn and 212.3 g/t silver from 179.38 m; and,
 - MHDD0021A - 13.45 m @ 15.9% Zn, 0.9% Cu, 5.75% Pb and 83 g/t Ag from 358.55 m
- ◆ Mineralisation at EM1 forms a steeply NE plunging pipe (that dips to the NW (Figure 3), with a strike length identified to date of up to ~70 m, a true thickness of up to 30 m and which has been intersected to a depth of 500 m - mineralisation is still open down plunge and along strike to the south - the vertical extent of the EM plates in Figure 3 reflects the limits of the method, and not the interpreted base of mineralisation.

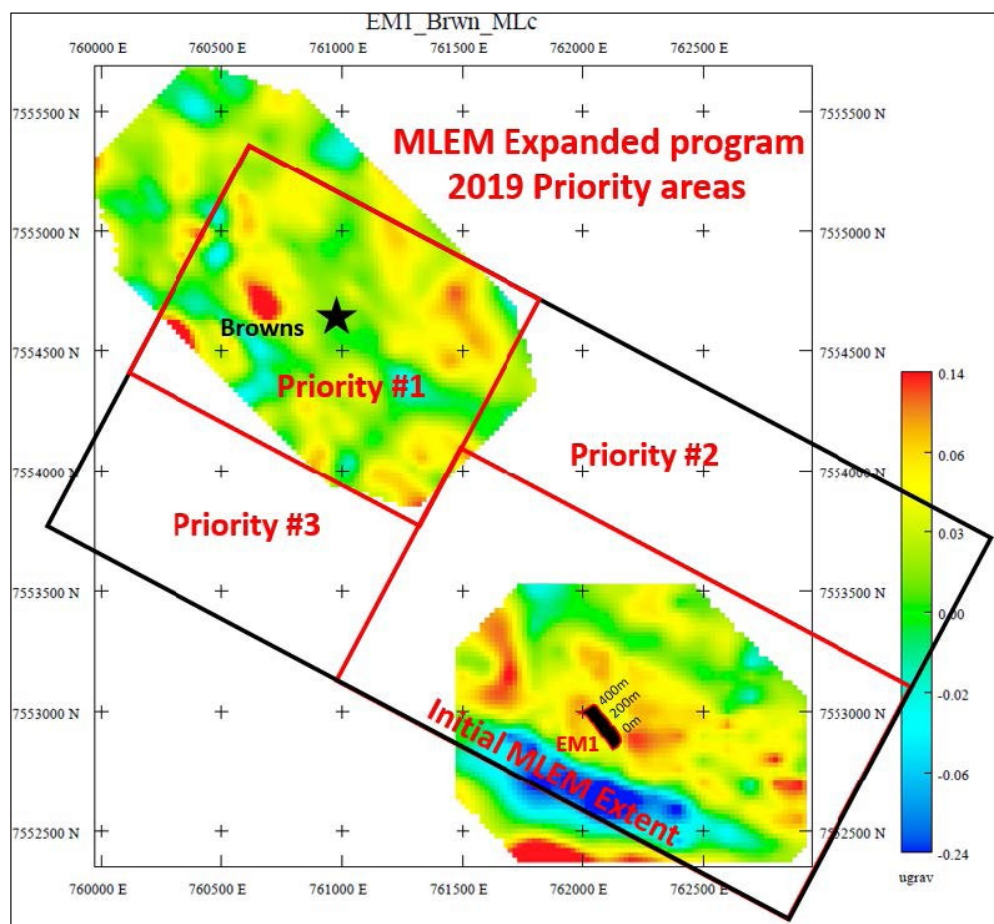
Figure 3: Mount Hardy long section showing pierce points looking southeast



Source: Todd River

- ◆ The other targets have returned very encouraging results from drilling by Todd River, with intersections including:
 - EM2 - MHRCCDU029 - 9.0 m @ 2.67% Zn, 0.97% Pb and 0.61% Cu from 135.0 to 144.0 m and 10.5 m @ 4.15% Zn, 1.10% Cu and 0.65% Pb from 178.0 to 188.5 m: and,
 - Browns Prospect - 17MHRC017 - 7.0 m @ 1.77% Cu, 0.43% Zn and 17.7 g/t Ag from 67-74 m.
- ◆ To date four holes for 1,224 m have been drilled into EM2 by Todd River, and four holes for 1,080 m into Browns.
- ◆ Drilling at the Mount Hardy Prospect, into which four RC holes for 598 m have been drilled by Todd River has returned a number of generally narrow (between 1 m and 8 m thick) zones assaying at up to 1.98% Cu in each hole - the Mount Hardy Prospect is characterised by low lead and zinc values, as is Browns.
- ◆ In late 2018 the Company completed a 4 km² MLTEM survey over EM1 for which processed results are still awaited - it is planned to expand this in 2019 to cover the EM1 to Browns corridor to allow for better drill targeting at the latter prospect and to test for additional drill targets within the corridor (Figure 4).
- ◆ DHEM surveying was completed late in 2018, with the results to be incorporated into the existing datasets - the DHEM completed to date has identified 29 conductor plates, a number of which are yet to be drill tested.

Figure 4: Mount Hardy Moving Loop EM survey



Source: Todd River

- ◆ The Company has completed initial metallurgical testwork on drill samples from EM1, with this returning very positive results, and highlighting the potential for sequential flotation to produce separate copper, lead and zinc concentrates - these results have been used in the design of a preliminary metallurgical circuit.
- ◆ The zinc concentrate values indicate a premium product with low impurities, whilst the testwork also produced copper and lead concentrates with key metal and low deleterious element grades indicating that they would be highly sought after products subject to sufficient mineralisation being delineated to support a viable mining operation.

- ◆ The testwork was carried out on a single composite with grades indicative of the mineralisation intersected to date - these were 0.92% Cu, 3.96% Pb, 17.8% Zn, 67.6 g/t Ag, 9.63% Fe, 14.7% S and 21.3% Si; the flotation testwork sample was prepared using a medium, 75µm grind size.
- ◆ Table 1 presents results of this work, with our view being that these are excellent outcomes, particularly given that these are from initial testwork, with optimisation yet to come - poly-metallic deposits commonly have difficult metallurgy, however this does not seem to be the case with Mount Hardy.
- ◆ This work also returned intermediate concentrate grades of up to 22.9% Cu, 74% Pb and 55.6% Zn, albeit at lower recoveries to the final concentrates; in addition grades of up to 800 g/t Ag reported to the copper concentrate.
- ◆ The Company states that these higher intermediate grades highlight the potential to improve final grades through flowsheet optimisation - optimisation work may include, amongst others:
 - Optimization of zinc depression in copper and lead circuits,
 - Depression of pyrrhotite, which is a diluent reporting to the concentrates; and,
 - Slowing zinc flotation kinetics.
- ◆ In addition we may expect increases in the cleaner recovery through the reintroduction of the intermediate concentrate streams (which include the cleaner and re-cleaner tails) into the circuit - this will be investigated in future locked cycle testwork.

Table 1 - Initial metallurgical testwork results - EM1

Initial metallurgical testwork results - EM1								
Result	Copper*		Silver*		Lead*		Zinc*	
	%Grade	%Recovery	%Grade	%Recovery	%Grade	%Recovery	%Grade	%Recovery
Copper Con								
Rougher	9.63	84.6	394	52.3				
Cleaner	18.8	71.0	627	34.5				
Lead Con								
Rougher			314	33.8	45.1	85.6		
Cleaner			421	23.2	64.0	62.2		
Zinc Con								
Rougher							46.6	85.5
Cleaner							54.6	79.5

Source: Todd River

*%Grade indicates final concentrate grade achieved and %Recovery indicates the recovery to final concentrate

ROVER - TRT 100%

Location and Tenure

- ◆ Rover includes one granted EL and two EL applications totalling 2170 km² (Figure 5), and one granted ML (Kovacs) for 8 ha – these tenements, with the exception of Kovacs, were originally 80% owned under the WDR Base Metals JV, however TRT acquired 100% following the liquidation of Western Desert Resources Limited.
- ◆ The tenements are located ~70 km SW of Tennant Creek, and are accessible by unsealed roads and tracks.

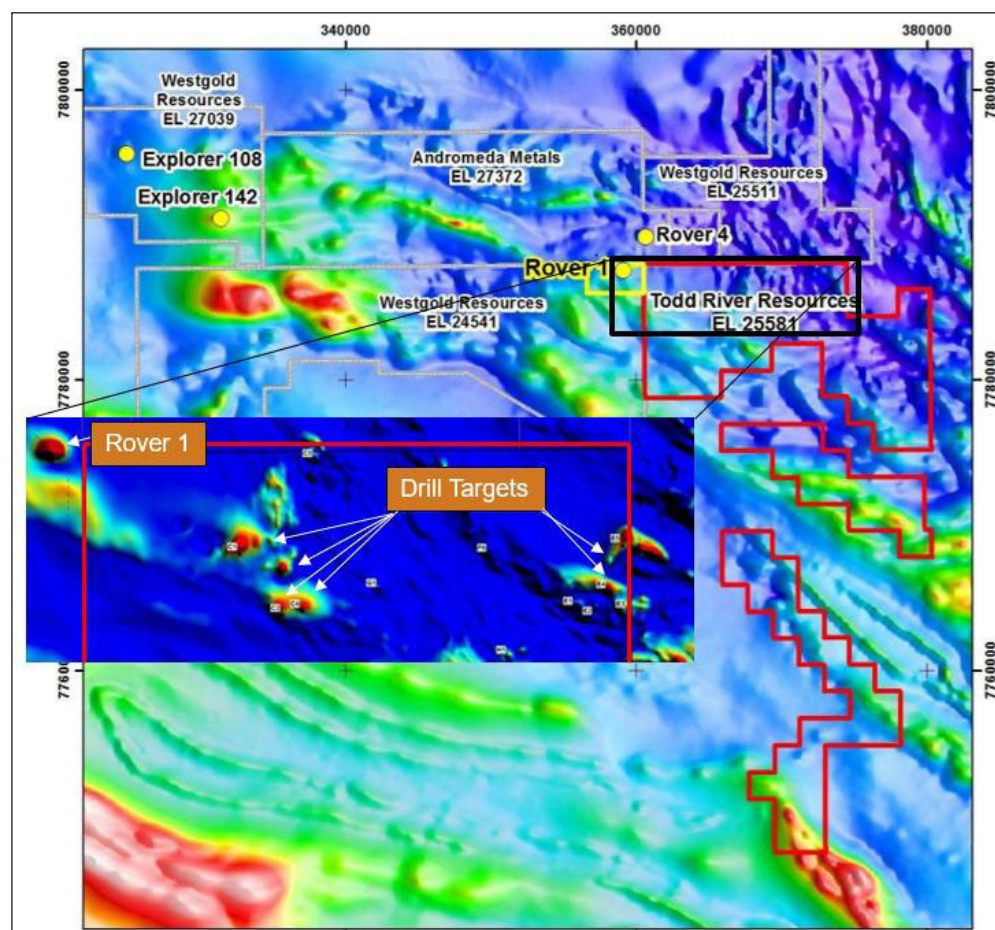
Geology and Mineralisation

- ◆ The Rover Project covers the southern margin of the Tennant Creek Block, a part of the Proterozoic Tennant Creek Inlier - the Tennant Creek Block hosts the TCMF, which is considered the most prospective gold field in the Northern Territory, and host to a number of very high grade gold, as well as copper deposits.
- ◆ Gold and copper mineralisation in the TCMF is associated with hematite and magnetite IOCG lodes, and is hosted within the Warramunga Formation, a Paleoproterozoic volcano-sedimentary succession.
- ◆ The area is overlain by 10-20 m of Cainozoic cover and up to 100 m of Palaeozoic sediments of the Wiso Basin, which hampered earlier exploration activities.

Work by Todd River

- ◆ Work by Todd River has followed that carried out by previous explorers (as outlined in our initiation report), with the most recent being geophysical surveys (ground and heliborne magnetics, IP and EM surveying) and limited drilling over targets E1 to E4 by TNG - these targets are within or adjacent to a sacred site exclusion zone.
- ◆ Magnetic targets are along strike from Westgold's Rover 1 project as shown in Figure 7, and also near the Rover 4 project drilled by Adelaide Resources (now Andromeda Metals, ASX:AND) - both of these are Tennant Creek style mineralisation, with Rover 1 drilling intersecting up to 20.87 m @ 14.5 g/t Au and 6.0% Cu.
- ◆ Recent work has included reprocessing of the helimag dataset along strike from Rover 1 - this is being used to define and refine a number of new drill targets, as shown in Figure 5.

Figure 5: Rover tenements, targets and adjacent properties on remodelled magnetic image



Source: Todd River

PETERMANN'S - TRT 100%

Location and Tenure

- ◆ Petermann's, which includes five large EL applications for 5,100km² (Figure 6), is located some 400 km SW of Alice Springs near the NT-SA-WA border - the tenements are located within the Petermann Aboriginal Land Trust.

Geology and Mineralisation

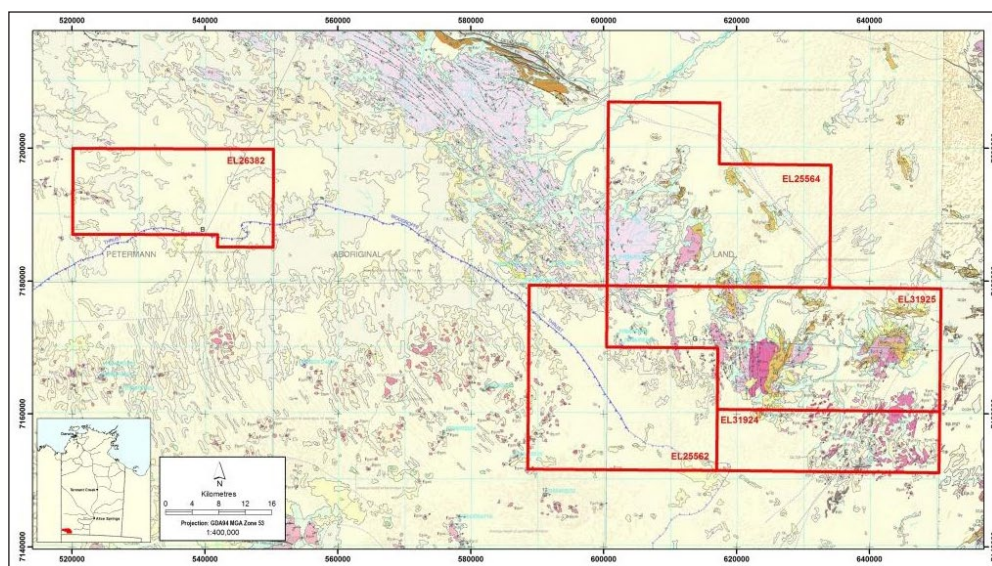
- ◆ The project is located over the Proterozoic Musgrave Block, and is considered prospective for a wide range of commodities.
- ◆ The project area is apparently relatively under-explored; however exploration in other areas of the Musgrave block has seen some recent discoveries, including Cassini Resources' (ASX: CZI) Nebo-Babel Ni-Cu-(PGE) deposit with resources of 203.1 Mt @ 0.41% Ni and 0.42% Cu - OZ Minerals (ASX:OZM) has farmed into the project, now holding 51%.
- ◆ Work by Musgrave Minerals' (ASX: MGV) has also identified nickel mineralisation in the South Australian part of the Musgrave Block.

- ◆ A number of small copper occurrences have been noted in the Petermann Ranges in South Australia – the NTGS considers that these may indicate some potential for metamorphosed or sediment hosted mineralisation.

Work by Todd River

- ◆ Activities by Todd River have been targeted on getting the tenements granted - as announced to the market on May 30, 2018, following successful meetings with the Traditional Owners, and subject to the negotiation of an exploration agreement, the Company has received consent to grant for the five applications.

Figure 6: Petermann tenement applications



Source: Todd River

McARTHUR RIVER - TRT 100%

Location and Tenure

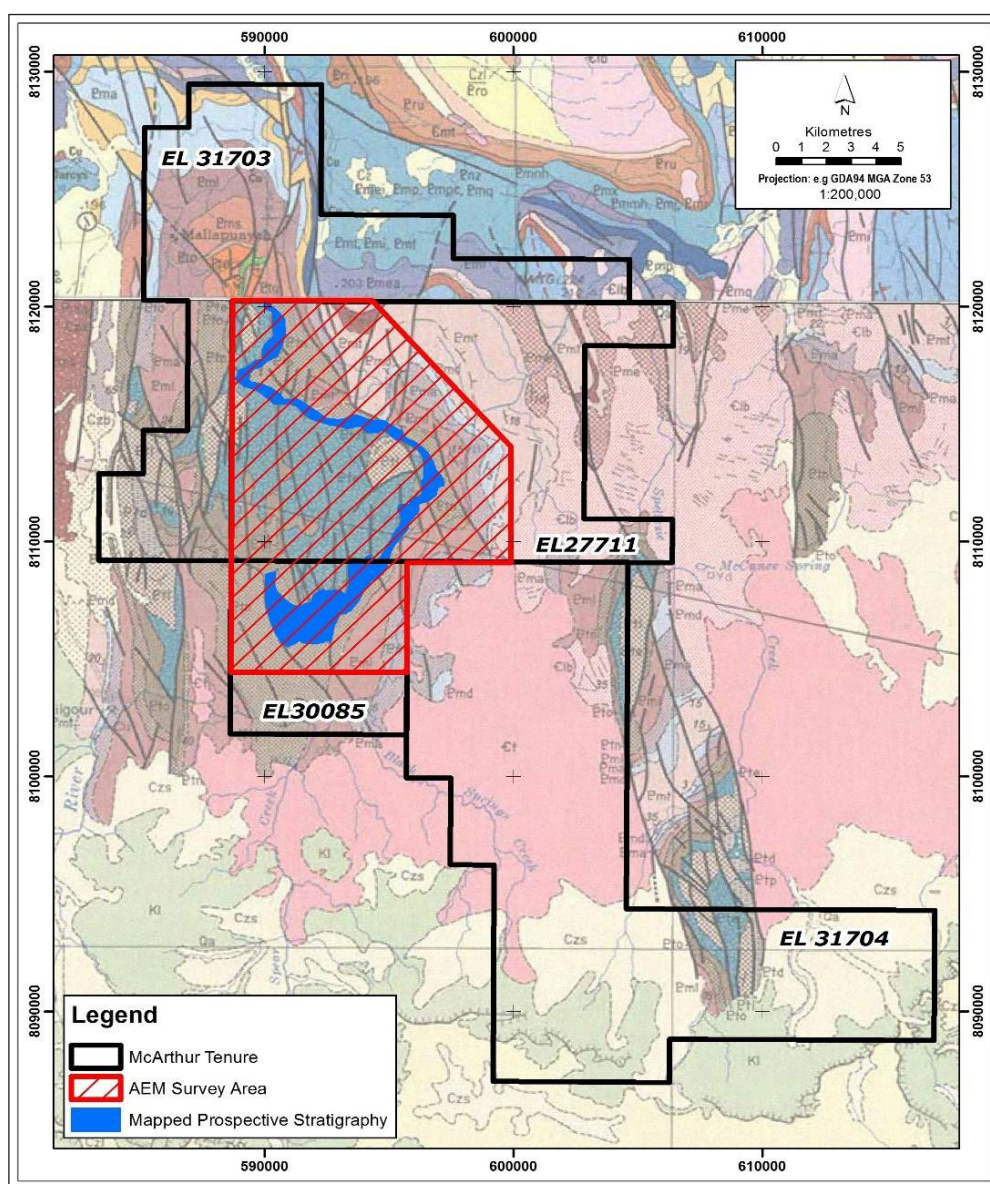
- ◆ McArthur River, which covers some 187 sub-blocks (612 km²), includes four granted EL's and one application – all granted tenements are in good standing, with two tenements totalling 70 sub-blocks (229 km²) being granted in 2018 (Figure 7).
- ◆ The project is located approximately 300 km NE of Tennant Creek, and readily accessible via the Tablelands Highway.

Geology and Mineralisation

- ◆ The geology is covered more fully in our Initiation Report, however in brief the McArthur River project is located on the western side of the Batten Fault Zone ("BFZ"), a major subdivision of the Mesoproterozoic McArthur Basin, and is considered prospective for:
 - Pb-Zn-Ag SEDEX style stratabound mineralisation, similar to that at the McArthur River Mine which is located on the eastern side of the BFZ, some 65km NE of Todd River's project,
 - Stratabound copper mineralisation, similar to that at Mount Isa and Gunpowder, with this mineralisation being of similar age to that identified to date at the McArthur River Project; and,
 - Breccia-hosted copper mineralisation, similar to that found at Redbank, which is hosted in the Tawallah Group, the lowermost unit in the McArthur Basin.
- ◆ The Project largely covers the Tawallah Group, including the Settlement Creek Dolerite and the overlying Wollgorang Formation and Warramana Sandstone - the central "ovoid rich" part of the Wollgorang Formation bears similarities to the Barney Creek Formation (which is within the overlying McArthur Group, and which hosts McArthur River).
- ◆ The Wollgorang Formation includes dolomitic and carbonaceous/bituminous units, thus reinforcing their prospectivity for sedex-style mineralisation – this is the key Pb-Zn target stratigraphy in Todd River's ground (marked as "prospective stratigraphy" in Figure 5), and which is marked by lead, zinc and copper geochemical anomalies.

- ◆ Two strata-bound disseminated copper occurrences are hosted within the Mallapunyah Formation, one of the lowermost units of the overlying McArthur Group.

Figure 7: McArthur River geology, tenements and SkTEM survey area

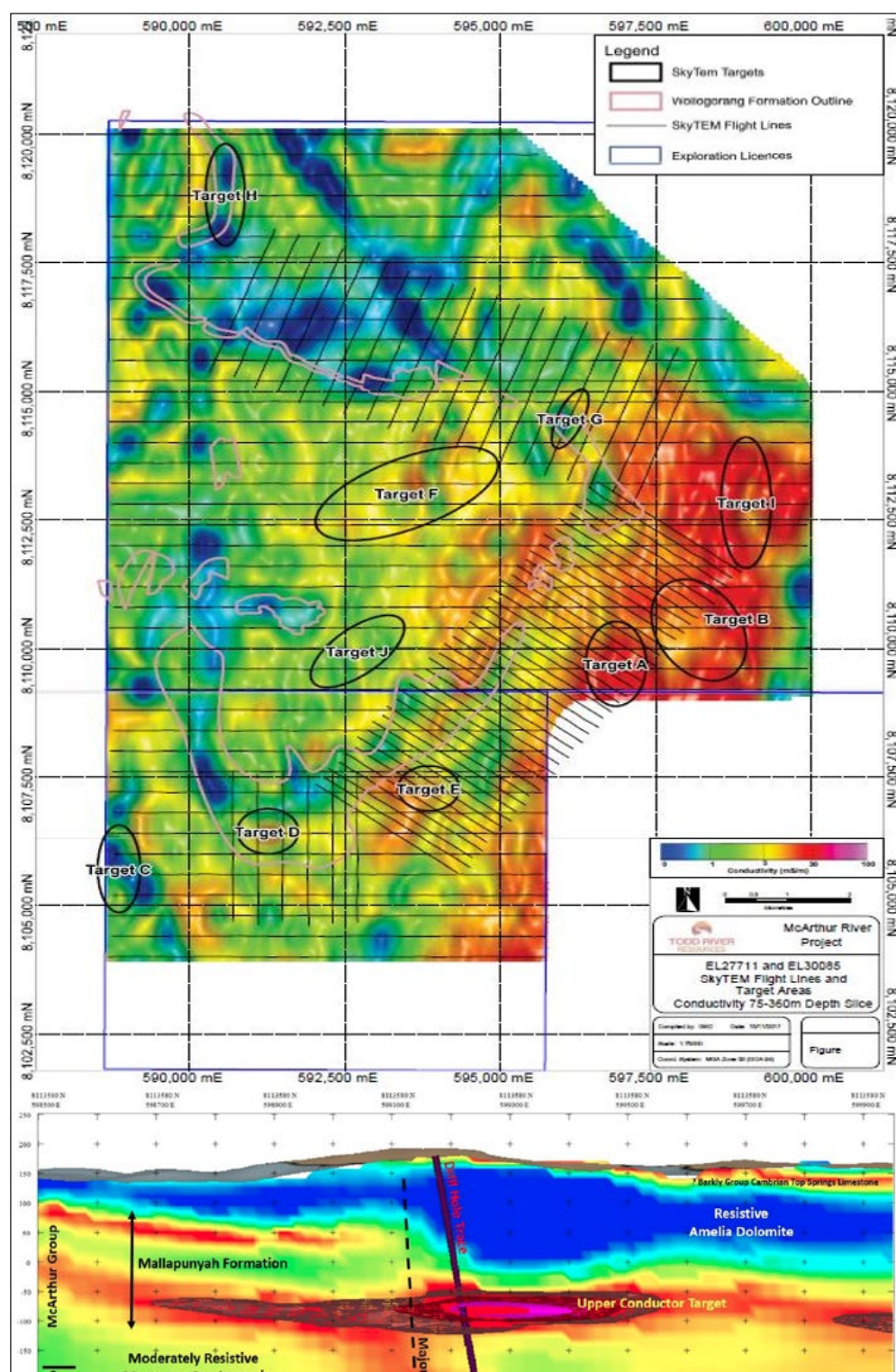


Source: Todd River

Work by Todd River

- ◆ Work by Todd River has followed up that carried out by previous explorers (as outlined in our Initiation Report), with the most recent being TNG, which largely defined the anomalism within the Wollogorang and Mallapunyah Formations as mentioned above.
- ◆ Key activities undertaken by Todd River include:
 - A 600 line km “SkyTEM” heliborne EM survey, with the area shown in Figure 7 and results in Figure 8 - this identified nine anomalies considered prospective for base metal mineralisation,
 - Geological mapping and trench sampling along the southern part of the “prospective stratigraphy” - this identified a copper rich shale horizon at the base of the Wollogorang Formation, which returned up to 44.5% Cu in rock chips,
 - Drilling three holes for 1,393 m, with one hole being drilled into each of Targets B, D and I - these holes intersected base metals sulphides and geochemical anomalism in the predicted positions; and,
 - Initial reconnaissance mapping and sampling on the newly granted tenure.

Figure 8: SkyTEM survey results - plan and east-west section through Target I



Source: Todd River

- ◆ The results of the SkyTEM survey (Figure 8) highlights the flat-lying to east dipping stratigraphy, with this hosting a number of stratiform conductors - the presence of these conductors was confirmed by the results of the drilling, and highlights the exploration potential of the Project.

MANBARRUM - TRT 100%

Location and Tenure

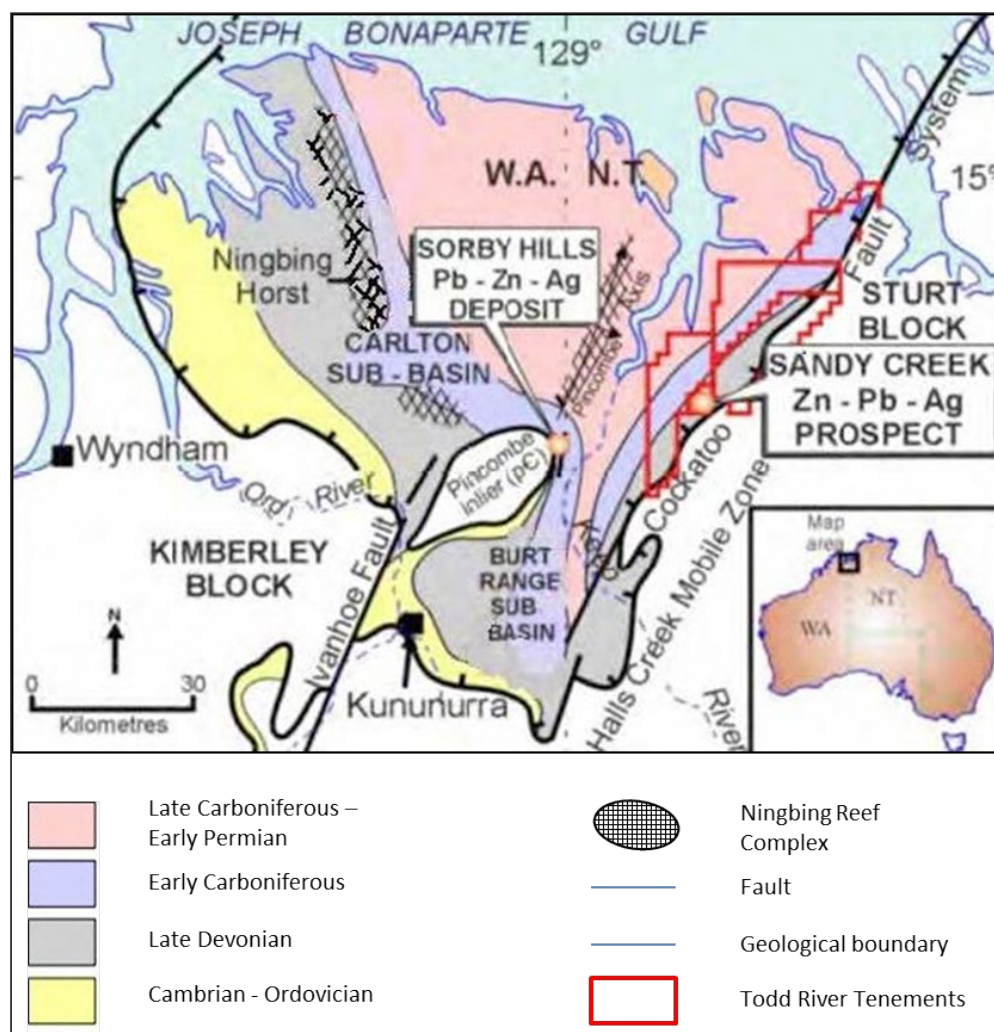
- ◆ Manbarrum comprises four granted ELs and one mining lease application ("MLA"), covering some 250 km². three of the ELs are in good standing with one in the process of being renewed (Figure 9).

- ◆ Manbarrum is located some 70 km north of the regional centre of Kununurra, and is accessible only during the dry season by sealed road and unsealed station tracks - the project is located close to infrastructure, including roads and the port at Wyndham.

Geology and Mineralisation

- ◆ Manbarrum is located on the eastern margin of the Bonaparte Basin, a Cambrian to Tertiary sedimentary basin with up to 15 km thick sediments related to a continental rift system - the tenements host the Sandy Creek Mississippi Valley Type ("MVT") deposit, with JORC 2012-compliant Indicated and Inferred Mineral Resources of 22.5 Mt @ 1.81% Zn, 0.44% Pb and 4.56 g/t Ag.

Figure 9: Manbarrum project location and regional geology



Source: Todd River

- ◆ The Project also hosts a number of MVT targets along strike, including Browns and Djibitgun.
- ◆ It is also located within 40km of Pacifico Minerals (ASX: PMY) Sorby Hills deposit which has Mineral Resources of 16.67 Mt @ 52 g/t Ag, 4.5% Pb and 0.7% Zn at a 2.5% Pb or Zn cut-off grade, for which a 2013 pre-feasibility study returned positive results.

Work by Todd River

- ◆ Todd River engaged CSA Global ("CSA") to undertake a conceptual mining study, following up on extensive work completed over Manbarrum by TNG, which included amongst others 37,000 m of drilling and a positive PFS in 2013.
- ◆ The study, which envisaged a contract mining scenario with a base case open pit production of 500 ktpa from Sandy Creek, identified a number of key sensitivities which would benefit from operational improvements, however the base case scenario resulted in positive cash flow.
- ◆ Areas that were identified where operational improvement could potentially be realised included:

- Investigate suitable processing strategies to develop an optimal flow sheet,
- The creation of geo-metallurgical models to understand mineralisation domains and mineral types,
- Looking at the potential for pre-concentration of the ore to lower costs; and,
- A review of grade bias in drilling, which has included undercalling grades in diamond drilling and overcalling grades in RC drilling.

PLANNED ACTIVITIES

- ◆ The below outlines planned activities for the 2019 field season - these planned activities may also change due to results of ongoing work, and changes in priorities.
- ◆ The key project is Mount Hardy, on which the bulk of activities will be concentrated.
- ◆ Following the late 2018 capital raising the Company is well placed to fund these activities.

Mount Hardy

- ◆ Todd River has a comprehensive exploration programme planned over Mount Hardy in 2019 for which it is well cashed up; this includes drilling, MLEM (as discussed above) and DHEM surveying.
- ◆ Drilling, which has now commenced, will be focussed on EM1, with this to be followed by drilling on other prospects, including Mount Hardy and Browns; any new anomalies identified during the upcoming MLEM survey will also be drill tested.
- ◆ Drilling at EM1 is expected to continue well into the June quarter, and will further assess both the shallow and deep potential of the mineralisation.
- ◆ Further metallurgical testwork is also planned, however this is not of a high priority at the current time, and will depend upon the results of ongoing drilling.

Rover

- ◆ The Company is planning to drill a number of the Rover targets in March/April 2019.

Petermann

- ◆ Once granted, initial activities will include early stage exploration, including reconnaissance geological mapping and geochemical sampling - all going well this may commence in the second half of CY2019.

McArthur River

- ◆ A collaborative study with the CSIRO is ongoing - the results of this will determine the next phase of drilling, with the Company of the view that any drilling will be carried out in 2020 at the earliest, unless particularly compelling targets are outlined as a result of the collaborative study.

Manbarrum

- ◆ Although the results of the Conceptual Mining Study were positive, the Company has no immediate work planned for Manbarrum, and may consider options with regards to the Project - there are obvious synergies with Sorby Hills.

Stokes Yard

- ◆ No exploration activities are currently planned for Stokes Yard.

PEER GROUP ANALYSIS

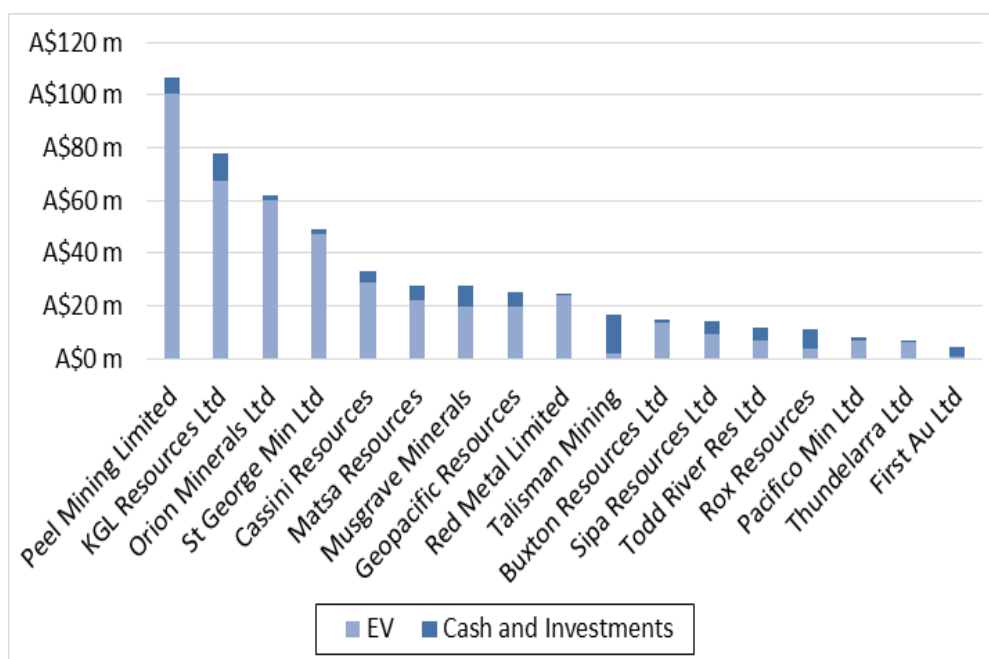
- ◆ Todd River is one of a number of diversified explorers listed on the ASX, with a selection of those shown in Table 2 and Figure 10 below.
- ◆ In the table below we have compared a mix of diversified explorers – most operating in Australia with some having projects outside of the country.
- ◆ A number of these companies have, or are operating in similar areas or geology to Todd River – these include Cassini, who are operating in the Musgrave Block of WA, and Rox, who are operating in the Arunta Block in the NT close to KGL's Jervois Project, and who also sold their Reward Lead-Zinc Project in the McArthur Basin to Teck for A\$15.97 million plus deferred payments of A\$3.75 million.

- ◆ We have also included Pacifico, who own 100% of the Sorby Hills Project in WA, close to Manbarrum.

Table 2: Todd River peer group

Todd River peer group						
Description	MC (\$m)	Precious Metals	Base Metals	Specialty Metals	Jurisdiction	Notes
Peel Mining Limited	\$106.7	Y	Y		NSW	Polymetallic resources at Mallee Bull in NSW
KGL Resources Ltd	\$78.1	Y	Y		NT	Polymetallic resources at the Jervois Project, Arunta Block
Orion Minerals Ltd	\$61.8	Y	Y		South Africa	
St George Min Ltd	\$49.2	Y	Y		WA	
Cassini Resources	\$33.2	Y	Y		WA	Musgrave Block
Matsa Resources	\$27.4	Y	Y		WA, Thailand	
Musgrave Minerals	\$27.3	Y	Y		WA, SA	
Geopacific Resources	\$25.0	Y	Y		PNG, Cambodia, Fiji	Ni-Cu resources at the West Musgrave Project
Red Metal Limited	\$24.4	Y	Y		WA, QLD, SA, NT	
Talisman Mining	\$16.7	Y	Y		NSW	
Buxton Resources Ltd	\$15.0		Y	Y	WA	
Sipa Resources Ltd	\$14.2	Y	Y		WA, Uganda	
Todd River Res Ltd	\$11.8	Y	Y	Y	NT	
Rox Resources	\$11.3	Y	Y		WA	
Pacifico Min Ltd	\$8.2	Y	Y		WA	Sorby Hills, close to Manbarrum
Thundelarra Ltd	\$7.0	Y	Y		WA	
First Au Ltd	\$4.2	Y	Y	Y	WA	

Source: IRESS, Company reports - note table sorted by market capitalisation to match order in Figure 10.

Figure 10: Todd River peer group financial position


Source: IRESS, Company reports

- ◆ We have considered cash and investments as held on December 31, 2018 - Investments are those as highlighted by companies in presentations and releases, and largely include holdings in listed companies.
- ◆ We have not considered any debt as held by the companies in Figure 10.
- ◆ With an EV of \$6 million Todd River is well leveraged to exploration success, which is the key to driving share prices and company value.

- ◆ Recent discoveries in Australia that have led to large price moves include the Nova-Bollinger discovery by Sirius in 2012 (\$0.05 to a peak of \$5.00/share) and the Doolgunna discovery by Sandfire in 2009, which had an initial run from \$0.05 to \$4.08/share, with subsequent movements to over \$8.00/share.
- ◆ Pertinent to Todd River are KGL (market capitalisation of A\$78 million) and Peel (market capitalisation of A\$106 million), both which have structurally controlled poly-metallic discoveries - KGL has the 25.2 Mt Jervois deposit, located in the Arunta Province of the NT and PEX has the 3.92 Mt Mallee Bull system in the Cobar Basin NSW, augmented by the high grade Wagga Tank-Southern Nights project which is the focus of current operations.

RISKS

- ◆ **Exploration** – This is the key risk facing any junior explorer, and this is no different with Todd River, however the results of work to date, particularly at Mount Hardy have mitigated this risk to some extent, although any mineralisation ultimately discovered will need to be of a size to support a standalone operation in a remote area, and thus additional mineralisation in addition to that at EM1 will need to be delineated.
- ◆ **Markets** – Having just raised cash, Todd River is well funded with close to \$4.7 million in the kitty as of December 31, 2018 - given expenditure over the last few quarters we would expect this to be sufficient to fund the planned 2019 field activities, with the need to go back to the market in late 2019. However should markets turn in the meantime it could prove difficult to raise funds – this will also be dependent upon ongoing exploration success.
- ◆ **Sovereign** – We do not consider this risk as significant – the Northern Territory is a well-regarded mining jurisdiction, in which Todd River personnel are experienced in operating in. In addition Company personnel have very good relationships with the various Traditional Owner groups – a vital consideration when operating in the Territory.

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