TODD RIVER METALS PTY LTD

WALABANBA PROJECT

GROUP ANNUAL REPORT

GR145/10

EL 26848 – 05/03/16 to 04/03/17
EL 27115 – 05/03/16 to 04/03/17

Tenement/s	EL26848, EL27115,	1:250 000 Sheet Name	Mount Peake (SE5305)
Holder	Todd River Metals Pty Ltd	1:100 000 Sheet Name	Anningie (5554), Conical Hill (5555)
Manager	N/A	Datum	GDA94-53
Operator	Todd River Metals Pty Ltd	GDA_E	276032-319124
Commodity	Cu, Au, Ni, Pb, Zn	GDA_N	7565673-7630564
Elements Analysed			
Keywords			

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Distribution	Todd River Resources Ltd	(1)
	NT Department of Primary Industry and Resources	(1)

EXECUTIVE SUMMARY

The Walabanba Hills Project is operated by Todd River Metals Pty Ltd, a wholly owned subsidiary of Todd River Resources Ltd.

The project comprises two exploration licences (EL26848 and EL27115) in the north-central portion of the Paleoproterozoic Arunta Province.

The Walabanba licences were acquired with a view to exploration for primary base metal sulphides, nickel and magnetite hosted vanadium-titanium, as found in the Mount Peake Fe-V-Ti deposit to the east.

During the reporting period preparations for drilling have been completed. It was hoped the programme would take place in March but it has been delayed until May 2017.

A review has also been completed on the geology and exploration history of the Anningie Tin Field and exploration across the area will take place subject to AAPA approval.

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1. INTRODUCTION

The Walabanba Hills Project is operated by Todd River Metals Pty Ltd (TRM), a wholly owned subsidiary of Todd River Resources Ltd.

The project currently comprises two exploration licences (EL 26848 and EL 27115; Figure 1). The licences were transferred into TRM and then demerged into the new parent company Todd River Resources Ltd on its listing on the ASX on 6 April 2017. All the non-core base metals assets owned by TNG Ltd are now owned by the new company.

During the reporting period preparations for drilling have been completed. It was hoped the programme would take place in March but it has been delayed until May 2017.

A review has also been completed on the geology and exploration history of the Anningie Tin Field and exploration across the area will take place subject to AAPA approval.

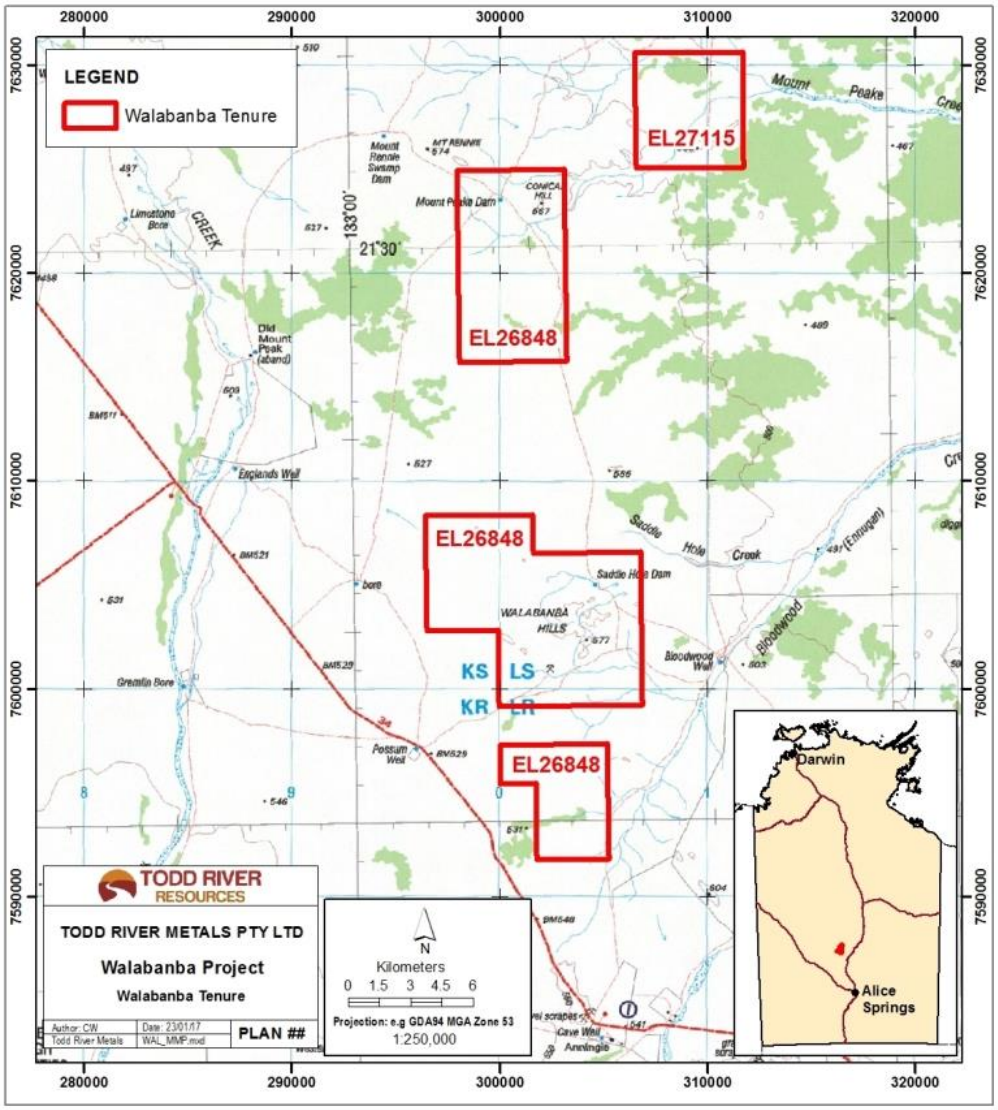

Figure 1: Location of Walabanba Hills project area.

2. LOCATION AND ACCESS

The Walabanba Hills project is located immediately to the west of the Mount Peake V-Ti-Fe project (Figure 1). The tenements are situated on Stirling and Anningie and stations approximately 250km north-northwest of Alice Springs with good access via the Stuart Highway then unsealed station tracks. The tenement group is on the Mt Peake 1:250,000 mapsheet with the majority of the tenement area in the Anningie 1:100,000 mapsheet extending northwards into the Conical Hill 1:100,000 mapsheet.

3. TENURE

The project currently comprises two exploration licences (EL 26848 and EL 27115). The licences were transferred into Todd River Metals Pty Ltd and then demerged from TNG Ltd into the new parent company Todd River Resources Ltd on its listing on the ASX on 6 April 2017. A two year renewal application for EL26848 was submitted in March 2017. Details of the licences are provided in Table 1 and Figure 1.

Table 1: Walabanba Project tenement details.

TITLE	BLOCKS	GRANT DATE	EXPIRY DATE
EL26848	45	4/03/2009	3/03/2017 (renewal submitted)
EL27115	9	18/09/2009	17/09/2017

4. GEOLOGY

The Reynolds Range project lies within the Arunta region of the Northern Territory. Basement is comprised of Palaeoproterozoic to Mesoproterozoic metasedimentary and granitic rocks within the Aileron Province, including the Reynolds Range Group. The granites and orthogneisses are highly-radiogenic within the Reynolds Range, hosting numerous veins and pegmatites with anomalous uranium and thorium. Locally the Aileron Province rocks are overlain by Tertiary to recent clastic sequences, derived from erosion of the radiogenic granites in the Reynolds Range.

Uranium mineralisation is known in the region and is restricted to the Proterozoic Aileron Province and nearby Carboniferous Ngalia Basin. To the southeast uranium occurs in phosphatic and REE-enriched metasomatic pods and veins within the high metamorphic grade Lander Rock beds.

To the east lies the mineralised Mount Peake gabbro, a Ti-V-Fe ore body hosted by a differentiated basic sill with minor ultrabasic layers. The predominant rock type is olivine gabbro with layering defined by variations in plagioclase/olivine+clinopyroxene ratios. Most of the gabbros are massive with no discernible layering.

The local geology (Figure 2) comprises sodic granites, gneisses and minor amphibolites, folded metasediments and intruded metabasic rocks. Major northwest shears cut the sequence and are associated with barren quartz intrusions. Two prominent structures run along the Lander River Valley, to the west and along the Salt Creek – Blue Bush Bore Valley. The granite batholiths are interpreted to be shallowly eroded with exposure of their upper levels only, with abundant pegmatite outcrops, typically of quartz-feldspar-muscovite-tourmaline composition. Some very coarse examples occur in association with minor tantalum or tin mineralisation that has in places been mined. The metasediments, comprising meta shales, cherts, siltstone and fine sandstone range in grade from lower to upper greenschist facies and are common in the Lander valley. Some exhibit quartz sericite alteration. Tertiary to Recent cover comprising laterite derived sands and clays

(alluvium and colluvium) , calcrete and ferricrete is common in low lying areas and can be up to 70m thick, however Toro's drilling indicates it is over 200m thick in places.

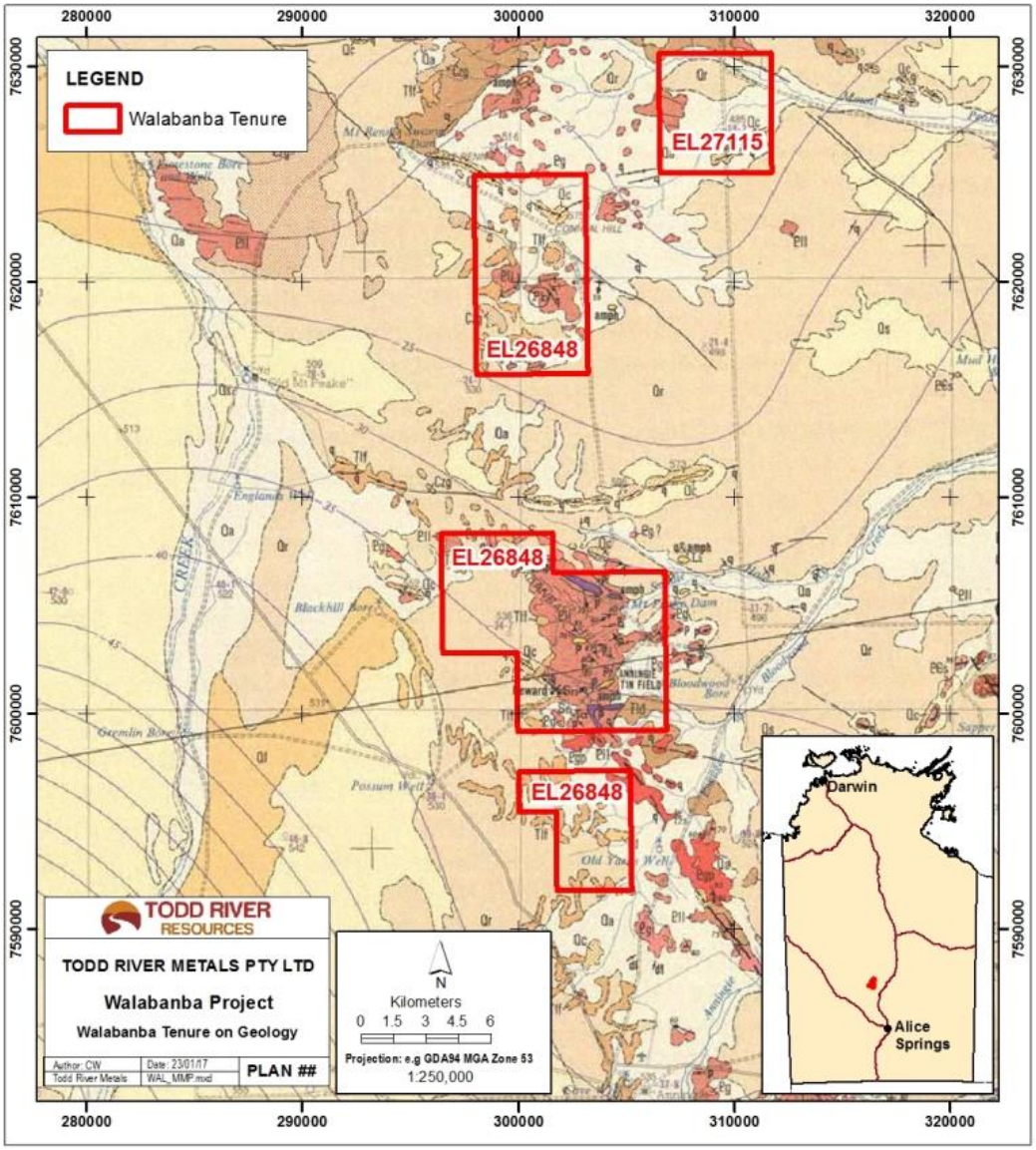

Figure 2: Walabanba Hills tenements on 250K geology.

5. PREVIOUS EXPLORATION

Numerous companies have been exploring in the region over the past 40 years in search of uranium, gold, base metals and diamonds. Within the tenement boundaries most drilling has been carried out in search of gold. Holes tend to be shallow (<10m). Uranium has been extensively explored for in the area but exploration has been restricted to water bore sampling, hard rock and limited near surface calcrete styles of uranium within or proximal to outcropping terrains.

Highlights of the exploration prior to Toro Energy include aeromagnetic surveys over the region, conducted by Anglo American Corporation (Anglo), and focused on magnetic and Electro-Magnetic (EM) anomalies. These surveys identified numerous targets anomalous in nickel, copper and platinum group elements, suggesting the presence of sulphide bearing intrusive rocks. Historical soil sampling and drilling conducted by WMC, Aberfoyle

and Anglo American returned highly anomalous nickel and copper results up to 3,581ppm nickel and 2,410ppm copper in shallow drilling over lengths of 20 to 50m above significant but unexplained magnetic anomalies, however these results were never followed up.

Following a desktop review of previous exploration by Toro and their consultant geophysicist an area was set aside for an airborne electromagnetic survey with the aim of identifying conductors within covered basement and palaeochannels. A TEMPEST AEM survey was carried out by Fugro Airborne Surveys Pty Ltd during August 2009 and several targets identified.

During 2010 and 2011 Toro drilled 16 aircore holes totalling 2440m (2 holes for 357m in November 2010 and 14 holes for 2083m in October 2011) within EL 26848 and EL 27115. Samples were assayed for As, Ce, Cu, Mo, Ni, Pb, Se, Th, U and W by ICP-MS at ALS laboratories. No spectacular results were received as part of the programme and Toro decided to pursue JV opportunities over the licence area.

In 2012 TNG undertook a HELITEM survey over several target areas within the Walabanba project area. Five block areas and four individual transects were flown over the Walabanba project licences for a total of 51 line km at 500 m and 742 at 200m line spacing. Twenty target areas were identified and fourteen were followed up with a field assessment in the last reporting year. The remaining targets were assessed in June 2013 with targets 1a, 1c, 1d, 3a, 5a, 5c being identified as highest priority.

Fixed loop EM was carried out over targets 1c, 1d and 5b/c in April 2014. At EM Target 1c a 1400 x 1000m area was surveyed with interpretation showing four discrete anomalies (A, B, C, D) that centre on the original conductor with a coincident aeromagnetic high. Drill testing is recommended for anomalies A, B and C. A single mid-time anomaly at EM Target 1d was outlined for medium priority drill testing. The third area surveyed covered two adjacent but discrete EM conductor targets (5b and 5c). Interpretation of the FLEM data suggests two moderately conductive bodies are present and three holes have been proposed to test the potential for base metal mineralisation.

6. EXPLORATION AND ACTIVITIES 2016-2017

Work carried out during the reporting year has involved a review of the Anningie Tin Field in the central part of EL 26848. An application has been submitted with AAPA for clearance to explore in the area with the final report currently in preparation. Drilling will take place across both licence areas in May 2017 and clearance preparations for this have been completed.

6.1 Anningie Tin Field Review

6.1.1 Geology and Mineralisation

The first comprehensive review of the geology of the Anningie Tin Field was published in the diary of H.I. Jensen after a field trip to the area in April 1944. The Anningie field the country rocks are interbedded schists and quartzites and other metasediments (Lander Rock Beds; Kojan, 1979), dipping steeply south and intruded by amphibolite sills and dykes (Jensen, 1944; Rochow, 1963).

The schists are mica-hematite schists split by three cleavages, one on the bedding, one perpendicular to the bedding and and one on the joint direction of the intruding pegmatite dykes which cut across both the metasediments and the amphibolites. The nature of the schists implies strong contact as well as regional metamorphism (Jensen, 1944).

The pegmatite dykes on the field generally 1-15m wide and 30-150m long and many are tourmaline-rich, an indication of increased fluorine in the magma. Many areas are sheared and greisenised which has resulted in cassiterite and tantalite (Rochow, 1963) being shed from the dykes. Quartz veins are evident on the shears, probably due to feldspar losing silica and forming muscovite during metamorphism. Cassiterite is deposited in the pegmatite and greisen whereas tantalite is wholly contained within the greisen and quartz veins (Jensen, 1944).

Regionally the Lander Rock Beds have been intruded by coarse grey porphyritic granite and the pegmatites within the tin field are thought to be associated with this more regional intrusive phase (Kojan, 1979).

6.1.2 Exploration History

The following history of early-day investigations within the Anningie Tin Field (Figure 3) is summarised from Fruzetti and Morlock (1974).

"Alluvial tin was discovered in the Anningie area by a prospector in 1935 and the Reward Claim was pegged. Limited exploration was undertaken and activity was confined to alluvial production. To the end of February 1936 two tonnes of tin oxide, averaging 63.65% Sn had been 'mined' from the area, and an additional tonne of concentrates were also bagged.

Over the next few years a further 23.8 tonnes of concentrate was produced from the alluvial ground mainly on the Reward Claim.

The site was visited by government geologists several times throughout the 1940's but it is said that regular mining of the alluvial tin ceased in 1944 and since then only small and sporadic periods of production have taken place.

In 1949 several geologists from the BMR undertook a radiometric survey across the Reward Claim with readings of twice background returned over a greisen band, and a maximum of four times background from a dump beside a pit. The greisen was sampled within the pit and returned 0.024% U_3O_8.

In 1967 staff from Anningie Station carried out pitting and costeaning to assess any further prospects of the field as an alluvial deposit and over the following two years produced 3.3 tonnes of tin concentrates."

Since this time the NT Mines Branch has drilled five holes at the Bismarks prospect, though the drilling proved ineffective in determining overall grade and tonnage due to the spasmodic nature of the mineralisation (Kojan, 1979). Drill core from these holes, held at the NTGS Core Store is Alice Springs was sampled in early 2016 and reported on in the previous Annual Report.

During the early 1980's Jays Exploration held EL2350 covering the Anningie Tin Field. It was noted that mineralisation existed in the pegmatites in the north and southeast regions of the EL where galena is apparent. Devils Dice are also apparent in granites in the southeast region of the EL which are located to the ESE of the named tin prospects (Powell, 1981).

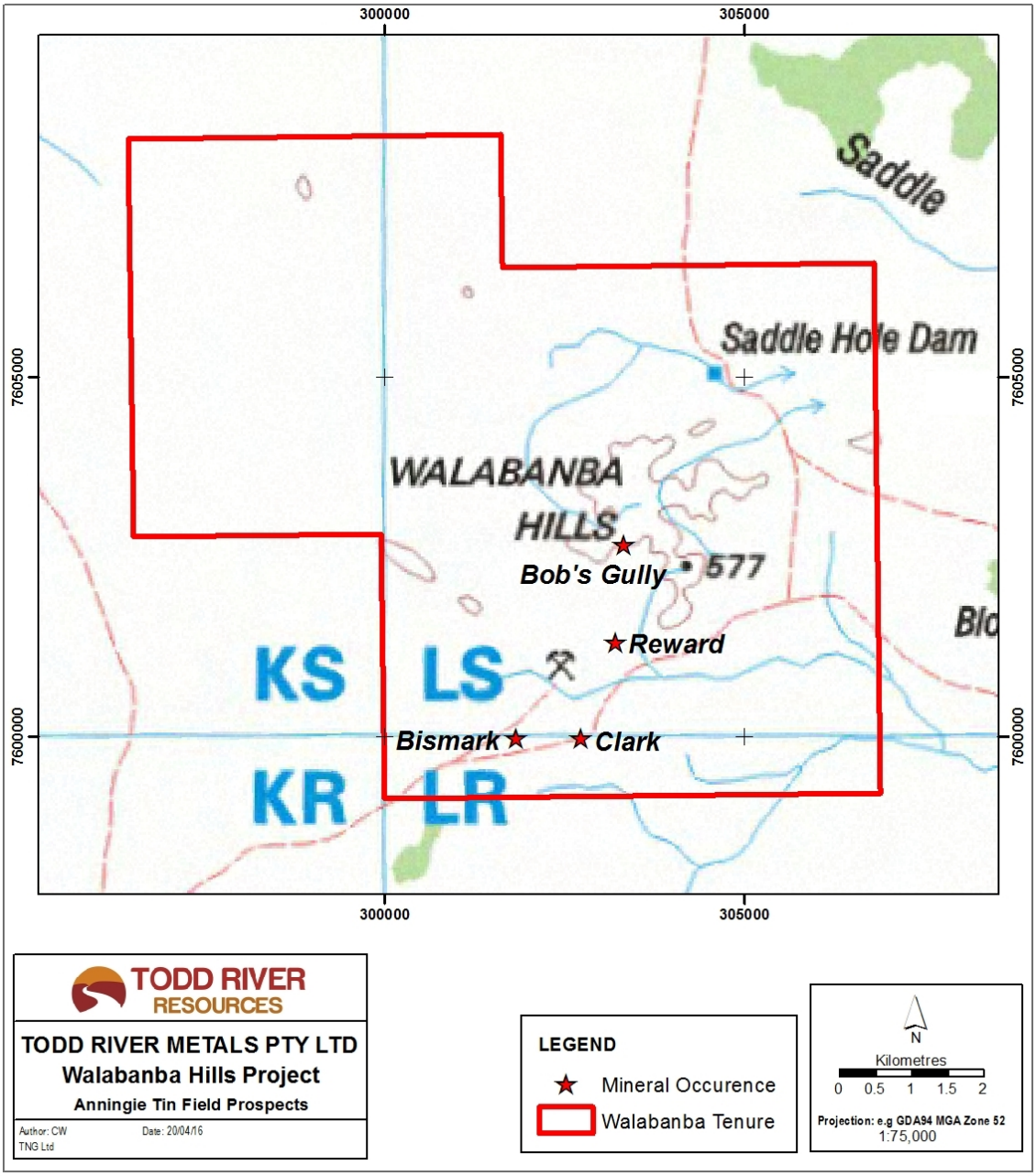

Figure 3: Anningie Tin Field Propsects within the Walabanba Hills Project area.

6.2 Drilling of EM Targets

Drilling of EM targets originally identified from the 2012 HELITEM survey is due to take place in early May 2017. A Mining Management Plan was submitted in the new name of Todd River Metals Pty Ltd and Authorisation 0924-01 was subsequently issued. A site inspection including checking of drill and access sites pegs was carried out in February and clearing of access tracks and drill pads was completed in late March in consultation with Anningie Station personnel.

Eight drillholes have been designed to test the three target areas over which ground EM surveys were completed in 2014.

Table 2: Location of planned drillholes for Walabanba EM Targets.

Target	Tenure	Easting	Northing	Azimuth	Dip	Depth
1c_A	EL26848	301300	7621350	0	-55	250
1c_B	EL26848	301850	7621350	0	-65	250
1c_C	EL26848	301700	7621800	0	-60	200
1c_D	EL26848	301600	7621600	0	-60	200
1d	EL27115	309000	7628250	0	-65	200
5b	EL26848	304600	7595400	180	-65	225
5b_mag	EL26848	304600	7595250	180	-65	225
5c	EL26848	304100	7595850	0	-65	300

Target 1c is considered the highest proprity target and four holes have been designed to test the four discrete anomalies (Figure 5) that centre on the original conductor with a coincident aeromagnetic high. Anomalies A and B are along the southern flank of a central ground polarisation (EM negative) zone, have strong (300 Siemens) late time responses that are coincident with anomalous copper geochemistry (Figure 6). Anomaly C is a 500 Siemen south-dipping late time plate, while Anomaly D is a weak circular mid time feature.

A single mid-time anomaly at EM Target 1d was outlined for medium priority drill testing (Figure 7). The feature trends WNW for ~500m, dips towards the south and laies between 50 and 100m below the surface.

The third area surveyed (Target 5b/c) covered two adjacent but discrete EM conductor targets outlined from the HELITEM interpretation (Figure 8). Interpretation of the FLEM data suggests two moderately conductive bodies are present and three holes would suffice to adequately test the potential for base metal mineralisation here.

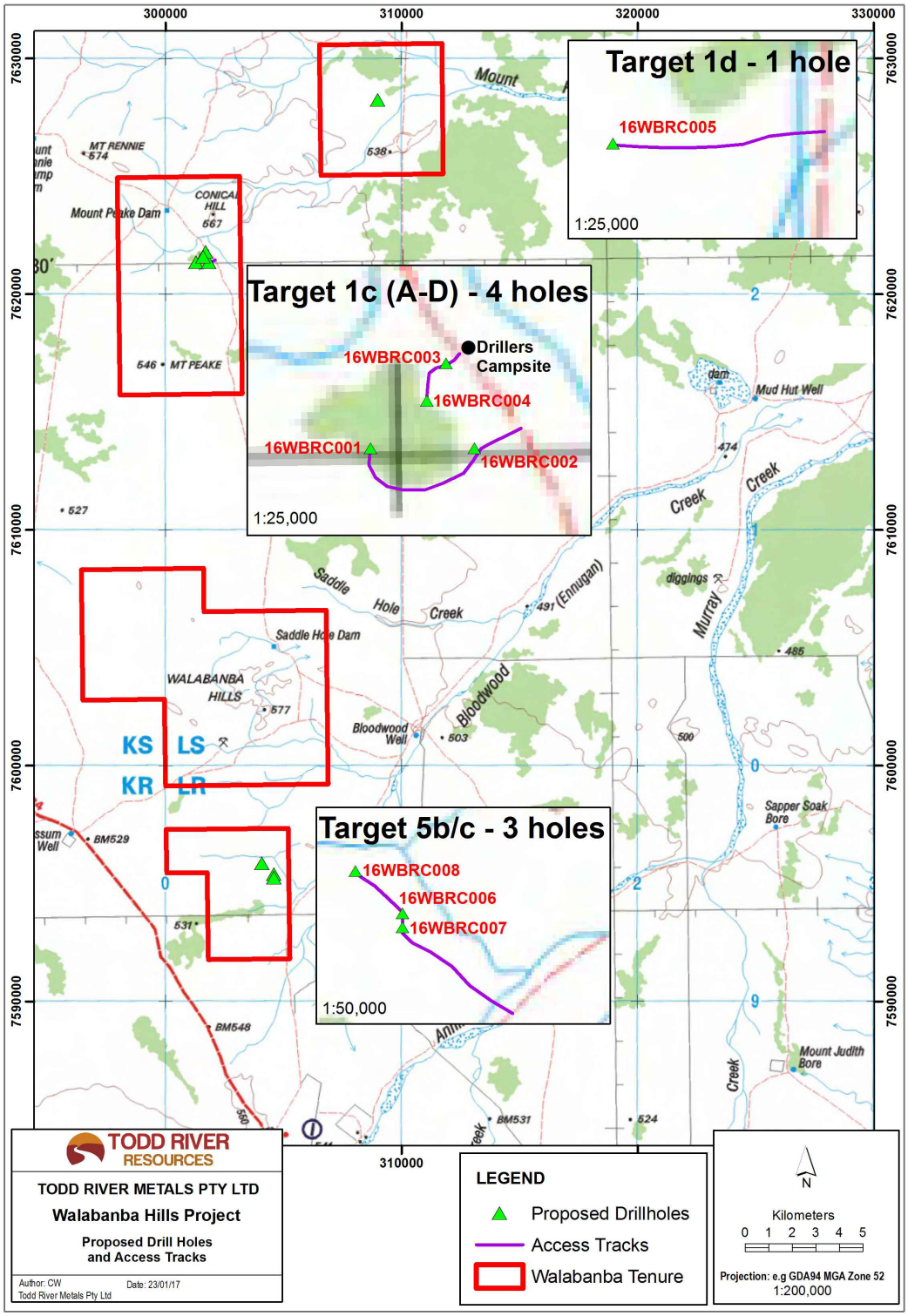

Figure 4: Site of EM Target Drilling within EL 26848 and EL 27115.

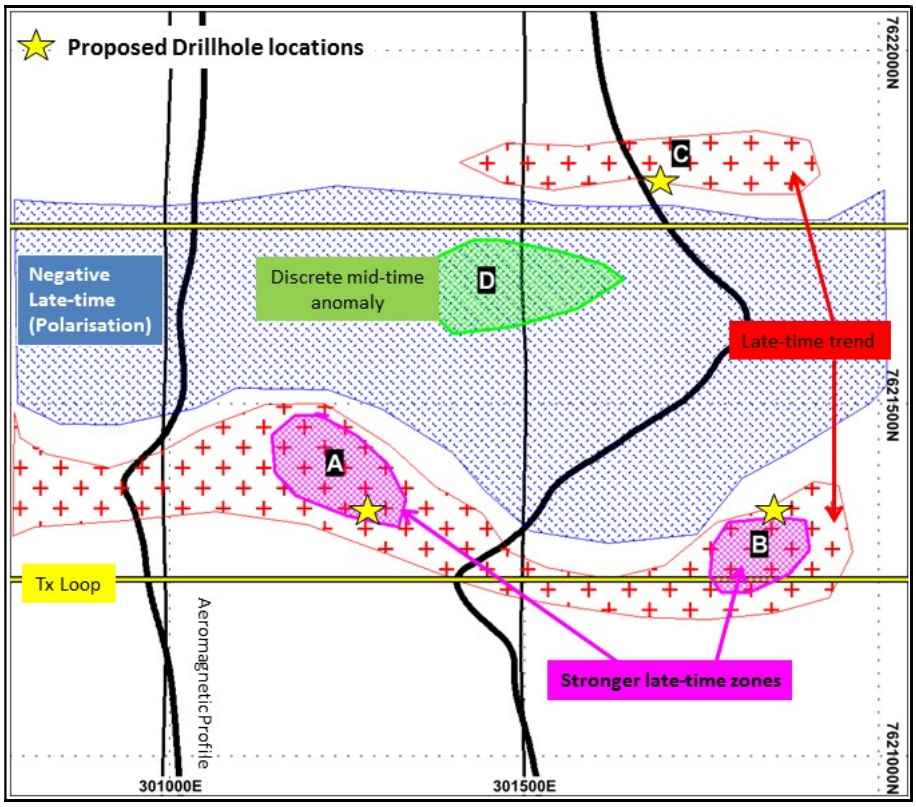

Figure 5: Walabanba Project FLEM Target 1c survey area and interpretation, showing four separate conductive anomalies.

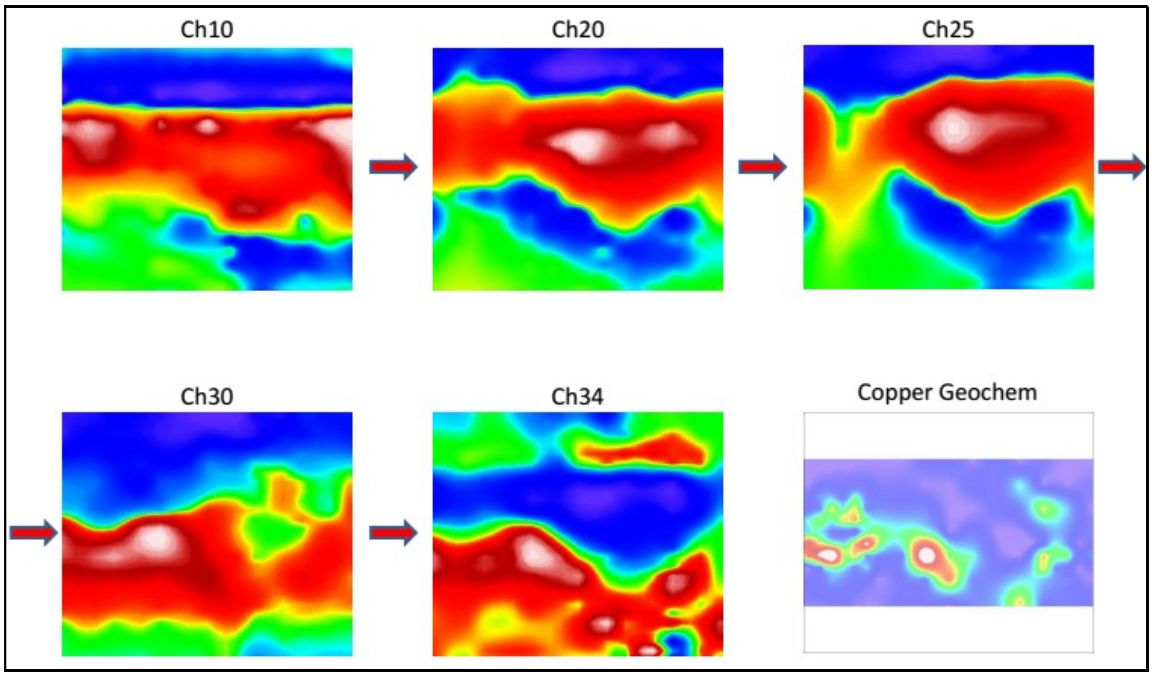

Figure 6: Target 1c, Channel images.

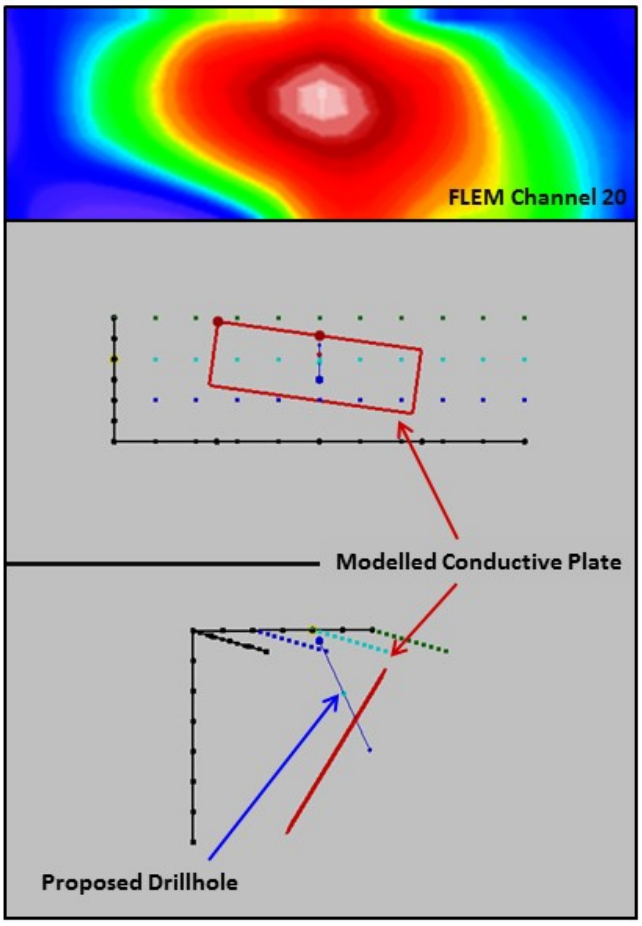

Figure 7: Composite of images from the Walabanba FLEM survey at Target 1d.

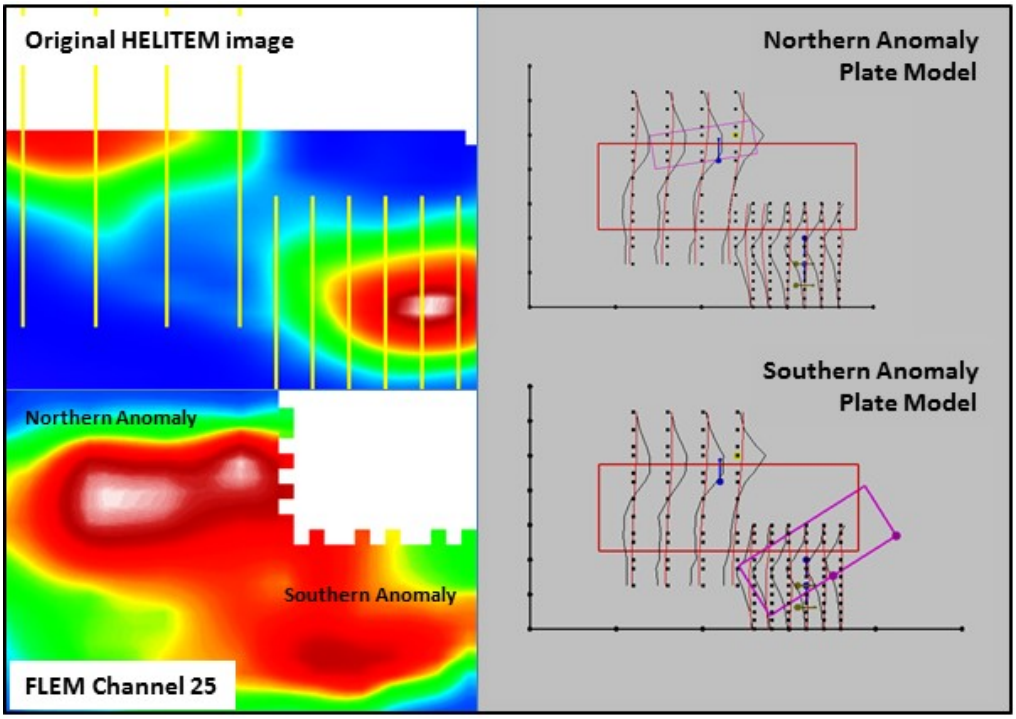

Figure 8: Composite of images from the Walabanba FLEM survey at Target 5b/c.

7. FURTHER EXPLORATION

Further investigation of the viability of exploration within the Anningie Tin Field will be undertaken once the report is received from AAPA regarding access for exploration. Subject to access approval mapping and pXRF soil and rock sampling will be completed across known prospect areas with additional samples collected for laboratory and petrographic analysis.

A geophysical review by an independent source is currently being completed on the EM data over the drilling areas in order to ensure that current planned drillhole positions have the highest probability of intersecting the expected targets. A full assessment of the remaining current licence area will be undertaken once the drilling programme has been completed in June 2017. Additional diamond drilling will be planned if anomalous results are received during the current programme.

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