

KRUCIBLE METALS LTD

ABN: 12 118 788 846

EL 28170 TOBERMOREY

ANNUAL REPORT 5 April 2014 to 4 April 2015

Holder/Operator:	Krucible Metals Ltd
Tenement Manager:	Krucible Metals Ltd
Author:	B Humphries
Commodity:	Copper, Gold, Silver/Lead/Zinc
Report Date:	17 April 2015
Datum/Zone:	AGD66/Zone 53
250,000 Mapsheet:	Hay River (SF53-16)
Report ID:	KRB-TSV-2015-211
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Distribution:

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1. SUMMARY

Exploration Licence (EL) 28170 (Tobermorey) held by Krucible Metals Limited (Krucible) is located on the Northern Territory/Queensland border about 400km east of Alice Springs and 300km south-south-west of Mount Isa. The concept target model is Iron Oxide Copper Gold (IOCG) and Orogenic/Tennant Creek Style mineralisation. Secondary targets include Century and Broken Hill Style lead/zinc/silver mineralisation in Proterozoic rocks as well as Mississippi Valley Style base metal mineralisation in Neoproterozoic to Palaeozoic aged sediments.

Krucible has completed surface geochemical programmes on the EL since grant in 2011. During reporting period Krucible exploration has focused on the Elstone prospect and has included an aeromagnetic/radiometric survey including processing and modelling, 12 RC percussion drill holes and geochemical sampling programmes.

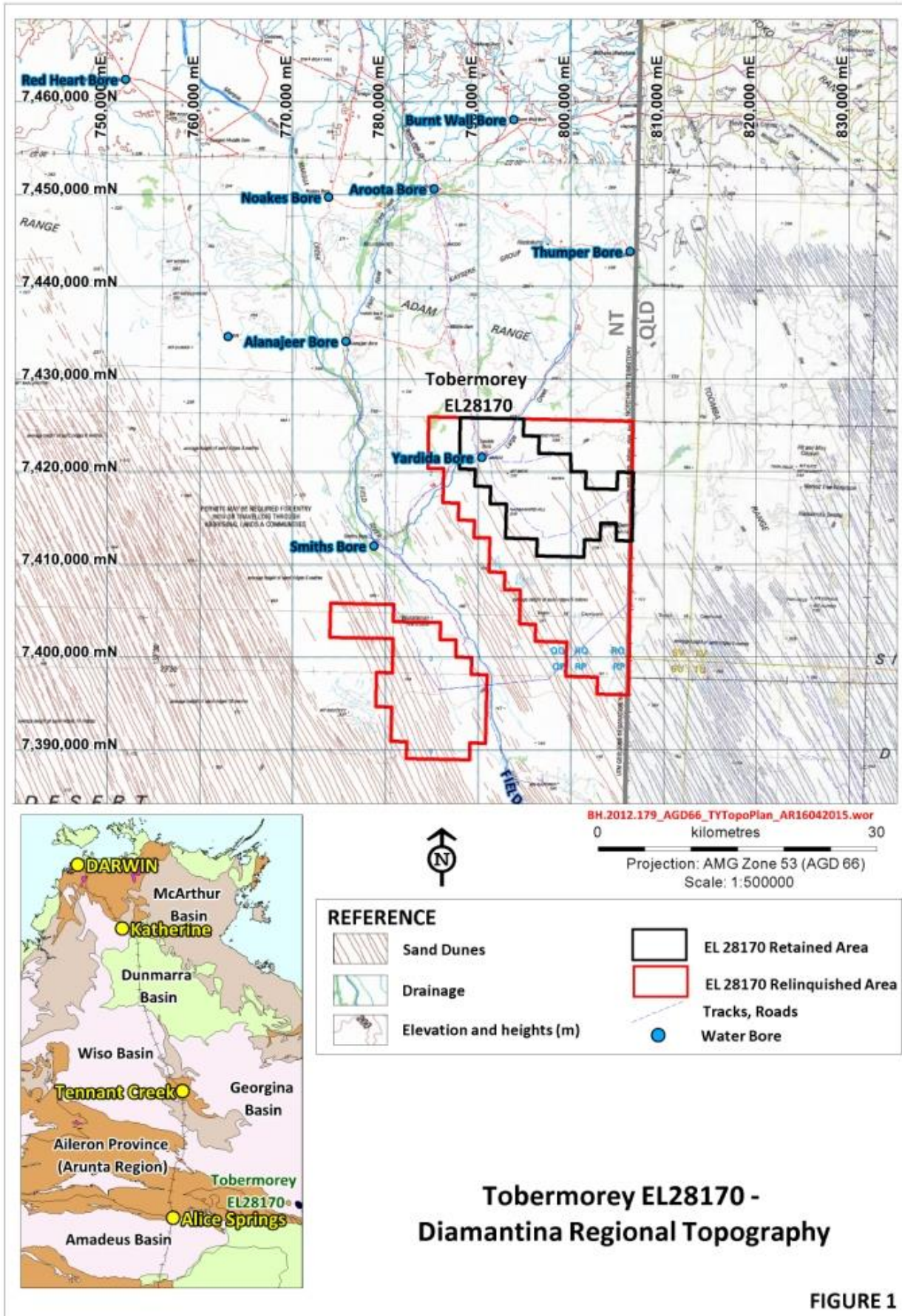


Figure 1: Tenement Location Plan

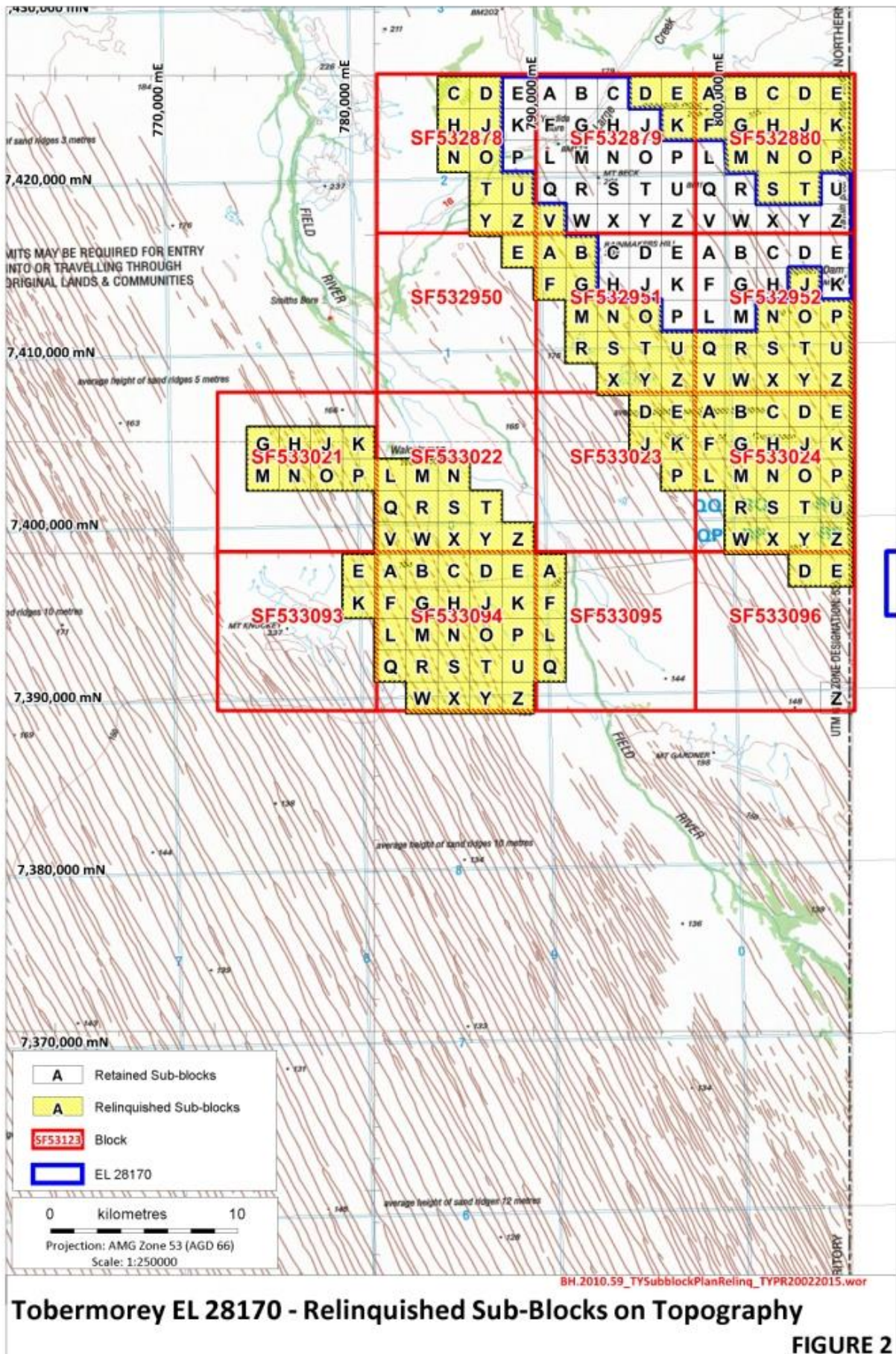


Figure 2: EL 28170 Plan Showing Retained and Relinquished Area

3. REGIONAL SETTING

3.1. Regional Geology

The tectonic model for the Diamantina region is poorly understood due to paucity of information. However, research suggests the region is characterised by large scale tectonic plate movement and that the Tobermorey tenement lies within the eastern extent of the Arunta Province close to the junction of three major plates i.e. the Mount Isa Block, the Tennant Creek Block, and the Gawler Craton. Subsequent rifting and thrusting would have created zones of high heat flow and brecciation conducive to development of large scale mineral deposits such as IOCG or orogenic shear hosted deposits. Secondary targets include base metal mineralisation in Proterozoic or younger sediments.

The regional basement geology (Figure 3) of the Tobermorey Project is interpreted to consist of the Northeast Aileron Province which is 'a Paleoproterozoic crust in the Arunta Region' (pg 12:1 Ahmad & Munson 2013) the age of which is prior to 1700Ma. This Province is comprised of granite, metamorphic rocks, and pegmatite's intruded by alkali granitoids. Outcrops occur as sporadic granitic and schist outcrops. The northern section of the block is considered to be continuous with the gold bearing Tennant Creek Region (Carroll 2008). In the southern area of the EL the Strangways Metamorphic Complex (part of the eastern Arunta Province) is interpreted to be at shallow depths. This complex contains a number of metamorphic assemblages derived from mafic and felsic granitic units (GA 2012).

Sitting unconformably on the Aileron (east Arunta) Province (GA 2012) the Georgina Basin is a widespread Neoproterozoic-Palaeozoic intracratonic basin that was initiated as part of the centralian super-basin and extends east into Queensland (NTGS 2011). The basin is comprised of clastic and calcareous units consisting of shales, limestones, dolostones, and siltstones.

3.2. Tenement Geology

Most of EL 28170 is covered by aeolian sand with occasional sand dunes becoming more prominent in the southern area of the tenement. Outcrops of duricrust development are common within the EL.

Recessive outcrops of Neoproterozoic Gnallen-A-Gea Arkose and Yardida Tillite formations are common and outcrop as shales, quartzite and tillites within the EL. There is a large amount of quartz outcrop within the EL which appears to have been fractured and infilled by iron rich fluid.

3.3. Mineralisation and Concepts

The Arunta Complex historically has not been considered a highly prospective province but this may be due to the limited exploration. Copper, gold, lead and zinc deposits have all been found and mined in this province and there is increasing interest in this under explored terrane. The Strangways Metamorphic complex is prospective for carbonatites with associated REE mineralisation and for marble lenses in the lower stratigraphic units of the complex which may be prospective for base metal mineralisation.

Magnetic maps provided by Government show numerous destruction zones and obvious large scale folding and faulting with potential remobilisation of fluids deemed prospective for IOCG and orogenic shear hosted mineralisation. There are a number of sub-parallel structures indicative of stacked or listric fault systems. Gravity images have poor resolution to give much detail over the prospective area.

IOCG Olympic Dam Style - Breccia Hosted

Krucible's main target in this EL is Olympic Dam IOCG+REE style intrusive granite breccia systems within a shallow-level magmatic-hydrothermal breccia complex. The reasons for selection of this are as follows:

- The Toomba Fault is a major thrust separating the Toko Syncline (east) from platform basement (west) - this is considered to be analogous to the Stuart Shelf setting in the Gawler Craton that hosts the Olympic Dam mineralisation.
- There are a number of co-incident & near co-incident magnetic / gravity anomalies as well as magnetic anomalies on gravity gradients which are considered to be ideal conduits for IOCG mineralisation
- The magnetics at Tobermorey indicate strongly magnetic units which may equate to steely hematites and iron rich metasediments. These are considered to be analogous to the footwall units to mineralisation at Olympic and Prominent Hill

Orogenic-Shear Hosted Tennant Creek Style Copper, Gold, Bismuth Mineralisation

The Tennant Creek region is known for shear related gold, copper, and bismuth deposits hosted within a magnetite +/- hematite ironstone unit. The genesis involves deposition of turbiditic sediments which were then hydrothermally altered to discordant magnetite, hematite, chlorite, quartz ironstone bodies and then deformed by faulting during the Barramundi Orogen (1860-1840Ma). A period of granitic intrusions within close vicinity were the source for the economic fluids which precipitated within dilation, fold hinges and shear zones to form many thin pipe-like, ellipsoidal or lensoidal mineralised bodies. (Skirrow, Walshe 2002). The reasons for selection of this are as follows:

- The Toomba Fault is a major reverse thrust fault similar to those responsible for the deformation and alteration in the Tennant Creek Province.
- The magnetics show indications of folding which maybe reflecting BIF (Banded Iron Formations) or Ironstone units similar to the host type in the Tennant Creek Region.
- Interpretations of the Arunta Complex suggest it is geologically continuous with the gold bearing Tanami and Tennant Creek provinces (Carroll 2008). Possible metamorphosed sediments with hydrothermal oxidation close to Toomba fault zone within the Arunta Complex would be a favourable host setting
- Both areas have similar evolution settings: there is the initial deformation event (Barramundi Orogen) creating the hydrothermal ironstones as well as dilation and shear zones and possible folding, and then later granitoid intrusions which provide the economic fluids.

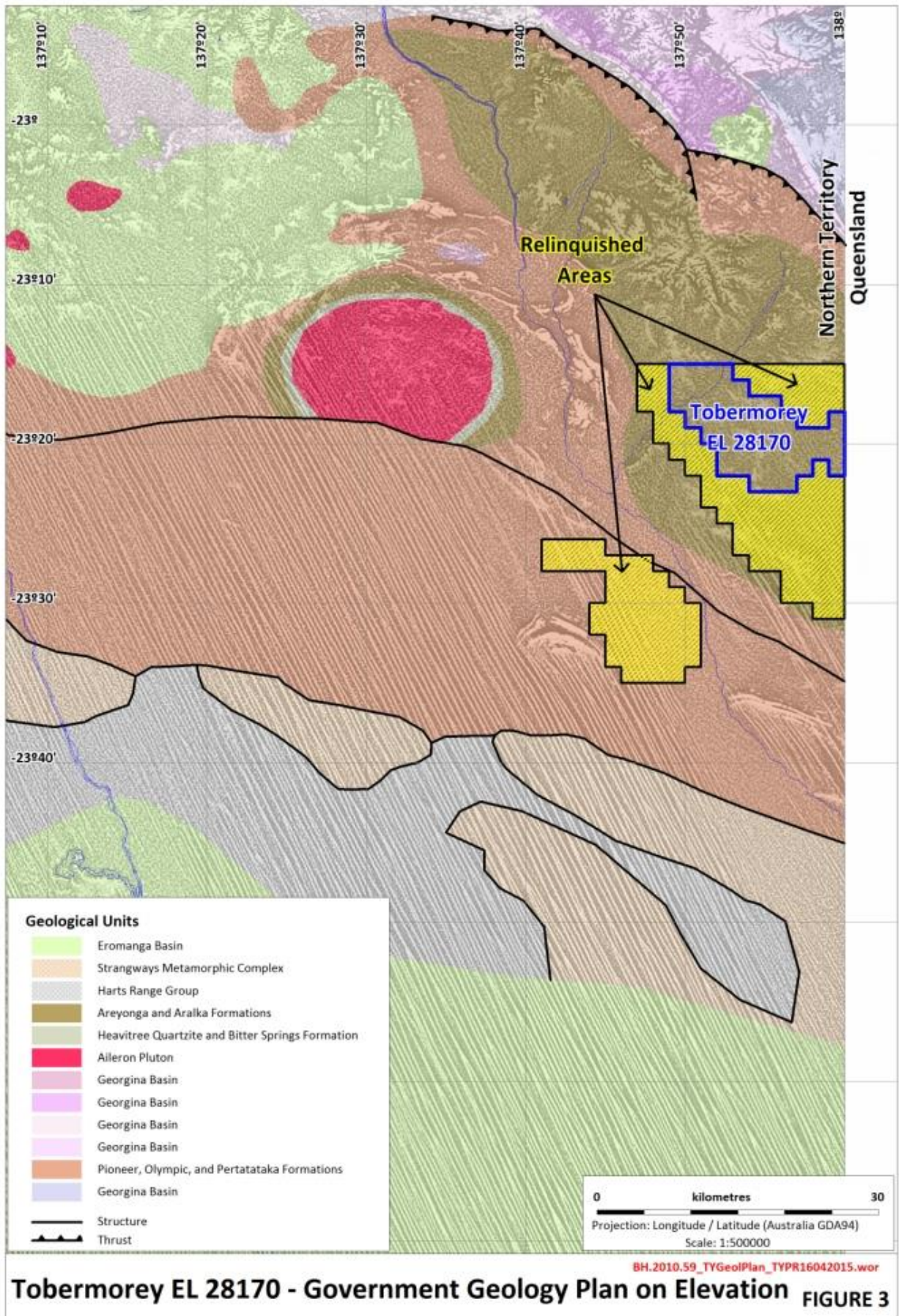


Figure 3: Tobermorey Project Geology

4. PREVIOUS EXPLORATION

The Tobermorey EL has had little previous exploration completed presumably due to the remote location of the tenement. Exploration programmes and results are summarised in Table 2 below.

Table 2: Summary of Previous Exploration on EL 28170

Company	EL	Date	Commodity	Work Done	Results	Reference
Le Nickel (Australia) Exploration	EL366	1973	Uranium	Helicopter supported reconnaissance	Failed to locate any prospective areas	Carrie 1973
Broken Hill	EL3164	1983	Diamonds	Geophysical Interpretation and Percussion drilling	Negative results	
Jones Mining/BHP Minerals	EL4320		Roxby Downs targets	Geophysical interpretations	2 anomalies not followed up	
CRA Exploration	EL7311		Pb, Zn, Cu, Au	111 Stream sediments, 6 rock chips	120ppm Pb, 550ppm Zn in rock chip	

5. EXPLORATION COMPLETED

During the reporting period Krucible completed an aeromagnetic/radiometric survey and interpretations over the Elstone prospect. RC percussion drilling of 12 holes and geochemical grab and lag sampling was also completed. See previous Krucible reports for information on previous exploration.

5.1. Geophysics

Krucible contracted UTS geophysics to complete an airborne magnetic and radiometric survey (Figure 4) the details of which are in Table 3 below. Further details including the equipment used are given in the survey report attached as Appendix 1.

Table 3: Geophysical Survey Specifications:

Project Name	Contractor	Line Spacing	Line Direction	Tie Line Spacing	Tue Line Direction	Sensor Height	Total Line KM	Date of Survey
Tobermorey	UTS Geophysics	150m	090-270	1500m	000-180	40m	2,348	July 2014

Krucible contracted GeoDiscovery to complete processing and depth to source modelling of the UTS line data. The full report is attached as Appendix 2. The survey images show a large deep seated magnetic source interpreted as a granitic body. This regional scale body was removed to highlight the local shallow magnetic features of the survey area.

Observations from the GeoDiscovery images indicate a north-west trend of the linear magnetic features and a depth to magnetic source of between 100-150m from surface.

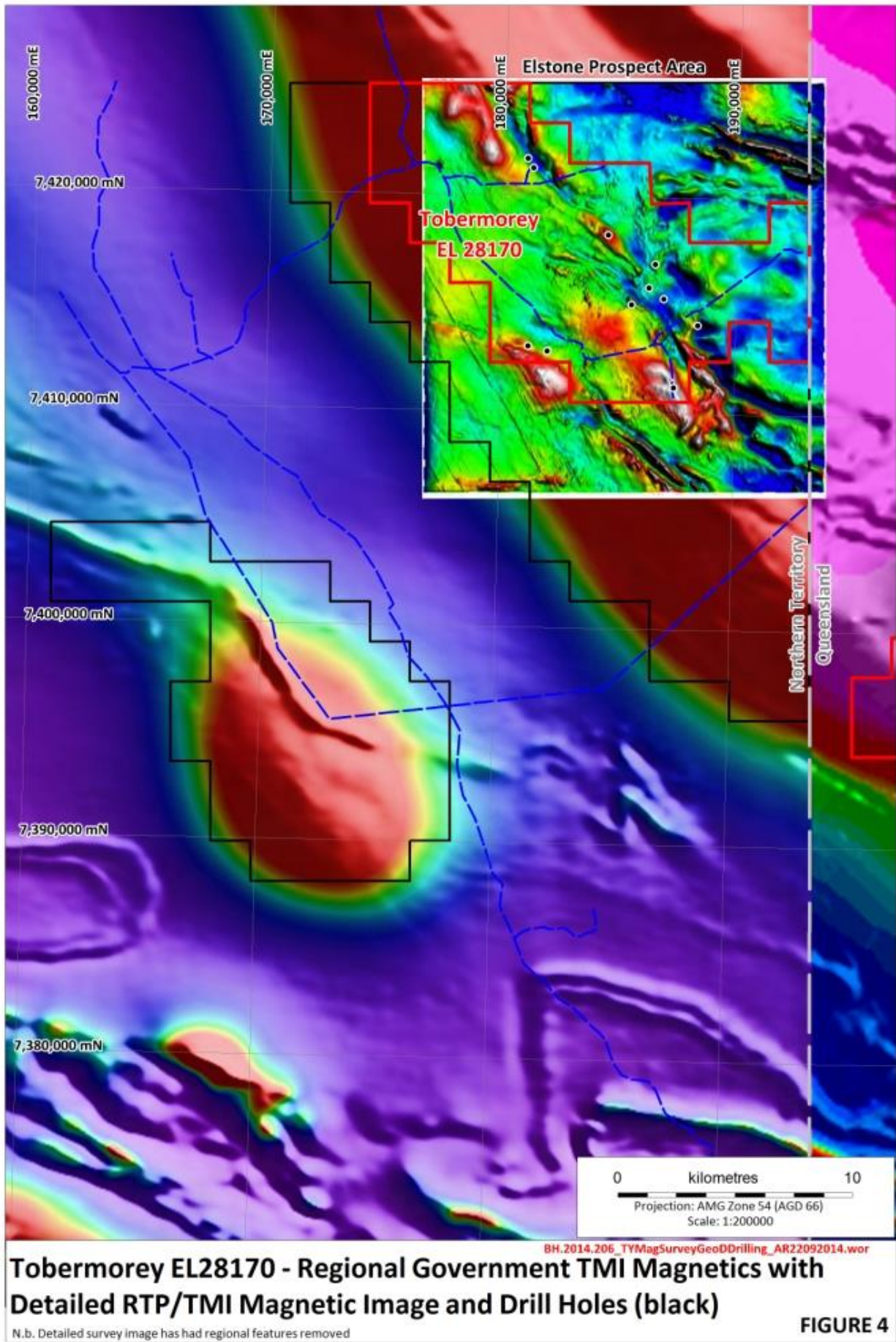


Figure 4: Tobermorey Project Geophysical Survey RTP/TMI Magnetics with Drill Holes

5.2. Percussion Drilling

Krucible engaged MLM Drilling Pty Limited to complete a RC percussion drilling programme over the Elstone prospect. The programme encountered a number of problems and was eventually cancelled after a total of 12 holes for 1,277m were completed to test magnetic and geochemical targets for copper/gold or base metal mineralisation. Hole depths ranged from 10m to 151m and intersected a ?Neoproterozoic sedimentary package of shales and quartzites with variable amounts of sulphides and quartz veining. Copper minerals including chalcopyrite and malachite were logged in the holes however these occurrences were sparse and low grade.

Krucible analysed 16 samples from hole 14TYRC-8 selected from logged copper mineralised intersections. These samples were sent to ALS in Townsville and analysed by methods Au-AA22 for gold and ME-MS41 for the full suite of elements. The maximum intersection in hole 14TYRC-8 was 3m @ 0.1% copper from 61m logged as quartz veining in a shale unit.

Krucible has determined there are no prospective indications of mineralisation from the drilling and no further analysis on the drill holes is planned.

5.3. Geochemical Sampling

A total of 468 lag samples were collected within the prospect area coinciding with the drilling programme. The grids were selected as areas where prospective units were recorded from reconnaissance exploration. Samples were collected on a grid spacing of 200m x 200m, areas and a tighter grid spacing of 100m x 100m where reconnaissance exploration located narrow zones of prospective material. Due to the transported and sandy nature of the area not all of the sample points could be collected. Where samples could be collected areas consisted of scree, sub-crop or outcrop.

Sample sites were located using a Garmin 76 GPS with an accuracy of 5m. Samples were collected using a brush and shovel to sweep the material from the surface which was then sieved to a -6mm +2mm fraction. This process is repeated within a 50m radius of the location until the sample weighed approximately 2kg. Once the desired weight was collected the material was placed in a numbered calico bag. Krucible subsequently determined the samples collected were in a non-prospective environment and the samples were not assayed by a laboratory. The descriptions of the samples are attached as Appendix 4 and locations shown on Figure 5.

During sampling programmes time was spent completing reconnaissance of areas located by satellite imagery. Grab samples were collected during reconnaissance and during lag sampling where material was considered to be prospective for mineralisation. A total of 63 samples were collected where the contract geologist determined the material had potential for mineralisation based on alteration or mineral assemblage. Krucible subsequently determined the samples collected to be in an unfavourable environment for mineralisation. These samples were not analysed by a laboratory. Sample descriptions are attached as Appendix 3 and locations shown on Figure 5.

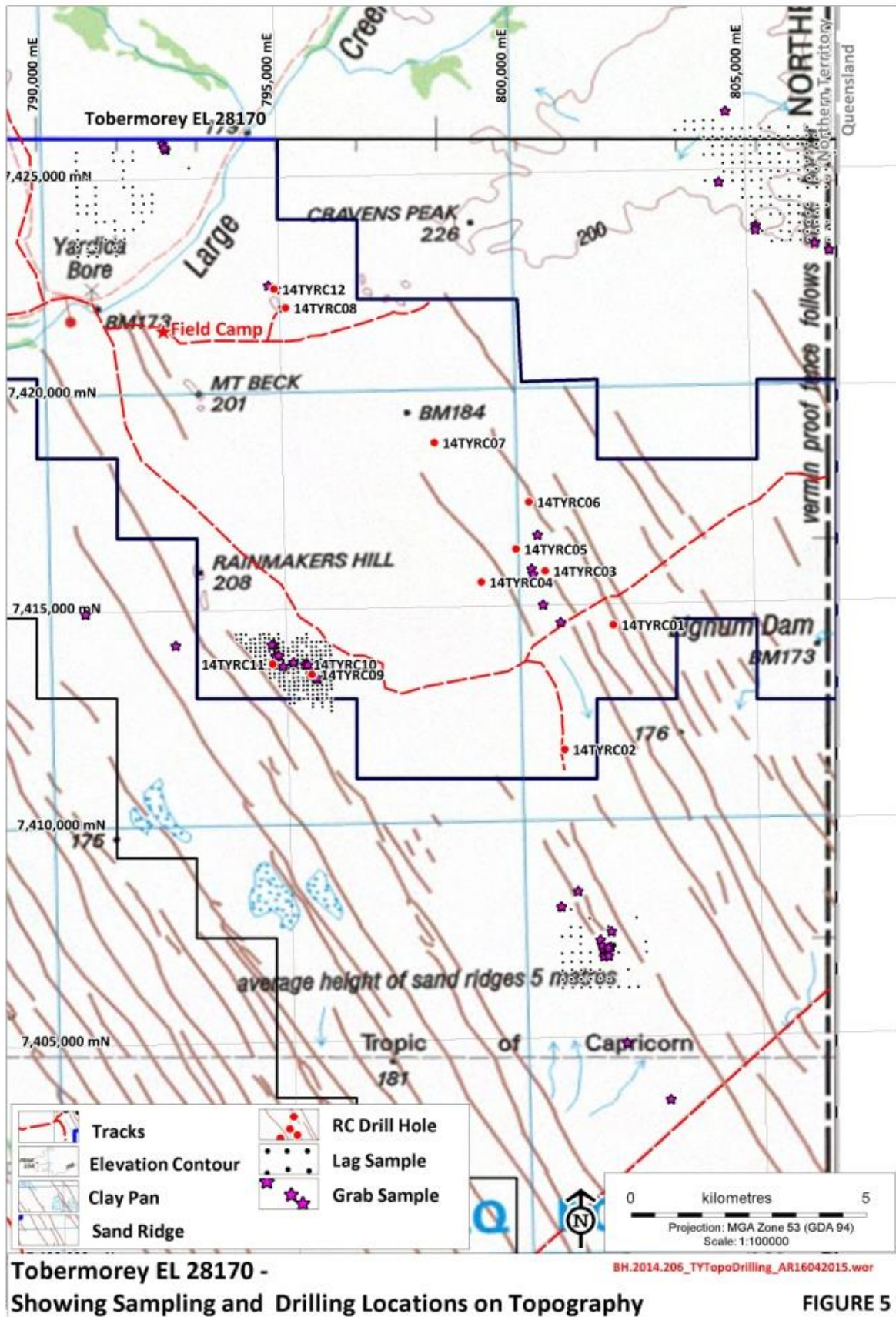


Figure 5: Tobermorey Project Sampling and Drill Hole Locations on Topography

6. BIBLIOGRAPHY

Ahmad M and Munson TJ (compilers), 2013. Geology and mineral resources of the Northern Territory. Northern Territory Geological Survey, Special Publication 5.

Geoscience Australia (GA), 2012 Geoscience Australia, Viewed 25th June 2012
http://dbforms.ga.gov.au/pls/www/geodx.strat_units.sch_full?wher=stratno=17395

Humphries, B. 2012. Tobermorey EL 28170 Annual Report for Period Ending 31st March 2012
Krucible Metals Ltd, Townsville

Humphries, B. 2013. Tobermorey EL 28170 Annual Report for Period Ending 31st March 2013
Krucible Metals Ltd, Townsville

Humphries, B. 2013. Tobermorey EL 28170 Partial Relinquishment Report 30th October 2013
Krucible Metals Ltd, Townsville

Humphries, B. 2014. Tobermorey EL 28170 Annual Report for Period Ending 31st March 2014
Krucible Metals Ltd, Townsville

Humphries, B. 2014. Tobermorey EL 28170 Partial Relinquishment Report 28th May 2014
Krucible Metals Ltd, Townsville

Humphries, B. 2015. Tobermorey EL 28170 Partial Relinquishment Report 18 February 2015
Krucible Metals Ltd, Townsville

Northern Territory Geological Survey (NTGS), 2011, Northern Territory Geological Survey,
Berrimah Viewed 22nd June 2012
http://www.nt.gov.au/d/Minerals_Energy/Geoscience/index.cfm?header=Georgina%20Basin