



KRUCIBLE METALS LTD

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EL 28170 TOBERMOREY PARTIAL RELINQUISHMENT REPORT

5 April 2011 to 22 December 2014

Holder/Operator: Krucible Metals Ltd
Tenement Manager: Krucible Metals Ltd
Author: B Humphries
Commodity: Copper, Gold, Silver/Lead/Zinc
Report Date: 18 February 2015
Datum/Zone: AGD66/Zone 53
250,000 Mapsheet: Hay River (SF53-16)
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1. SUMMARY

The Tobermorey exploration licence (EL 28170) is located on the Northern Territory/ Queensland border about 400km east of Alice Springs and 300km south-south-west of Mount Isa.

EL 28170 comprising 490 sub-blocks was granted to Krucible Metals on the 5th of March 2011 for a period of six years. A total of 112 sub-blocks were relinquished at the end of the 2nd year of term. At the end of the 3rd year of term a further 78 sub-blocks were relinquished. A relinquishment of 110 sub-blocks was lodged prior to the end of the 4th year of grant. This report documents exploration carried out on the 110 relinquished sub-blocks for the term of tenure.

Exploration carried out during the life of the tenement on the relinquished blocks consisted of a review of historic and regional data and collection of 18 lag samples and 6 grab samples.

2. INTRODUCTION

The exploration licence (EL) is situated in an area where the Arunta Complex is believed to be at a shallow depth (<100m) and subjected to several phases of deformation. Geophysical images also indicate a number of parallel structures associated with deformation and remobilisation of fluids deemed prospective for 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 neo Proterozoic – Palaeozoic sediments.

Krucible believes this area is prospective due to the geological units present, the complex structural framework, the location close to crustal terrane boundaries and the remote location where no previous companies have completed systematic exploration. Krucible focussed on the Tobermorey EL area following the return of anomalous copper from drilling on Krucible's Toomba EPM approximately 60km east across the border in Queensland.

This report covers exploration conducted on the relinquished portion of EL 28170 throughout the term of tenure.

2.1. Tenure

The EL 28170 'Tobermorey' consisted of 490 sub-blocks (Table 1) and was granted to Krucible Metals on 5 March 2011 for a period of six years. Krucible has relinquished 190 sub-blocks during this term of grant with 112 sub-blocks being relinquished at the end of the 2nd year of term and a further relinquishment of 78 sub-blocks at the end of the 3rd year of term. A relinquishment of 110 blocks was lodged prior to the end of the 4th year of term reducing the area to 190 blocks (Figure 2).

Table 1: Tobermorey Tenement Details

Tenement No.	Name	Granted Sub-Blocks	Current Sub-Blocks	Grant Date	Expiry Date
EL 28170	Tobermorey	490	190	5 April 2011	5 April 2017

2.2. Location and Access

The Tobermorey tenement is located on the Northern Territory/Queensland border about 400km east of Alice Springs and 300km south-south-west of Mount Isa in the Arunta Province. EL 28170 is covered by the 1:250,000 Hay River (SF53-16) map sheet. The project area is accessed via existing (Tobermorey) station tracks south from the Plenty Highway to Yardida Bore (Figure 1).

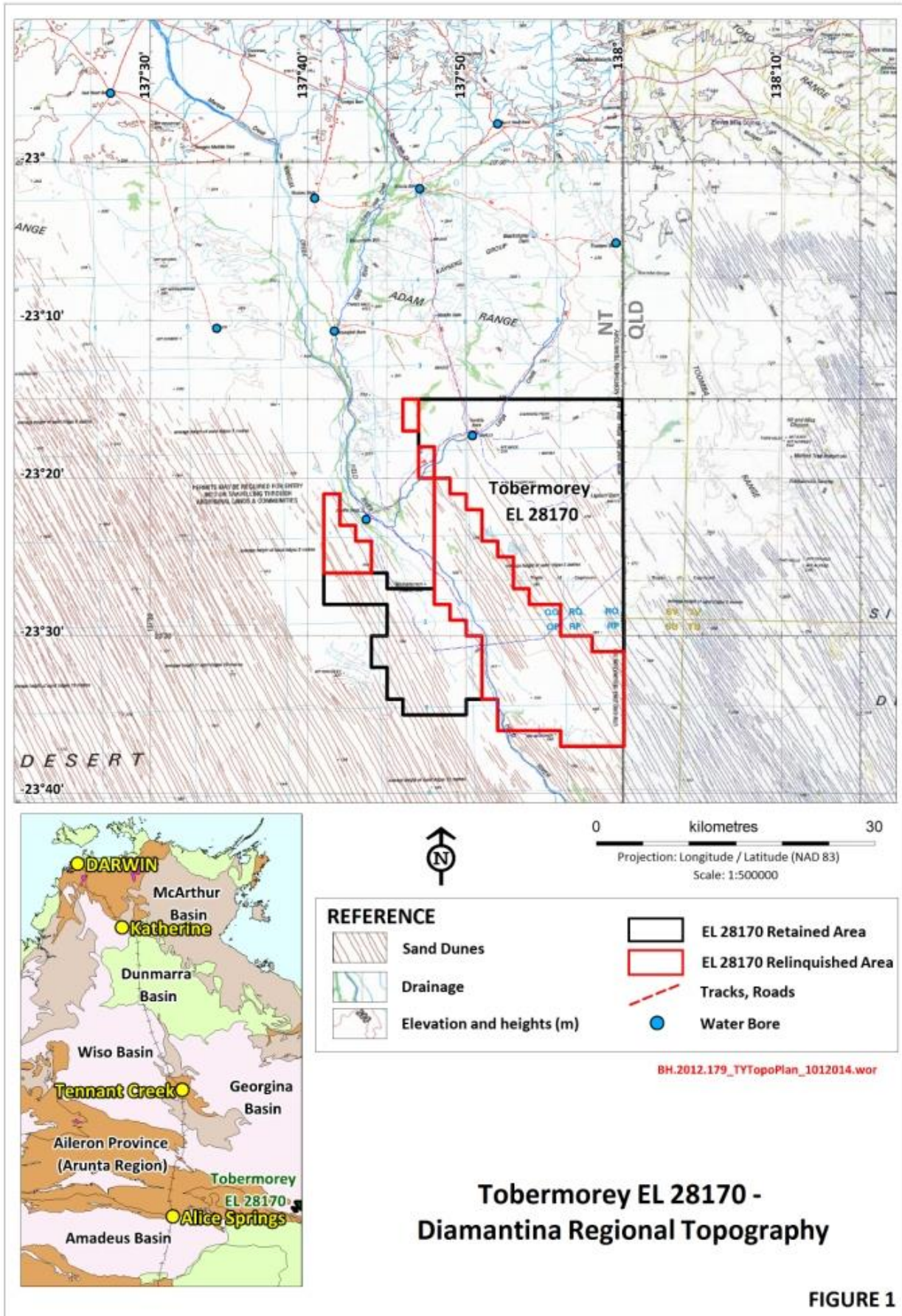


Figure 1: Tenement Location Plan

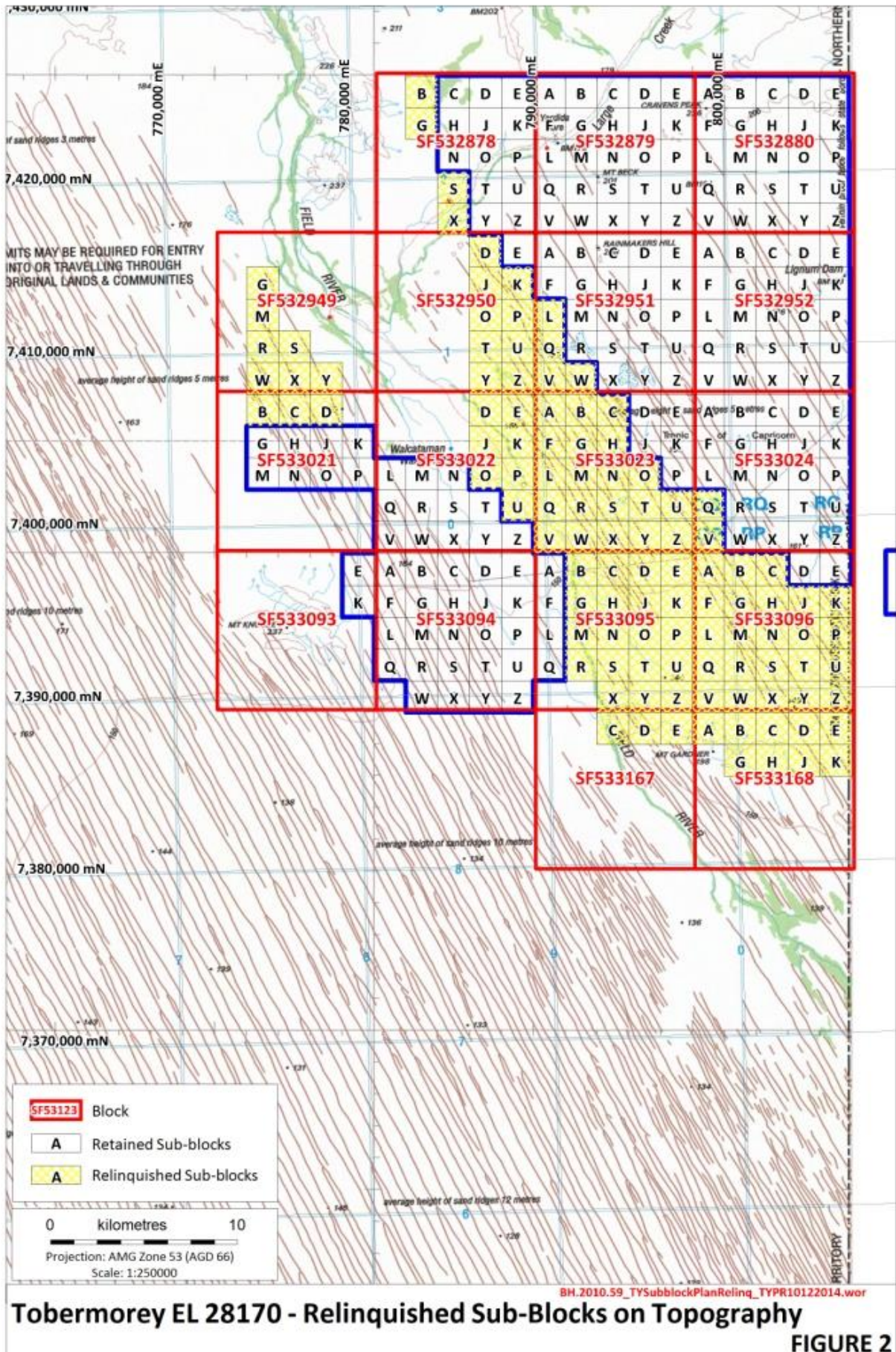


Figure 2: EL 28170 Plan Showing Retained and Relinquished Areas

3. GEOLOGY AND MINERALISATION

3.1. Regional Geology

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.

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.

3.2. Mineralisation

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.

The Altjwarra domain is also considered prospective for diamonds with a number of exploration studies on diamond potential. All available geochronological data from the Jervois district suggests the age of the Altjwarra Domain is 1846Ma.

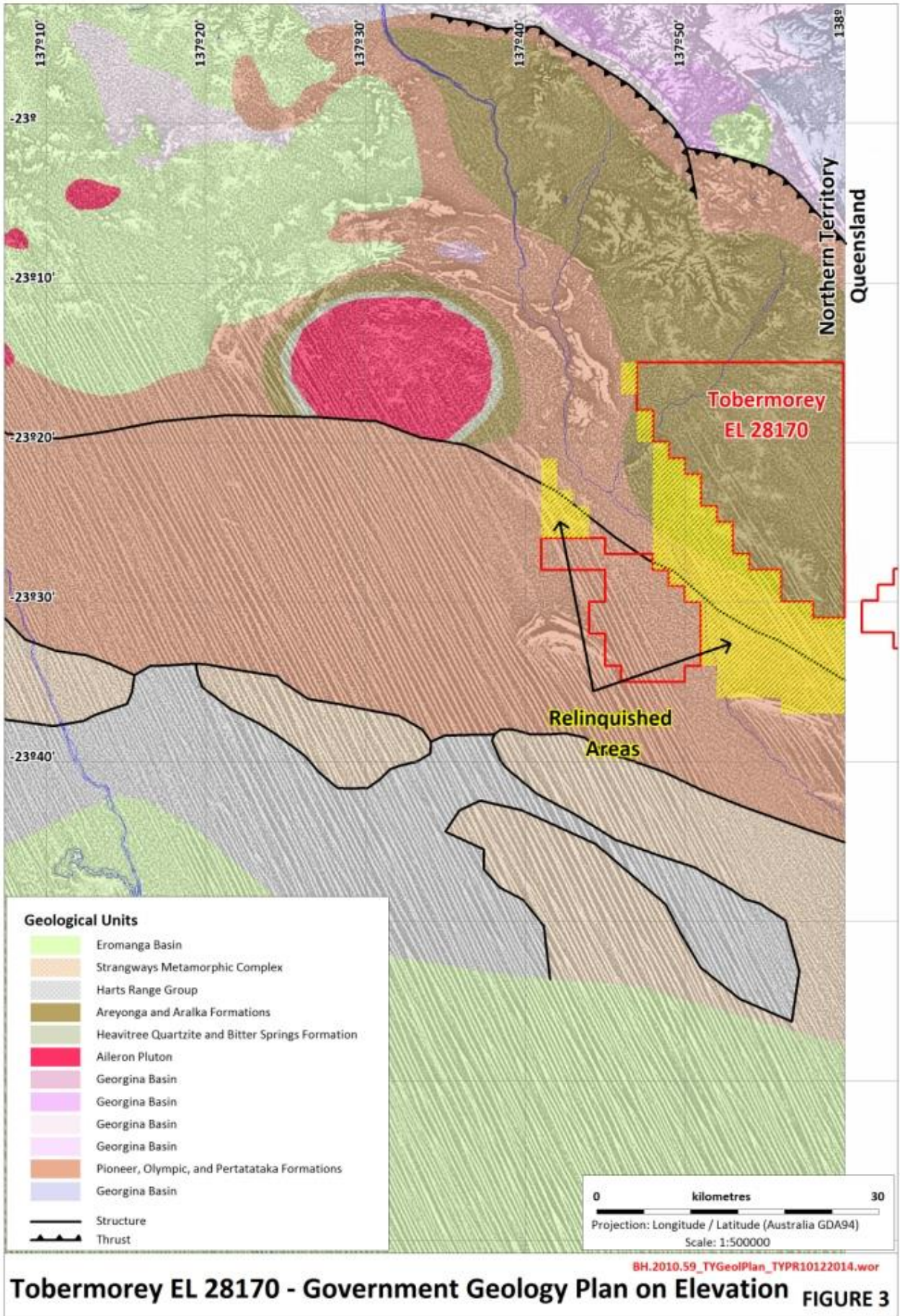


Figure 3: Tobermorey Project Geology

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 reviews of the available historical and regional data. Reconnaissance sampling was undertaken as well as a regional lag sampling program.

Krucible has completed reconnaissance sampling within the relinquished area comprising two samples collected from areas where the surface material was considered to have characteristics known to be associated with mineral enrichment. The samples were sent to SGS Laboratories and analysed by method FAA505 for gold and ICP40Q for elements Ag, As, Bi, Cu, Mo, Sb, Pb, and Zn. No anomalous results were returned, all results and descriptions are located in Appendix 1 and locations are shown on Figure 4.

A total of 18 lag samples were collected within the relinquished area as part of a regional survey of the tenement. Samples were collected on a grid spacing of 100m x 50m. 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 for assay. This process is repeated within a 20m 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 and sent to ALS Laboratories in Townsville. All samples were analysed by method Au-AA22 for gold and ME-MS41 for a full suite of elements.

Results from this prospect were disappointing with maximum results of 0.06ppm silver, 23.6ppm copper, 25.2ppm lead and 71ppm zinc (See Appendix 3 for full results).

During lag sampling grab samples were collected where material was considered to be prospective for mineralisation. Within the relinquished area 4 samples were collected these were sent to ALS Laboratories in Townsville and assayed by methods Au-AA22 for gold and ME-MS41 for the full suite. No anomalous results were returned (See Appendix 2) from this sampling.

The areas selected for surrender were chosen on the basis of the failure to identify, through analysis of regional and historical data in conjunction with field exploration results and data, any potential for mineralisation.

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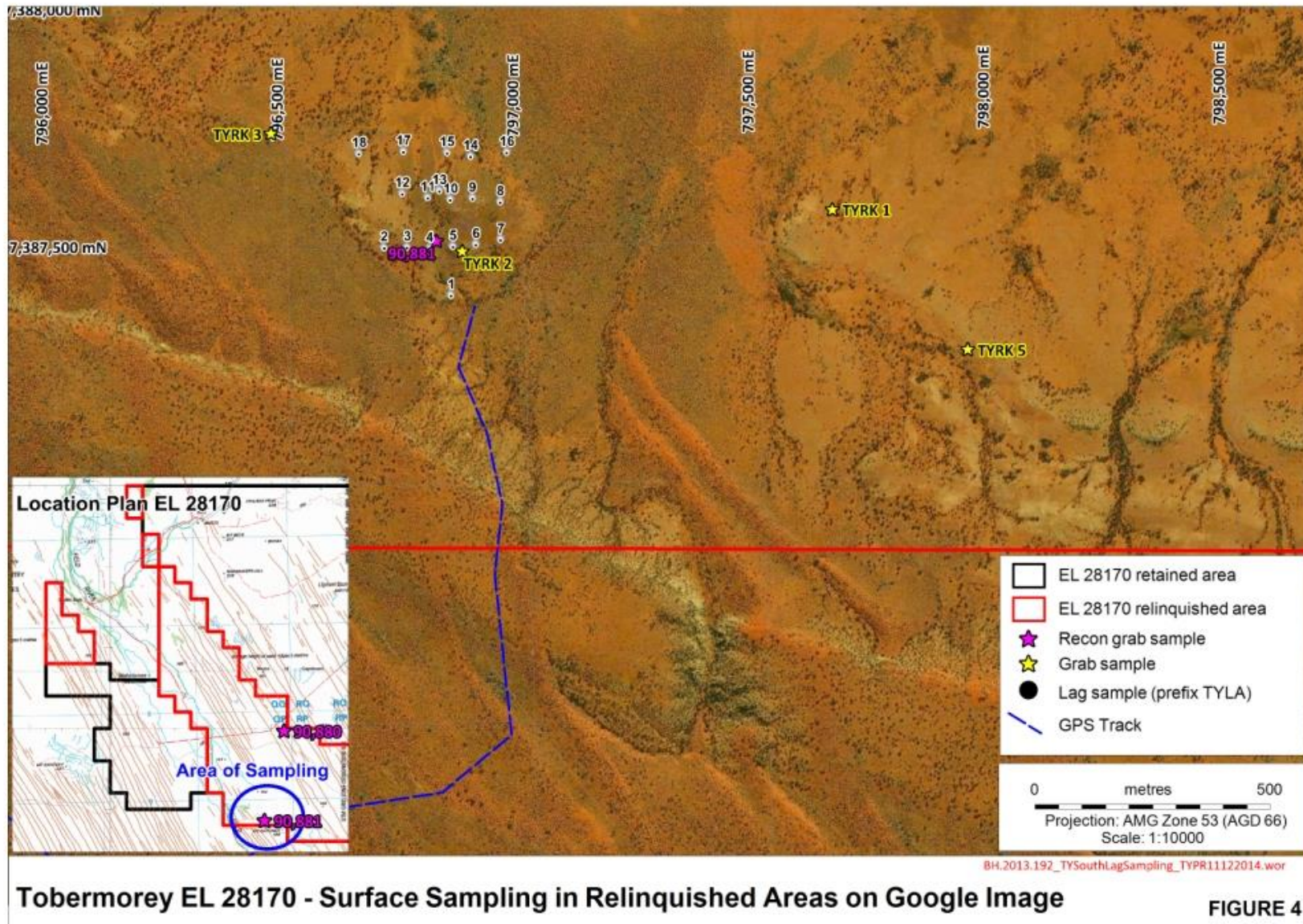


Figure 4: Surface Sampling Locations on Google Image