

TNG LIMITED

ENIGMA MINING LTD

MOUNT HARDY PROJECT

FIRST ANNUAL REPORT

17/09/12 to 16/09/13

EL 29219

Tenement/s	EL 29219	1:250 000 Sheet Name	Mt Doreen (SF5212)
Holder	Enigma Mining Ltd	1:100 000 Sheet Name	Yuendumu (5253)
Manager Operator	Enigma Mining Ltd	Datum	Doreen (5153) GDA94-52
Commodity	Cu, Zn, Pb, Au		
Elements Analysed			
Keywords	Historical data and literature review, HeliTEM, targets		
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Distribution	TNG Limited		(1)
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EXECUTIVE SUMMARY

Exploration Licence 29219 (Figure 1) was granted to Enigma Mining Limited (Enigma) on 17/09/2013. Enigma is a wholly owned subsidiary of TNG Ltd (TNG).

In late July 2012 undertook a HeliTEM survey over the Mount Hardy Copper Field, and north into EL 29219 where the Lander Rock Formation is host to copper-bearing quartz reefs and pegmatite veins. Five targets were identified within EL 29219 and a ground EM survey was then undertaken on one priority target. Followup field assessment was completed on this, and a further four targets within the licence. No further work has currently been recommended for these areas.

A full literature review was also undertaken outlining previous exploration within the licence. Targets have been generated through geophysical and geological interpretation, for additional exploration in the next year of tenure.

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1. INTRODUCTION

Exploration Licence 29219 (Figure 1) was granted to Enigma Mining Limited (Enigma) on 17/09/2013. Enigma is a wholly owned subsidiary of TNG Ltd (TNG).

In late July 2012 undertook a HeliTEM survey over the Mount Hardy Copper Field, and north into EL 29219 where the Lander Rock Formation is host to copper-bearing quartz reefs and pegmatite veins. A ground EM survey was then undertaken on one target and followup field assessment completed on a further four targets within the licence.

A full literature review was also undertaken outlining previous exploration within the licence area. Targets have been generated for additional exploration in the next year of tenure.

2. LOCATION AND ACCESS

The Mount Hardy project is located approximately 300km north-west of Alice Springs in Northern Territory (Figure 1). The project comprises three exploration licences covering a total area of 731.46 km². The project area is accessed via the Tanami Road and is situated on the Mount Doreen pastoral lease (NT Portion 1947 under Perpetual Pastoral Lease 1035). Access to the Mount Hardy tenement is via the Tanami Highway and then along station tracks and fencelines.

The Mount Hardy area consists of low ridges and some areas of high relief separated by extensive flats. The drainage is generally northwards. East Point Ridge, on which Mount Hardy Mine is located, strikes east-northeast for about 300 metres and has its highest point about 21 metres above the extensive lowlands drained by Keridi Creek. To the west, a series of low ridges join East Point Ridge to The Gap Range, or Ngadarunga Hills. This range, with a relief of over 100 metres, is broken at the Gap, just east of the Brown's Mine, by a drainage system trending north from Mount Hardy, and is separated from the Mount Hardy Range by an area of low relief. The Mount Hardy Range rises to 840 metres above sea level, and extends east/west for over 20 kilometres as a nearly continuous line of ridges. Mount Hardy is the highest point in the area.

3. TENURE

Exploration Licence 29219 is part of the Mount Hardy Project Area (Figure 1) along with EL 27892 and EL 28694. EL 29219 covers an area of 215.98km² and is 100% held by Enigma Mining Ltd.

Tenure details for EL 29219 are summarised in Table 1.

Table 1: EL 29219 tenement details.

TITLE	PROJECT	AREA (blocks)	GRANT DATE	EXPIRY DATE
EL 29219	Mt Hardy	69	17/09/2012	16/09/2018

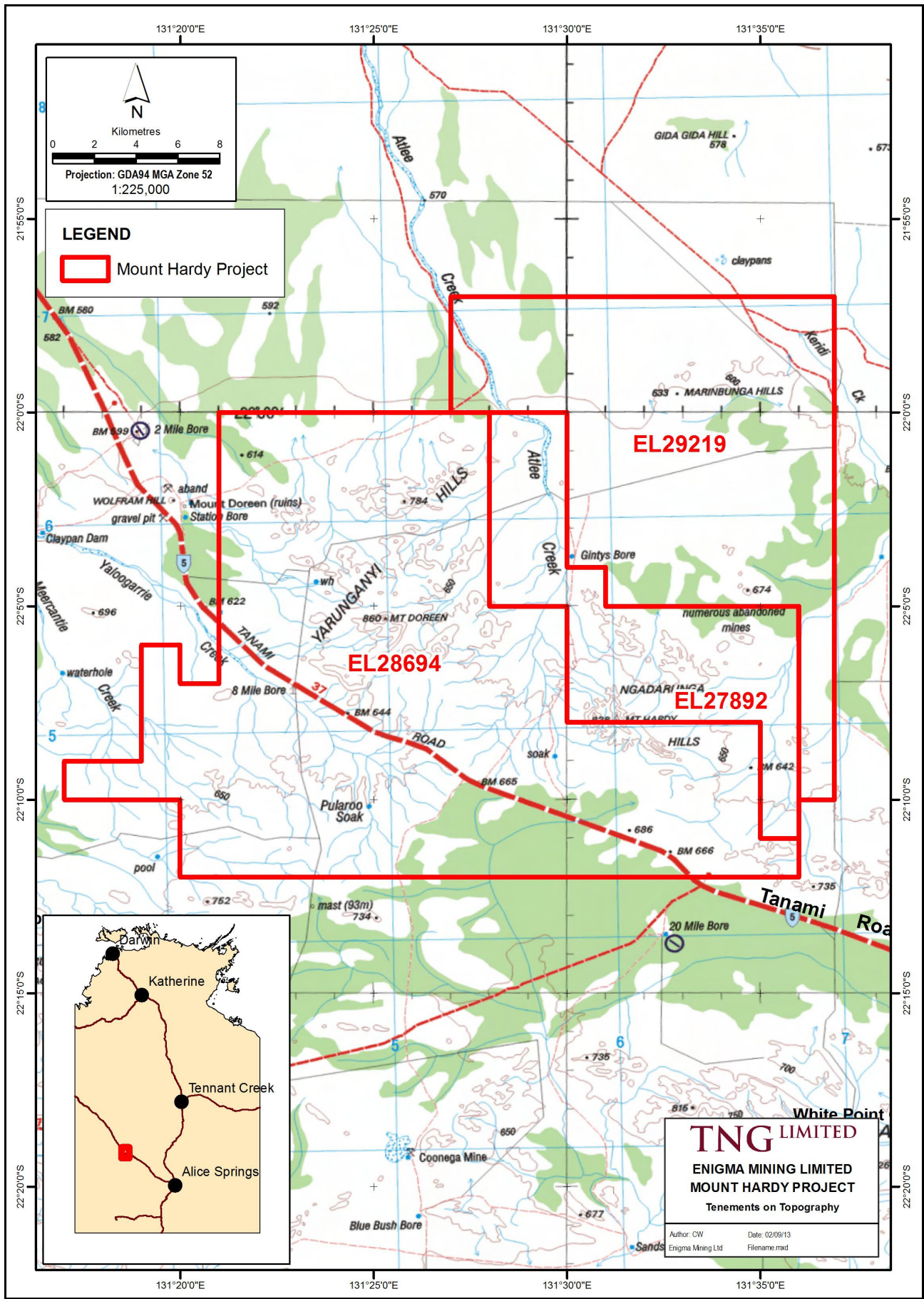


Figure 1: Location of Mount Hardy project area.

4. GEOLOGY

The Mount Hardy Project (Figure 2) area lies within the Aileron Province of the northern Arunta region. The oldest rocks in the area are metamorphosed Palaeoproterozoic siliciclastic sediments of the c.1840 Ma Lander Group (Rohde, 2005, Scrimgeour, 2013). These sediments were multiply deformed and variably metamorphosed during the c.1810 Ma Stafford Event and numerous subsequent events. The previously reported magmatic age of 1880 Ma for the Ngadarunga Granite and consequent older age for the Lander Group and proposed Yuendumu Tectonic Event has been re-evaluated and is now interpreted to be much younger (Rohde, 2005).

The Lander Group is interpreted to be stratigraphically equivalent to the Tanami Group, which hosts significant gold mineralisation at The Granites, Dead Bullock Soak and Coyote. As such, the Lander Group metasediments are considered prospective for gold mineralisation.

Rare amphibolite and metagabbro occurs within the Lander Group and are interpreted to be metamorphosed dolerite sills. Volcanic units have not been identified in the Lander Group. There are other Palaeoproterozoic volcanosedimentary successions in the Mount Doreen area, including the ~1770-1790 Ma Reynolds Range Group, Patmungala and Nicker beds, but these are relatively insignificant (Rohde, 2005).

There have been two main periods of granite intrusion in the Mount Doreen area; the c.1780 Ma Carrington Suite and the c.1580 Ma Southwark Suite. The Southwark Suite has geochemical affinities with granite associated with Proterozoic Au-Cu mineralisation elsewhere in Australia (Wyborn, 1998). Correlatives of the 1820-1790 Ma granites in the Tanami region (Frederick and Grimwade Suites) are unknown in the Mount Hardy area and may have implications for mineralisation models (Rohde, 2005).

Neoproterozoic to Palaeozoic sedimentary rocks of the Ngalia Basin overlie the Palaeoproterozoic to Mesoproterozoic Arunta basement in the central part of the Mount Doreen 1:250,000 sheet (Rohde, 2005).

4.1 Local Geology and Mineralisation

The geomorphology at Mount Hardy is dominated by the rugged ranges of the Ngadarunga Hills, which comprise high quartzite ridges of the Reynolds Range Group, and lower rounded hills formed by schists and gneisses of Lander Group metasediments (Rohde, 2005). Regolith is dominated by colluvial gravels and skeletal soils overlaying relatively fresh bedrock on ridgetops and hillsides, giving way downslope to deeper valley filling colluvial fans and fluvial gravels. To the north of the ranges are low flat grass plains with thick stands of mulga and occasional low ridges and hills of bedrock schist. The plains have a shallow transported cover of 1-5 m alluvial sand, gravel and clay overlying weather bedrock (Rohde, 2005).

The Mount Hardy copper workings are hosted within the Lander Group (Figure 2) and are dominated by psammite and lesser pelite, which have been metamorphosed to amphibolite-facies mica schist and andalusite(?) porphyroblastic schist. Complex mesoscopic-scale folding of schistosity/bedding is observable. Greenschist facies Lander Group schists and Reynolds Range Group quartzites lie to the south of the workings separated from the higher grade schists by a major east-west fault. Dolerite and pegmatite stocks and dykes are common in the area, the pegmatites most likely related to granite plutons of the Southwark and Carrington suites lying to the west and south of the Ngadarunga Hills (Rohde, 2005).

The copper workings display strong structural controls, being hosted within quartz veined shear zones. Surficial mineralization comprises copper carbonates and gossans within sheared mica-schist wallrocks and boudinaged and brecciated quartz veins. Quartz veins range for tabular and consistently strike over 10 to 100's of metres to complexly fractured and folded plunging rocks (Rohde, 2005).

Two main structural trends are event from the distribution of the workings and lineations observable in Landsat imagery and aeromagnetics: NW to WNW (parallel to trans-Tanami regional scale structures in the region), and ENE-WSW (Rohde, 2005).

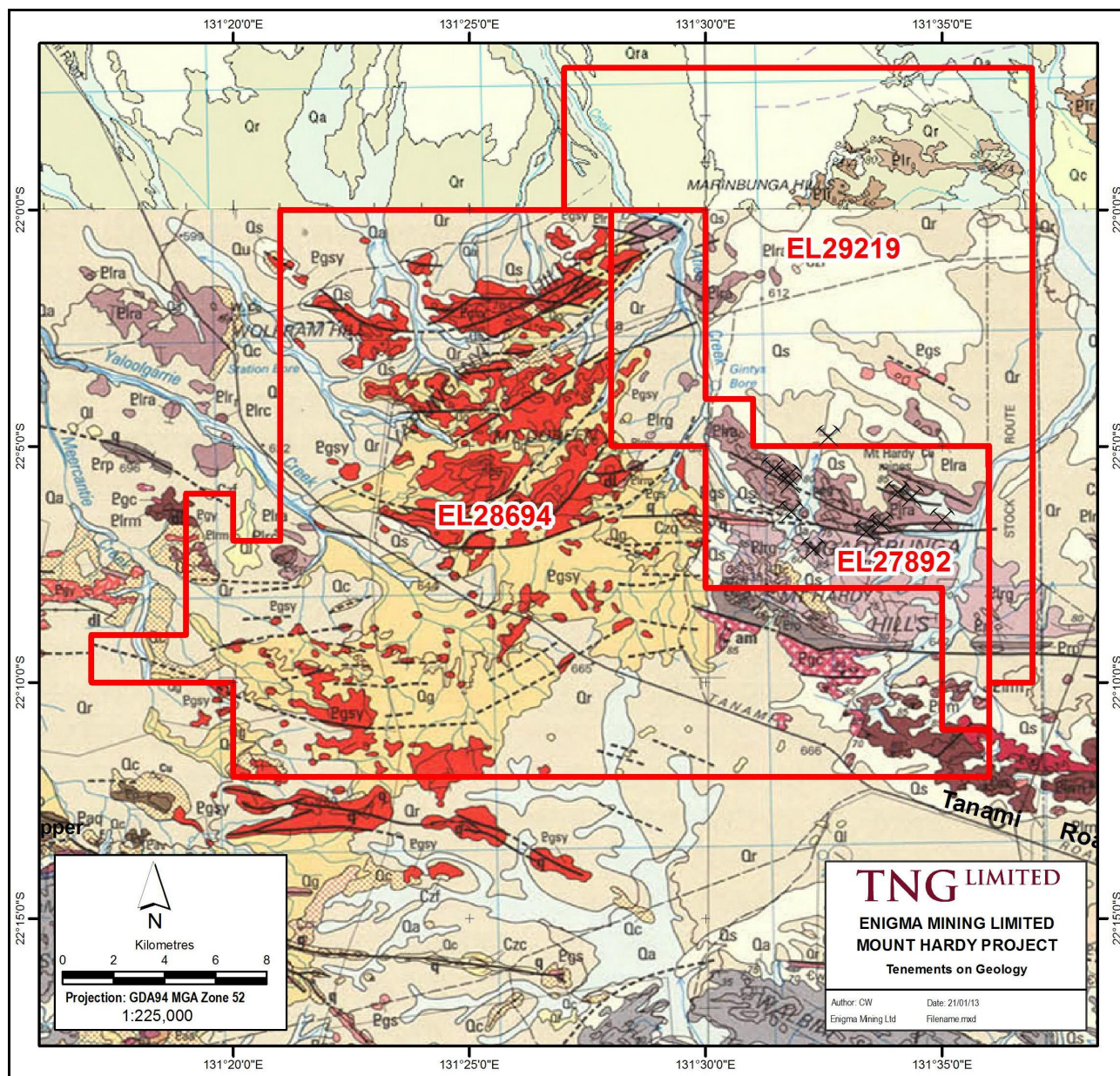


Figure 2: Geological setting of EL 29219.

5. PREVIOUS EXPLORATION

The following exploration has been carried out on the Mount Doreen mapsheet and around the Mount Hardy area:

- Mount Hardy Cu prospects were discovered by W.W. Braitling in 1935 (Kiek, 1941).
- Uranium Development and Prospecting N.L. carried out diamond drilling in the area in 1956.
- Bureau of Mineral Resources (BMR) conducted aeromagnetic, radiometric and gravity surveys in the 1960s.
- Central Pacific Minerals held AP1722 in the Mount Hardy area from 1967-69.
- NTGS assessed the economic feasibility of the Mount Hardy and Clarke copper deposits from 1968 to 1972.
- NT Geological Survey and BMR completed 2nd edition mapping of Mount Doreen sheet in the 1990s.
- White Industries conducted exploration on EL 5688 from 1988-90. Rock chip and stream sediment sampling was carried out from Wolfram Hill through to Mount Hardy.
- Bruce and Mules' explored the Silver King area for gold and base metals from 1988-1991.
- MIM/Roebuck Resources Joint Venture targeted magnetic highs in the early 1990s and explored the silver King deposit.
- Yuendumu Mining Company/Posgold explored the western parts of the Mount Doreen area from 1992 to 1996, particularly Terry's Find, other targets were 'Buger' and 'Grasshopper'.
- BMR completed airborne magnetic and radiometric surveys in 1993.
- Aberfoyle Resources were granted EL's 8913 and 8608 in late 1994. They undertook ground magnetics surveys and significant RAB drilling. Exploration failed to locate significantly anomalous gold mineralisation and the tenements were surrendered.
- BHP tested the northern Mount Doreen and southern Mount Theo mapsheets for Cu-Au in the late 1990s, but concluded that no major deposits were likely.
- Tanami Gold NL explored for Tanami-style gold mineralization and Tennant Creek-style copper mineralization in the Mount Doreen area from 2001 to 2005. The main target areas were the Terry's Find, Mount Hardy and Pyramid Hill Prospects. 7 Rock chip samples returned copper assays of 7032 ppm to 217972 ppm.
- Deep Yellow conducted exploration for uranium in the Mount Hardy area in 2009 and 2010. No other commodities were investigated.

6. EXPLORATION COMPLETED, 2012-2013

6.1 Literature Review

A literature review was carried out of all historical exploration undertaken within EL 29219 and around the Mount Hardy Copper field. A summary of exploration is included above and the full literature review is attached as Appendix 1.

6.2 HeliTEM Survey

Fugro Airborne Surveys Pty Ltd were commissioned to undertake a HeliTEM Survey over the Mount Hardy licence area in July 2012. Figure 3 shows the survey boundaries. A total of 930 line kilometres were flown in a north-south direction at 200m line spacing. 403 line km were flown over EL 29219. A full logistical report and data is contained in Appendix 2.

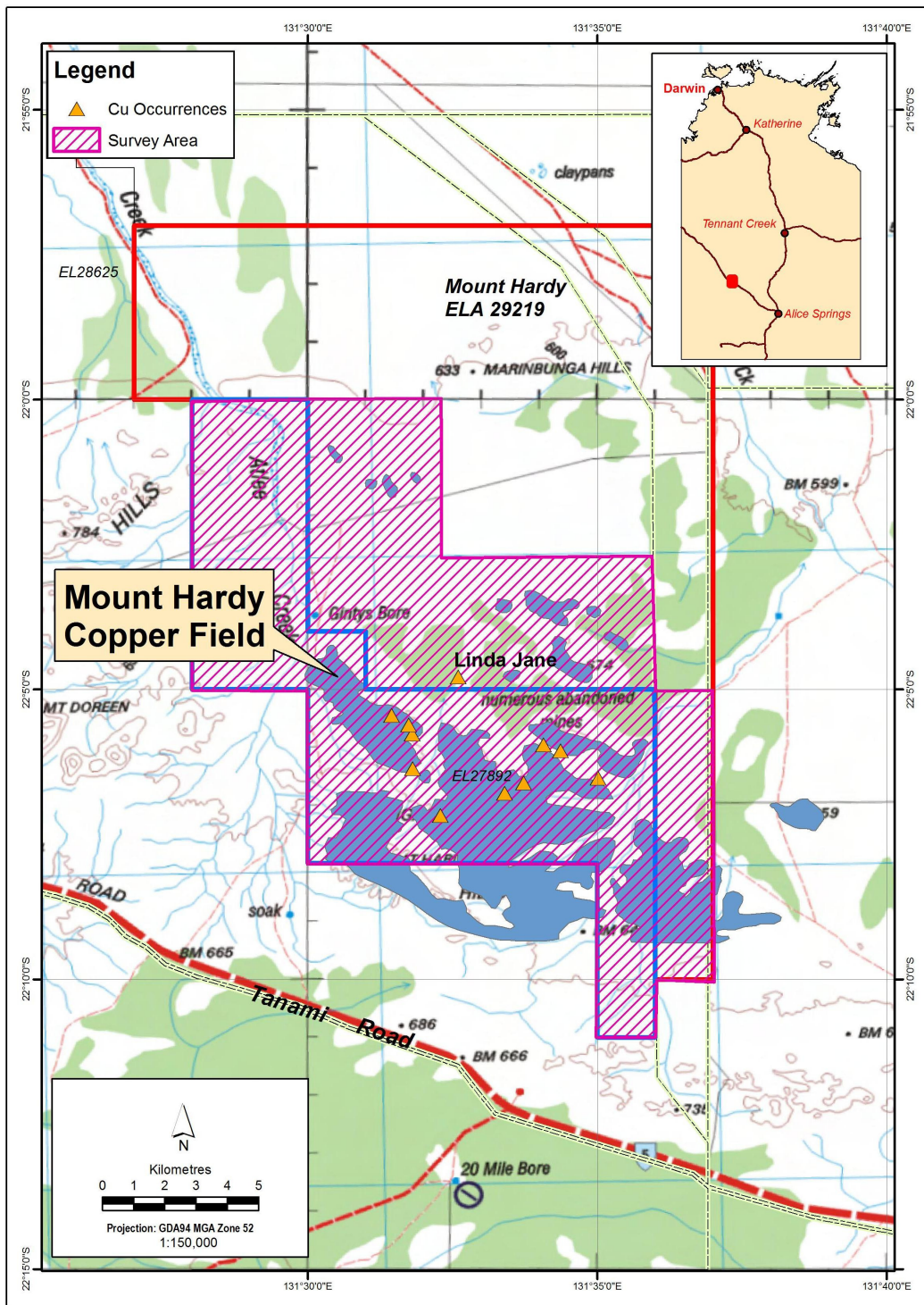


Figure 3: Location of HeliTEM survey.

Overall there were 23 anomalies generated in the interpretation work, five of these within EL 29219 (Figure 4; Table 2; Target #6, #17, #18, #19, #20). These areas were given priority based on the strength of the response and the size, area and depth modelled. One target (Figure 5) within EL 29219 was selected for immediate follow up by ground EM (along with five targets within EL 27892).

The interpretation phase itself consists of interrogating all of these image products as well as the raw profile data and identifying specific anomalies. These are classified into early-, mid- and late-time anomalies. Specific targets/areas of interest have then been selected and ranked according to their strength and other characteristics (Table 2).

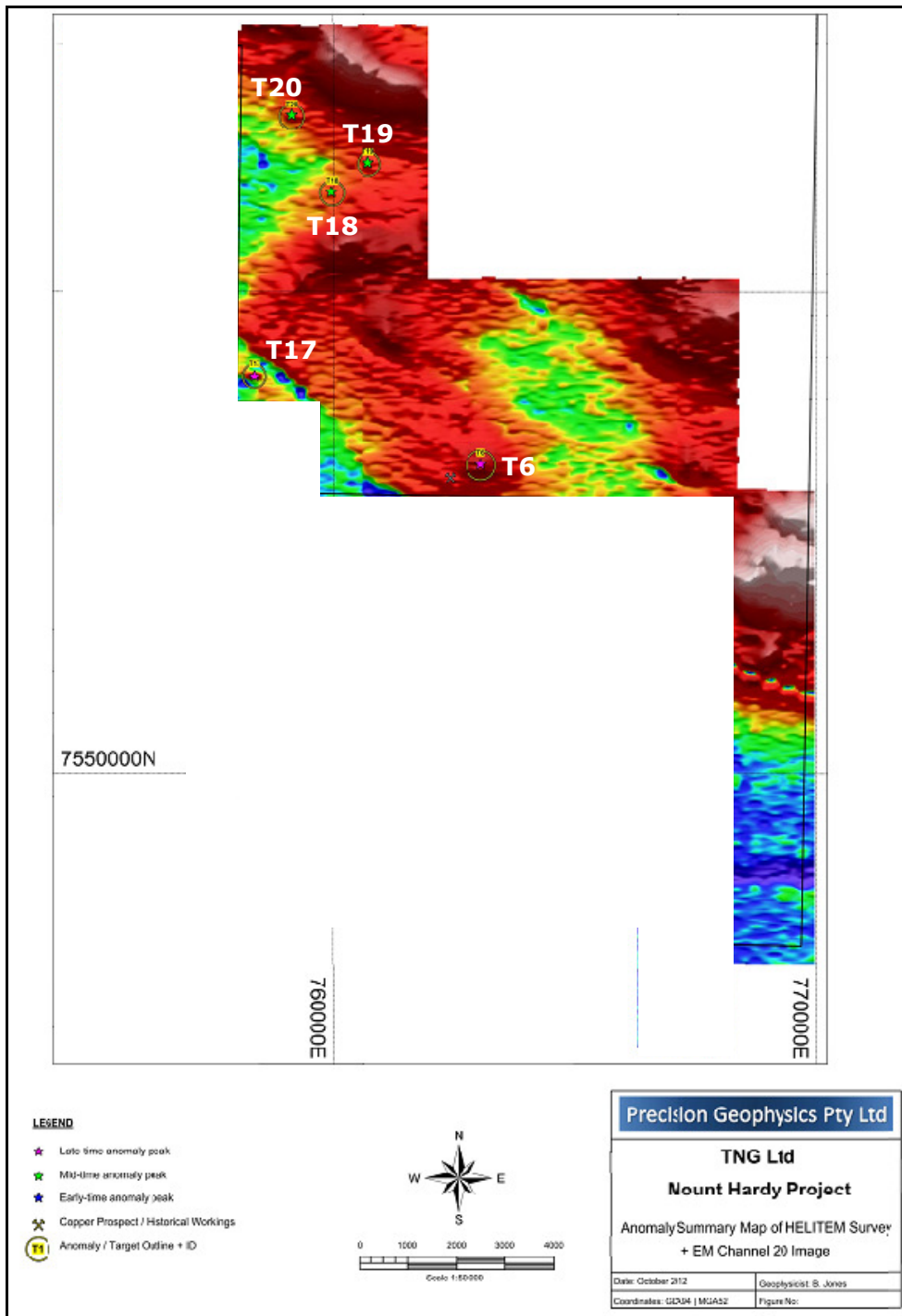


Figure 4: Anomalies identified from HeliTEM survey.

Table 2: Summary of HeliTEM Targets in EL 29219.

Anom. No.	MGAE	MGAN	Description	Rank	Recommendation
T6	763050	7556400	Circular, relatively big amplitude, mid-time anomaly close to historical workings. ~1km diameter.	2	Field inspection, geochem testing/possible ground EM followup
T17	758650	7558250	Cultural/noise	0	None
T18	759950	7562050	Possible mid-time anomaly - weak, low amplitude	3	Field inspection, geochem testing
T19	760750	7562700	Possible mid-time anomaly - weak, low amplitude	3	Field inspection, geochem testing
T20	759150	7563650	Possible mid-time anomaly - weak, low amplitude	3	Field inspection, geochem testing

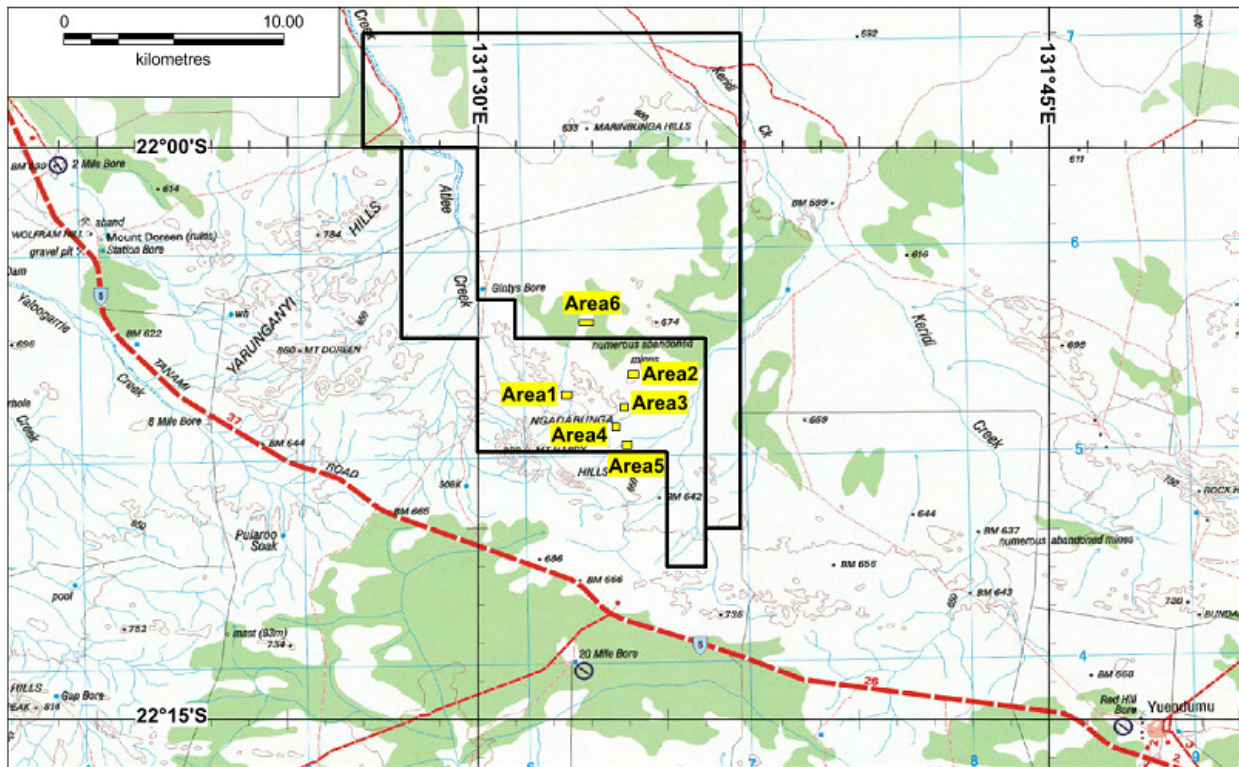


Figure 5: Areas selected for ground EM surveys.

6.3 Ground EM Survey

GEM Geophysics completed the ground EM survey from 16-29th August 2012. In order to complete the ground EM surveys as quickly as possible, but with high resolution detail each area was surveyed with a small fixed loop setup.

Survey details are as follows:

- Configuration – Fixed Loop,
- Instrumentation – Zonge ZT30 transmitter, Smartem V receiver, 3 component B-field fluxgate sensor,
- Base frequency/Time Base – 2Hz/125msec.

The logistics report, data and images are included in Appendix 3.

Target Area 6 (Figure 5) was original identified from the HeliTEM survey as a large circular-shaped (1km diameter), mid-time anomaly. Results of the ground EM survey are presented in Figure 6. The data shows the western side of a large bullseye type anomaly which is consistent with the HeliTEM data. The anomaly has not been closed-off to the east so remains open along strike. The eastern lines were not surveyed for several reasons:

1. The ground EM was focussing on the western side of the anomaly where the HELITEM was showing possible secondary responses.
2. The crew only had enough wire to complete the 3 survey lines with the 300x700m transmitter loop.
3. The ground EM results were identical to the HELITEM data so targeting could be done using the airborne data.

No modelling has been completed for this anomaly. The source appears to be due to a conductive zone within the weathering profile (clay pan at surface or weakly conductive zone in upper 50m). The EM response in the later channels reverses into a negative anomaly and is

typical of a clay-rich horizontal layer near surface (ground polarisation response). No other anomalies were identified in the ground EM data.

The area represents a low priority target. Subsequent ground mapping and soil tests have not revealed any anomalous geochemistry. A shallow vertical hole centred at approx. 763100E, 7556450N could be considered if the target was to be tested.

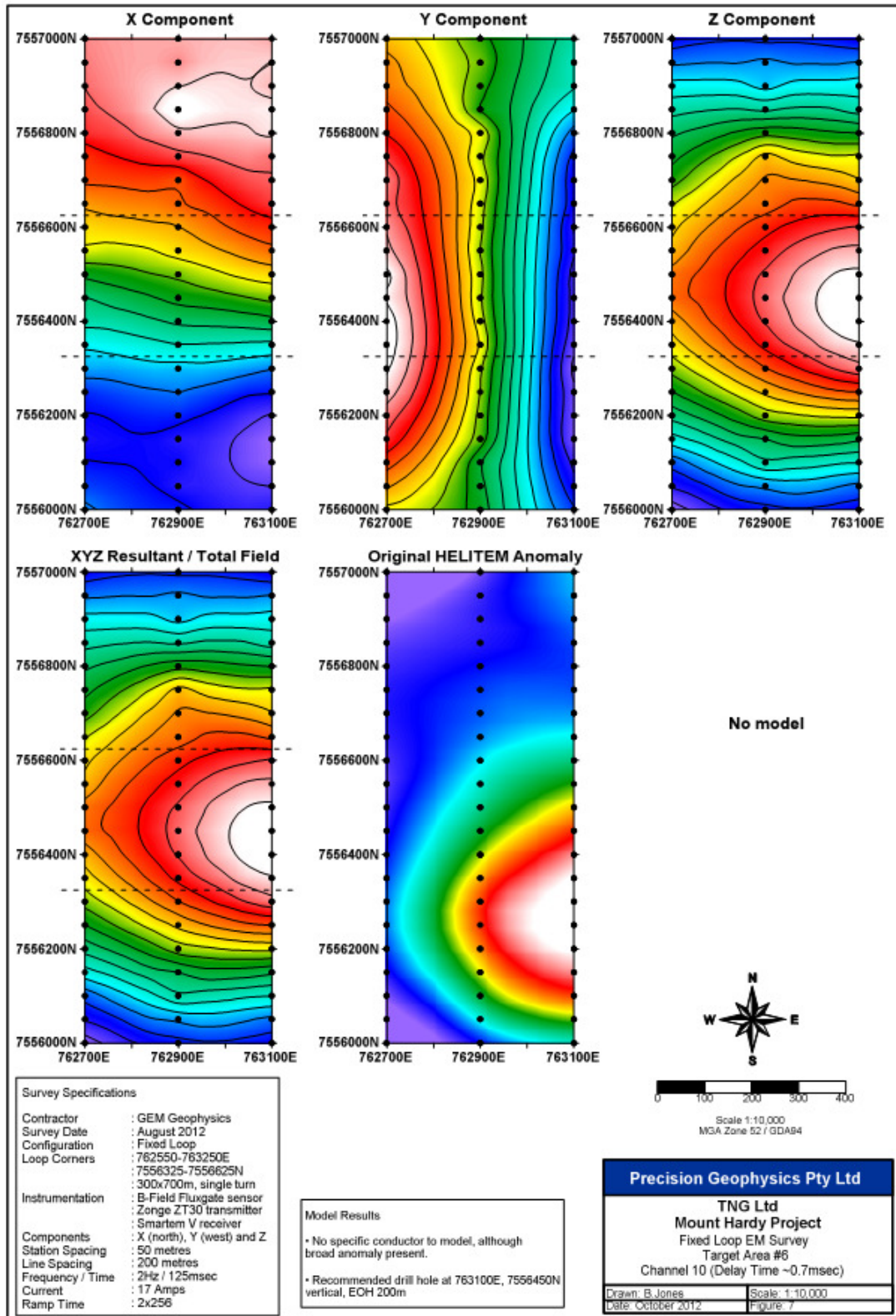


Figure 6: Fixed Loop EM Survey, Target Area 6.

6.4 Field Assessment of EM Targets

Field work commenced in September 2012 and focussed on investigating the strongest EM Targets, including EL Target #6 within EL 29219. Subsequent to this the other target areas identified within EL 29219 (EM Targets #17, #18, #19 & #20) were assessed also (Figure 4).

6.4.1 EM Target #6

Site reconnaissance was conducted to determine the source of the EM conductor. No outcrop was apparent in the vicinity of the anomaly which was located on an extensive sandy, spinifex plain, centred within a mulga thicket. Transported alluvial and aeolian sands were evident with no significant lag deposits. A total of 42 Niton pXRF samples (Figure 7) were taken over the anomaly, the maximum Cu reading being 59ppm. Full sampling results are included in Appendix 4.

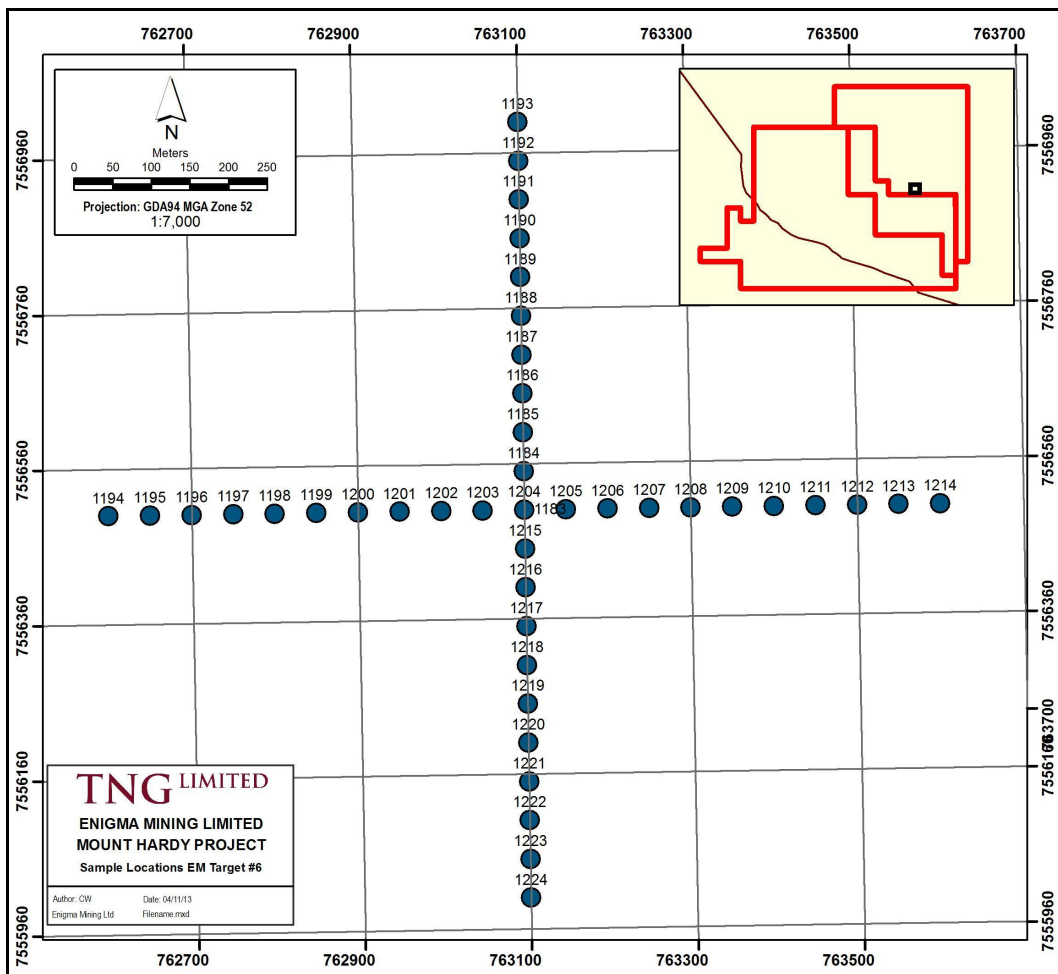


Figure 7: Sample locations EM Target #6

6.4.2 EM Target #17

Located in the southeast of the EL29219 and identified by the HeliTEM EM Target #17 is a strong conductor; however it is clearly artificial.

This distinct conductor is located at Ginty Bore where there is a windmill with associated infrastructure, diesel pump and steel cattle yards. The target is clearly an artificial conductor requiring no further follow-up.

6.4.3 EM Target #18

Targets #18 in the north of the EL29219 is identified from the HeliTEM as a shallow, weak conductor.

Site inspection determined the area lies on a spinifex sand plain with aeolian transported silty sand. The cover, although thin (<10m based on photo interpretation), eliminated the use of geochemical survey to identify any underlying source.

The nearest outcrop, approximately 400m to the northeast (760100mE, 7562500mN), is a low hill (200m x 200m) composed of Precambrian Lander Group schist, reaching approximately 3m above the plain. North-northeast (025°) striking, outcrop and subcrop make up the high, dipping at 60° west. Compositional banding is visible intersected by the dominant foliation. The schist varies from 60-90% quartz with 10-15% biotite, 0-15% muscovite and 0-15% feldspar, weathering to kaolin. Multiple pegmatites, up to 5m wide, both cross-cutting and parallel to bedding can be followed up to 50m along strike, these reach up to 50% quartz with 20% muscovite books (up to 10-15mm) and 30-40% feldspar laths (up to 50mm). No visible mineralization was observed. Based on the strike and position of the hill there is reasonable confidence that Precambrian Lander Group Schist underlies the conductor site.

6.4.4 EM Target #19

The target, in the north of EL29219 at 759950mE, 7562050mN, was identified from the HeliTEM as a shallow, weak conductor. The site was visited to investigate the geology both at the site and any surrounding outcrops.

The ground visit identified no geochemical or geological evidence to explain the geophysical anomaly. The site lies on aeolian transported sediment within spinifex and mallee scrub. Additional geochemical sampling would not provide information on a possible conductor.

The closest outcrop, composed of Precambrian Lander Group schist, forms a small high approximately 200m to the south. There is no outcrop in the immediate vicinity of the target. As the outcrop lies along strike to the conductor it was decided it most likely underlies the transported material. A small Niton pXRF traverse was conducted along the residual soil surrounding the outcrop. A total of 14 samples were collected along the slope edge closest to the target (Figure 8), the highest soil Cu was 51.4ppm. Full results are included in Appendix 4.

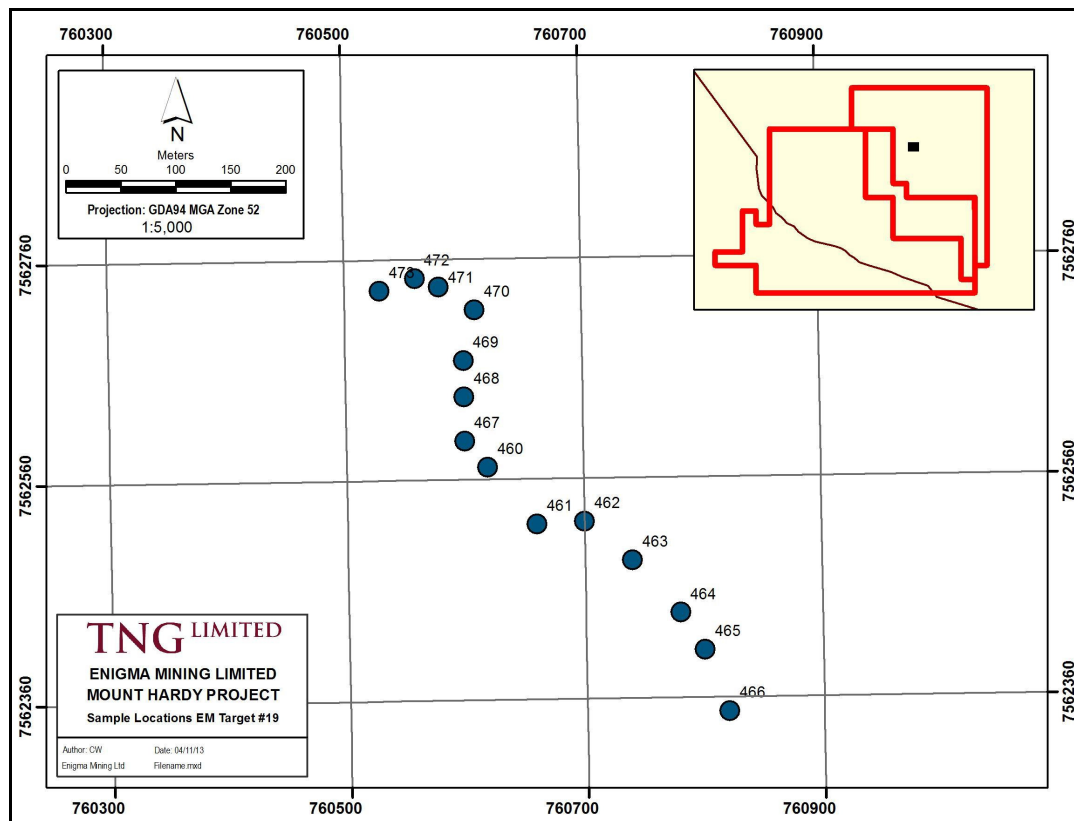


Figure 8: Sample locations EM Target #19.

6.4.4 EM Target #20

Target #20 is a shallow, weak conductor. Site follow-up showed no geochemical or geological source at the surface. The conductor underlies an open, flat spinifex sand plain with moderately thick mallee thickets to the north and east, opening out to a spinifex/mallee sand plain to the west. The area surrounding approximately 100m of the target is transported aeolian sand and silt, eliminating geochemical sampling.

The nearest outcrop is a moderate hill to the southwest comprised of north-south striking Precambrian Lander Group schist dipping to the west. A small (10-15cm) quartz vein was observed but no visible mineralization was noted in the area.

6.4.5 Recommendations

Field reconnaissance of the EM targets has not returned any significant findings. Further interrogation of the HeliTEM data could be undertaken to determine whether EM surveys over the areas would provide additional information. However the low priority of these targets suggests exploration would be more beneficial elsewhere within the licence.

7. PROPOSED 2013-2014 PROGRAM

Five regions in the Mount Hardy project area have been selected for mapping and geochemical testing in the coming year (Figure 9). These areas are spread over all three tenements in the Mount Hardy Project, and have been chosen based on structural and geological indications that the existing mineralisation will continue and is controlled by structure.

Some are located along the eastern and north-eastern margins of the Mount Doreen granite. This intrusive crops out over the central portion of EL 28694, and may be the heat source mobilising metals within the schists of the Mount Hardy Copper Belt to the east.

Two areas within EL 29219 have been chosen based on structural and geological indications that the existing mineralisation will continue and is structurally controlled. These areas are located along zones of structural complexity identified in geophysical interpretation of TNG acquired and regional datasets.

Additional geological reconnaissance is required to further assess the geological potential of the tenement.

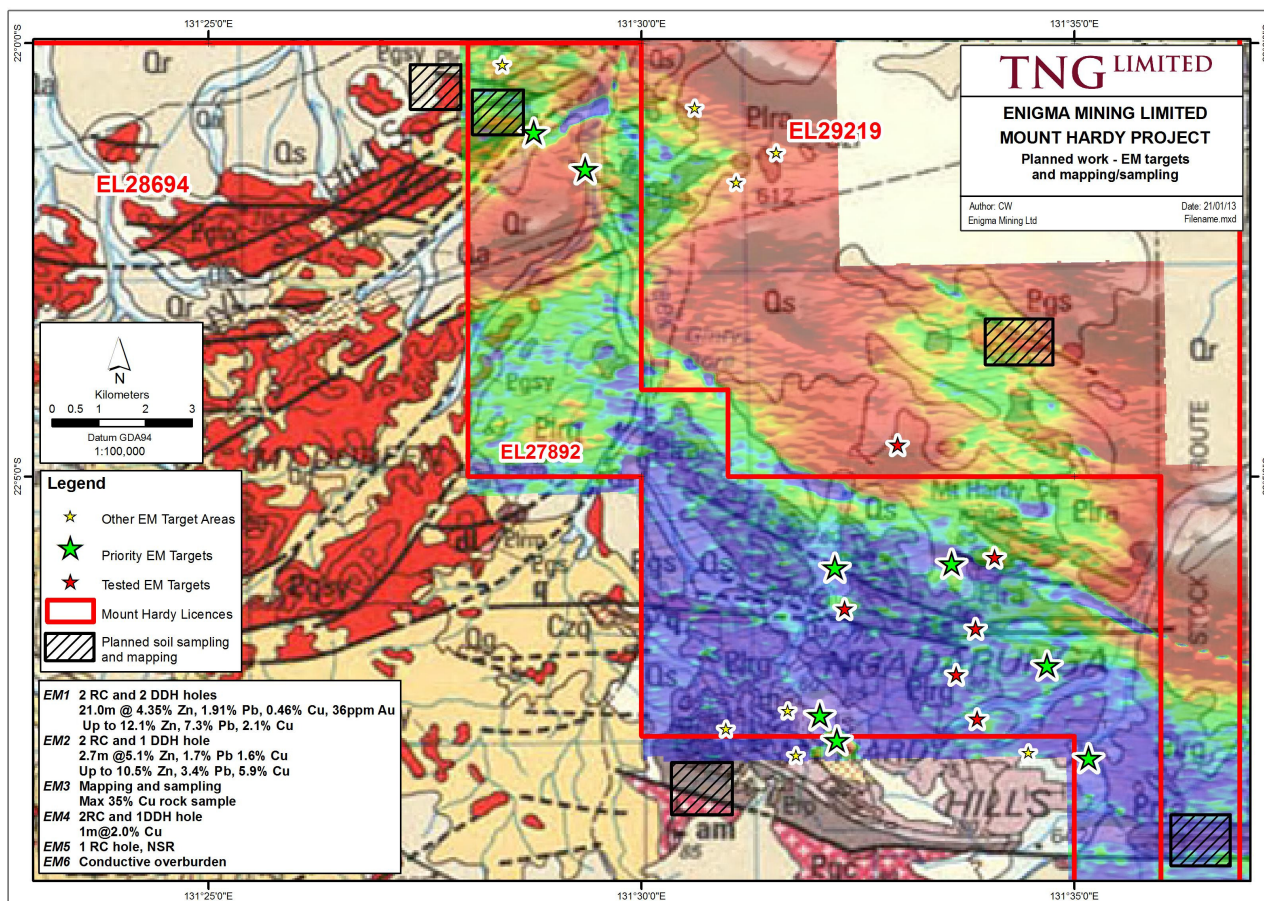


Figure 9: Location of proposed exploration target areas within EL 29219 and the Mount Hardy project area.

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