



KGL Resources Ltd.
Kentor Minerals (NT) - Operator

EL30242

Mt. Cornish Project

Annual Report
for the reporting period
26 November 2016 to 25 November 2017

Project Name: Mt Cornish

Map Sheets: Hukkitta SF53-11, 1:250,000

Commodities: Copper, Silver, Lead, Zinc

Licensee: Jinka Minerals Ltd.

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SUMMARY

KGL Resources Ltd., acquired the Mt. Cornish tenement (EL30242) following the reprocessing of Poseidon Exploration Ltd.'s airborne EM data by International Geoscience, of 8 May Ave. Subiaco, 6008 WA.

The tenement is held by Jinka Minerals Limited, a fully owned subsidiary of KGL Resources Ltd.

International Geoscience identified a coincident magnetic-EM trend on Poseidon's Area 2 and KGL applied for the ground.

Poseidon did their own follow up work that included soil/ lag traverses but from a review of their reports there were no anomalies identified.

A preliminary field reconnaissance visit of the area suggests there is extensive cover. The mag/ EM trend is covered with calcrete so surface sampling wouldn't have been effective.

KGL Resources Ltd., a Brisbane based company, purchased Jinka Minerals in early 2011 from Reward Minerals Limited.

Annual Reporting of activities conducted on Exploration Licence 30242 is reported by Kentor Minerals (NT) who is the authorized operator of the tenement.

There is a very high cost associated with Central Land Council (CLC) exploration agreement negotiations and with the issuing of an Aboriginal Areas Protection Authority (AAPA) tenement Authorisation Certificate.

Site visitations and reviews, by the KGL Board, to ascertain the viability of continuing geological exploration activities on EL30242 were a large component of the costs associated with activities undertaken on the tenement.

Activities undertaken by Kentor Minerals (NT) Pty. Ltd included:

1. Site inspection and review.
2. Field geological mapping and observations
3. Desk top mapping of field observations.

Expenditure on EL30242 for the year is \$38,192.00 against a covenant of \$35,000.00.

1.0 INTRODUCTION

This report covers work conducted on Exploration Licences 30242 (Mt Cornish) during the third year of tenure from 26 Nov. 2016 to 25 Nov. 2017.

EL 30242 was granted on the 26 Nov. 2014 and consisted of 57 blocks (180.32 sq. km). A subsequent relinquishment of 29 Blocks was undertaken in November 2016. The licence is located in SE corner of the Huckitta (SF53-11) 1:250,000 map sheet.

Following an in-house study of selected Australian Proterozoic terrains, the region was identified as prospective for sediment hosted Broken Hill type mineralisation. Mineralisation at the nearby Jervois Development Project has similarities to Broken Hill style deposits.

Exploration this year included a complete review of the tenement by the KGL Board and exploration staff to determine the viability of continuing the tenement holding.

Unfortunately, there is a very high cost associated with Central Land Council (CLC) exploration agreement negotiations and with the issuing of an Aboriginal Areas Protection Authority (AAPA) tenement Authorisation Certificate and these associated costs apply additional financial strain on junior exploration companies to actively undertake appropriate geological field activities.

The purpose of this report is to detail exploration conducted by Kentor Minerals (NT) Pty. Ltd within EL 30242 during the year ended 25 November 2017.

Expenditure for the year is estimated at \$38,192.00 against a covenant of \$35,000.00.

2.0 LOCATION and ACCESS

The Jervois Project is located 380 kilometres north east of Alice Springs on the Huckitta 1:250,000 map sheet (SF53 -11). See Figure 1.

Access is via the Stuart and Plenty Highways to the Jervois Station Road. The tenement is located approximately 10km east of the Jervois Station Homestead.

Historical exploration tracks, as well as limited station tracks provide local access throughout the tenement which is located over a portion of the Jervois Pastoral Lease.

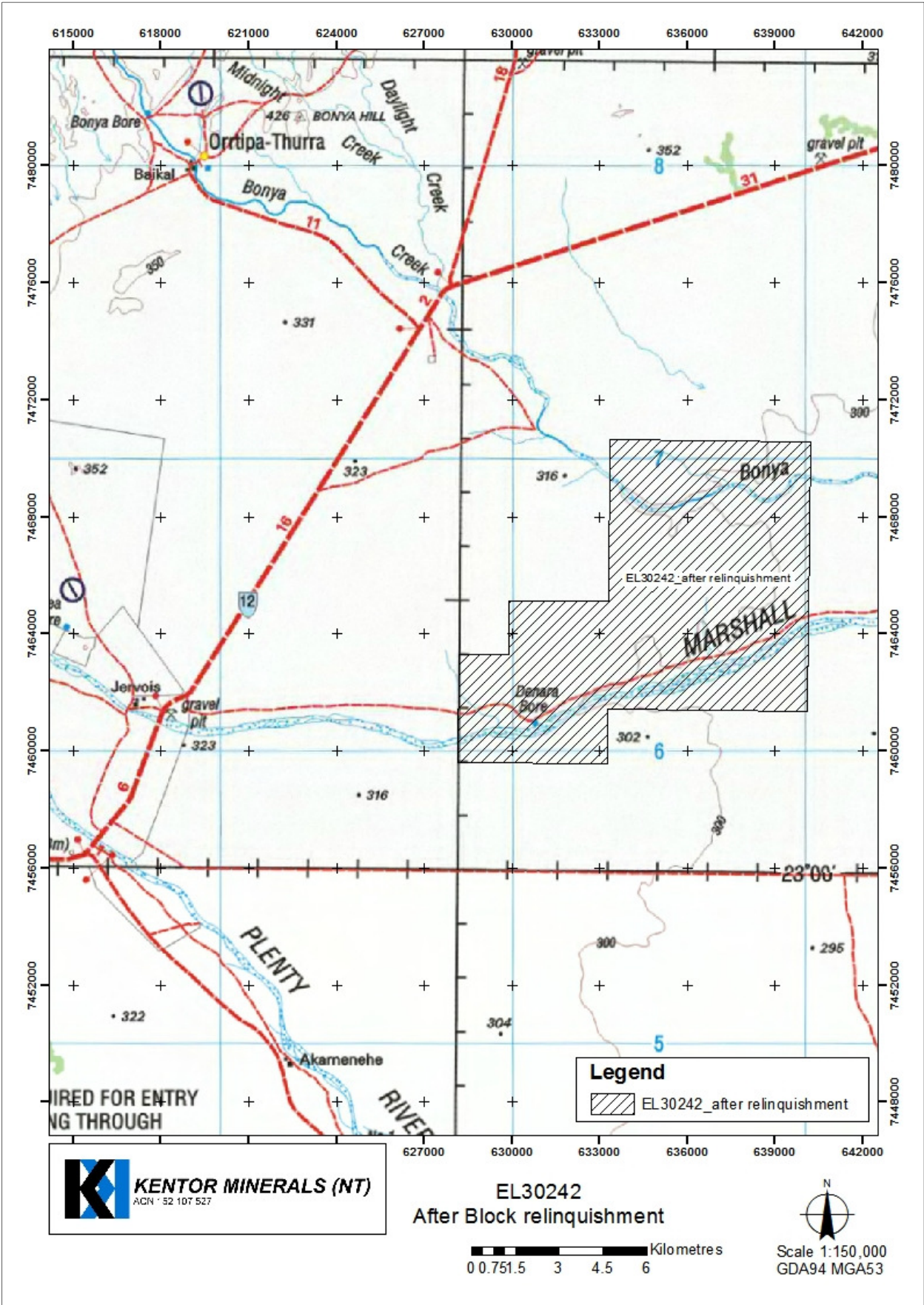


Figure 1. Mt. Cornish Project – EL30242 Location plan

3.0 TENURE

EL 30242 was granted on the 26 November 2014 and consists of 29 blocks (88 sq. km) after a recent relinquishment. It is located in the south-east corner of the Huckitta (SF53-11) 1:250,000 map sheet.

The tenement is held by Jinka Minerals Ltd. and is operated by Kentor Minerals (NT) Pty. Ltd. Both Companies are held by parent company KGL Resources Ltd. Figure 1 shows a plan of the tenement layout at the Mt. Cornish Project.

4.0 GEOLOGY

4.1 REGIONAL GEOLOGY

The Arunta Orogenic Domain has been divided into 3 tectonic areas: Central, Southern and Northern (Freeman 1986). The Central Tectonic Zone consists of an accumulation of sedimentary and volcanogenic rocks deposited in an east-west trough. With time the trough broadened to include the Northern and Southern Tectonic Zones and the composition of the sediments being supplied to the basin matured.

The rocks within the Orogenic Domain have been divided into 3 groups:

- Division 1: felsic and mafic granulites
- Division 2: schistose pelitic metasediments and quartzo-feldspathic gneisses
- Division 3: schistose, pelitic metasediments and metaquartzite

The divisions are separated by unconformities. The increasing maturity of the sediments reflects the evolution of the basin.

An early tectonic event during the mid-Proterozoic metamorphosed and dislocated the rocks into many fault bounded blocks. A later event, the Carboniferous Alice Springs Orogeny reactivated the faults.

The project area is located within the Jervois Block in the Northern Tectonic Zone and consists of Division 2 rocks.

Sedimentation in the Georgina Basin began during the Adelaidean with the deposition of argillites, arenites, glaciogene sediments and carbonates along the southern margin of the basin. After the Adelaidean the sediments primarily consisted of carbonates and arenites (Freeman 1986).

4.2 TENEMENT GEOLOGY

The Arunta Block rocks within the tenements are described below.

4.2.1 Arunta Block

Division 1

Unnamed Metamorphics - Jervois Homestead District

This is the oldest unit and outcrops in the southern part of the project area and consists of quartzo-feldspathic to biotite gneiss, feldspathic quartzite, muscovite quartzite, minor quartz-rich metasediment, partly schistose, biotite schist and layered magnetite-quartz rock covered by extensive soil and sand plains.

Division 2

Mascotte Gneiss Complex

This unit consists of granitic gneiss grading into quartzo-feldspathic gneiss in places and less commonly leucogranite, biotite schist, biotite gneiss, amphibolite and hornblende gneiss. Igneous dykes are common and include tourmaline bearing aplite dykes up to 50m wide. This unit is restricted to the Jervois and eastern Jinka Blocks.

Bonya Schist

This unit overlies the Mascotte Gneiss Complex with a transitional contact. This unit is located east of the Jervois Range in the northern half of the Bonya Creek licence area.

The Bonya Schist has been subdivided into 5 informal sub-units and one formal member, the Kings legend Amphibolite Member. The sub units are:

Unit 1: the basal unit. Amphibolite and layered amphibolite.

Unit 2: pink quartzo-feldspathic rock, hornblende gneiss and quartz-epidote-calc-silicate rock, all interlayered in fine muscovite and biotite-muscovite schist. Scheelite occurs in the calcsilicate rocks.

Unit 3: coarse grained knotted muscovite schist or andalusite muscovite schist. Pods and layers of quartz-epidote calcsilicates.

Kings Legend Amphibolite Member:

amphibolite, glomerophyric in places, minor calc-silicate rock. Scheelite occurs in the calc-silicates and fine disseminated chalcopryrite and pyrite occurs in the amphibolite.

Unit 5: fine to medium grained biotite-muscovite schist, quartz garnet-epidote calc-silicate rock. amphibolite, felsic schist and sulphide bearing quartz magnetite and quartz hematite rock. This is currently the most significant unit in the area as it contains the Pb-Zn-Ag-Cu-Bi mineralisation at Jervois and W-Cu mineralisation in the calc-silicates.

Unit 5 has been further subdivided by Peters et al (1985), shown in Yates et al (1989). They recognised four main metamorphic suites:

1. Gneissic suite
2. Magnesium Silicate suite
3. Mine Sequence suite. The lode horizon occurs within andalusite-muscovite schist and consists of garnet chlorite-magnetite rocks.
4. Magnesium Silicate suite.

Unit 6: layered actinolite-K-feldspar calc-silicate rock, acid crystal meta-volcanic, calcareous metapelite, muscovite-rich schists, quartzite and amphibolite.

Intrusive Rocks

Jervois Granite

A fine to medium, even-grained biotite granodiorite and leucogranites. It contains numerous roof pendants and rafts of metamorphic rocks. The granite outcrops at the south-east end of the Jervois Mine, and intrudes both the Unnamed Metamorphics and the Bonya Schist. A Rb/Sr age of 1808 ± 80 Ma has been determined.

Xanten Granite

This medium to coarse grained 2-feldspar leucocratic silicified granite outcrops at the southern limit of the Jervois Range. It is interpreted that the granite intrudes the Mascotte Gneiss Complex.

Unca Granite

An even-grained leuco granite with a metamorphic texture that intrudes the Sonya Schist and outcrops 5km north of the Jervois Mine.

Attutra Metagabbro

This unit consists of at least 20 outcrops of coarse grained bytownite pyroxene gabbro located east of the Jervois Range. In the south there are plugs of coarse grained magnetite rocks.

Samarkand Pegmatite

These pegmatites are situated in the Bonya Schist and consist of small veins to stocks of medium to very coarse grained sodic plagioclase, quartz, k-feldspar, muscovite, tourmaline, apatite and sphene.

4.2.2 Tertiary

Much of the area is covered by alluvial and aeolian sands and gravels. Ferruginous red soils have developed over iron rich units or from erosion of lateritic surfaces. The outcrops of Arunta rocks are deeply weathered particularly the gneisses and granites.

5.0 PREVIOUS EXPLORATION

1992 and 1993 - Poseidon Exploration Limited. Airborne EM and Magnetic Survey.
Regional work involved RAB checking and reconnaissance over EL7287.

6.0 WORK DONE DURING THE YEAR

Despite the modest assay values reported previously, it was determined that the mapping of the fine to medium, even-grained biotite granodiorite and leucogranites in the southern portion of the tenement should continue to determine if there was a change in the physical appearance of the outcropping rocks.

Continuation of the mapped in the southern portion of the tenement (Figure 2) within the granitic rocks indicated numerous coarser grained, pegmatitic dykes and narrow veins which are potentially a source of rare earth mineralisation and remain a sampling target for future programs.

The pegmatite's consisted of medium to very coarse grained sodic plagioclase, quartz, k-feldspar, muscovite, tourmaline, apatite and sphene. The granites have not yet been classified into the regional geological model.

6.1 Radiometrics

Re-presentation and interpretation of radiometric imagery (Figure 3) was undertaken to gain an understanding of the weathering profile and residual soil geochemistry.

The image clearly indicates the potassium rich alteration zones represented by the outcrop mapping. There does not appear to be a high Th signature which may suggest a reduced level of calcareous / ferruginous accumulations in the region.

Uranium is also poorly represented in the area that was examined.

The Marshall River is well presented by the Total Count imagery however, there appears to be no significant paleochannel representation indicating a consistent flow path of the Marshall River.

6.2 Magnetism

The re-interpretation of regional, broad spaced, TMI data gave a good visual representation of the sub-surface structural boundaries associated with the Mt Cornish prospect. (Figure 4).

The relationship with surface topographical features and trends will be examined as investigations progress. The central region of EL20242 requires detailed geological and structural mapping in order to understand what moderate zinc and lead assayed rocks (from previous exploration) were associated with and if there is a correlation between surface geological features and subsurface magnetic responses.

There has been a limited amount of previous exploration undertaken in several areas of interest and it is expected that the selected areas will be examined during the next field season.

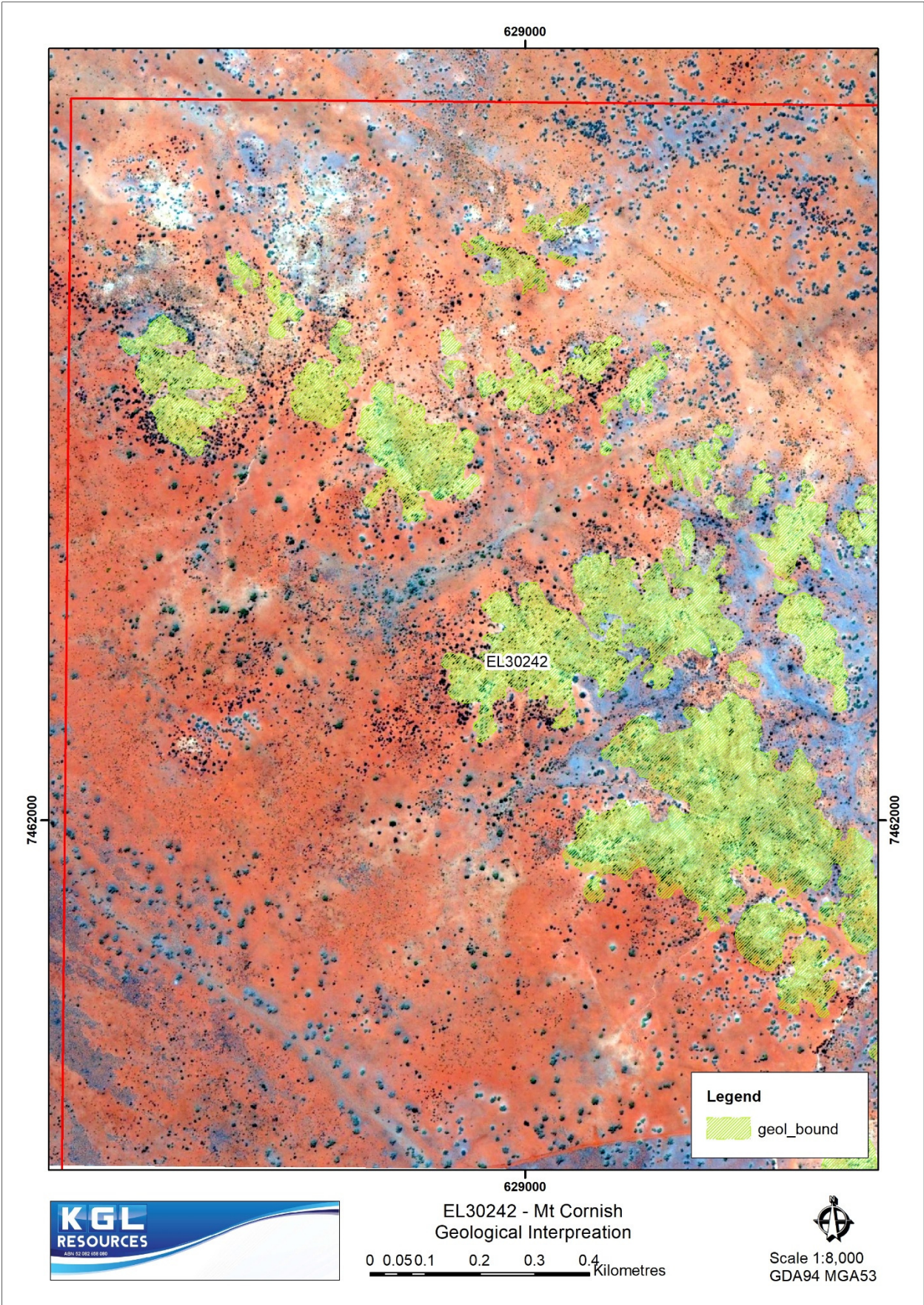


Figure 2. EL30242 – Geological Outcrop mapping.

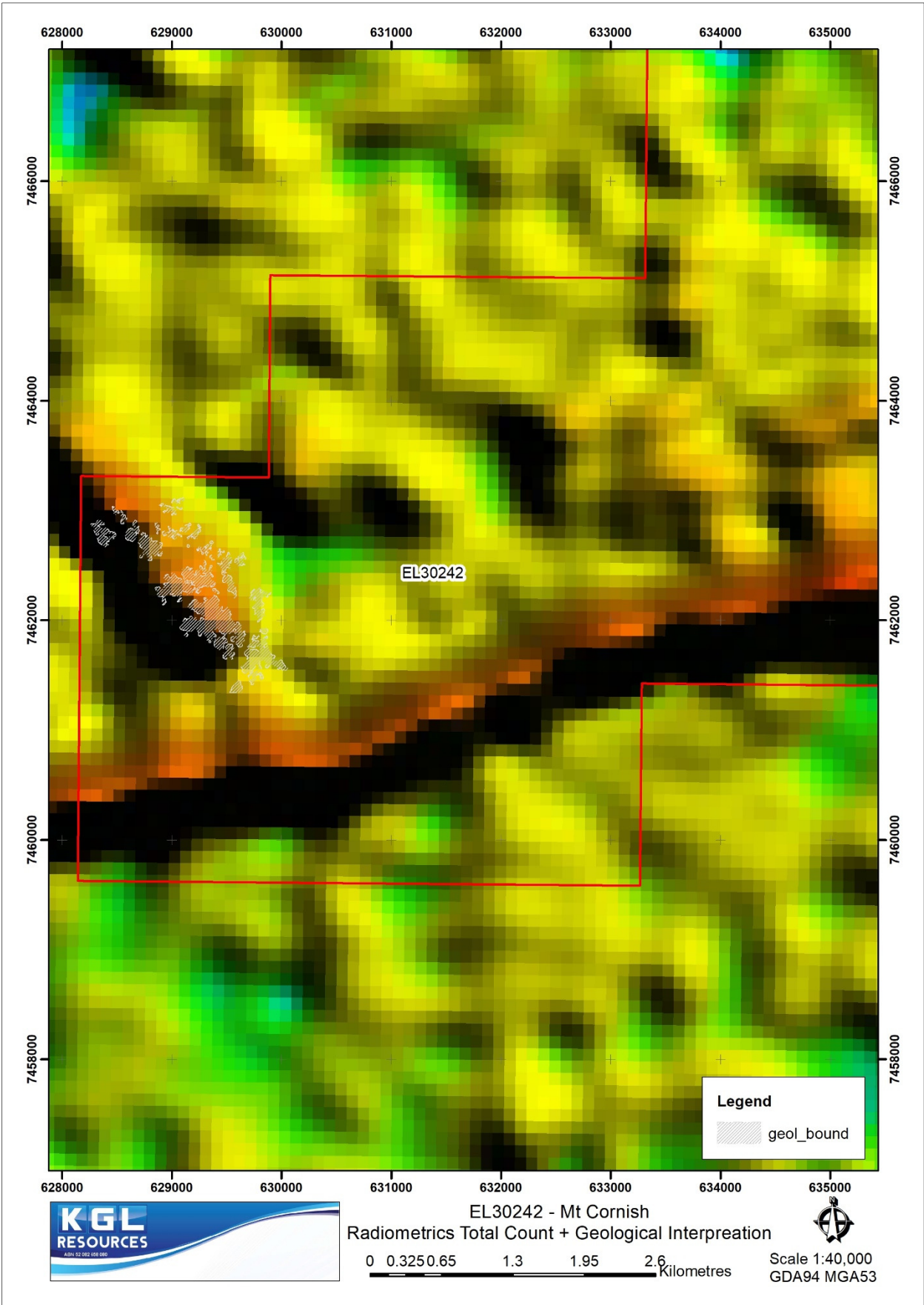


Figure 3. Radiometric Total Count representation.

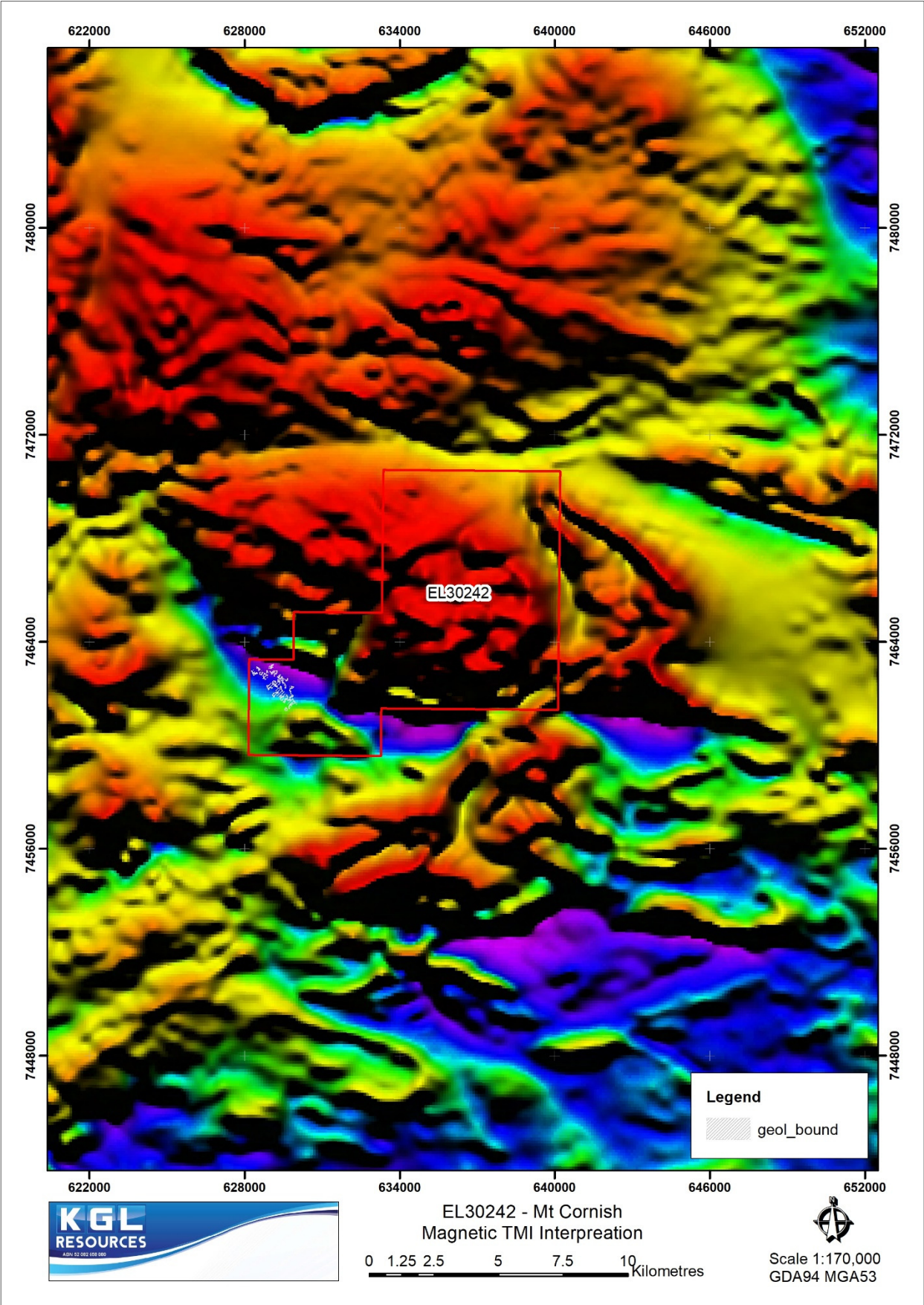


Figure 4. Magnetic TMI representation.

7.0 PROPOSED FUTURE EXPLORATION

The proposed exploration work schedule for 2018 includes;

- i. Regional exploration drilling on previously identified targets
- ii. Structural and geological analysis and interpretation
- iii. Field geological mapping

It is anticipated that the proposed work plan for the 2018 field season will cost approximately \$35,000.00.

8.0 BIBLIOGRAPHY

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