

Loyetea EL12/2014

Final Report on

Surrendered Areas

For: Edrill Pty. Ltd.
September 2021

Summary

This Final Report on surrendered areas of EL12/2014 (Loyetea) details work within these areas, including results of previous works. Edrill Pty. Ltd. wishes to surrender part of EL12/2014 in order to better focus on areas deemed priority targets.

During the period of tenure, Edrill has focused on drilling and limited ground magnetics within the retained area, and did not complete work within surrendered areas.

Key exploration targets within EL12/2014 were granite related Sn-W magnetite skarn, as well as skarn and vein Cu-Pb-Zn mineralisation, and some VHMS potential within Mount Read Volcanics mapped within the licence area. Although the surrendered areas contain a significant portion of the contact between the Husetop Granite and variably skarned host sediments, the local Cambrian Middle Owen Group rocks are considered less prospective than rocks to the north in the retained area.

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Introduction

This Final Report on surrendered areas of EL12/2014 (Loyetea) details work within these areas, including results and interpretation of previous works. Edrill Pty. Ltd. wishes to surrender part of EL12/2014 (see Figure 2) in order to better focus on areas deemed priority targets.

EL12/2014 is located in NW Tasmania, approximately 25km south of Burnie, and was granted to Edrill Pty. Ltd. on 30/7/2014. In 2019, the tenement was reduced in size from 83km² to 40km², with this further reducing the tenement to 22.5km².

During the period of tenure, Edrill did not complete work within surrendered areas.

Key exploration targets within EL12/2014 were granite related Sn-W magnetite skarn, as well as skarn and vein Cu-Pb-Zn mineralisation, and some VHMS potential within Mount Read Volcanics mapped within the licence area. Although the surrendered areas contain a significant portion of the contact between the Housetop Granite and variably skarned host sediments, the local Cambrian Middle Owen Group rocks are considered less prospective than rocks to the north in the retained area.

All coordinates in this report are located in GDA94, MGA Zone 55.

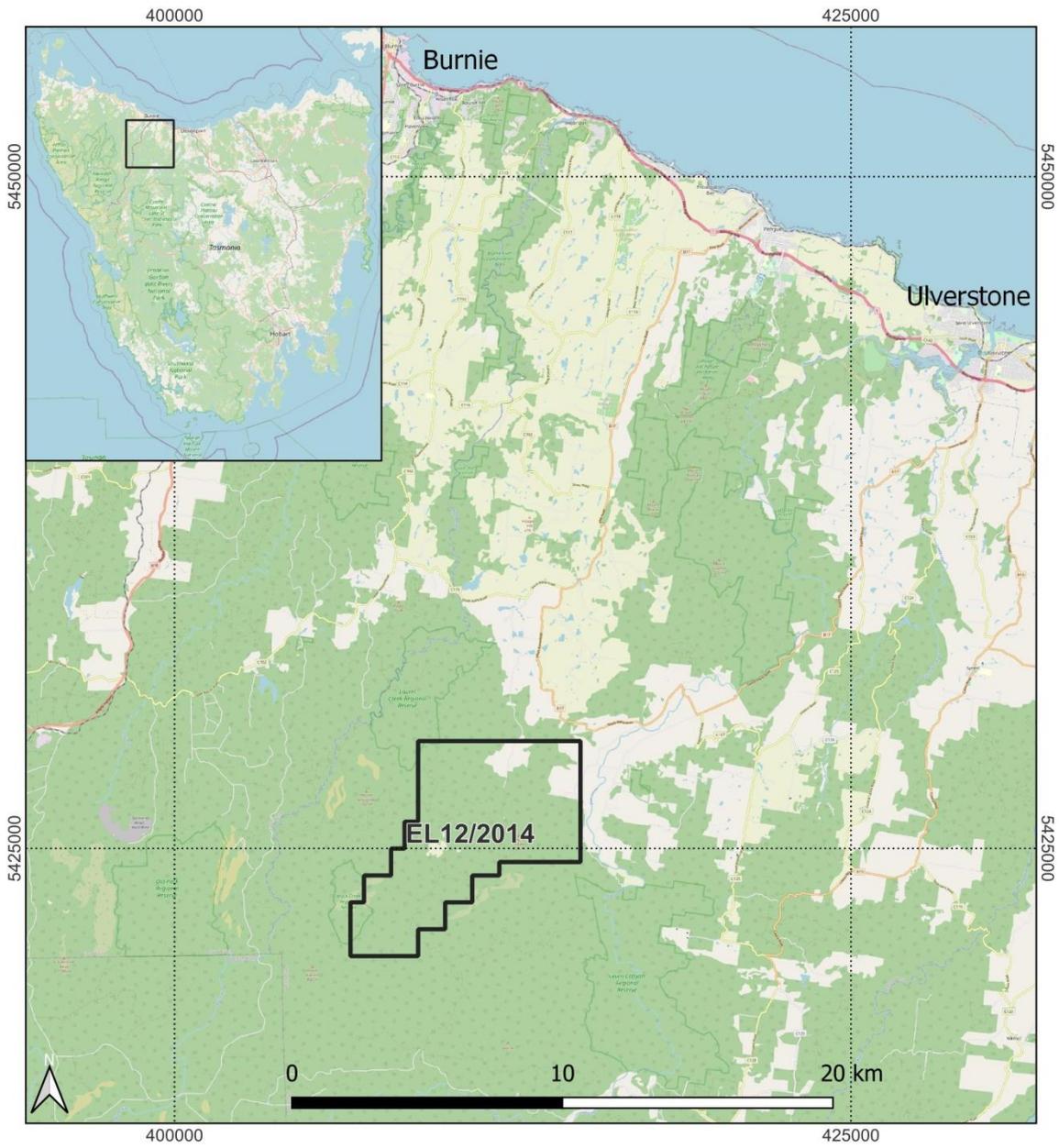


Figure 1: Location of EL12/2014.

Access

EL14/2014 is located approximately 30km to the south-west of Ulverstone, and is best accessed via B17 (Gunns Plains/South Riana Road), and turning west on to Loyetea Road. Access within EL14/2014 is excellent, with Loyetea/Alstergren Road continuing through the centre of the property, and numerous trails branching off these to various parts of the property.

Geology

Figure 3 shows the geology of EL14/2014. The geology of the area is generally oriented NE-SW, and youngs to the NW. Predominantly felsic Cambrian Tyndall Group volcanoclastics and volcanics of the Mt Read Volcanics are located near the eastern margin of the property. Cambrian rocks are overlain by a conglomerate with pebbly sandstone, siltstone and volcanoclastics of the Cambrian Lower Owen Conglomerate. These are overlain by Middle Owen Conglomerate marine sediments including siltstone, sandstone and conglomerate. Ordovician sediments overlie the Cambrian rocks, with a siliciclastic pebble conglomerate overlain by pale grey to pink quartz sandstones of the Moina Sandstone. The Ordovician Gordon Group limestone overlies the Moina Sandstone. The Moina Sandstone and Gordon Limestone units appear to be partly intercalated.

The Devonian Husetop Granite, in the western part of the area, has intruded the above rocks, and was emplaced within the Ordovician Moina Sandstone and Gordon Limestone. The Husetop Granite is an I-type medium- to coarse-grained equigranular biotite±hornblende bearing granite of alkali feldspar/syenogranite/monzogranite composition, with minor porphyritic and fine-grained variants.

Tertiary basalt and sediments occupy the central portion of the area, obscuring much of the contact zone between the granite and Cambro-Ordovician rocks. Tertiary sediments mostly underlie basalts, and locally appear to be largely composed of weathered Cambro-Ordovician rocks, granite, and some clasts of magnetite. Vesicular basalt flows are generally poorly magnetic, while zones of massive basalt are occasionally strongly magnetic.

Various Quaternary sediments form extensive cover in the NE part of the tenement, including talus sourced from Owen Group rocks in addition to the Tertiary basalt, older Quaternary stream deposits, and Quaternary alluvium and marsh deposits.

Structure

The geology of the licence is structurally complex, and is dominated by a NE-trending lineament controlling the eastern margin of the granite. Bedding within Cambrian and Cambro-Ordovician units is generally oriented NE-SW. At least two generations of folding have affected these rocks (Ruxton, 1984). In the northern part of the property, Cambrian sediments are in contact with the Husetop Granite with Ordovician rocks to the east. These are located to the NE of a major fault zone, and represent the western limb of a NE-dipping synclinal structure largely covered by Tertiary and Quaternary materials.

NE-trending structures are offset by frequent NW trending faults, which appear to have strong control over the northern and southern margins of the granite. These faults are post-Ordovician, producing dextral offset in the southern part of the property. A parallel fault in the northern part of the area may represent a large normal fault with a sinistral component. Downthrow of the NE block reveals a

north-dipping synform structure in Cambrian and Ordovician sediments. A similar structure is seen in Cambro-Ordovician sediments at the contact with the Husetop Granite a short distance to the south. Shortening in a NE-SW direction occurred during the Devonian Tabberabberan Orogeny(?), producing secondary folding on a NW-SE axis.

The central and eastern portions of the licence area subject to extensive Tertiary and Quaternary cover, including Tertiary basalt flows which have preserved underlying Tertiary sediments, while Quaternary materials include various talus and alluvium, swamp and marsh deposits.

Mineralisation and Alteration

Known mineralisation associated with the Husetop Granite is primarily tin, magnetite and tungsten, occurring either within the granite as vein mineralisation or near the Moina Sandstone/Gordon Limestone interface as part of skarn alteration systems. Within EL12/2014 there are 10 listed mineral occurrences. Nine of these are located within or on the margin of the granite, with a single Zn occurrence noted in the vicinity of Loyetee Peak. This Zn occurrence has been attributed to local high background values and is of no further interest.

Occurrences within the granite are narrow veins, with Sn mineralisation related to quartz-tourmaline veins, and Cu related to quartz-chlorite veins, and of no economic interest. The remaining occurrences are located along the margin of the granite, and are all related to skarn mineralisation proximal to the granite contact.

Observed skarn mineralisation is primarily contact related endoskarn within 'dirty' carbonates of the transition zone between the Moina Sandstone and Gordon Limestone. Mineralisation is primarily pyrrhotite and magnetite, with a halo of weakly disseminated pyrite.

Calc-silicate alteration is the most pervasive skarn alteration, with fine garnet, pyroxene and actinolitic skarn proximal to the granite contact, preferentially infiltrating the limestone along some beds. Retrograde epidote alteration occurs in some exoskarn zones, typically coinciding with strong pyrrhotite and/or magnetite mineralisation.

The Husetop Granite is typically K-altered, and commonly features biotite altering to actinolite, with pervasive sericite alteration, minor albite and disseminated magnetite.

Previous Work

The following is partly taken from Reid (2020), who summarises and adds to Murphy and Bates (2009) and Hansen (2014). The vast majority of work has been completed over parts of EL12/2014 that are being retained, including all known drillholes and ground geophysics. Significant geophysics of note is the Comalco Redwater Creek IP and Bass Metals commissioned VTEM survey extending across, as well as north and south of the tenement (see Figure 3). Placer Exploration Ltd. completed the majority of surface geochemistry in areas proposed for surrender.

A total of 146 stream sediment, BLEG and panned concentrate samples and 3 rock samples are known from the southern area proposed for surrender, with an additional 46 stream sediment and panned concentrate sample known from the eastern area for surrender. The bulk of exploration work in the surrendered areas is stream sediment sampling, and was conducted by Comalco and Placer Exploration Ltd. Distribution of these samples is shown in Figure 4.

Comalco – Shell 1976 - 1981

Weste (1979) reported rock chip and auger sampling, with Sn to 490ppm and 1500ppm W in the latter. Comalco undertook grid based ground magnetics and IP in the Redwater Creek area.

Comalco drilled five diamond holes at Loyetea exploring for F, Sn & W. Comment and results follow:-

In RED1, analysis for Sn reached 150ppm and W reached 55ppm. Zn to 700ppm was returned. No other appreciable results were returned. There was poor core recovery over parts of the drill hole. The upper portion of the hole was logged as Tertiary breccias, whereas reported strained fabrics in clays and magnetite pebbles enables re-interpretation of these rocks correlating with the Puffers Creek / Loyetea Road fault zone.

Analysis in RED2 was more encouraging with Sn reaching 430ppm and W 760ppm. Zinc commonly hovers around 0.1% in most samples. Re-interpretation as largely faulted in the upper portion of the hole is warranted. Closer to the granite at depth is what reads as faulted but possibly near in-situ magnetite then calc-silicate altered skarn. Notably the sediments adjacent to the granite in the Loyetea Road section are missing.

RED3 drilled Tertiary Basalts with basal deep lead deposits, over highly weathered granite. The granite base is faulted and 2m of limestone at the end of hole may be a fault clast(?). Hole terminated in limestone. No sampling was undertaken but subsequent samples reported by Banwell (1982) were very low for Sn, W, Cu, Pb and Zn. Banwell (1982) notes that this hole was terminated early, prior to intersecting the magnetic anomaly on 6100N. RED5 tested the magnetic anomaly missed by RED3.

Banwell (TCR82_1784) reports further investigation of the Redwater Creek and Laurel Creek West prospects. Included further gridding extending south on the Redwater Creek Grid, but no soil sampling was undertaken due to extensive Tertiary basalt cover. RED4 testing an IP chargeability anomaly, was extensively sampled top to bottom of hole and returned nothing anomalous; Sn max 40ppm. No Fe analyses were undertaken. The basal 75m of this 349.6m hole possibly drilled down a fault.

Significant analysis from RED5 include 450ppm Sn, 150ppm W, 450ppm Zn, 0.23ppm Au, 230ppm Bi and 31.8% Fe from magnetite skarn (167.8 to 168.2m). Fe values ranged from mostly 5 to 11, peaking at 34.4%. RED5 had a significant swing in azimuth toward holes end (261 to 283), which may have been magnetite influenced. It's unclear if RED4 & 5 surveys are reported as true or magnetic north; actual drill logs are scantily reported.

Soil geochemistry was undertaken at Laurel Creek and Laurel Creek West with analysis for Cu, Pb & Zn. Ground magnetic at Laurel Creek West revealed a narrow anomaly targeted by drill hole PD1. This work is yet to be assessed.

Placer Exploration Limited 1988-1990

Placer Exploration identified areas of weakly anomalous Au in Laurel Creek and its tributaries through extensive stream sediment sampling, but could not locate the source of mineralisation through geological mapping or rock chip sampling. They concluded the gold may be associated with faulting along the granite/sediment contact, but the level of mineralisation was considered unpromising for a nearby economic deposit (Ellis, 1990).

Bass Metals 2005-2009

Bass Metals conducted the most recent exploration on the area, including a 455.8 line km VTEM survey, geological mapping and modelling. Interpretation of VTEM data produced a large VTEM conductor coincident with a magnetic anomaly approximately 600m to the south of the Pilbeam Road mineral occurrence at a depth of approximately 250m. A 350m drillhole was proposed for this target, but it was not drilled prior to relinquishment of the property.

The magnetic high coincides with Tertiary basalts in the area. Although the upper basalts appear to be poorly magnetic, lower basalts are typically weak to moderately magnetic. Basalts are commonly underlain by Tertiary sediments, which have been noted in current drilling to contain rich magnetite clasts of up to cobble size.

The most likely source of magnetite clasts within Tertiary sediments is considered to be skarn altered calcareous Cambrian to Ordovician sediments, which may have been exposed during the Tertiary and subsequently eroded. The magnetic high reported as coincident with the VTEM high continues below Tertiary materials to the NE in what is thought to be a paleochannel. However, the magnetic feature does not continue to the SW, suggesting the identified VTEM anomaly may be the source of magnetite within Tertiary sediments. This would be considerably shallower than modelled, resulting in a smaller mineralised body. In the northern part of the property, Cambrian and Cambro-Ordovician sediments to the NW and SE of the Tertiary basalts are also highly magnetic, but these appear to be stratigraphic features.

Edrill Pty. Ltd. 2015-2021

During the period of tenure, work by Edrill focused on ground to the north and west of the areas to be surrendered, identified as more prospective. No ground work has been completed in either of the areas to be surrendered.

Work Conducted

Edrill conducted no work in the surrendered portion of EL12/2014 in the current reporting period.

Interpretation

Edrill's primary exploration target remains granite related Sn-W magnetite skarn, as well as skarn and vein Cu-Pb-Zn mineralisation. VHMS potential within Mount Read Volcanics mapped within the licence area has not been investigated to date, and is retained along with ground considered most prospective for skarn mineralisation.

Historic stream sediment data show the majority of elevated and anomalous surface geochemistry occurs within the areas proposed for relinquishment. However, Tertiary basalts and sediments, and Quaternary talus and sediments overlie the majority of ground to be retained, likely concealing any geochemical signature.

In the southern area for surrender, TMI data from Bass Metals clearly defines the margin of the granite intersected and offset by multiple NW-trending faults. Weakly anomalous Au was noted by Placer Exploration here, and interpreted as associated with these faults with little economic interest. A NE-trending magnetic high feature about 800m to the SE of the granite-sediment contact is a moderately magnetic feature. This is located along a drainage, which does not exhibit anomalous geochemistry, although samples in multiple tributaries are elevated in various elements. Several parties have noted large boulders of 'ironstone' in drainages across the property during field inspections, and it is interpreted here that the magnetic feature relates to a concentration of magnetite-rich colluvium and alluvium. It is unknown if the elevated geochemistry in tributaries relates primarily to a higher background within Cambrian rocks in the area.

Conclusions

Previous exploration in the area has focused primarily on Sn, W, F, and Fe around the margin of the Housetop Granite, and results have consistently suggested the most prospective area is located within the retained area of EL12/2014. While elevated Au has been noted to the south of this, it appears associated with NW-oriented faulting, and is only marginally anomalous. The likelihood of a structurally-related economic Au deposit in this area is considered highly unlikely, and surrender of the southernmost part of EL12/2014 is recommended.

The easternmost part of the licence contains the "Loyetea Peak" mineral occurrence. However, this occurrence is described as anomalous Pb/Zn in stream sediments, and no former workings or mineralised outcrop is known in the area. Although limestone has been mapped below Quaternary cover in the area, there has been no indication to date of mineralisation of this unit at such a large distance from the granite (>2km), and is also recommended for surrender.

The remaining area includes the contact zone between the Housetop Granite and the Gordon Limestone, considered the most prospective part of the licence, and several other zones yet to be properly assessed, and is recommended for retention.

Environment

No work was completed on site in the period

Expenditure

There was no expenditure within the surrendered area during the period of tenure.

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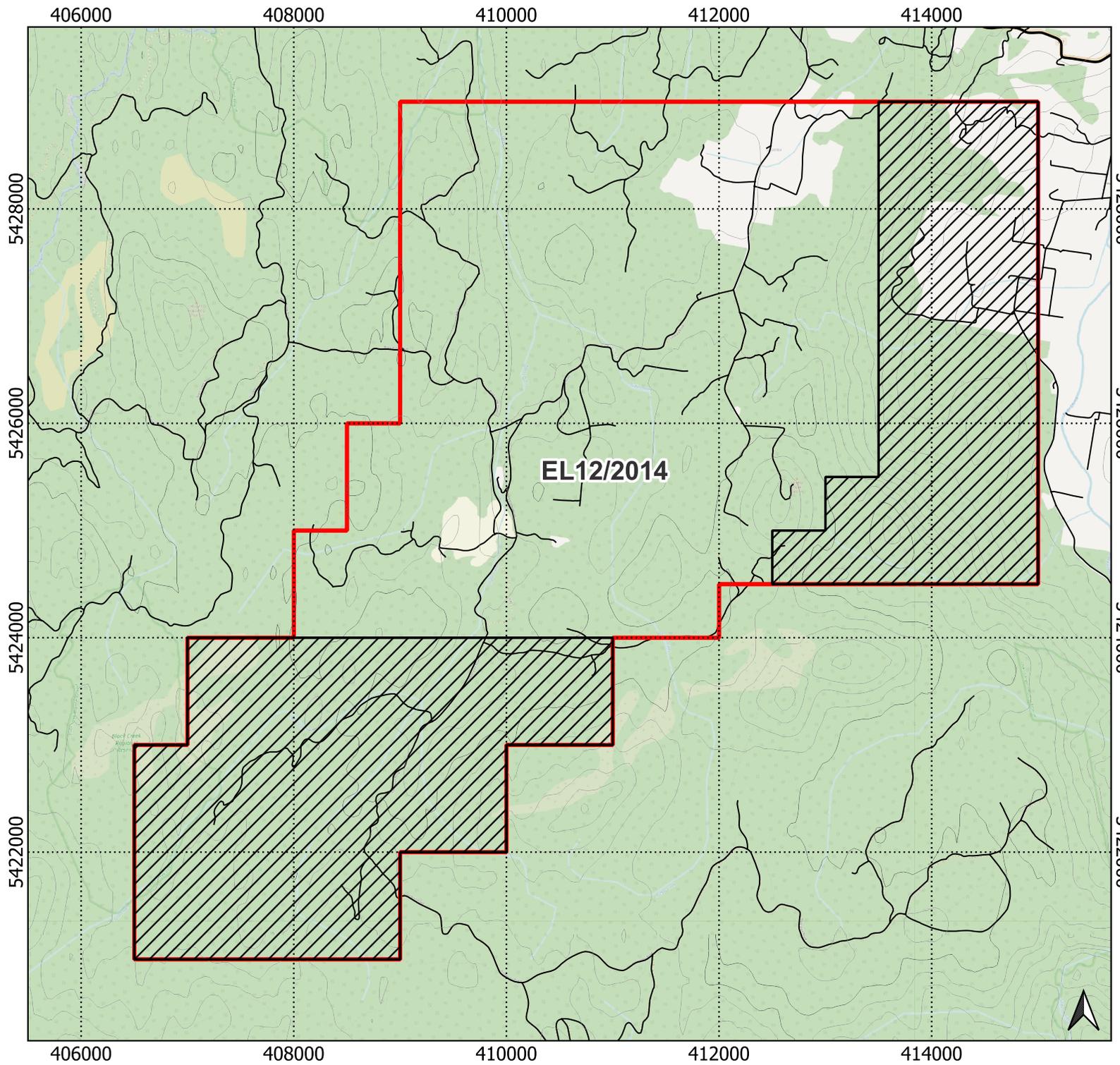


Figure 2:
EL12/2014 Loyetea
 Partial Surrender
 1:50,000

Legend

- Partial surrender
-  Surrender
-  EL12/2014 Boundary
- Road Centrelines
-  Sub Arterial Road
-  Local Road

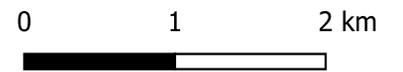
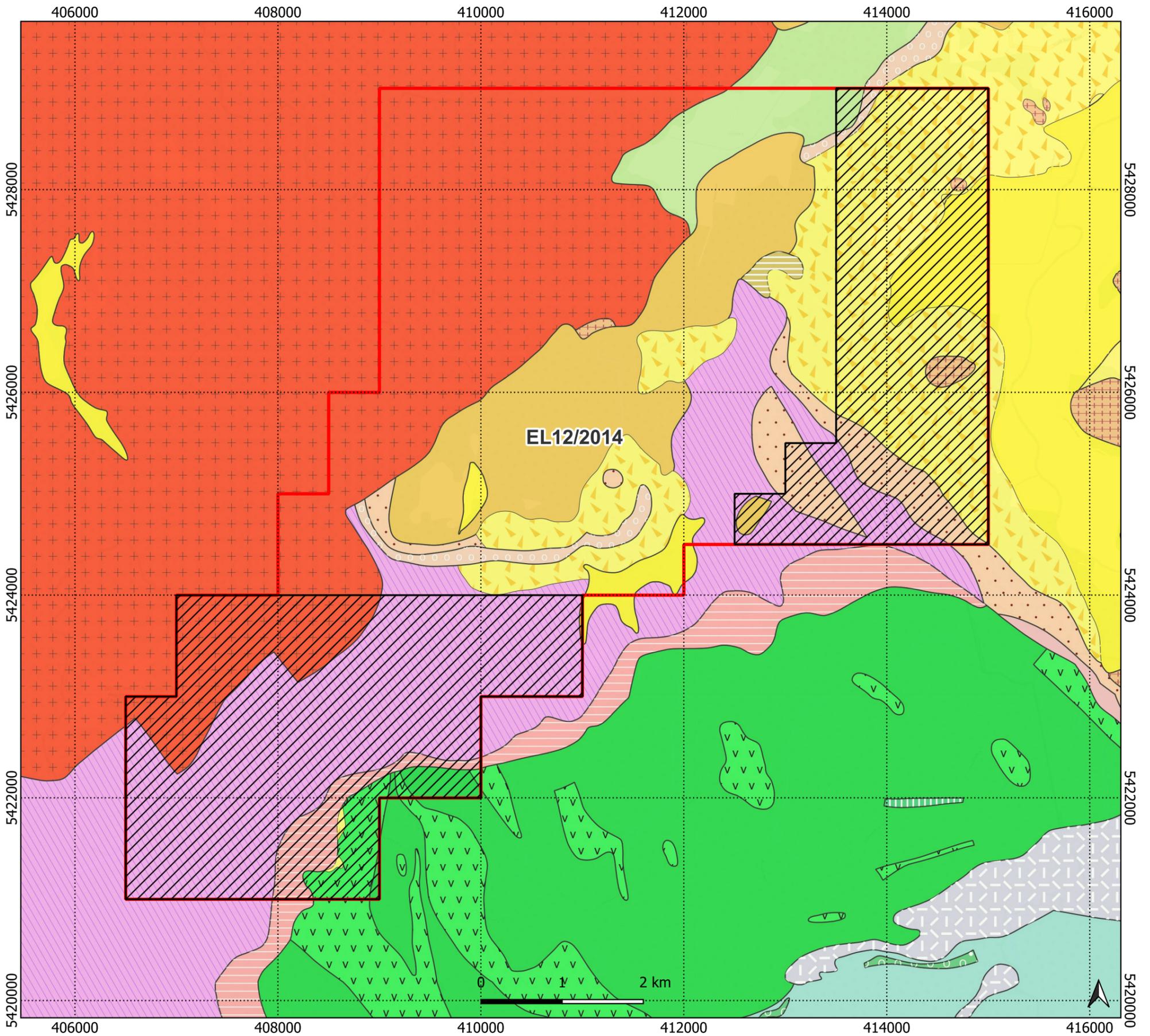


Figure 3: Geology of EL12/2014 Loyetea

Partial Surrender
1:40,000



Partial surrender

-  Surrender
-  EL12/2014 Boundary

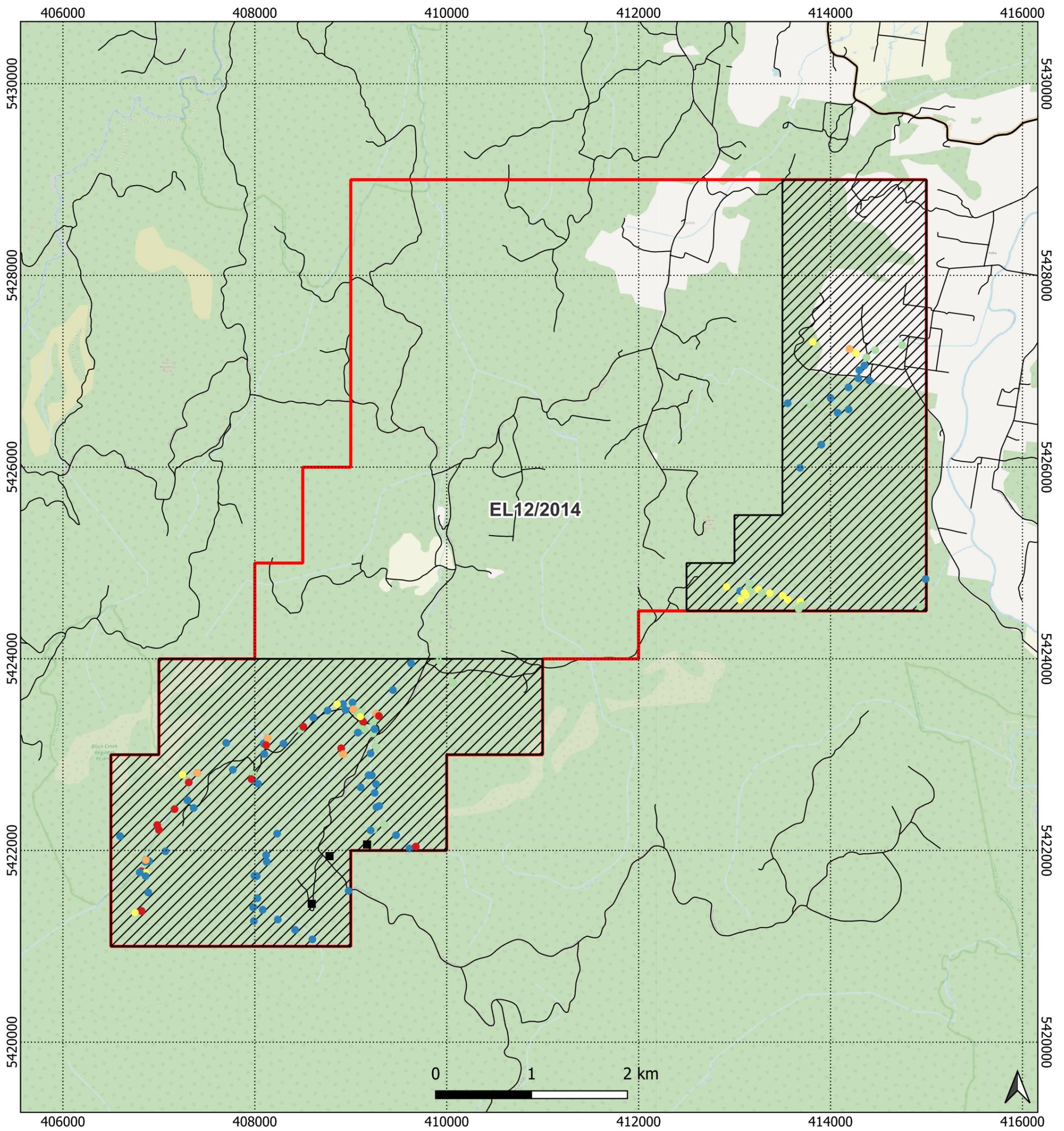
Geology

-  Quaternary alluvium, swamp and marsh deposits
-  Quaternary talus - basalt
-  Quaternary talus
-  Tertiary basalt
-  Tertiary grey-billy and silcrete
-  Devonian Housetop Granite
-  Ordovician Gordon Group Limestone with minor siltstone and sandstone
-  Ordovician Moina Sandstone. Pale grey to pink, commonly cross-bedded quartz sandstone, coarse and pebbly in places.
-  Ordovician siliclastic pebble conglomerate

-  Cambrian Owen Group undifferentiated
-  Cambrian Middle Owen Group. Marine siltstone, sandstone and conglomerate
-  Cambrian Lower Owen Conglomerate. Conglomerate with pebbly sandstone, minor siltstone and volcanoclastics
-  Cambrian Lobster Creek Intrusives. Massive plagioclase-hornblende phyric dioritic, andesitic and dacitic intrusives
-  Cambrian siliceous conglomerate and sandstone, typically with quartzite and chert clasts
-  Cambrian Gog Range Greywacke. Marine volcano-sedimentary and sedimentary sandstone, siltstone, mudstone, conglomerate and breccia
-  Cambrian Tyndall Group. Interbedded siltstone, mudstone and volcanoclastic sandstone
-  Cambrian Tyndall Group. Dacitic Lava
-  Cambrian Tyndall Group. Interbedded volcanoclastic and volcanic rocks
-  Cambrian undifferentiated sediments. Shale, siltstone, lithicwacke, sandstone and conglomerate. Minor volcanoclastics and rare felsic lava.

Figure 4: Historic stream sediment and rock samples in surrendered parts of EL12/2014

1:40,000



- Historic rocks_Surrendered areas Partial surrender
- Historic sediments_Cu (ppm)
- Surrendered areas
- 0 - 5
- 5 - 15
- 15 - 30
- 30 - 50
- 50 - 193
- ▨ Surrender
- ▭ EL12/2014 Boundary
- Roads
- Sub Arterial Road
- Local Road