

**Leached Cap Pty Ltd
E.L. 3/2014 Duck River
Annual Report Year 1**

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31 October 2015**

CONTENTS

	Page No
SUMMARY	1
1. TENEMENT DETAILS	1
2. GEOLOGY	5
3. EXPLORATION AIMS & PHILOSOPHY	5
4. SUMMARY OF PREVIOUS EXPLORATION	6
5. GEOPHYSICS	6
6. IMPLICATIONS OF EL19/2012 WORK	6
7. EXPENDITURE	6
8. ENVIRONMENTAL ISSUES	7
9. PLANNED PROGRAMME	7
10. REFERENCES	7

FIGURES

Figure 1. EL 3/2014 Location map

APPENDIX 1

Airborne geophysics report

SUMMARY

This report summarises the Year 1 activities of EL3/2014.

Leached Cap Pty Ltd has undertaken exploration of a 3 km long zone of outcropping silicification close to the Roger River Fault (RRF), primarily located in adjacent EL19/2012. The work to date has been designed to test the concept that the silicification is an intensely leached cap to an epithermal system which may contain gold mineralisation at depth. Low level soil and rock chip anomalies achieved by previous explorers, the presence of warm water springs and mounds along the faulted eastern margin of the Smithton Basin, and similarities between the geology at Roger River and established epithermal gold districts elsewhere, all support this model.

Four lines of Induced Polarisation and Resistivity (IP) were completed in 2014 over the RRF and silicification within contiguous EL19/2012. The IP programme outlined chargeability anomalies to the east of the RRF, and resistivity outlined the RRF as a resistive zone steeply dipping to the east.

The chargeability anomalies show a shallow dip to the east which was the reason for applying for the additional area contained in EL3/2014.

In EL19/2012, hole RRD01 tested one of the chargeability highs and showed it was due to syngenetic pyrite within a sequence of primarily siltstones, shales and sandstones. This pyrite is unrelated to the RRF siliceous zone and therefore is concluded to not be an indicator of mineralization associated with the epithermal system.

RRD01 consequently downgraded the chargeability anomalies and moved the focus for future exploration back to a corridor approximately 1 kilometre wide on either side of the RRF.

During the year, all available aeromagnetic and airborne electromagnetic survey data was re-processed and evaluated. This did not provide any immediate targets for follow-up apart from those already defined by previous mapping.

Depending on funding availability, a small close-spaced soil and stream sediment sampling programme is being planned for early 2016 in the most prospective sections of the EL near the north Whitewater Prospect.

1. TENEMENT DETAILS

EL 3/2014 is a 10km² licence centred on Duck River, approximately 25 km by road south of Smithton, NW Tasmania (Figure 1). The licence was granted to Leached Cap Pty Ltd (Leached Cap) by Mineral Resources Tasmania (MRT) for a 5 year term commencing on 17th November 2014. The expenditure commitment for the first 2 years was put at \$100,000 by MRT. A Partial Surrender of 5km² was submitted on 16 September from the original 15km².

Land tenure comprises mainly private land which is a mix of beef and dairy cattle farms, and eucalypt plantation owned by Gunns Ltd and remnant native bush. All year round access to the area is via the bitumen roads Trowutta Road and Roger River Road which run through the centre of the licence for its entire length (Fig. 1).

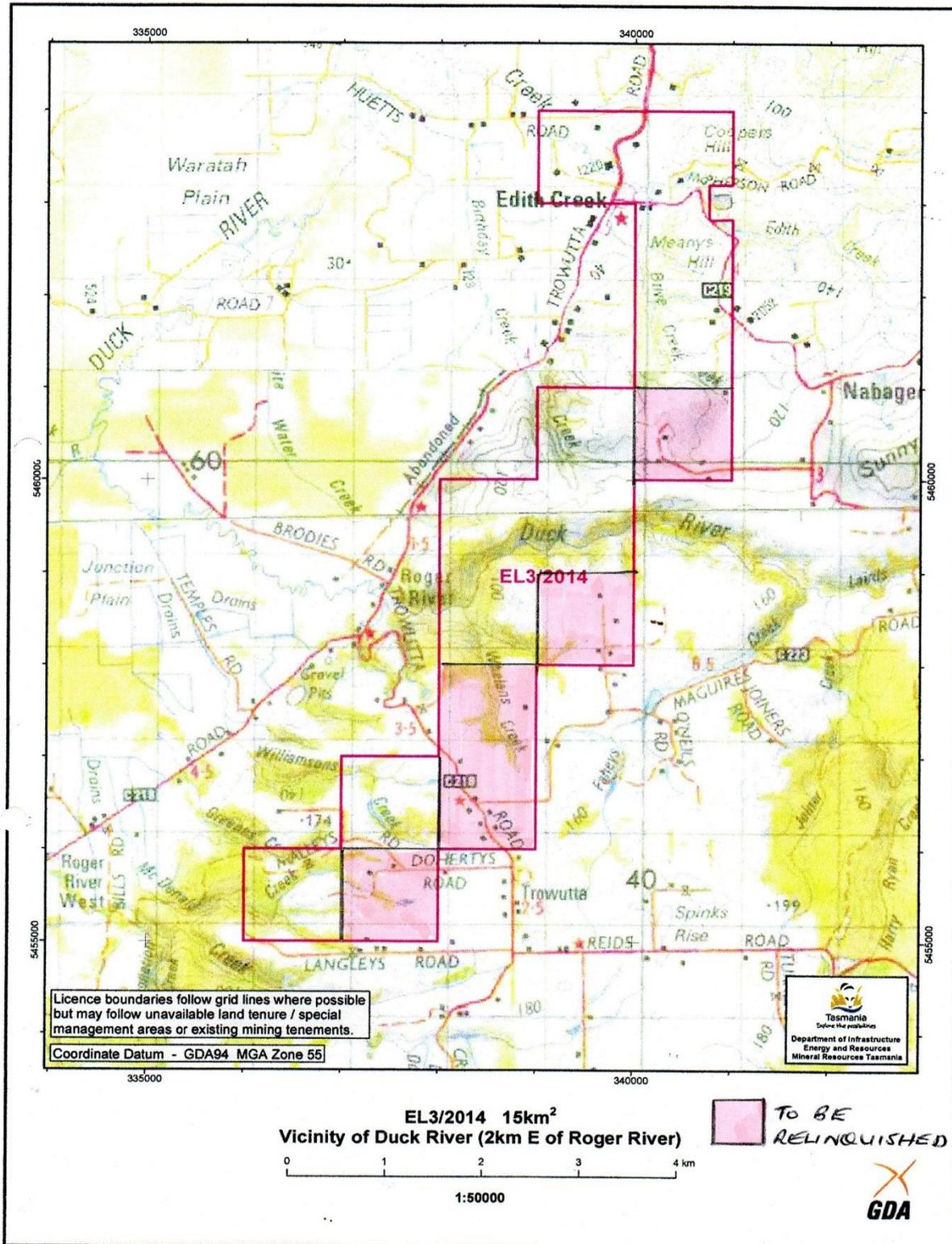


Figure 1. Location map showing EL3/2014 and the partial relinquishment blocks. [REPLACE]

2. GEOLOGY

EL 3/2014 covers a northern portion of the Roger River Fault (RRF), a NNE trending major structure transecting Neoproterozoic rocks at the eastern margin of the Smithton Basin/Smithton Synclinorium (Smithton 1:50,000 Geological Atlas Series sheet, Roger and Togari 1:25,000 Digital Geological Atlas Series sheets). The RRF cuts through the eastern limb of a north-plunging synclinorium containing the Neoproterozoic Togari Group. The Togari Group consists of a basal dolomite-chert-lutite sequence (Black River Dolomite), overlain by an interstratified mixed sedimentary and volcanic sequence (Kanunah Subgroup), overlain in turn by the Smithton Dolomite and the Salmon River Siltstone. A distinctive member of the Kunannah Subgroup is a massive basalt unit (Spinks Creek Volcanics).

In the area covered by EL3/2014 and EL19/2012 the precise location of the RRF is commonly masked by surficial sediment cover but it appears to be close to the contact between the Smithton Dolomite to the west and the Kunannah Subgroup to the east. Outcrop of the Smithton Dolomite is restricted to drainage ditches excavated into the flat lying farm land west of the fault and it is reasonable to interpret the fault location as being close to the persistent break in slope at the boundary between the well exposed Kunannah Subgroup on the eastern hill slopes and the largely regolith and soil covered Smithton Dolomite on the flat westerly side of the fault. The current dip direction on the Roger River Fault and the relationship between the fault and discrete zones of silicification are unclear and these are significant issues for the current exploration program, as will be discussed below. Although mapping suggests that the younger Smithton Dolomite appears to be down thrown to the west, implying a normal fault dipping to the west, Everard et al (2007) note that the Black River Dolomite and The Kunannah Subgroup thicken from west to east across the fault zone, suggesting syn-depositional growth faulting and the possibility of an easterly dip, at least during the Proterozoic. By comparison with other major basin bounding faults in western Tasmania it is likely that the Roger River Fault has been through at least two major orogenic deformation events during the Paleozoic and it may have been reactivated again during the regional Cenozoic rifting and volcanism associated with the development of the Bass Basin (Morrison, 2014).

3. EXPLORATION AIMS and PHILOSOPHY

Leached Cap is specifically targeting the zone of silicification which extends for approximately 3 km along the strike of the RRF. Prospectivity for epithermal gold mineralisation at depth beneath the outcropping silica has been established by previous mapping and exploration geochemistry (Turner, 2001, 2003, 2009) and the current exploration program is based on the concept that the outcropping silica represents heavily leached high level capping to an epithermal system analogous to some established gold epithermal provinces elsewhere on Earth (eg. Radtke and Davis, 1990). The presence of geologically juvenile mounds and warm water springs along the eastern margin of the Smithton Basin supports the model.

Davis (2014) summarises the aims and results for the first two year programme in EL19/2012 which has had a direct bearing on the potential of EL3/2014. The aim of the work was to confirm the relationship between the outcropping silicification and the RRF, to test the current dip direction on the fault and to test for mineralisation at depth. This was to be achieved by a combination of re-interpreting existing magnetics and gravity data, conducting

a new IP survey and the drilling of three targets.

4. SUMMARY OF PREVIOUS EXPLORATION

Previous exploration which has direct relevance to the current programme is restricted to mapping, rock chip and soil geochemistry and on-ground gravity and magnetics, conducted by Greenstone Resources NL and Morrith Holdings Pty Ltd, between 2001 and 2003, on ELs 61/1994, 11/1997, 12/1997, 13/1997, 14/1997 and 17/2001 (Turner, 2002, 2003). some further compilation and interpretation of results from this work was done for Manasia Mining and Metals Ltd on their EL 31/2005 (Turner, 2009).

Mapping demonstrated a series of outcropping bodies of erosion resistant micro crystalline cherty silica with a variety of textures ranging through massive, brecciated, banded, honeycombed and pitted. The outcrop is distributed along a narrow, 3 km long and up to 300 metres wide, zone conformable with the probable sub-crop position of the RRF.

Selective rock chip sampling on outcrop and several east-west lines of soil sampling across the zone detected spotty low level anomalism for; gold (max 15 ppb), arsenic (max 1273 ppm), antimony (max 30 ppm), copper (max 886 ppm), zinc (max 510 ppm) and lead (max 302 ppm). One rock chip sample from outcrop in an abandoned road aggregate quarry at Roger River (approximate location 336550E, 5457600N MGA) included visible barite and assayed almost 6% barium and 1.5 ppm mercury (Turner, 2003).

No follow up field work was conducted on this target prior to the current programme commenced by Leached Cap.

5. GEOPHYSICS

Phil Muir of SMEG consultants was requested to undertake a review and re-processing of all available airborne geophysical data over the Duck River and Roger River ELs. This work is contained in the Appendix I. No new targets for follow-up were defined.

6. IMPLICATIONS OF EL19/2012 WORK

The drilling of the chargeability anomaly in hole RRD01 in EL 19/2012 demonstrated that the syngenetic sulphides within siltstones, sandstones and shales to the east of the RRF were not related to the epithermal system along the RRF, and therefore the areas to the east and further than approximately 1 kilometre from the RRF are considered un-prospective for this style of mineralisation.

7. EXPENDITURE

Expenditure to 31 October has been primarily on the geophysics re-processing and geological assessment.

Category	Cost \$
Geology	3,375
Geophysics	1,455
Administration & Tenement Costs	750
Total	5,580

8. ENVIRONMENTAL ISSUES

As no field work has been conducted in these areas, there have been no environmental issues.

9. PLANNED PROGRAMME

As the testing of the IP chargeability anomaly by RRD01 in EL19/2012 demonstrated that the chargeability anomalies are unrelated to the RRF epithermal system, the focus of the exploration has to change from an initially proposed extension of the IP programme and associated conceptual studies related to the IP programme.

Subject to the availability of funds, a stream sediment and targeted soil sampling programme may be carried in the north Whitewater Prospect area of the EL in early 2016.

10. REFERENCES

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APPENDIX

SMEG Airborne Geophysics Report