

**Leached Cap Pty Ltd  
E.L. 19/2012 Roger River  
Annual Report Year 4**



Silicified dolomite fragment-rich diatreme breccia, Church Prospect

**Geoff Davis  
Consulting Geologist  
December 2016**

## CONTENTS

	<b>Page No</b>
<b>SUMMARY</b>	<b>1</b>
<b>1. TENEMENT DETAILS</b>	<b>1</b>
<b>2. GEOLOGY</b>	<b>5</b>
<b>3. EXPLORATION AIMS &amp; PHILOSOPHY</b>	<b>5</b>
<b>4. SUMMARY OF PREVIOUS EXPLORATION</b>	<b>5</b>
<b>5. GEOPHYSICS</b>	<b>6</b>
<b>6. DRILLING, LOGGING and ASSAYING</b>	<b>6</b>
<b>7. LOCAL GEOLOGY</b>	
<b>8. C-HORIZON SOIL SAMPLING</b>	
<b>9. EXPENDITURE</b>	<b>8</b>
<b>10. ENVIRONMENTAL ISSUES</b>	<b>8</b>
<b>11. RECOMMENDATIONS</b>	<b>8</b>
<b>12. REFERENCES</b>	<b>8</b>

### **FIGURES**

Figure 1. EL 19/2012 Location map

Figure 2. Geology map showing drill holes

Figure 3. Location and results of C-horizon soil sampling

### **APPENDIX I**

C-horizon soil sample descriptions and assays

### **APPENDIX II**

Stream sediment sample descriptions and assay

## **SUMMARY**

**This report summarises the Year 4 activities within EL19/2012.**

**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 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 anomalism 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.**

**In Year 1, four lines of Induced Polarisation (IP) and Resistivity were completed in 2014 over the RRF and silicification entirely within 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 Year 2, 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.**

**In Year 3, diamond drill holes RRD02 and 03 were completed for a total of 361.70 metres (including RRD01). Both holes demonstrated that there are detectable gold values and anomalous arsenic within the epithermal system. Importantly RRD02 demonstrated that the RRF is an easterly dipping reverse fault which has had numerous movements, the last post-dating silicification. In addition, all available open file 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.**

**During Year 4,**

- a close-spaced soil and stream sediment sampling programme was completed in the northern section of the EL,**
- ELs 19/2012 and 3/2014 were consolidated on 8 September 2016, and**
- All historic data and new Leached data have been entered into a digital data base.**

# 1. TENEMENT DETAILS

Post consolidation on 8 September 2016, EL 19/2012 now comprises a 26 km<sup>2</sup> licence centred on Duck River, approximately 25 km by road south of Smithton, NW Tasmania (Figure 1). The licence was initially granted to Leached Cap Pty Ltd (Leached Cap) by Mineral Resources Tasmania (MRT) for a 5 year term commencing on 16 January 2013. On 22 September 2015, a partial surrender application was submitted to reduce the area by 3km<sup>2</sup> to 16km<sup>2</sup> from the original 19km<sup>2</sup>.

Land tenure comprises mainly private land which is a mix of several beef and dairy cattle farms, and eucalypt plantation and remnant native bush owned by FGI-Australia Pty Ltd. 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).

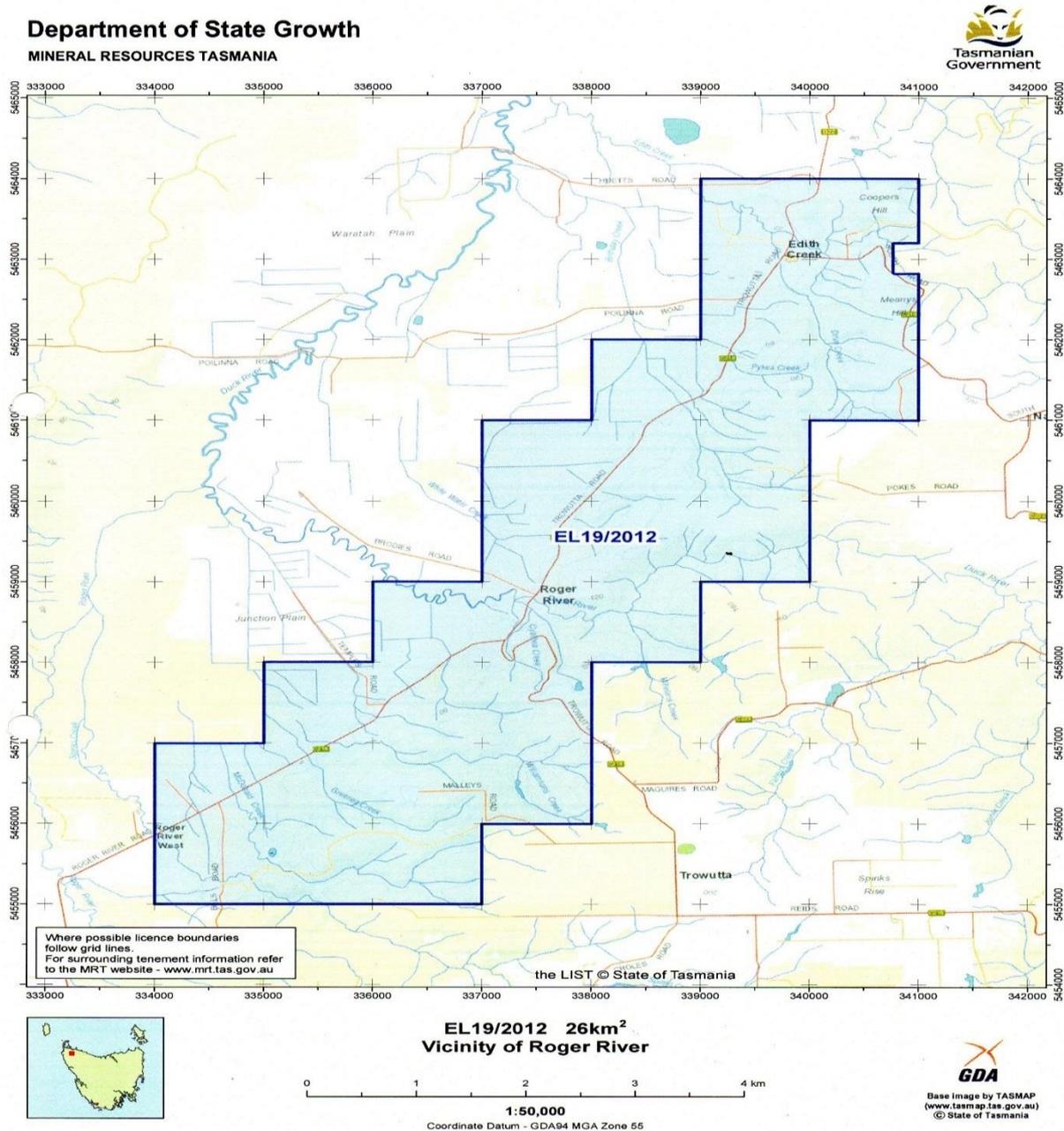


Figure 1. Location map showing EL19/2012 after consolidation.

## **2. GEOLOGY**

EL 19/2012 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 (Kanannah 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 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.

Morrison (2013) and Davis (2014 and 2015) summarise the aims and results for the first three year programme in EL19/2012, with the aims 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 included re-interpreting existing magnetics and gravity data, conducting the first 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 Davis (2015) in Appendix I.

#### **6. DRILLING, LOGGING and ASSAYING**

The diamond drilling in holes RRD01-03 in EL 19/2012 is described in Davis, 2014 and 2015, including drill logs, results and interpretations.

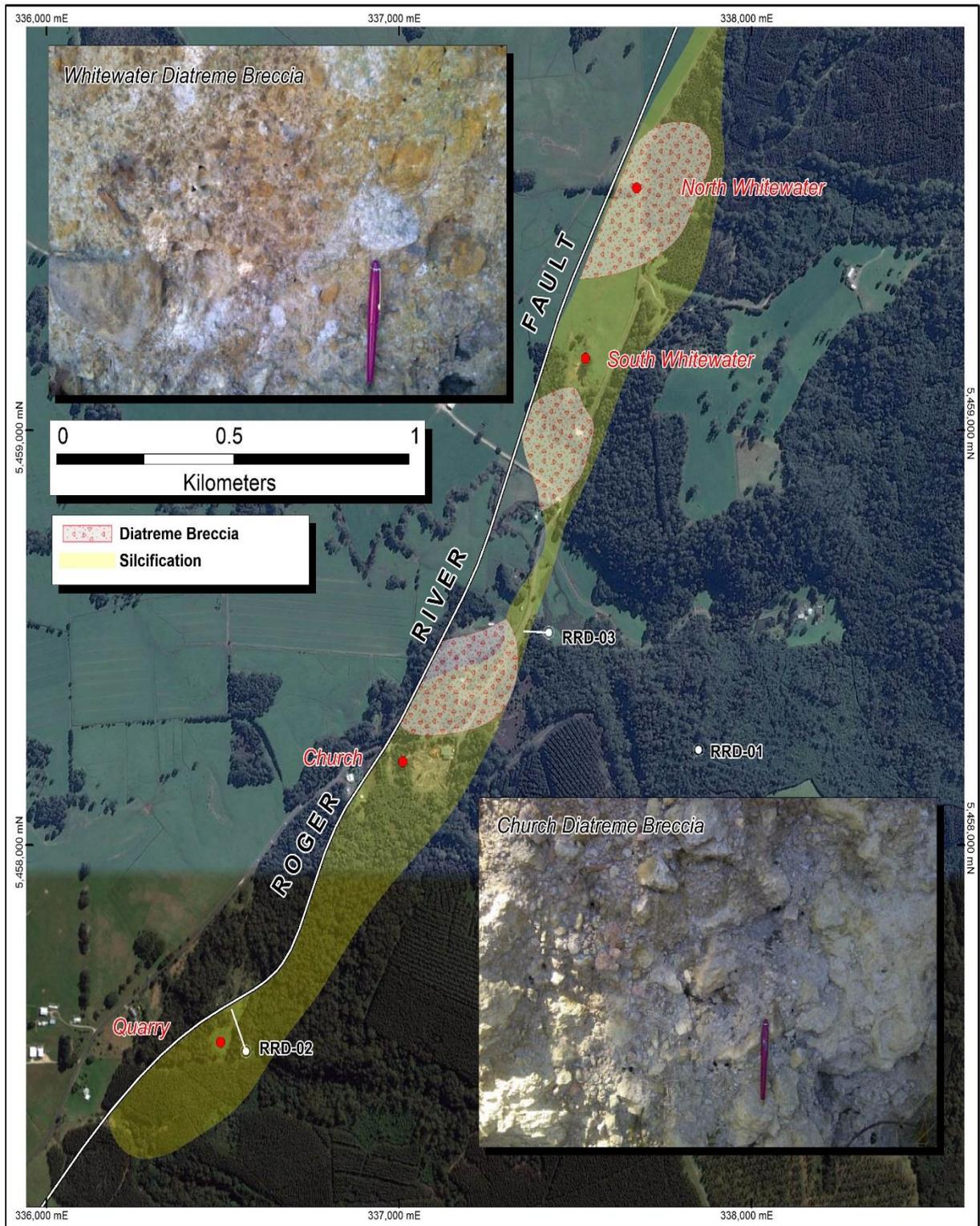


Figure 2. Geology of EL19/2012 and locations of diamond drill holes RRD01-03.

## 7. LOCAL GEOLOGY

As shown in Figure 2, three diatreme breccia zones have now been located, at the North and South Whitewater and Church Prospects. Each one is different depending on the rocks they truncate. A photo of the Church Diatreme is shown on the cover page, and the north Whitewater Diatreme is shown on the cover page of Davis (2015).

## 8. GEOCHEMISTRY C-HORIZON SOIL and STREAM SEDIMENT SAMPLING

As foreshadowed in Davis 2014b, in April 2016 Consultant geologist Ken Morrison supervised a stream sediment sampling programme and a 50x50m and 50m x 100m C-horizon soil sampling programme at the North Whitewater prospect and within the Duck River and Roger River ELs.

Figure 3 shows a plot of the C-horizon sample locations and results which are listed in the Appendix I.

The following descriptions were provided by Ken Morrison:

### *Methods*

#### *1) Soils*

80 C-horizon soil samples were taken on a gridded pattern centred on a base line tracking the projected position of the target linear structure (Figure 3). Land use on the area covered is a mix of eucalypt plantation and beef cattle pasture, with minor belts of native vegetation (Figure 3). Substantial weed infestation, especially by blackberry, exists through the plantation and the remnant adjacent native forest. Both the forestry company (FGI-Australia Pty Ltd) and the freehold farmers were helpful and cooperative regarding access and no vegetation cutting was required to access the sample sites.

Basal soils including bed rock chips were encountered at depths ranging from 10cm to 2.2m, with the deeper samples drilled by hand auger and the shallower sites sampled by trenching tool. Achieving genuine C-horizon intersections with abundant rock chip regolith was uncertain on two or three of the deep soil profile sites in the paddock west of Trowutta Road, at the southwest end of the grid (Figure 2). Bedrock lithology also exerts control over rock chip hardness, with soils on silicified carbonate and chert weathering much less than the softer basaltic siltstones and polymict lutites of the Keppel Creek Formation. Details of each sample are tabulated in Appendix I and assays are listed in Appendix II.

Samples of approximately 2 kg average weight were bagged and submitted to the Burnie ALS depot for drying, pulping and assaying for gold by 50g fire assay/AAS (0.2ppb detection limit) and arsenic by ICP-AES (2ppm detection limit).

#### *2) Stream Sediments*

14 sites on creeks and small rivers spread over a northeast-southwest distance of 7 km were sampled (Figure 3), with the aim being to test for discrimination between regional background and an anomalous zone, especially for ultra-fine gold. Sites which qualified for sampling showed evidence of transported sediment and had some running water, although in

the smaller creeks with minimal water flow and a high mud content, sumps were dug into the creek bed to enable sampling and sieving of a reasonably uniform sample type.

Sampling method involved wet sieving bed load sediment through a 2mm sieve on top of a pan, until 2 litres of -2mm product was recovered. Free water was drained off and the bagged samples were submitted to the Burnie ALS depot for drying and mechanically dry sieving to produce a -80 mesh fraction. Details of each sample are tabulated in Appendix I.

The -80# fraction was pulped and assayed for gold by 50g fire assay/AAS (0.2ppb detection limit) and arsenic by ICP-AES (2ppm detection limit), ie the same program as applied to the soils.

The residual +80# -2mm fraction was retrieved from the lab and panned down to a concentrate estimated to be approximately 50g (ie equivalent to a single fire assay charge) and then re-submitted to ALS for gold and arsenic assaying as per the -80# fraction.

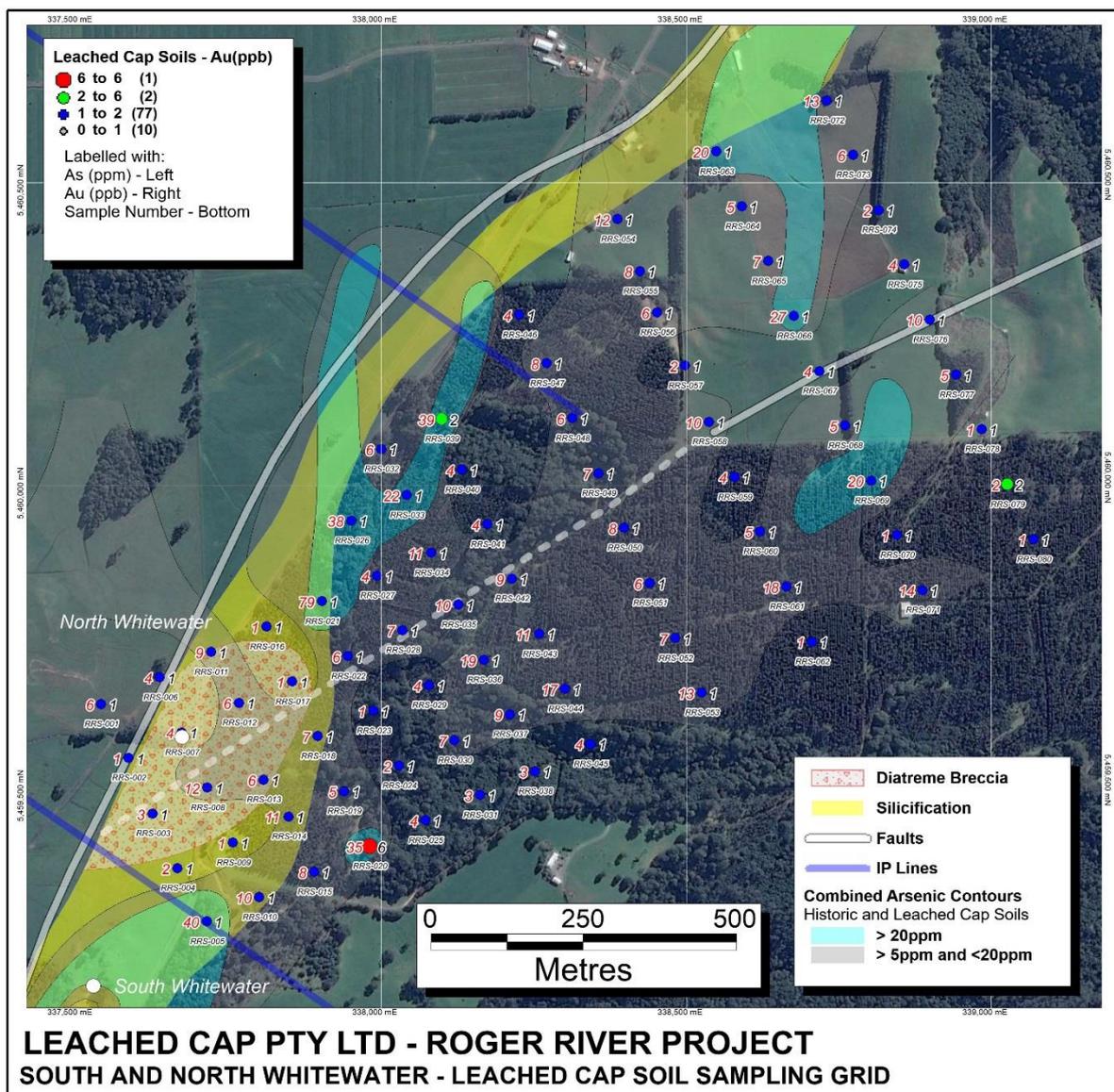


Figure 3. Locations of the C-horizon soil samples and results.

## 9. EXPENDITURE

Expenditure to 31 December 2016 includes the expenditure of \$14,306 on EL3/2014 from 1 January 2016 and now consolidated with EL19/2012 and which was reported in October 2015.

Category	Cost \$ EL 19/2012	Cost \$ EL 3/2014
Geology incl. geochemistry	24,923	13,495
Land access	1,089	
Administration	4,548	811
Other costs	264	
<b>Total</b>	<b>29,824</b>	<b>14,306</b>
<b>GRAND TOTAL</b>	<b>\$44,130</b>	

## 10. ENVIRONMENTAL ISSUES

As the geochemistry programme was non-invasive there were no environmental issues.

## 11. PLANNED PROGRAMME

As shown on Figure 3, the arsenic ± gold anomaly is not closed off so a C-horizon soil sampling programme to close off the anomalies is proposed but not yet approved.

## 12. REFERENCES

Davis, G., 2014. Leached Cap Pty Ltd. EL19/2012 Roger River, Year 2 Annual Report.

Davis, G., 2015. Leached Cap Pty Ltd. EL 19/2012 Roger River, Year 3 Annual Report.

Everard, J. L., Seymour, D. B., Reed, A. R., McClenaghan, M. P., Green, D. C. and Calver, C. R., 2007. Regional Geology of the southern Smithton Synclinorium, Explanatory report for the Roger, Sumac and Dempster 1:25,000 geological sheets, Mineral Resources Tasmania.

Morrison K., 2014. Leached Cap Pty Ltd. E.L. 19/2012 Roger River, Year 1 Annual Report.

Radtke, A. S. and Davis, G. J., 1990. Epithermal Precious Metal Deposits, their Characteristics and Exploration Guides, Unpublished Curtin University of Technology Course Guidebook, Western Australian School of Mines.

Turner, N. J., 2002. Greenstone Resources NL, Roger River Project Tasmania, ELs 11/97, 12/97, 13/97, 14/97 and 61/94 Combined Annual Report to 18<sup>th</sup> December, 2001 (3 Vols).

Turner, N. J., 2003. Morrirt Holdings Pty. Ltd., ELs 11/97, 12/97, 13/97, 14/97, 61/94 and 17/01 Combined Annual Report to 18<sup>th</sup> December, 2002.

Turner, N. J., 2009. Manasia Mining and Metals Ltd., EL 31/2005 Stephens Rivulet and Roger River Annual Report.

## APPENDIX I

### C horizon sample descriptions and assays

ROGER RIVER SOIL SAMPLING APRIL 2016														
SAMPLE ID	location		acc. +/- in m	line	samples in line	land type	quality of sample		depth in mm's	tone	colour	rock chip	method	comments
	easting	northing					wet/dry	type						
RRS-001	337541	5459639	3	1	5	farmland	dry	clay	1200	mid	brown	white	auger	poor sample, no base
RRS-002	337586	5459550	2	1	5	farmland	dry	clay	100	dark	grey	pale	auger	
RRS-003	337625	5459458	3	1	5	farmland	moist	clay	1100	pale	brown	none	auger	
RRS-004	337666	5459368	3	1	5	farmland	dry	clay	600	pale	brown	pale	auger	
RRS-005	337714	5459280	3	1	5	farmland	dry	clay	300	pale	yellow	yellow	auger	many R.C
RRS-006	337637	5459683	3	2	5	farmland	moist	clay	2200	dark	orange	orange	auger	trk side 1m embankment
RRS-007	337673	5459592	3	2	5	farmland	dry	clay	1200	dark	orange	none	auger	decomposed R.C fragments
RRS-008	337715	5459501	3	2	5	farmland	dry	clay	100	pale	brown	white	auger	
RRS-009	337757	5459410	3	2	5	farmland	dry	grit/rock	50	pale	grey	white	mattock	outcrop, soft rock sample
RRS-010	337800	5459320	3	2	5	farmland	dry	clay	300	pale	brown	white	auger	rock regusal. Many R.C
RRS-011	337721	5459725	3	3	5	farmland	moist	clay	1100	dark	orange	red	auger	
RRS-012	337767	5459641	3	3	5	plantation	dry	clay	1200	mid	orange	none	auger	shifted due to blackberries
RRS-013	337807	5459514	3	3	5	plantation	dry	clay	800	mid	brown	white	auger	break of slope, near creek
RRS-014	337848	5459453	3	3	5	plantation	dry	clay	900	mid	brown	white	auger	
RRS-015	337890	5459362	3	3	5	plantation	dry	clay	900	light	brown	red	auger	
RRS-016	337812	5459767	3	4	5	plantation	dry	clay	300	pale	grey	white	mattock	
RRS-017	337854	5459676	3	4	5	plantation	dry	grit	200	pale	grey	white	mattock	
RRS-018	337896	5459586	3	4	5	plantation	dry	clay	600	light	orange	orange	mattock	
RRS-019	337939	5459495	4	4	5	native	dry	grit/sand	300	mid	grey	white	mattock	
RRS-020	337981	5459404	3	4	5	native	dry	clay	700	mid	orange	orange	mattock	embankment. Solid clay
RRS-021	337903	5459809	4	5	5	native	dry	clay	500	mid	orange	none	mattock	break of slope.
RRS-022	337945	5459718	3	5	5	native	dry	clay	400	light	brown	orange	mattock	
RRS-023	337987	5459628	5	5	5	native	dry	clay	300	light	orange	white	mattock	
RRS-024	338029	5459537	5	5	5	native	dry	clay	500	light	orange	white	mattock	minimal R.C. break of slope
RRS-025	338072	5459447	5	5	5	native	dry	clay	400	mid	brown	orange	mattock	
RRS-026	337951	5459942	3	6	6	native	dry	clay	500	mid	orange	none	mattock	
RRS-027	337993	5459851	3	6	6	plantation	dry	clay	300	pale	tan	none	mattock	
RRS-028	338035	5459761	3	6	6	plantation	dry	clay	500	mid	yellow	none	mattock	
RRS-029	338078	5459670	3	6	6	plantation	dry	clay	400	light	brown	white	mattock	
RRS-030	338120	5459579	4	6	6	native	dry	clay	300	light	orange	orange	mattock	narrow ridge
RRS-031	338162	5459489	4	6	6	native	dry	clay	400	pale	orange	orange	mattock	
RRS-032	338000	5460060	3	7	7	native	dry	clay	600	pale	tan	brown	mattock	road & track disturbance

ME-ICP41	Au-AA22
As	Au
ppm	ppm
6	<0.002
<2	<0.002
3	<0.002
2	<0.002
40	<0.002
4	<0.002
4	<0.002
12	<0.002
<2	<0.002
10	<0.002
9	<0.002
6	<0.002
6	<0.002
11	<0.002
8	<0.002
<2	<0.002
<2	<0.002
7	<0.002
5	<0.002
35	0.006
79	<0.002
6	<0.002
<2	<0.002
2	<0.002
4	<0.002
38	<0.002
4	<0.002
7	<0.002
4	<0.002
7	<0.002
3	<0.002
6	<0.002

RRS-033	338042	5459984	3	7	7	plantation	dry	clay	500	mid	orange	orange	mattock	solid clay.	22	<0.002
RRS-034	338082	5459889	3	7	7	plantation	dry	clay	600	light	brown	orange	mattock	shifted due to earthworks	11	<0.002
RRS-035	338126	5459803	4	7	7	native	dry	clay	400	pale	brown	orange	mattock		10	<0.002
RRS-036	338168	5459712	3	7	7	plantation	dry	clay	500	pale	orange	red	mattock	minimal R.C. (ironstone)	19	<0.002
RRS-037	338211	5459622	5	7	7	native	dry	clay	500	light	orange	orange	mattock		9	<0.002
RRS-038	338252	5459528	3	7	7	native	dry	clay	500	dark	orange	orange	mattock	trk embankment. Solid clay	3	<0.002

SAMPLE ID	location		acc. +/- in m	line	samples in line	land type	quality of sample		depth in mm's	tone	colour	rock chip	method	comments		
	easting	northing					wet/dry	type								
RRS-039	338099	5460110	3	8	7	native	dry	clay	300	mid	orange	orange	mattock	break of slope. Neer dam	39	0.002
RRS-040	338132	5460026	3	8	7	native	dry	clay	400	mid	yellow	none	mattock	solid clay	4	<0.002
RRS-041	338174	5459936	3	8	7	plantation	dry	clay	600	mid	brown	orange	mattock	solid clay	4	<0.002
RRS-042	338214	5459846	3	8	7	plantation	dry	clay	400	mid	brown	orange	mattock	shift due to trk & disturbance	9	<0.002
RRS-043	338259	5459755	4	8	7	plantation	dry	clay	600	dark	orange	orange	mattock	embankment near trk	11	<0.002
RRS-044	338301	5459664	3	8	7	plantation	dry	clay	400	dark	red	white	mattock	many R.C	17	<0.002
RRS-045	338343	5459573	4	8	7	native	dry	clay	500	dark	red	red	mattock	solid clay	4	<0.002
RRS-046	338226	5460282	3	9	8	plantation	dry	clay	600	dark	orange	orange	mattock	shift due to blackberries	4	<0.002
RRS-047	338271	5460202	3	9	8	plantation	dry	clay	300	light	orange	orange	mattock	solid clay	8	<0.002
RRS-048	338313	5460111	3	9	8	native	dry	clay	200	mid	brown	orange	mattock	many R.C	6	<0.002
RRS-049	338356	5460020	3	9	8	plantation	moist	clay	500	dark	brown	orange	mattock	top of creek gully	7	<0.002
RRS-050	338398	5459930	3	9	8	plantation	dry	clay	500	mid	brown	orange	mattock		8	<0.002
RRS-051	338440	5459839	3	9	8	plantation	dry	clay	600	dark	orange	orange	mattock	solid clay	6	<0.002
RRS-052	338482	5459748	3	9	8	plantation	dry	clay	700	dark	orange	yellow	mattock	solid clay	7	<0.002
RRS-053	338525	5459658	3	9	8	plantation	dry	clay	600	dark	orange	orange	mattock	many R.C. solid clay	13	<0.002
RRS-054	338387	5460440	3	10	9	farmland	dry	clay	600	mid	brown	orange	auger	shift due to house	12	<0.002
RRS-055	338424	5460354	3	10	9	farmland	dry	clay	600	dark	orange	red	mattock	taken from test pit wall	8	<0.002
RRS-056	338452	5460286	3	10	9	plantation	dry	clay	400	dark	orange	orange	mattock	many R.C	6	<0.002
RRS-057	338498	5460198	3	10	9	farmland	dry	clay	400	mid	red	red	mattock	shift due to trees. Many R.C	2	<0.002
RRS-058	338537	5460105	3	10	9	farmland	moist	clay	600	mid	orange	red	auger		10	<0.002
RRS-059	338579	5460014	3	10	9	plantation	dry	clay	400	dark	red	red	mattock	many R.C. solid clay	4	<0.002
RRS-060	338621	5459924	3	10	9	plantation	dry	clay	500	dark	brown	red	mattock	Quartz R.C	5	<0.002
RRS-061	338664	5459833	3	10	9	plantation	dry	clay	400	mid	brown	orange	mattock	solid clay	18	<0.002
RRS-062	338706	5459742	3	10	9	plantation	dry	clay	300	mid	brown	red	mattock	solid clay	<2	<0.002
RRS-063	338549	5460552	3	11	9	farmland	moist	clay	1200	dark	orange	red	auger	fenced crk gully. Minimal R.C	20	<0.002
RRS-064	338591	5460461	3	11	9	farmland	dry	clay	900	mid	brown	red	auger	Ironstone R.C	5	<0.002

RRS-065	338634	5460371	3	11	9	farmland	moist	clay	900	dark	orange	orange	auger	many R.C	7	<0.002
RRS-066	338676	5460280	3	11	9	farmland	dry	clay	800	dark	orange	white	auger	many R.C	27	<0.002
RRS-067	338718	5460189	3	11	9	farmland	moist	clay	1200	dark	red	red	auger		4	<0.002
RRS-068	338760	5460099	3	11	9	farmland	dry	clay	700	mid	red	orange	auger		5	<0.002
RRS-069	338803	5460008	3	11	9	plantation	dry	clay	500	dark	red	mixed	mattock	many R.C	20	<0.002
RRS-070	338845	5459918	3	11	9	plantation	dry	clay	1200	mid	brown	red	auger		<2	<0.002
RRS-071	338887	5459827	3	11	9	plantation	moist	clay	500	dark	orange	red	mattock		14	<0.002
RRS-072	338730	5460636	3	12	9	farmland	dry	clay	600	light	orange	grey	auger		13	<0.002
RRS-073	338773	5460546	3	12	9	farmland	moist	clay	600	mid	orange	red	auger		6	<0.002
RRS-074	338815	5460455	3	12	9	farmland	moist	clay	700	mid	brown	red	auger	decomposed R.C	2	<0.002
RRS-075	338857	5460365	3	12	9	farmland	moist	clay	800	mid	brown	red	auger	decomposed R.C	4	<0.002
RRS-076	338899	5460274	3	12	9	farmland	dry	clay	600	dark	orange	red	auger		10	<0.002
RRS-077	338942	5460183	3	12	9	plantation	moist	clay	1200	mid	orange	orange	auger	Quartz. farm tree belt	5	<0.002
RRS-078	338984	5460093	3	12	9	farmland	moist	clay	1200	mid	red	none	auger	no base. Bottom of plateau	<2	<0.002
RRS-079	339026	5460002	3	12	9	plantation	dry	clay	1200	dark	red	red	auger	buckshot layer @ 700	2	0.002
RRS-080	339069	5459911	3	12	9	plantation	dry	clay	500	dark	red	orange	mattock		<2	<0.002

BU16050500 - Finalized

CLIENT : "LEACAP - Leached Cap Pty Ltd"

# of SAMPLES : 80

DATE RECEIVED : 2016-04-05 DATE FINALIZED : 2016-04-21

PROJECT : "Leached Cap"

CERTIFICATE COMMENTS : ""

PO NUMBER : " "

SAMPLE	ME- ICP41 As ppm	Au- AA22 Au ppm
RRS-001	6	<0.002
RRS-002	<2	<0.002
RRS-003	3	<0.002
RRS-004	2	<0.002
RRS-005	40	<0.002
RRS-006	4	<0.002
RRS-007	4	<0.002
RRS-008	12	<0.002
RRS-009	<2	<0.002
RRS-010	10	<0.002
RRS-011	9	<0.002
RRS-012	6	<0.002
RRS-013	6	<0.002
RRS-014	11	<0.002
RRS-015	8	<0.002
RRS-016	<2	<0.002
RRS-017	<2	<0.002
RRS-018	7	<0.002
RRS-019	5	<0.002
RRS-020	35	0.006
RRS-021	79	<0.002
RRS-022	6	<0.002
RRS-023	<2	<0.002
RRS-024	2	<0.002
RRS-025	4	<0.002
RRS-026	38	<0.002
RRS-027	4	<0.002
RRS-028	7	<0.002
RRS-029	4	<0.002
RRS-030	7	<0.002
RRS-031	3	<0.002
RRS-032	6	<0.002
RRS-033	22	<0.002
RRS-034	11	<0.002

RRS-035	10	<0.002
RRS-036	19	<0.002
RRS-037	9	<0.002
RRS-038	3	<0.002
RRS-039	39	0.002
RRS-040	4	<0.002
RRS-041	4	<0.002
RRS-042	9	<0.002
RRS-043	11	<0.002
RRS-044	17	<0.002
RRS-045	4	<0.002
RRS-046	4	<0.002
RRS-047	8	<0.002
RRS-048	6	<0.002
RRS-049	7	<0.002
RRS-050	8	<0.002
RRS-051	6	<0.002
RRS-052	7	<0.002
RRS-053	13	<0.002
RRS-054	12	<0.002
RRS-055	8	<0.002
RRS-056	6	<0.002
RRS-057	2	<0.002
RRS-058	10	<0.002
RRS-059	4	<0.002
RRS-060	5	<0.002
RRS-061	18	<0.002
RRS-062	<2	<0.002
RRS-063	20	<0.002
RRS-064	5	<0.002
RRS-065	7	<0.002
RRS-066	27	<0.002
RRS-067	4	<0.002
RRS-068	5	<0.002
RRS-069	20	<0.002
RRS-070	<2	<0.002
RRS-071	14	<0.002
RRS-072	13	<0.002
RRS-073	6	<0.002
RRS-074	2	<0.002
RRS-075	4	<0.002
RRS-076	10	<0.002
RRS-077	5	<0.002
RRS-078	<2	<0.002
RRS-079	2	0.002
RRS-080	<2	<0.002

## APPENDIX

### II

Stream  
sediment  
descriptions  
and assays

**Register of Roger River stream Sediment Samples - March-April 2016**

<b>gda</b>	<b>Easting</b>	<b>Northing</b>	<b>Stream Type</b>	<b>Sediment Type</b>
	336687	5458012	muddy creek with weak flow	silicified dolomite, chert in mud
	337300	5458877	Duck River with good clean water flow, bed load sand, gravel,	polymict sediments, basaltic volcanoclastics
	337611	5459583	clean water flow creek in paddock	silicified dolomite, chert in mud
	338007	5459650	muddy creek with weak flow, mainly dry	mixed sediments, dolomite, basaltic volcanoclastics in mud
	334019	5455789	muddy creek with weak clean flow	basalt, volcanoclastics in mud
	335813	5456965	muddy creek with weak flow	basalt, volcanoclastics in mud
	336071	5457027	good flow clean water creek, bed load sand, gravel	polymict sediments, basaltic volcanoclastics, basalt
	337000	5459717	drain with moderate flow, in paddock	silicified dolomite, chert in mud
	337320	5458030	muddy creek with weak flow	basalt, volcanoclastics in mud
	335837	5457878	drain with moderate flow, in paddock	basalt, volcanoclastics in mud
	336057	5457062	good flow clean water creek, bed load sand, gravel	basalt, basaltic volcanoclastics
	339004	5460596	weak flow clean water creek in steep valley, bed load sand	basaltic volcanoclastics in mud
	339136	5460639	weak flow, mainly dry creek on basaltic bed rock	basalt, basaltic volcanoclastics
	339145	5460586	good flow clean water creek, bed load sand, gravel	basalt, basaltic volcanoclastics

BU16050514 - Finalized

CLIENT : "LEACAP - Leached Cap Pty Ltd"

# of SAMPLES : 14

DATE RECEIVED : 2016-04-05 DATE FINALIZED : 2016-04-18

PROJECT : "Leached Cap"

CERTIFICATE COMMENTS : ""

PO NUMBER : " "

SAMPLE	Au- AA22	ME- ICP41
	Au ppm	As ppm
RRPC-001	<0.002	2
RRPC-002	0.002	4
RRPC-003	<0.002	3
RRPC-004	<0.002	6
RRPC-005	<0.002	<2
RRPC-006	<0.002	2
RRPC-007	0.002	<2
RRPC-008	<0.002	4
RRPC-009	<0.002	<2
RRPC-010	0.002	<2
RRPC-011	<0.002	<2
RRPC-012	0.002	3
RRPC-013	<0.002	4
RRPC-014	<0.002	<2