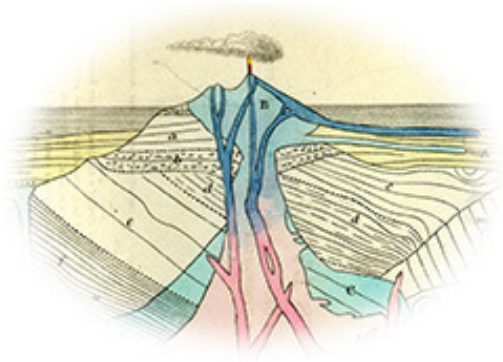

LYELL RESOURCES LTD.

ANNUAL & FINAL REPORT

EL 39 / 2005

Mt Owen Project

June 2013

Report Period: 14th June 2012 to 13th June 2013

David Esser

June 2013

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EXECUTIVE SUMMARY

EL39/2005 comprises a 19 km^2 tenement three kilometres south-west of the Mt Lyell group of Cu – Au deposits near Queenstown in Western Tasmania. The tenement area features a muscovite-pyrophyllite (MP) alteration anomaly, which is similar to that associated with the Mt Lyell group of mines. In contrast to the Mt Lyell system, which is hosted in the Upper to Middle Cambrian Mt Read volcanics, the Mt Owen MP anomaly is hosted within the Upper Cambrian Owen Conglomerate. Mt Owen Resources was conducting an exploration program to determine if the Mt Owen MP anomaly represents hydrothermal alteration produced by a concealed Cu/Au system.

EL 39/2005, named 'Mt Owen' is located in the Dundas Trough approximately 3 km to the SE of Queenstown on the west coast of Tasmania. The tenement is held by Mt Owen Resources Pty Ltd, which is a wholly owned subsidiary of Lyell Resources Limited (Lyell). Mt Owen Resources was acquired from Pangean Resources Pty Ltd (Pangean) in March 2011, by payment of cash and shares.

EL 39/2005 has the potential to host a concealed Mt Lyell type Cu – Au orebody at depth and interpretation of HYMAP and ASTER hyperspectral survey data by Pangean defined several anomalous alteration zones which have similarities to those found around the Mt Lyell mineralisation to the west (Nunn et al, 2007). An IP and CSAMT survey completed by Mt Owen Resources in 2011 defined a number of chargeability anomalies, which require drill testing (Esser, 2011). The planned drilling was postponed in 2012 due to a lack of budget, however Mt Owen Resources was allowed to retain EL 39/2005 with the understanding that we would continue to seek funds through either a joint venture or company merger. Unfortunately, no joint venture partner, nor potential merger company could be found.

No field exploration work has been carried out on EL 39/2005 since April 2011 and no further analysis of the data has been conducted since 14th June 2012 (Esser, 2012). The lease was allowed to lapse on 14th June 2013.

Although the Mt Owen hyperspectral anomaly, with associated IP anomalies, is a 'high risk' target, it remains to be tested by drilling. The only reason the drilling was not completed was the lack of exploration funds.

INTRODUCTION

Lyell Resources Limited, through its wholly owned Australian subsidiary Mt Owen Resources Pty Ltd, is the holder of EL 39/2005. Lyell acquired the Mt Owen Project to test for buried Mt Lyell type Cu – Au mineralisation in a highly prospective area, which has had no previous drilling and only limited surface exploration. Refer to **Figure 1** for the location map.

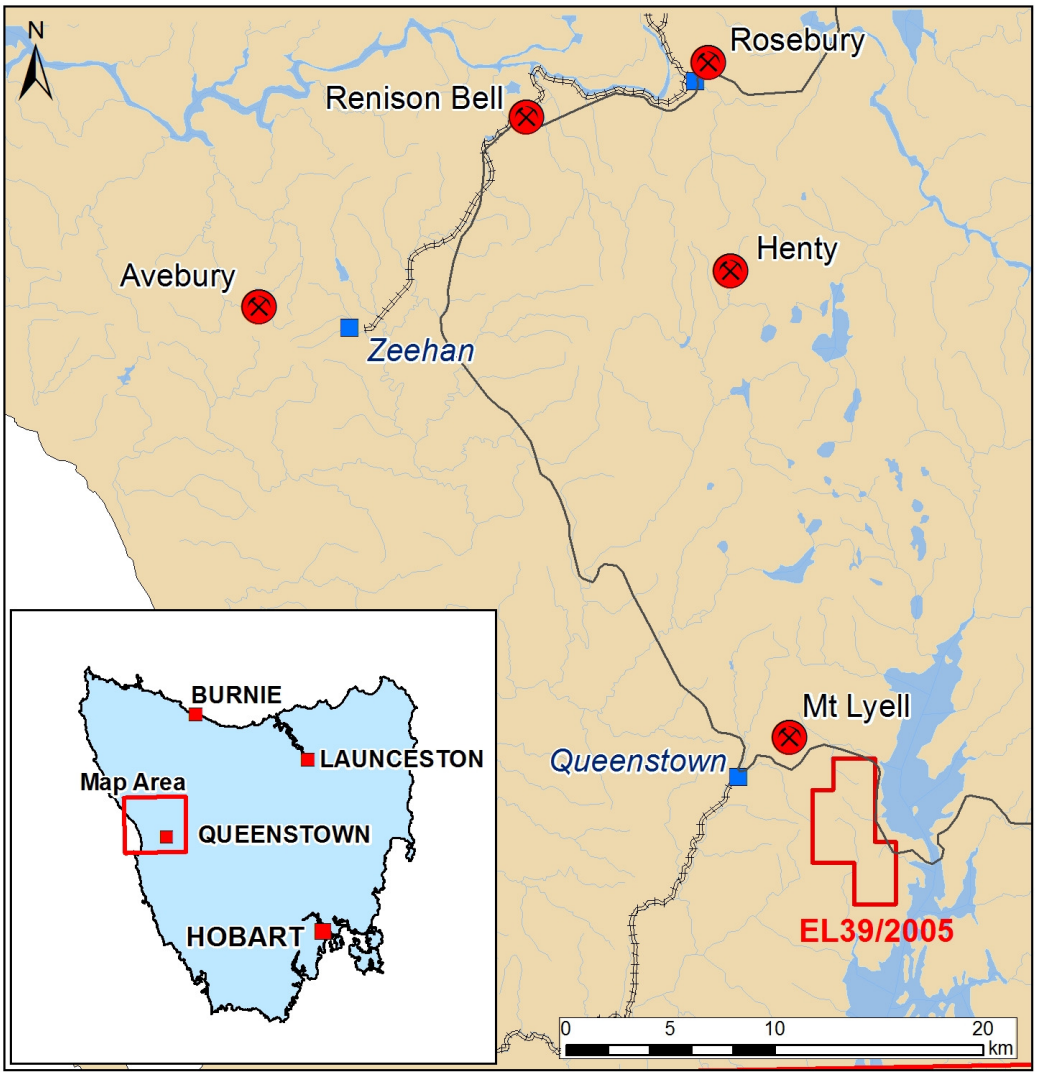

Figure 1 - Location Map showing EL 39 / 2005, 'Mt Owen'

LOCATION & ACCESS

EL 39/2005 is located approximately 3 km south-east of Queenstown on the west coast of Tasmania and access is via the sealed Lyell Highway which is approximately 260km to the north-west from Hobart, see **Figure 1**. Access on the lease is via a Telstra and Broadcast Australia service road which leads to the summit of Mt Owen, or a forestry track which leads to the south-west edge of the tenement south of Mt Owen. Access within the lease is generally very poor with very steep and heavily vegetated slopes on the eastern side, and rugged hills in the centre of the lease. The licence is located on the *Lyell* 1:50,000 map sheet.

TENURE

Mt Owen Resources Pty Ltd, originally applied for EL 39/2005 and the tenement was acquired by the purchase of Mt Owen Resources by Bondi Mining Ltd from Pangean Resources Pty Ltd in March 2011, Bondi Mining Ltd was subsequently taken over by World Titanium Resources (WTR) in December 2011 and the tenement was acquired by Lyell Resources Ltd at that time as part of the takeover arrangements with WTR. The tenement details are shown below in **Table 1**. The tenement was renewed for one year on 14th June 2012, then allowed to lapse on 14th June 2013.

Table 1: Tenement details

Exploration Licence No.	No. Blocks	Area (km^2)	Grant Date	Expiry Date	Expenditure Commitment
EL 39/2005	19	19	15/6/2006	14/6/2013*	$ 20,000

*The tenement will lapse on 14th June 2013.

EXPLORATION

Previous Exploration

The Mt Owen lease has not had any intensive exploration conducted on it, with most previous work comprising ground reconnaissance, regional mapping, airborne magnetics and EM. For details refer to Esser (2012). Although there has been drilling programs on targets to the north and west of the tenement within the favourable Mt Read Volcanics, there has been *no drilling* within the Mt Owen lease. The main reason for this is that the tenement is largely covered by the Cambro-Ordovician aged Owen Conglomerate and historically this is considered to have post dated the Mt Lyell mineralisation.

Research conducted by various workers in the Dundas trough in the last 20 years (see Esser, 2012), has provided evidence that the Mt Lyell Cu- Au mineralisation is younger than originally thought and therefore the hyperspectral anomaly with the Owen Conglomerate, on the Mt Owen lease, is potentially related to Mt Lyell type mineralisation.

Exploration by Bondi Mining / Mt Owen Resources:

In 2011 Bondi Mining conducted an IP and CSAMT geophysical survey, and structural mapping over the Mt Owen lease in an attempt to define anomalies associated with alteration and mineralisation from a buried orebody (Esser, 2011). A number of IP anomalies were identified, however, some of these were in fact due to surface culture associated with Telstra's and Broadcasting Australia's infrastructure (various pipes, wires and towers).

In December 2011 Bondi Mining Ltd merged with World Titanium Resource (WTR) and Mt Owen Resources was purchased from Bondi Mining by Lyell Resources Ltd, which is an unlisted public company. The intention was to IPO Lyell Resources Ltd in early 2012 and raise sufficient funds to complete a 1200m+ diamond drilling program to test the IP / geological targets on the Mt Owen lease, however, the market for completing an IPO was not favourable and the work was deferred until 2013. Desktop studies were completed in 2012, which included some 3D modelling of the geology and IP data to help plan the proposed drill holes (Esser, 2012).

Investor sentiment in 2012 – 2013 got progressively worse and precious metals, and commodity prices in general fell significantly. As a result Lyell was not able to attract a joint venture partner and therefore were not able to complete the planned drilling program. No exploration was conducted on EL39 / 2005 between June 2012 to June 2013.

RECOMMENDATIONS

Exploration recommended for future programs:

- Detailed mapping at Mt Owen to extend the understanding of the 3D structural geometry of the Central Volcanic Complex and overlying Mt Owen Conglomerate.
- Three dimensional geological modelling using MICROMINE, or similar, software.
- Investigate using a deep penetrating electrical geophysical technique suitable for detecting a Mt Lyell type Cu – Au orebody.
- Plan and conduct a staged diamond drilling program to test deep chargeability anomalies defined by the IP and CSAMT surveys and the three dimensional geological modelling using MICROMINE software. It is proposed that 3 holes for approximately 1500m be drilled, subject to receiving a quote from a drilling contractor. Timing dependant on weather and rig availability.
- Down-hole geophysical survey (EM or IP?) to help vector towards off-hole mineralisation
- Investigate conducting a collaborative stratigraphic hole with the MRT, which might help develop the exploration model and therefore help with drill targeting.

REFERENCES

Esser, D.M., 2011. 'ANNUAL REPORT EL 39 / 2005 Mt Owen Project June 2011'. Bondi Mining Ltd, Unpubl company report, 2011.

Esser, D.M., 2012. 'ANNUAL REPORT EL 39 / 2005 Mt Owen Project June 2012'. Lyell Resources Ltd, Unpubl company report, 2012.

Nunn, D. and Nano, S., 2007. Mt Owen EL39/2005 Annual Report June 2007. Unpubl. Pangean Resources Pty Ltd commissioned consultants, Global Ore Discovery.

APPENDICES

Appendix 1: Expenditure statement

Mount Owen Resources Pty Ltd Job Profit & Loss Statement June 2012 - May 2013				
	Account Name	**JUN 2012**	**JUL - MAY 2013'**	**TOTAL**
	MT OWEN			
5-5010	Salaries & Wages	$576.92	$576.92	$1,153.84
5-5030	Wage Oncosts	$115.38	$115.38	$230.76
5-7520	Tenement Rentals	$1,763.55	$151.20	$1,914.75
5-7530	Tenement Management	$301.00		$301.00
	Total Cost of Sales	**$2,756.85**	**$843.50**	**$3,600.35**