

Third Annual Report, 2013

SEL 18/2009 (Tunbridge)

13th April 2012 - 12th April 2013

Mineral Ventures Pty Ltd

Authors:

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Summary

Mineral Ventures Pty Ltd (MVPL) holds Special Exploration Licence (SEL) 18/2009 in Tasmania for Category 1 minerals. MVPL is a 100% subsidiary of KUTh Energy Limited (KUTh). KUTh is the holder of the overlapping geothermal (category 6) SEL 26/2005 through its 100% owned subsidiary KUTh Exploration Pty Ltd. The principle target of KUTh's work on SEL 26/2005 is the location of high-temperature Hot Rock geothermal resources suitable for development as Enhanced Geothermal System (EGS) power generators.

SEL 18/2009 lies entirely within SEL 26/2005. Exploration for minerals on SEL 18/2009 is incidental to geothermal exploration. This report covers work undertaken during the licence period 13/4/2012 – 12/4/2013

No field work has been undertaken on the licence area in the current annual reporting period. Work previously completed on the licence area during KUTh's tenure includes gravity and magnetotelluric geophysical surveys. Deep drilling of identified geothermal targets at Lemont remains on hold.

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1 Introduction

Mineral Ventures Pty Ltd (MVPL) is a 100% owned subsidiary of KUTH Energy Limited (KUTH). KUTH is a geothermal explorer and is the holder, through its 100% owned subsidiary KUTH Exploration Pty Ltd, of SEL 26/2005 a geothermal (category 6) licence which overlaps SEL 18/2009. This report covers work completed in the period 13/4/2012 – 12/4/2013 on MVPL's minerals exploration tenement SEL 18/2009 which overlaps an identified geothermal resource target within KUTH's tenement SEL 26/2005. This is the third Annual Report lodged for SEL 18/2009.

1.1 Tenement Status

MVPL is the sole holder of SEL 18/2009 (Figure 1). The tenement was granted for an initial period of five years to search for metallic minerals (Category Type 1) on 13 May 2010. Tenure details of SEL 18/2009 are tabulated below.

Tenement Type	SEL
Number	18/2009
Commodity	Minerals Cat. 1
Licensee	Mineral Ventures P/L
Operator	KUTH Exploration P/L
Area	648km ²
Date Granted	13/05/2010

Table 1: Tenure details for SEL 18/2009.

1.2 Location and access

SEL 18/2009 is located in the central Midlands area. Road access to the tenement is excellent via the Midlands Highway, a number of secondary roads and farm tracks.

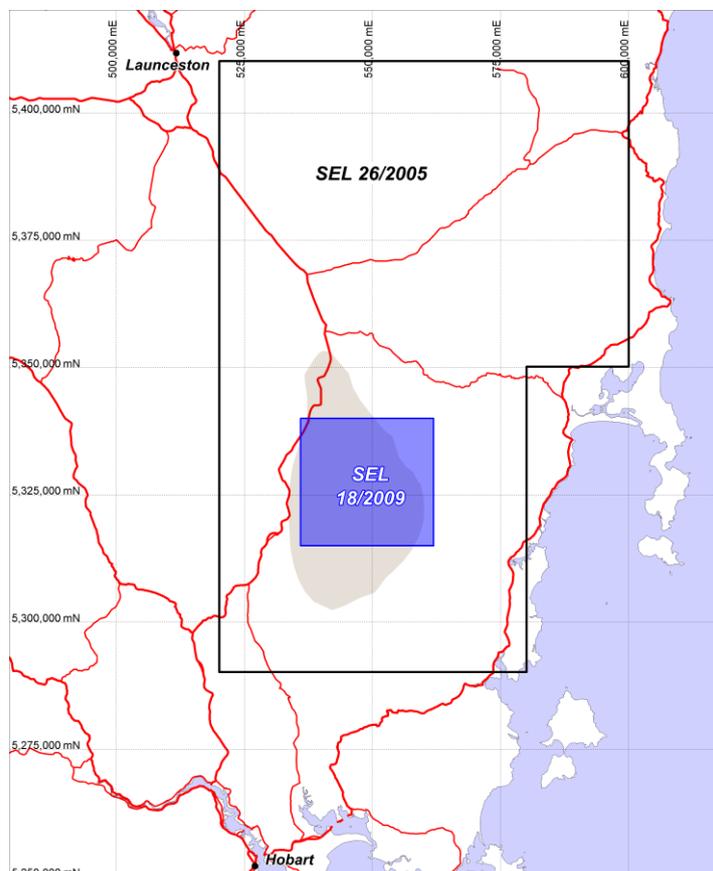


Figure 1: Location map for SEL 18/2009 (blue) showing KUTH SEL boundaries (black) and roads (red). Grey shaded area indicates the surface extent of KUTH's defined Lemont geothermal resource. Grid squares 25 x 25km; MGA 94 Zone 55.

1.3 Topography and vegetation

SEL 18/2009 is dominated by farmland comprising mainly pasture and broad-acre grazing.

1.4 Geological setting

Tasmania is divided into two basement terrains located in the west and east of the State (Figure 2). Distinguished by age, lithology and deformation these two regions are 'believed to have been juxtaposed at a NNW trending dislocation' inferred to coincide with the Tamar Valley region in central Tasmania (Burrett & Martin, 1989). The Western Terrain comprises variably deformed and metamorphosed Pre-Cambrian basement, the now-deformed Cambrian volcanics and sediments of the Dundas Trough and Mt Read Volcanic Belt and the Ordovician-Silurian shelf sediments of the Wurrawina Supergroup. In the East, deformed low-grade meta-sediments of the Ordovician – Devonian Mathinna Supergroup comprise deep water turbidite deposits that are analogous to the ubiquitous Tasminide flysch of mainland eastern Australia. Similarities in the deformation and depositional style of the Mathinna Supergroup and mainland Tasminide units have led to numerous attempts to correlate the two, the Mathinna being compared variably to the Melbourne Trough and the Tabberabbera Zone of central and eastern Victoria (Powell & Baillie, 1992; Reed, 2001).

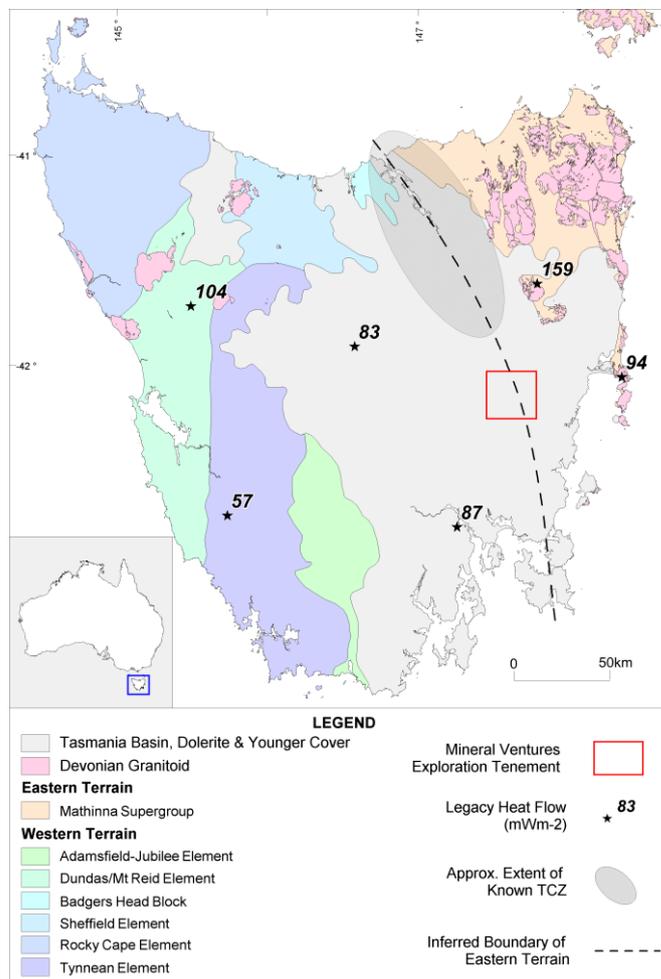


Figure 2: Regional geology of Tasmania showing the major crustal elements. Legacy heat flow data are as summarised by Cull (1991). Also shown is the approximate extent of the known TCZ prior to recent MT survey work.

Across much of the state, basement is concealed by up to 1km of flat-lying Permian-Triassic sediments of the Tasmania Basin and the extensive thick (>300m) Jurassic dolerite sills which intruded these during Gondwana break-up. Mesozoic and Tertiary cover, including extensive dolerite, shale, silt and some coal formations, totally obscure the contact between the Pre-Cambrian Western and Palaeozoic Eastern terrains. The presence of this thick cover across the Eastern Midlands has significantly impacted on the level of mineral exploration that has been undertaken in this area.

Both Western and Eastern Terrains host Devonian granite, the most extensive intrusions being the slightly older batholiths in the East (Burrett & Martin, 1989). Exposures of Devonian-aged granite in the far north-east of the state are known to include highly-fractionated high-heat-producing (HHP) granites as part of three major suites (Figure 2; Burrett & Martin 1989). Significant gold and tin mineralisation is observed in association with these exposures. To the south and west of this area, granite plunges beneath cover which potentially provides the insulation necessary for a classic Hot Dry Rock or Enhanced Geothermal System (EGS) target. Complicating this picture is the presence of a known electrical conductivity anomaly observed in the northern Tamar Valley area and referred to as the Tamar Conductivity Zone (TCZ) (Figure 2; Hermanto, 1992). Coinciding broadly with the boundary of the East and West terrains, the TCZ has been interpreted an indicator of fluid in fractured permeable zones (Hermanto, 1992). Intersection between the TCZ and buried HHP granites may thus imply the presence of an existing fracture-permeable geothermal system in Eastern Tasmania. Areas associated with deep fluid permeable fracture zones, both modern and fossil, represent valid mineral exploration targets.

2 Previous Exploration

A detailed account of relevant exploration conducted by KUTH across the area defined by SEL 26/2005, including shallow drilling, seismic surveys, magnetotelluric, gravity and magnetic surveys is provided in the licence Annual Reports 2008 – 2012. Information derived from these surveys indicates the presence of a large electrically conductive anomaly, potentially an equivalent of the Tamar Conductivity Zone, within the vicinity of SEL 18/2009. Interpretation of gravity data, including stations acquired across the tenement by KUTH in 2010 indicates the presence of granite intrusives at depth beneath the tenement (Figure 2; Leaman 2012). A deep geothermal/mineral drill target has been identified in this area (see - SEL 26/2005 Annual Report 2011).

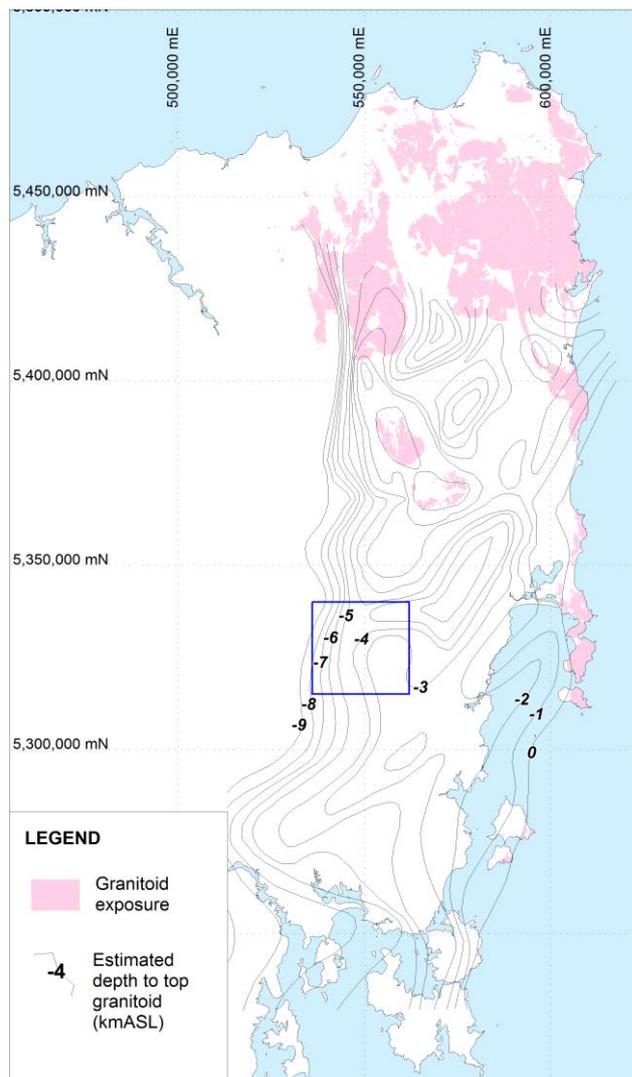


Figure 3: Interpretation of depth-to-granite beneath SEL 18/2009 derived from gravity data acquired in 2010 (see – Leaman 2012 for details of gravity interpretation)

3 Work Completed in the Current Annual Reporting Period

No field work was undertaken on SEL 18/2009 in the period April 2012 and April 2013.

4 Discussion

Exploratory work undertaken on SEL 18/2009 by MVPL is dependent upon a broader program of geothermal exploration undertaken by KUTH on its overlapping tenement SEL 26/2005. Work completed to date on the latter tenement has led to the identification of a significant deep drill target in the vicinity of the Lemont area. This target, which has been identified as a geothermal resource, is considered to have coincident exploratory potential for metallic minerals (gold).

A deep drilling program has been developed by KUTH for the Lemont target. This program incorporates data acquisition that will be of direct relevance to minerals exploration in this area. MVPL and KUTH are currently awaiting the resolution of a number of outstanding issues that will enable the commencement of drilling. It is hoped that commitment to a deep drilling program may be secured within the next twelvemonth following successful funding via Federal renewable energy grant programs. Further progress on SEL 18/2009 is dependent upon the success of grant application at Lemont. This is reflected in the forward work program and proposed expenditure for the tenement which has now been reduced.

5 Environment

There are no outstanding environmental or rehabilitation issues across SEL 18/2009.

6 Expenditure

Details of expenditure on SEL 18/2009 in the year 2011-2012 are captured in Table 2 below.

	SEL 18/2009
Geoscience Costs	\$
Geology	442
Geochemistry	
Geophysics	
Remote Sensing	
Drilling & Gridding	
Gridding	
Drilling	
Land Access Costs	
Rehabilitation Costs	
Feasibility Study Costs	
Other Costs	5,798
Administrative Costs	
TOTAL	6,240
TOTAL ALL YEARS	79,698

Table 2: Expenditure on KUTH tenement SEL 18/2009 in the year 2012-2013.

The total expenditure of A\$6,240 represents a significant underspend relative to the 2012-2013 commitment of A\$200,000. This underspend reflects delays experienced in the execution of deep exploratory drilling on SEL 26/2005 and is the second year of significant under-expenditure on the tenement. For this reason, and due to the ongoing uncertainty regarding the timing of the forward drilling program on SEL 26/2005 KUTH is now seeking to vary the forward expenditure commitment on this tenement for the upcoming year 2013 – 2014 reducing it to A\$20,000.

7 Conclusion and Recommendations

Mineral exploration in SEL 18/2009 is incidental to geothermal exploration in SEL 26/2005 within which it lies. A major conductivity feature has been identified which has the potential to contain significant metallic mineralisation. KUTh has planned a deep exploration drill-hole which should intersect this feature and provide conclusive information about its nature and origin. Numerous commercial and technical issues continue to delay the execution of this program. For this reason, MVPL is now seeking to reduce forward expenditure commitments on SEL 18/2009 for the year 2013 - 2014 to A\$20,000.

8 References

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9 Keywords

Geothermal exploration; Gold; Gravity; Magnetotelluric.