GEOPOWER ENERGY LIMITED

EXPLORATION LICENSE
SEL37/2007
NORTH EAST TASMANIA

ANNUAL REPORT FOR THE YEAR ENDED
25 AUGUST 2010

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INTRODUCTION

Geopower Energy Limited have proposed a model of producing 'hot rock' geothermal energy at the surface via hydraulic stimulation of sedimentary rocks above a high heat producing granitoid, then passing fluids through the fracture system and delivering them to the surface at approximately 150°C. This is both a lower production temperature and a different reservoir location and rock type for the fracture system than most other 'hot rocks' geothermal projects in Australia and these in turn bring about advantages and disadvantages in a geological technical sense.

SEL37/2007 is a large tenement covering 4786 SKM in North East Tasmania, the tenement was granted to Geopower Energy Limited on 25 August 2009. The geology of north-eastern Tasmania and SEL37/2007 is dominated by two broad geological units – the 'Mathinna Super Group' sedimentary rocks of Ordovician to early Devonian age and a suite of granitoid intrusives of broadly Devonian age.

Work during this first year of tenure has focused on gaining an understanding of the prospectivity of this area for geothermal energy production. Geopower is particularly interested in relatively shallow 'low temperature' thermal reservoirs in sediments at or above the contact of buried radiogenic granitoids, with the objective being to produce electricity using technologies which can effectively exploit temperatures in the range 150-180°C.


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Tasmania
Scala 1:400,000

REGIONAL GEOLOGY

The geology of north-eastern Tasmania and SEL 37/2009 is dominated by two broad geological units – the 'Mathinna Super Group' sedimentary rocks of Ordovician to early Devonian age and a suite of granitoid intrusives of broadly Devonian age. Figure 1 shows SEL37/2009 in the context of the simplified geology of all of Tasmania, whilst Figure 2 focuses on the area of the Geopower tenement. Besides the above mentioned units, a number of later geological units and formations are present, including Jurassic age dolerite intrusives, Permo-Triassic sediments, Tertiary basaltic extrusives, and more recent unconsolidated sand, clay and talus deposits. None of these have any material impact on the geothermal prospectivity of the Geopower tenement and will not be considered further, except to note further the Tertiary extrusives.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Three detailed studies were completed by Geopower Energy Limited during the reporting period. The first was an Independent Geologist's Report, authored by Malcolm Ward, which provided a detailed overview of the tenements geothermal prospectivity. A further two geophysical studies were completed by Dr Neil Allen which highlight four geothermal possibilities at relatively shallow depths.

1 Great Forrester River
2 Middle Great Musselroe River
3 Great Northern Plains – Boobyalla Sub-basin
4 Mathina sedimentd area to the north-east of Gladstone

All three reports are included in this report.

ENVIRONMENT

No surfaces disturbing operations or surveys were conducted by the company during this reporting period.

CONCLUSIONS

Geopower Energy Limited has been encouraged by the information and data produced during this first reporting period. During its second year of tenure work will be directed towards priority areas as recommended in the Independent Geologists Report and additional geophysical reports. It is intended that follow up work will involve compiling as much information as possible on the geological and structural settings of these areas derived from the technical literature, available drill hole data and field observations. This approach will allow a better appreciation of likely target depth and lead to a number of possible drilling sites.

EXPENDITURE

Geoscientific Costs	Geophysics	25000
Feasibility Study Costs		22000
Other Costs	Rental fees	22837
Administration Costs		35000
		104837

APPENDICES