



# Third Annual Report

## Witchellina, Mulgaria Project

### GELs 166, 167, 168

For the period 13/07/2007 to 12/04/2009

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## CONTENTS

1. Introduction .....	3
1.1 Background .....	3
1.2 Licence Data .....	3
1.3 Period .....	3
2. Work Requirements .....	4
3. Work Conducted .....	5
4. Year 3 Expenditure .....	5
5. Year Four Work Programme .....	5
6. Compliance with the Petroleum Act (Reg. 33) .....	5
6.1 Summary of the regulated activities conducted under the licence during the year .....	5
6.2 Report for the year on compliance with the Act, these Regulations, the licence and any relevant Statement of Environmental Objectives .....	5
6.3 Statement concerning any action to rectify non-compliance with obligations imposed by the Act, these regulations or the license, and to minimise the likelihood of the recurrence of any such non-compliance .....	6
6.4 Summary of any management system audits undertaken during the relevant licence year, including information on any failure or deficiency identified by the audit and any corrective action that has, or will be, taken .....	7
6.5 List of all reports and data relevant to the operation of the Act generated by the licensee during the relevant licence year .....	7
6.6 Report on any Incidents reportable to the Minister under the Act and Regulations during the relevant Licence Year .....	7
6.7 Report on any reasonably foreseeable threats (other than threats previously reported on) that reasonably present, or may present, a hazard to facilities or activities under the licence, and a report on any corrective action that has, or will be, taken .....	7

## List of Figures

Figure 1 Location map of GELs 166, 167 and 168 .....	4
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# **1. Introduction**

## ***1.1 Background***

GELs 166, 167 and 168 are located on the north eastern edge of Lake Torrens within the Arrowie and Torrens Basins. Previous studies in this area have shown it to have potential for the discovery of geothermal resources. The Radiogenic Iron Oxide (RIO) model for the generation of geothermal resources and the more widely recognised granite hosted system are both continuing to be investigated in this area.

## ***1.2 Licence Data***

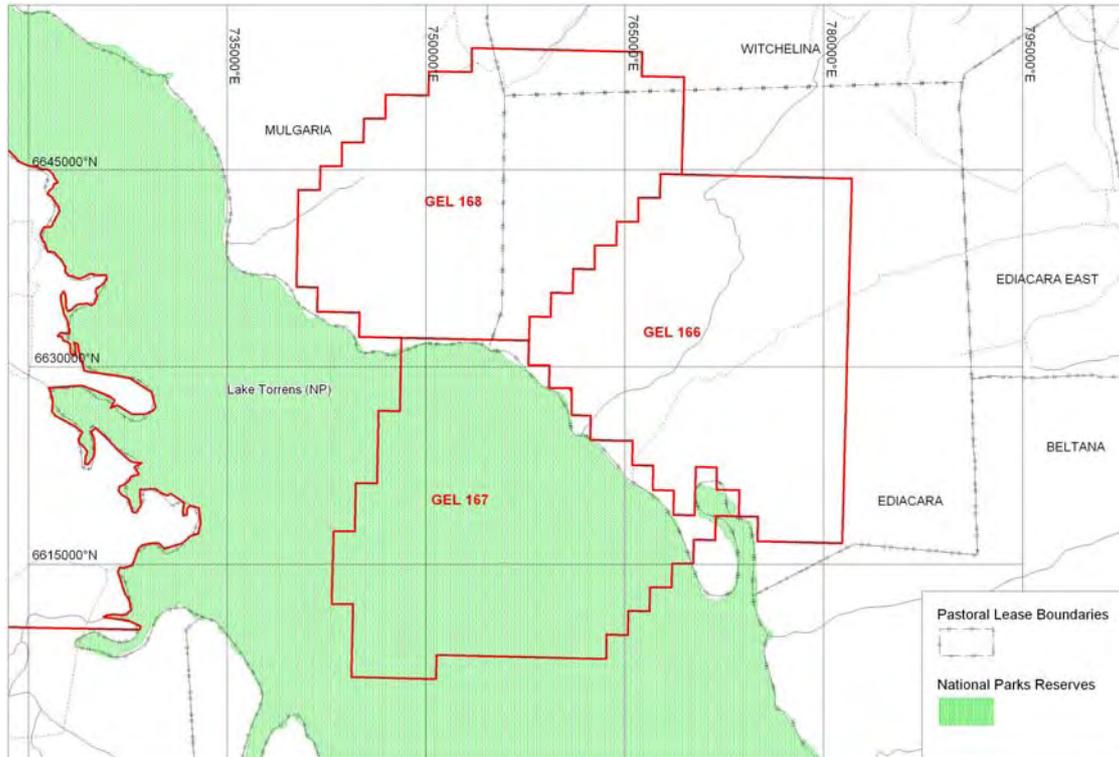
Geothermal Exploration Licences 166, 167 and 168 were granted on between the 7<sup>th</sup> September 2004 and 13<sup>th</sup> July 2005 (GEL167) and were given single regional project status in May 2005, with a common expiry date of 12<sup>th</sup> July 2010. In July 2008 the licences were suspended from 2 July 2008 to 1 October 2008, and subsequently the three licences were again suspended for the period from and including 2 October 2008 to 1 April 2009. The revised expiry date of these tenements is now 12 April 2011. They total an area of 1427km<sup>2</sup>.

Prior to the completion of licence year 3, Eden Energy applied to Primary Industries & Resources SA to surrender these licences (dated 7<sup>th</sup> April 2009)..

Figure 1 shows the location of the licences.

## ***1.3 Period***

In accordance with Section 33 of the Petroleum Regulations 2000, this report details work conducted during the third permit year of these GELs.



**Figure 1** Location map of GELs 166, 167 and 168

## 2. Work Requirements

At the commencement of licence year 3, the annual work programme negotiated by Eden with PIRSA for GELs 166, 167 and 168 comprised:

<b>Licence Year</b>	<b>Licence dates</b>	<b>Minimum Work Program</b>
Year 1	<i>12 July 2005 – 12 July 2006</i>	<i>Geological and geophysical studies</i>
Year 2	<i>13 July 2006 – 12 July 2007</i>	<i>Geological and geophysical studies</i>
Year 3	<i>13 July 2007 – 12 April 2009</i>	<i>Drill two prospecting wells (500 m each)</i>
Year 4	<i>13 April 2009 – 12 April 2010</i>	<i>Geological and geophysical studies, preliminary feasibility study, investigate development issues</i>
Year 5	<i>13 April 2010 – 12 April 2011</i>	<i>Drill one test well (3,500 m to 4,000 m) and conduct flow test</i>

### **3. Work Conducted**

During licence year 3, there was no on ground work conducted within these tenements.

Hot Dry Rocks Pty Ltd was engaged to undertake a comprehensive review of GELs 166, 167 and 168 in late 2008. HDRPL provided EDE with a report on a risk analysis of the reservoir and temperature aspect of the geothermal play identified within these tenements, and an outline of the work required to allow for the calculation of an inferred resource that would be compliant with the *Australian Geothermal Reporting Code, 2008*, for this area.

The required work programme for GELs 166, 167 and 168 was to drill two prospecting wells, each to a depth of 500 metres. Eden Energy confirms that the work programme commitment was not met. Accordingly, a non-compliance has been listed below in Section 6.

### **4. Year 3 Expenditure**

Please refer to Appendix 1.

### **5. Year Four Work Programme**

As Eden Energy have applied to surrender GELs 166, 167 and 168 and licence year four will not be realised, there is no work programme planned.

### **6. Compliance with the Petroleum Act (Reg. 33)**

#### ***6.1 Summary of the regulated activities conducted under the licence during the year***

Eden did not undertake any regulated activities during the year. Office-based studies were completed.

#### ***6.2 Report for the year on compliance with the Act, these Regulations, the licence and any relevant Statement of Environmental Objectives***

- (1) Eden has not complied with Section 33 (1) of the Regulations pertaining to the provision of an annual report within two months after the end of the licence year.
- (2) Eden Energy did not meet the minimum work programme commitment for this licence block (the drilling of two prospecting wells did not occur). Therefore, Eden Energy lists a non-compliance in this respect.

**6.3 Statement concerning any action to rectify non-compliance with obligations imposed by the Act, these regulations or the license, and to minimise the likelihood of the recurrence of any such non-compliance**

General      Eden Energy recognises the importance of achieving regulatory compliance and is committed to achieving appropriate practices in its management strategies, work practices and procedures. Eden is committed to operating in an environmentally and socially responsible manner.

- (1) Eden Energy will review its management strategies to ensure that more robust systems are put in place to reduce the likelihood of administrative oversight from occurring again in the future regarding annual reporting requirements. This case of non compliance was influenced to some degree due to the present day market forces taking some of the company focus from the reporting requirements associated with being the registered tenement holder.
- (2) Subsequent to the application to surrender the licences and the end of licence year 3, Eden Energy applied for a variation to the work programme requirements to ensure Eden remained in good standing as a geothermal licence operator. As such, Eden Energy applied to PIRSA to vary the existing work programme to the following:

<b>Licence Year</b>	<b>Licence dates</b>	<b>Minimum Work Program</b>
Year 1	<i>12 July 2005 – 12 July 2006</i>	<i>Geological and geophysical studies</i>
Year 2	<i>13 July 2006 – 12 July 2007</i>	<i>Geological and geophysical studies</i>
Year 3	<i>13 July 2007 – 12 April 2009</i>	<i>Geological and geophysical studies</i>
Year 4	<i>13 April 2009 – 12 April 2010</i>	<i>Geological and geophysical studies, preliminary feasibility study, investigate development issues</i>
Year 5	<i>13 April 2010 – 12 April 2011</i>	<i>Drill one test well (3,500 m to 4,000 m) and conduct flow test</i>

Should PIRSA accept the variation of the work programme and the surrender of the licences, the non-compliance of not meeting minimum work programme commitments is rectified. Future confirmation of the application to vary the licence conditions will be included on the Licence Register on PIRSA’s website. Confirmation of the surrender of the licences will also be available on the PIRSA Licence Register.

**6.4 Summary of any management system audits undertaken during the relevant licence year, including information on any failure or deficiency identified by the audit and any corrective action that has, or will be, taken**

Eden is a new company and has developed appropriate systems and documentation to cover Field Operations, Environmental Management, Health and Safety issues and compliance checklists to ensure the requirements of relevant Acts and Regulations are met.

As these systems are newly developed and the work conducted to date has not shown any deficiencies in the systems, no management system audits have been undertaken as yet.

**6.5 List of all reports and data relevant to the operation of the Act generated by the licensee during the relevant licence year**

Description of Report/Data	Date Due	Date Submitted	Compliant / Non-Compliant
Terratherma – Risk Assessment of Identified Geothermal Plays. Internal strategic and analysis report by HDRPL Oct 2008	NA	with this report	
Geothermal Tenements – schedule of activities. Internal report by HDRPL June 2008.	NA	with this report	

**6.6 Report on any Incidents reportable to the Minister under the Act and Regulations during the relevant Licence Year**

No reportable incidents occurred.

**6.7 Report on any reasonably foreseeable threats (other than threats previously reported on) that reasonably present, or may present, a hazard to facilities or activities under the licence, and a report on any corrective action that has, or will be, taken**

No threats have been identified.

# Appendix 1

**GELs 166, 167 and 168 Witchellina Project Expenditure 13/07/07 – 12/04/09**

Commercial in Confidence