

# Fourth Annual Report

## Renmark Project

### GELs 175, 176

For the period 23 May 2008 – 22 May 2009.

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## CONTENTS

1. Introduction .....	3
1.1 Background .....	3
1.2 Licence Data .....	3
1.3 Period .....	4
2. Work Requirements .....	4
3. Work Conducted .....	4
4. Year 4 Expenditure .....	5
5. Year Five 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 .....	5
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.....	6
6.5 List of all reports and data relevant to the operation of the Act generated by the licensee during the relevant licence year .....	6
6.6 Report on any Incidents reportable to the Minister under the Act and Regulations during the relevant Licence Year .....	6
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.....	6

### List of Figures

Figure 1 Location map of GELs 175 and 176.....	3
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# 1. Introduction

## 1.1 Background

GELs 175 and 176 are located over the Renmark Trough, approximately 40 kilometres north of Renmark within the Chowilla Station and Chowilla Regional Reserve. The deep sedimentary sequences of the Nadda and Berri Basins, which underlie the Tertiary Murray Basin, are preserved in the structurally controlled depressions of the Renmark Trough. The combination of previously modelled geothermal gradients and the potential for thick insulative cover sedimentary sequences existing relatively close to energy infrastructure initially made this area attractive for geothermal exploration. Subsequent results have reduced the prospectivity of the region and no further immediate work is recommended.

## 1.2 Licence Data

Geothermal Exploration Licences 175 and 176 were granted on the 23<sup>rd</sup> May 2005 for initial terms of five years. GEL175 covers an area of 499km<sup>2</sup>, and GEL176 covers an area of 495km<sup>2</sup>.

Figure 1 shows the location of the licences.

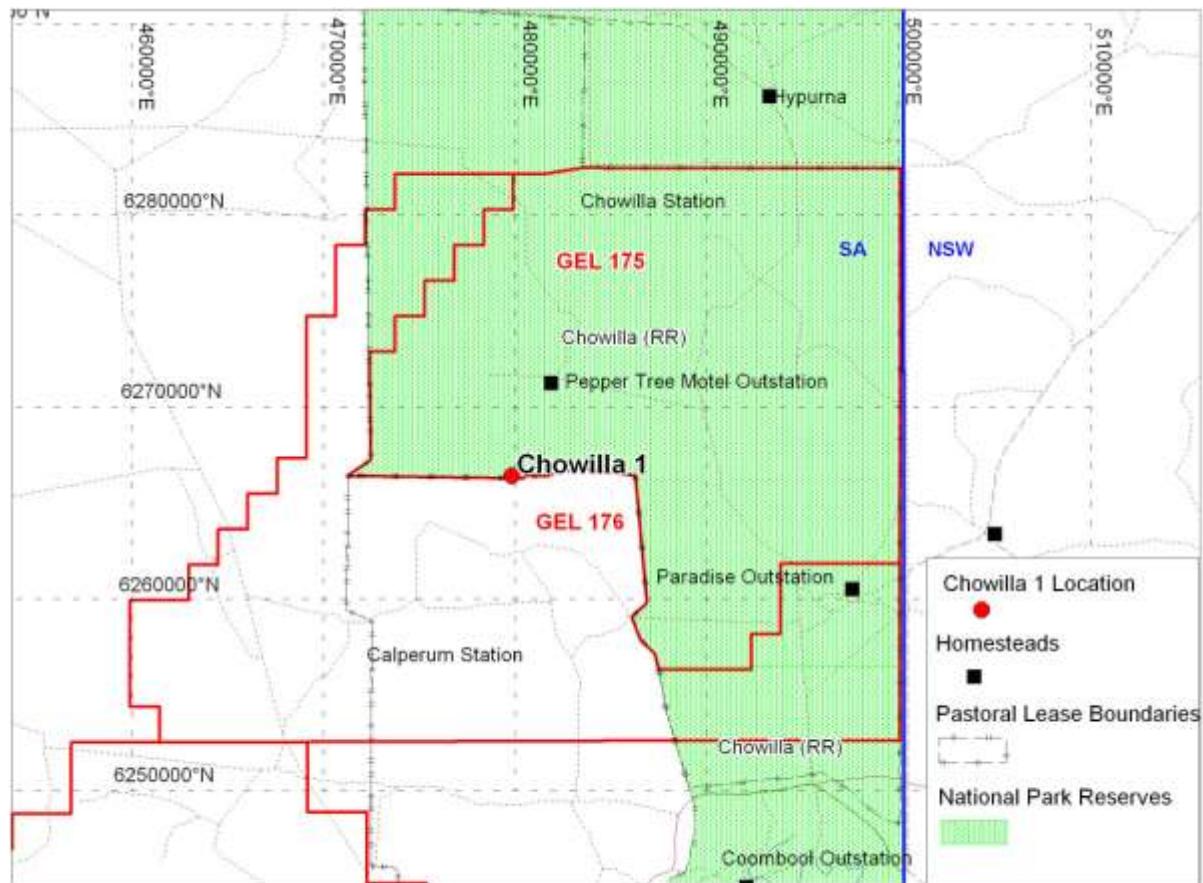


Figure 1 Location map of GELs 175 and 176

### **1.3 Period**

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

## **2. Work Requirements**

The original work programme for GELs 175 and 176 is shown in Table 1. The licences were granted on the 23<sup>rd</sup> of May 2005.

**Table 1: Original Work programme for GELs 175 & 176**

<b>Year of Term of Licence</b>	<b>Minimum Work Requirements</b>
<b>One</b>	<ul style="list-style-type: none"><li>• Geological and geophysical review</li><li>• Seismic reprocessing</li><li>• Logging and petrographic investigation (to be carried within the area covered by GEL's 175 &amp; 176)</li></ul>
<b>Two</b>	<ul style="list-style-type: none"><li>• Limited, infill geophysical surveys (if required) (to be carried out within the area covered by GEL's 175 &amp; 176)</li></ul>
<b>Three</b>	<ul style="list-style-type: none"><li>• Drill one test well</li><li>• Thermal and stress analysis (to be carried out within the area covered by GEL's 175 &amp; 176)</li></ul>
<b>Four and Five</b>	<ul style="list-style-type: none"><li>• Drill one test well</li><li>• Conduct circulation test (to be carried out within the area covered by GEL's 175 &amp; 176)</li></ul>

## **3. Work Conducted**

A variation to this work programme was approved on 23<sup>rd</sup> April 2008 (i.e. in Year 4 of the licences) as shown in Table 2.

**Table 2: GEL 175 &176 Work Programme Variation Approved 23/4/2008**

<b>Year of Term of Licence</b>	<b>Minimum Work Requirements</b> (to be conducted anywhere within the boundaries of GEL's 175 and 176)
<b>One</b>	<ul style="list-style-type: none"><li>• Geological and geophysical studies</li></ul>
<b>Two</b>	<ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>
<b>Three</b>	<ul style="list-style-type: none"><li>• Drill one slimline prospecting well (500m);</li></ul>
<b>Four</b>	<ul style="list-style-type: none"><li>• Geological and geophysical studies;</li><li>• Conduct a preliminary feasibility study</li></ul>
<b>Five</b>	<ul style="list-style-type: none"><li>• Drill one test well (3,500 to 4,000m) and conduct flow test</li></ul>

The varied work programme for Year 4 was to undertake geological and geophysical studies and conduct a preliminary feasibility study.

Based on the previous year's work that comprised the drilling of a prospecting hole, Chowilla 1, work in Year 4 on the Renmark project consisted of a review of geological risk based on the modelled and collated data from the area.

Based on the results of the Chowilla 1 well and the subsequent geological investigations the licences have been recommended for relinquishment.

This will occur once all rehabilitation requirements have been met at the drill site.

## **4. Year 4 Expenditure**

Expenditure for Year 4 is summarised in Appendix 1.

## **5. Year Five Work Programme**

The year five work that was agreed with PIRSA included

- Drill one test well to 3500–4000m
- Conduct flow tests

However, due to the results returned from Chowilla 1 no further work is proposed for this year other than rehabilitation of the drilling site and access areas. The licences are proposed to be relinquished.

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

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

Eden undertook geological studies based on the results of the Chowilla 1 well within GEL175, and other regionally based studies.

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

Eden complied with all relevant sections of the Act and Regulations as they pertain to the regulated activities conducted during the year, apart from Eden not complying 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.

### ***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***

Eden 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.

Eden is aware of the non compliance regarding the lodgement date of this report. Greater attention will be paid in future to the administration of the licensing and reporting requirements for Eden Energy tenements.

***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***

One report was generated during Year 4 relevant to the operation of the Act:

1. HDRPL Geothermal Systems Assessment of GELs 175 & 176, Renmark, SA.

This report, although dated January 2008, was not reported in Year 3, and contributed to Eden's decision to subsequently surrender the licences.

***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.