



ABN 19 127 106 665

Combined Annual Report for the Period  
7 March 2008 to 6 March 2009

**GELS 296, 304, 305, 306, 307 and 350**

**Callabonna Energy Geothermal Project**

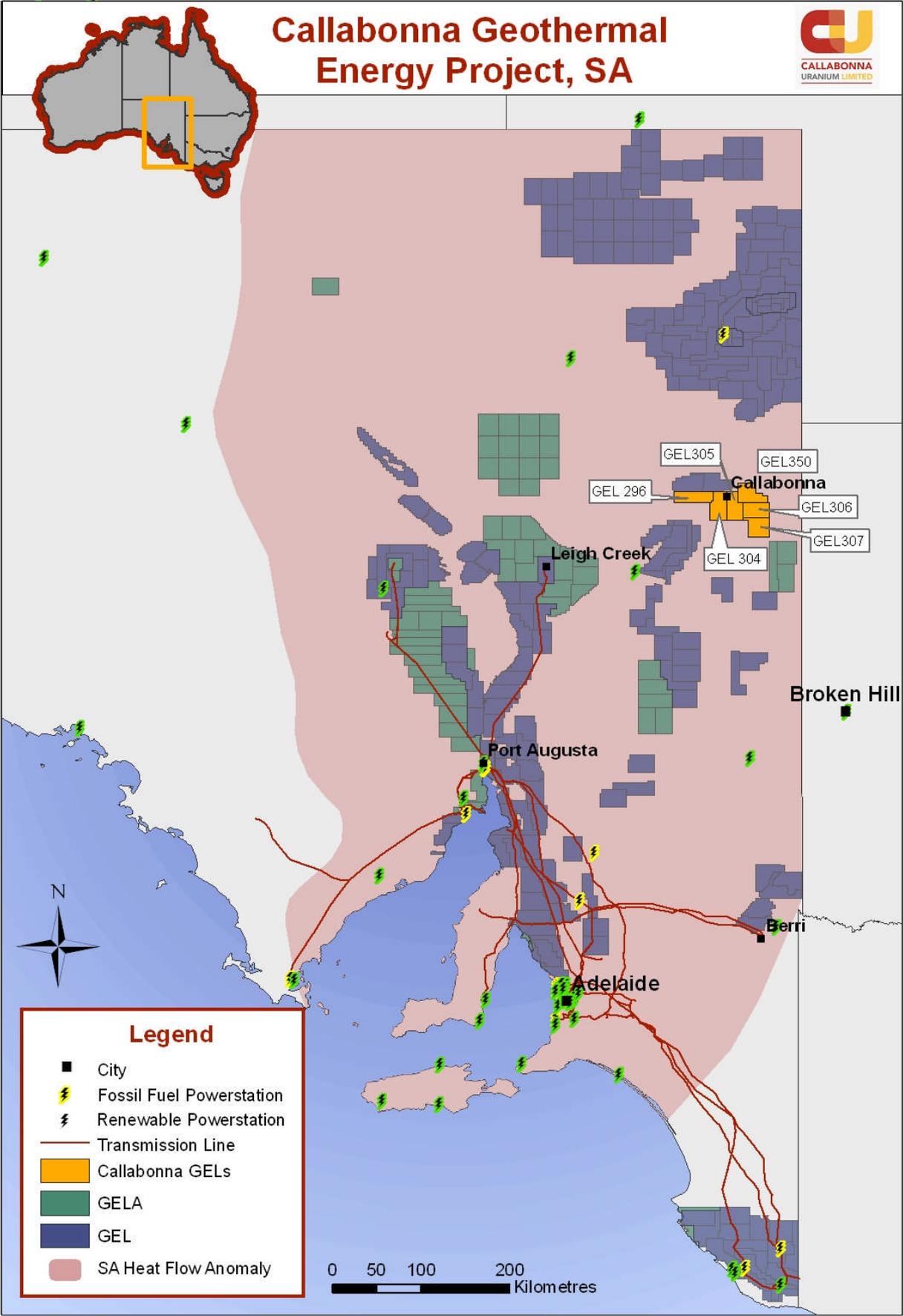
**Tenement Holders:** Callabonna Energy Pty Ltd  
(Subsidiary of Callabonna Uranium Ltd)

**Submitted by:** Callabonna Uranium Ltd

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9 September 2009

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## 1. INTRODUCTION

Callabonna Energy Pty Ltd is a 100% owned subsidiary of Callabonna Uranium Ltd and holds a 100% interest in Geothermal Exploration Licences 296, 304, 305, 306, 307 and 350 which form the Callabonna Energy Project ('CEP'). The six tenements cover a continuous area of 2,875 km<sup>2</sup> (Table 1). The project is managed by Callabonna Uranium Ltd ('Callabonna').

Tenement	Granted	Expiry	Area km <sup>2</sup>
GEL 296	7-Mar-08	6-Mar-13	497.1
GEL 304	7-Mar-08	6-Mar-13	496.5
GEL 305	7-Mar-08	6-Mar-13	472.7
GEL 306	7-Mar-08	6-Mar-13	428.0
GEL 307	7-Mar-08	6-Mar-13	480.6
GEL 350	7-Mar-08	6-Mar-13	500.0

**Table 1. Tenement Details**

The CEP lies on the north eastern structural margin of the Curnamona Craton within the Frome Embayment (Callabonna Sub-basin) in northeast South Australia. Callabonna considers the CEP area to be highly prospective for geothermal resources because the project is located in one of the hottest areas of the South Australian Heat Flow Anomaly where the high-heat producing Proterozoic basement rocks of the Mount Painter Inlier extend deep below an insulating sedimentary cover.

## 2. PERMIT SUMMARY

The five year work program for GELs 296, 304, 305, 306, 307 and 350 is outlined below in Table 2.

Year	Work Requirements
One	<ul style="list-style-type: none"> <li>• Geological and geophysical studies;</li> <li>• Drill 5-10 drill holes at depths of 250-350 metres; and</li> <li>• Airborne electromagnetic survey – 1000 line kilometres</li> </ul>
Two	<ul style="list-style-type: none"> <li>• Conduct thermal probe measurements;</li> <li>• Acquire a single seismic line to test depth of cover.</li> <li>• Geological and geophysical studies.</li> </ul>
Three	<ul style="list-style-type: none"> <li>• Drill one test well to a depth of 1500 metres</li> <li>• Measure geothermal gradient, conductivity and stress fields;</li> <li>• Geological and geophysical studies</li> </ul>
Four	<ul style="list-style-type: none"> <li>• Geological and geophysical studies; and</li> <li>• Commercial and development studies.</li> </ul>
Five	<ul style="list-style-type: none"> <li>• Deepen test well and convert to injection well;</li> <li>• Commence reservoir stimulation (subject to adequate temperatures);</li> <li>• Drill trial production well</li> </ul>

**Table 2. Work Requirements**

(Work Program may be carried out anywhere within GELs 296, 304-307 and 350)

### 3. WORK CONDUCTED

During the first year of tenure, the company completed background geological and geophysical studies using existing data and reports from public domains. Some of datasets used included:

- PEPS- SA Database
- Geoscience Australia XY Geotherm 94 Database
- FrOG Tech's SEEBASE
- Regional Gravity and Magnetic Images

The company used this available information to examine the basement lithology, sedimentary cover and regional structures. Before the tenements were granted, two Independent Consulting Geologists also completed background geological studies on the geothermal prospectivity of the CEP area.

### 4. EXPENDITURE

See Appendix 1.

### 5. PROPOSED WORK PROGRAM FOR YEAR 2

The drilling program planned for Year 1 was postponed due to extenuating circumstances and as a result Callabonna has lodged a request to vary the Work Program. The request to vary the work program, to be approved by PIRSA, will result in the following work program scheduled for Year 2. Callabonna intends to be compliant with the proposed work program.

Year	Work Program
Two	<ul style="list-style-type: none"><li>• Magnetotelluric Survey to ascertain the depth of basement</li><li>• Deepen pre-collars (used for uranium exploration)</li><li>• Down hole temperature and wireline logging</li></ul>

Table 3. Proposed Year 2 Work Program

### 6. COMPLIANCE WITH THE PETROLEUM ACT 2000 (Regulation 33 Section 2)

**A. Summary of the regulated activities conducted under the licence during the year**  
Callabonna Energy Pty Ltd has not undertaken any regulated activities as defined under the Petroleum Act in GELs 296, 304, 305, 306, 307 and 350 during the licence period to date.

**B. Report for the year on compliance with the Act, these Regulations, the licence and any relevant Statement of Environmental Objectives**  
Callabonna Energy Pty Ltd did not meet the required work program for Year 1 for GELs 296, 304, 305, 306, 307 and 350, and was therefore non compliant with the licence conditions.

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

To rectify the non-compliance issue in section B, Callabonna Energy Pty Ltd has lodged a variation request to change the Work Program for the GELs.

**D. 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**

No management system audits were conducted.

**E. List of all reports and data relevant to the operations of the Act generated by the licensee during the relevant licence year**

The work undertaken to date has been primarily desktop studies, therefore no operational reports were generated. Two geological reports have been previously prepared for Callabonna.

1. Beardsmore, G., 2007. Review of geothermal systems in the vicinity of Lake Callabonna, South Australia. Report prepared for Callabonna Uranium Ltd, July 2007.
2. Giles, D., 2008. Independent Geologist's Report prepared for Callabonna Uranium Ltd Prospectus.

**F. In relation to any incidents reported to the Minister under the Act and these regulations during the relevant licensing year-**

- i. An overall assessment and analysis of the incidents, including the identification and analysis of any trends that have emerged*
- ii. An overall assessment of the effectiveness of any action taken to rectify non-compliance with obligations imposed by the Act, these regulations or the licence, or to minimise the risk of recurrence of any such non-compliance*

No reportable incidents occurred.

**G. 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 report on any corrective action that has, or will, taken**

No threats have been identified.

**H. Statement outlining operations proposed for the ensuing year**

See section 5 above.

# **APPENDIX 1**

## **Expenditure Statement**

During the period the company did not spend money on exploratory operations, as activities were limited to desktop reviews of historic data. Most of the background research was conducted before the tenements were granted. This includes two Independent Geologist Report's completed by Beardsmore (2007) and Giles (2008) on the geothermal prospectivity of the CEP area for inclusion in the company Prospectus. The parent company, Callabonna Uranium Ltd was due to be listed on the Australian Stock Exchange in the first half of 2008 following completion of an Initial Public Offering ('IPO'). However, due to the turmoil in global financial markets the IPO has been delayed. As a result, this postponement has forced the company to delay most of its exploration activities on the Callabonna Energy Project. The Company is currently pursuing other means of financing, and will certainly increase its exploration activities during year two.

The expenditure statement is Commercial in Confidence.