

Near Surface Geothermal Energy Pty Ltd

Annual Report

Licence Year 1

20 April 2009 – 19 April 2010

Geothermal Exploration Licence 321

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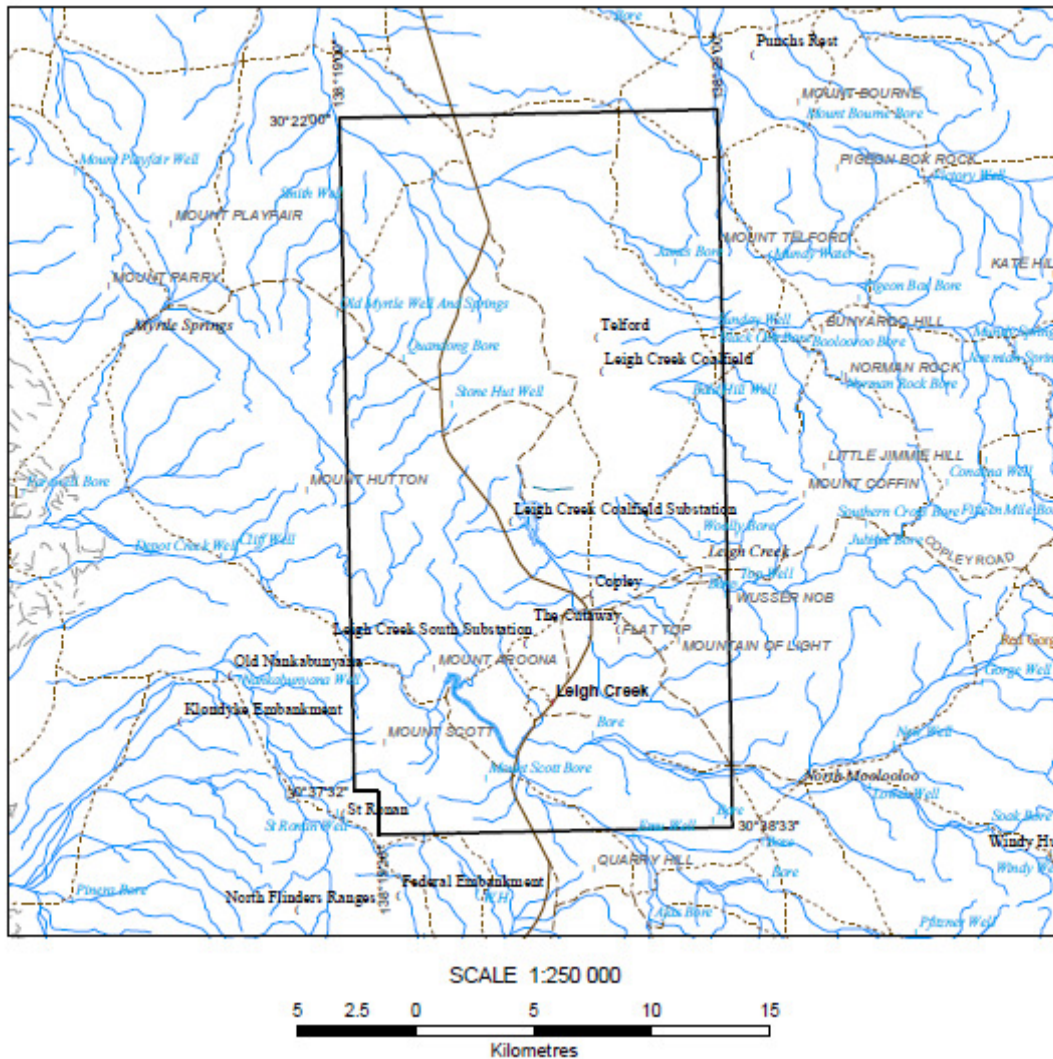
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1 Introduction

Geothermal Exploration Licence GEL321 was granted on 20th April 2009. The licence is located in the Leigh Creek region of South Australia. This report details the work conducted during Licence Year 1 of the licence (20 April 2009 – 19 April 2010 inclusive), in accordance with Regulation 33 of the Petroleum Act 2000.

GEL321 is located as shown in map below:



2 Permit Summary

For the duration of the licence year, licensees for Geothermal Exploration Licence (GEL) 321 were:

- *Near Surface Geothermal Energy Pty Ltd* 100%

The current work commitments (including all variations) associated with GEL 321 can be seen in Table 1.

Table 1 Current work commitments by licence year

Licence Year	Licence dates	Minimum Work Program
Year 1	<i>20 April 2009 – 19 April 2010</i>	<i>Geological and geophysical review Eg Infra red / thermography / magnetometer surveys</i>
Year 2	<i>20 April 2010 – 19 April 2011</i>	<i>Geological and geophysical review Eg Infra red / thermography / magnetometer surveys</i>
Year 3	<i>20 April 2011 – 19 April 2012</i>	<i>Ongoing monitoring of heat probes Modelling of geothermal resource Pre-feasibility study Selection of sites for trials of down hole heat exchangers</i>
Year 4	<i>20 April 2012 – 19 April 2013</i>	<i>Trial of down hole heat exchanger and measurement of heat drawdown profile</i>
Year 5	<i>20 April 2013 – 19 April 2014</i>	<i>Feasibility study for power generation in association with other sites.</i>

Licence Year 1 concluded on 19th April 2010. The following table displays the minimum work program (after all variations) and the actual work completed up until the end of the current licence period.

Table 2 Final work program and work completed (as of end of current reporting period) by licence year

Licence Year	Minimum Work Program	Actual Work
Year 1	<i>Geological and geophysical review Eg Infra red / thermography / magnetometer surveys</i>	<i>Consultant review of tenement holding and impacts of overlapping tenements. Work plan was altered as a result of this report.</i>
Year 2	<i>Geological and geophysical review Eg Infra red / thermography / magnetometer surveys</i>	

3 Regulated Activities

Pursuant to Regulation 33(2)(a) under the Act, an annual report must include:

“a summary of the regulated activities conducted under the licence during the [current reporting] year.”

Drilling and Related Activities

No regulated activities undertaken in the licence reporting period.

Seismic Data Acquisition

No regulated activities undertaken in the licence reporting period.

Seismic Data Processing and Reprocessing

No regulated activities undertaken in the licence reporting period.

Geochemical, Gravity, Magnetic and other surveys

No regulated activities undertaken in the licence reporting period.

Production and Processing

No regulated activities undertaken in the licence reporting period.

Pipeline/Flowline Construction and Operation

No regulated activities undertaken in the licence reporting period.

Preliminary Survey Activities

A review of the tenement holding and relationship with overlapping tenements was undertaken by ELP Pty Ltd. This work was to ensure the interests of all tenement holders in the area covered by GEL321 was fully understood prior to work commencing. As a result of this work Near Surface Geothermal Energy has discovered that access to thermal energy sources formed as a result of mining at Leigh Creek is not included in the GEL.

4 Compliance Issues

Licence and Regulatory Compliance

Pursuant to Regulations 33(2) (b) & (c), an annual report must include:

“a report for the year on compliance with the Act, these regulations, the licence and any relevant statement of environmental objectives;” and

“a 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 recurrence of any such non-compliances.”

No environmental incidents were reported during the permit year.

Detailed information on the individual instances of non-compliance are provided below in designated sections.

Licence Non-Compliance

Table 2 List of licence non-compliances for current reporting year

No.	Stated Commitment	Reason for Non-Compliance	Rectification of Non-Compliance
1	Commitment to undertake Infra-red or thermography or magnetometer surveys.	<p>NSGE has been investigating options for satellite remote data sensing as a means of providing a better range of data.</p> <p>A review of the tenement holding and relationship with overlapping tenements was undertaken by ELP Pty Ltd. This work was to ensure the interests of all tenement holders in the area covered by GEL321 was fully understood prior to work commencing. As a result of this work Near Surface Geothermal Energy has discovered that access to thermal energy sources formed as a result of mining at Leigh Creek (spoil dumps) is not available through the GEL and hence Near Surface Geothermal Energy has revised its work program to target deeper thermal sources</p> <p>NSGE has been sourcing additional finance to carry out the planned program for Years 1 and 2 and is close to finalising this financing.</p>	<p>Heat source target has been changed to deeper regions.</p> <p>Near Surface Geothermal Energy is sourcing funding to commence geophysical and geological data collection aimed at providing a target for deep drilling.</p>

Regulatory Non-Compliance

Table 3 List of regulatory non-compliances for current reporting year

No.	Date	Activity	Details of Non-Compliance	Rectification of Non-Compliance
				Not Applicable

Compliance with Statement of Environmental Objectives

Table 4

Objective	Assessment Criteria	Compliant/Non-Compliant (inc. Compliance statement)	Comments
			Not Applicable

There were no environmental incidents in the period.

Management System Audits

Pursuant to Regulation 33(2) (d) under the Act, an annual report must include:

“a 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 actions that has, or will be taken”.

No management system audits were conducted during Year 1.

Report and Data Submissions

Pursuant to Regulation 33(2) (e) under the Act, an annual report must include:

“a list of all reports and data relevant to the operation of the Act generated by the licensee during the licence year”.

Table 5 List of report and data submissions during current licence reporting year

Description of Report/Data	Date Due	Date Submitted	Compliant / Non-Compliant
Not applicable			

Incidents

Pursuant to Regulation 33(2) (f), an annual report must include:

“in relation to any incidents reported to the Minister under the Act and these Regulations during the relevant licence year –

- (i) an overall assessment and analysis of the incidents, including the identification and analysis of any trends that have emerged; and*
- (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”.*

Table 6 List of incidents during current licence reporting year

Date of Incident	Activity	Incident Description	Type of Loss	Action to Rectify & Effectiveness of Action	Date Reported / Reported to Whom

No incidents occurred in the reporting year.

Threat Prevention

Pursuant to Regulation 33(2) (g) under the Act, an annual report must include:

“a report on any reasonably foreseeable threats (other than threats previously reported on) that reasonably presents, 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”.

There were no perceived threats and no action taken.

Future Work Program

Pursuant to Regulation 33(2) (h) under the Act, an annual report must include:

“unless the relevant licence year is the last year in which the licence is to remain in force – a statement outlining operations proposed for the ensuing year”.

Near Surface Geothermal Energy is in discussions with a publicly listed company regarding funding for a program to collect geophysical and geological data collection aimed at providing a target for deep drilling. As the original focus of the work program, the development of heat associated with burning spoil piles at Leigh Creek, is not covered by the GEL the Company's focus is now aimed at the heat sources believed to exist at greater depth within the exploration area. It is hoped that geophysical and geological data collected in Year 2 will allow a target to be identified for initial drilling in Year 3.

5 Expenditure Statement

Pursuant to Regulation 33(3) under the Act, an annual report must contain:

“An annual report must be accompanied by a statement of expenditure on regulated activities conducted under the licence for the relevant licence year, showing expenditure under each of the following headings:

- a) drilling activities;*
- b) seismic activities;*
- c) technical evaluation and analysis;*
- d) other surveys;*
- e) facility construction and modification;*
- f) operating and administration expenses (not already covered under another heading)”.*

Please refer to Appendix 1 for the expenditure statement for the current reporting period.