

Panax Geothermal Limited

ABN 89 122 203 196

Annual Report

Licence Year 4

24 July 2009 – 23 January 2011

Geothermal Exploration Licence 220 and 221

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1. Introduction

Geothermal Exploration Licences (GELs) 220 and 221 were acquired by Panax Geothermal Ltd (“Panax”) on the 5th December 2008 when it acquired 100% of the issued capital of Osiris Energy Ltd. The licences are located in the Cooper Basin of South Australia (see Figure 1).

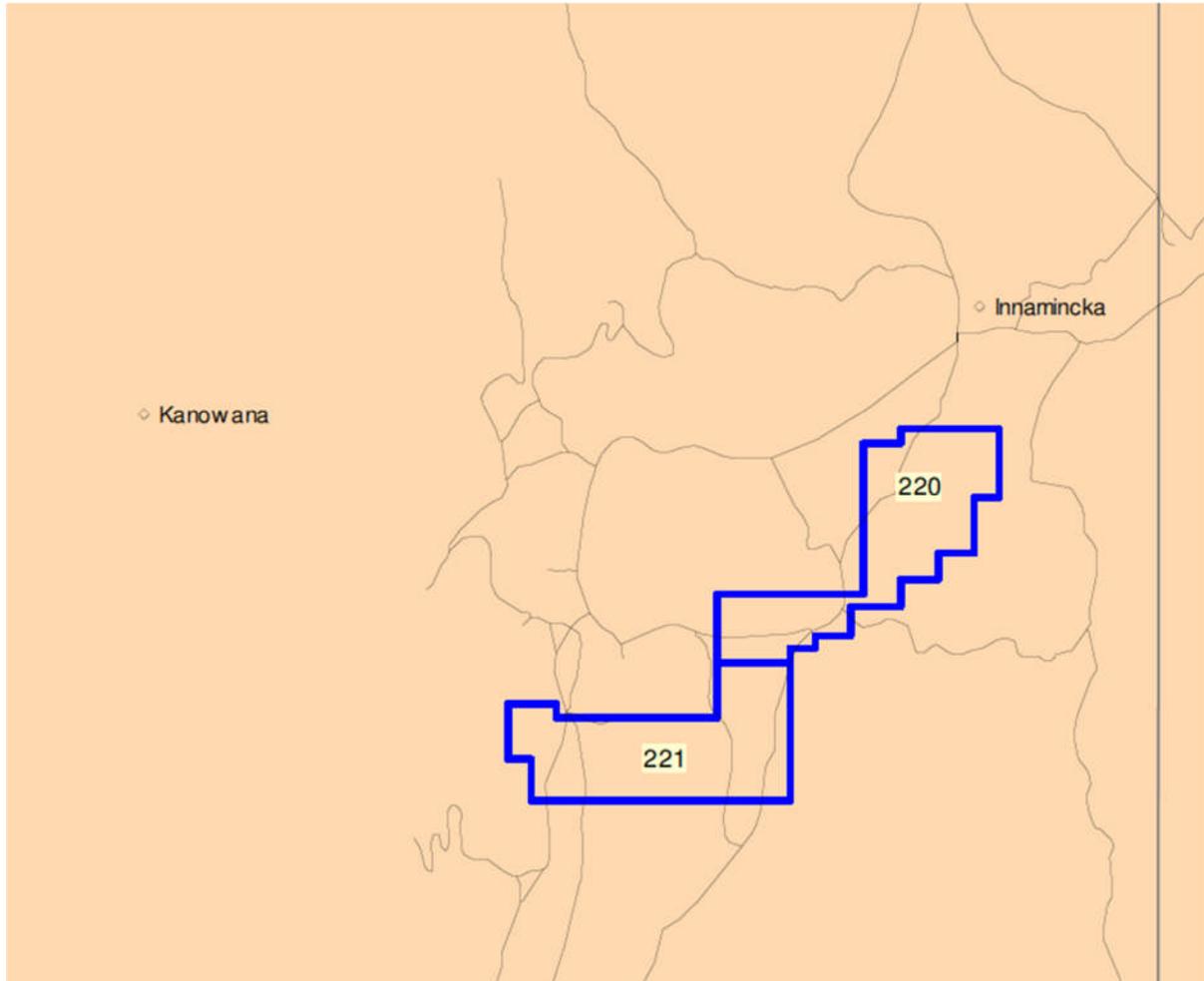


Figure 1. Location of Panax GEL's in the Cooper Basin of South Australia. GELs are annotated on yellow background and localities are in black. The width of the map is about 160km.

This report details the work conducted on GEL 220 and 221 during the period 24th July 2009 to 23rd January 2011 (licence year 4) in accordance with Section 33 of the Petroleum Regulations 2000.

This reporting period includes a period from 10 May 2010 to 9 November 2010 when the licences for GELs 220 and 221 were suspended following the issuing of a notice dated 28th May 2010

That notice also advised a new expiry date for GELs 220 and 221 of 23 January 2012.

2. Permit Summary

For the duration of the licence year, the licensee for the Geothermal Exploration Licences (GEL's) were:

Licence	Owner/s	Interest
GEL 220	Osiris Energy Ltd	100%
GEL 221	Osiris Energy Ltd	100%

Osiris Energy Ltd is 100% owned by Panax Geothermal Ltd.

GELs 220 and 221 are referred to as a Group of Licences and have a combined work programme.

A variation of the second year work programme was requested during Year 1 and was agreed to on the 11th September 2007. The variation of the work programme meant that Years 2 and 3 minimum work requirements were merged.

A variation of the fourth and fifth years' Minimum Work programmes was requested and granted on 15th March 2011.

The following tables display both the minimum work program (after all variations) and the actual work completed up until the end of the current licence period.

Table 1. Licence work programme (after variation) by licence year.

Year of Licence	Minimum work commitments
1	<ul style="list-style-type: none"> Review geological and geophysical data. <p>Note: Year 1 work programme to be carried out within the combined area of GEL 220 and 221</p>
2 & 3	<ul style="list-style-type: none"> Measurements of detailed geothermal gradients in relevant and accessible water wells; Conduct infill geophysical surveys if required; Seismic re-processing; Geological and geophysical studies <p>(to be carried out within the area covered by GEL's 220 and 221)</p>
4	<ul style="list-style-type: none"> Geological and geophysical studies. <p>(to be carried out within the area covered by GEL's 220 and 221)</p>
5	<ul style="list-style-type: none"> Geological and geophysical studies. <p>(to be carried out within the area covered by GEL's 220 and 221)</p>

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	<ul style="list-style-type: none"> Review geological and geophysical data. 	<ul style="list-style-type: none"> Review geological and geophysical data.
Year 2 & 3	<ul style="list-style-type: none"> Measurements of detailed geothermal gradients in relevant and accessible water wells; Conduct infill geophysical surveys if required; Seismic re-processing; Geological and geophysical studies 	<ul style="list-style-type: none"> Given wealth of data, it was considered not required to acquire additional measurements of geothermal gradients. Given data available, it was considered not required to collect additional geophysical data at this stage. Seismic re-processing Geological and geophysical studies (see report by Hot Dry Rocks Pty Ltd)
Year 4	<ul style="list-style-type: none"> Geological and geophysical studies. <p>(to be carried out within the area covered by GEL's 220 and 221)</p>	<ul style="list-style-type: none"> Geothermal Systems Assessment of GELs 220 & 221 carried out by Hot Dry Rocks Pty Ltd Assessment based on seismic data of the depth, thickness and temperature potential of the Hutton Sandstone carried out by Hot Dry Rocks Pty Ltd
Year 5	<ul style="list-style-type: none"> Geological and geophysical studies. <p>(to be carried out within the area covered by GEL's 220 and 221)</p>	<ul style="list-style-type: none"> Not yet due.

3. Regulated Activities

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.

Geochemical, Gravity, Magnetic and other surveys

No regulated activities undertaken in the licence reporting period.

Processing, inversion and Interpretation

No regulated activities undertaken in the licence reporting period.

Post-survey activities

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

No regulated activities undertaken in the licence reporting period.

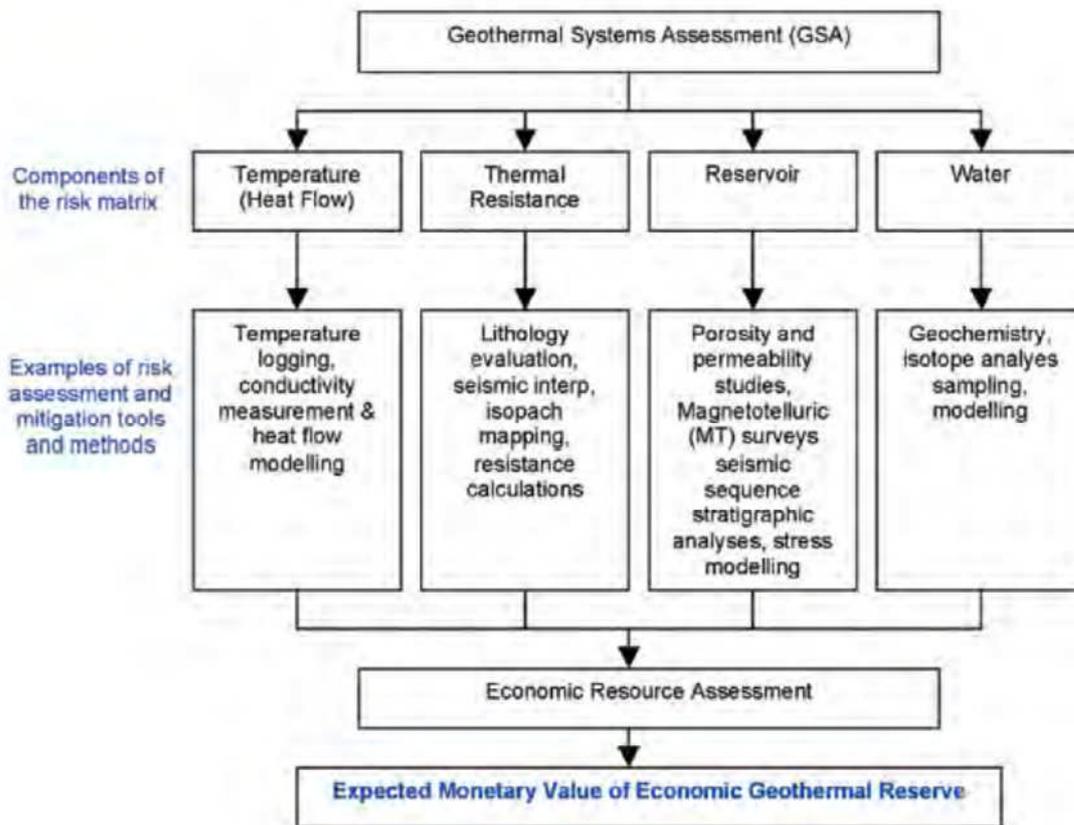
4. Non-regulated Activities (Geological and Geophysical Studies)

Two reports were commissioned and completed during the reporting period. Both were completed by Hot Dry Rocks Pty Ltd.

Hot Dry Rocks Pty Ltd (HDRPL) was commissioned by Panax Geothermal Ltd (Panax) to undertake a Geothermal Systems Assessment of GELs 220 and 221 in the Nappamerri Trough region of the Cooper Basin, South Australia.

The Geothermal Systems Assessment (GSA) approach is a risk assessment framework developed by Hot Dry Rocks Pty Ltd, see figure 3, that assesses the principal geological risks at basin-scale.

Figure 3. Geothermal Systems Assessment as developed by Hot Dry Rocks Pty Ltd.



This report assesses the principal risks associated with geothermal prospectivity in GELs 220 and 221, namely;

- Presence of an adequate thermal insulating cover sequence and adequate temperatures for geothermal prospectivity;
- Presence of a suitable reservoir unit; and
- Availability of water.

This confidential report was submitted to Panax on 14/9/09, and can be supplied to PIRSA on request.

Hot Dry Rocks Pty Ltd (HDRPL) was also commissioned by Panax to undertake a preliminary interpretation of 2D seismic data to identify the thickest and deepest part of the Hutton Sandstone in GEL 220. In addition to this, temperature estimates were to be carried out on the target Hutton Sandstone reservoir zones

The assessment involved tying in seismic lines to petroleum wells Moontanna 1 and Moomba 51 to identify and trace relevant reflectors. The results of the seismic work were incorporated with thermal conductivity data and heat flow estimates from previous assessments in this area to produce 1D temperature models to 4500 m depth.

In addition, all available porosity and permeability data were plotted versus depth to investigate any compaction-associated trends.

This confidential report was submitted to Panax on 16/12/09, and can be supplied to PIRSA on request.

5. Compliance Issues

Licence and Regulatory Compliance

All material and significant licence, regulatory and SEO requirements have been fulfilled.

Regulatory Non-Compliance

No regulatory non-compliance

Management System Audits

The activities in the period have been desk top studies only no management system audit has been undertaken.

Report and Data Submissions

	Report/Data	Due Date	Date Submitted	Compliant?
1	Year 4 Annual Report	23rd March, 2011	29th April, 2011	Non Compliant (late submission)

Incidents

There were no reportable incidents that occurred during the permit year.

Threat Prevention

There are no foreseeable threats to report in the permit year.

Future Work Program

Panax intends to continue to assess the most appropriate geothermal model from technical and commercial perspectives as detailed in the work programme for the licences.

The GSA assessment outlined a few geothermal systems that will be further assessed in the next period. The results of these studies will formulate the details of the work programme for Year 5.

6. **Expenditure Statement**

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

THE ATTACHED FINANCIAL INFORMATION IS NOT FOR PUBLICATION

Commercial in confidence