PEL 107
Cooper - Eromanga Basin
- South Australia -

Annual Report
Licence Year 2 of Term 2

2 December 2009 to 1 December 2010

Beach Energy Limited
Great Artesian Oil and Gas Limited
Drillsearch Gas Pty Ltd
# PEL 107
Annual Report
Licence Year 2 Term 2

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1 Introduction

Petroleum Exploration Licence (PEL) 107 is situated on the south western margin of the Cooper/Eromanga Basin, South Australia. The Licence was first awarded on 2 April 2003. Renewal of the Licence for a second five year term effective from 2 December, 2008 was entered into the public register on 5 December, 2008.

This report details the work performed by the Joint Venture during this second year of the Licence Term, in accordance with the requirements of Section 33 of the Petroleum Regulations 2002. The second year of the second term of the Licence covers the period 2 December 2009 to 1 December 2010.

2 Licence Summary

2.1 Licence Interests

Petroleum Exploration Licence 107 was awarded on 2 April 2003 to Great Artesian Oil & Gas Ltd.

Beach Petroleum farmed into PEL 107 on 24 April 2003 and assumed Operatorship.

Drillsearch Gas Pty Ltd acquired Magellan Petroleum (Southern), effective on 25th March 2010, and consequently now holds the 20% interest in PEL 107 previously held by Magellan.

The current interests in PEL 107 are:

- Beach Energy Ltd (Operator) 40%
- Great Artesian Oil & Gas Ltd 40%
- Drillsearch Gas Pty Ltd 20%

2.2 Suspensions Term 1

An 8 month suspension from 23 January 2006 to 23 September 2006 (Licence Year 3 of Term 1) was requested by Beach Petroleum on 16 January 2006 and approved by PIRSA on the 18 January 2006. The suspension was lifted twice to enable exploration operations to be conducted (Cadulus seismic survey & uphole drilling). The details of the period in suspension are shown below:

- Licence suspended 23 January 2006; Licence active 14 August 2006;
- Licence suspended 25 August 2006; Licence active 19 September 2006;
- Licence suspended 22 September 2006; Licence active 9 October 2006.

As a result of the periods in Suspension, the third year of the Licence ended on 1 December 2006 and the Licence Term ended on 1 December 2008.
2.3 Work Program Variations Term 1

Applications during the period of Term 1 to vary the work program are listed below and the resulting agreed work program for the first term of the Licence is shown in Table 1.

- An application was made to PIRSA on 1 June 2004, requesting Years 1 & 2 work programs to be combined. This was approved on 25 June 2004.

- An Application was made to PIRSA on 1 March 2005 requesting Years 2 & 3 work programs to be combined. This was approved on 14 March 2005.

- An Application was made to PIRSA on 7 November 2007 to substitute the 125 km² Spencer Kiana Muteroo 3D seismic survey that was acquired earlier in 2007, for the two contingent Year 5 wells. This was approved on 29 November 2007.

2.4 Work Completed Term 1

Term 1 concluded on 1 December 2008. Table 1 below details the minimum required work program and the actual work that was completed for the full five year period of Term 1 for PEL 107.

Table 1 Final Work Program and Work Completed as of end of Term 1

<table>
<thead>
<tr>
<th>Licence Year</th>
<th>Minimum Required Work Program</th>
<th>Actual Work Undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>1 well; 50 km 2D seismic; seismic reprocessing; Geological &amp; Geophysical Studies</td>
<td>1 well (Moana-1) 153 km Albus 2D Seismic Survey 270 km seismic reprocessing Geological and Geophysical studies</td>
</tr>
<tr>
<td>Year 2</td>
<td>1 well, 50 km 2D seismic or detailed 3D seismic program</td>
<td>1 well (Goolwa-1) 86 km Malleus 2D Seismic Survey 313 km seismic reprocessing</td>
</tr>
<tr>
<td>Year 3</td>
<td>4 wells, 50 km 2D seismic or detailed 3D seismic program</td>
<td>4 wells (Kiana-1, Tyringa-1, Keeley-1, Talia-1), 95 km Discus &amp; Cadulus 2D seismic, 100 km seismic reprocessing</td>
</tr>
<tr>
<td>Year 4</td>
<td>2 wells and 125km² 3D seismic</td>
<td>2 wells (Appadare-1 &amp; Cabbots-1) 54km Ficus/Ficus Extension 2D Seismic Survey plus reprocessing, 125 km² Spencer-Kiana-Muteroo 3D seismic</td>
</tr>
<tr>
<td>Year 5</td>
<td>Geological &amp; Geophysical Studies</td>
<td>Geological and Geophysical studies</td>
</tr>
</tbody>
</table>

The Term 1 Work Program requirements were fully met. During the course of the five year period of Term 1, eight (8) exploration wells were drilled, 388 kms of 2D
and 125 sq km of 3D seismic data were acquired and 683 km of 2D seismic data were reprocessed. This resulted in one oil field discovery, - Kiana 1.

2.5 Work Obligations and Work Completed to Date for Term 2

Term 2 commenced on 2 December 2008. Table 2 below details the agreed minimum work program and the work undertaken to date for Term 2 of PEL 107.

Table 2  Agreed Work Program for Term 2 and Work Completed as of end of Current Reporting Period

<table>
<thead>
<tr>
<th>Licence Year</th>
<th>Licence Dates</th>
<th>Minimum Work Program</th>
<th>Actual Work Undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>2/12/08 - 1/12/09</td>
<td>Geological and Geophysical Studies</td>
<td>Geological and Geophysical Studies</td>
</tr>
<tr>
<td>Year 2</td>
<td>2/12/09 - 1/12/10</td>
<td>Geological and Geophysical Studies</td>
<td>Geological and Geophysical Studies</td>
</tr>
<tr>
<td>Year 3</td>
<td>2/12/10 - 1/12/11</td>
<td>Geological and Geophysical Studies</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>2/12/11 - 1/12/12</td>
<td>One well and Geological and Geophysical Studies</td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td>2/12/12 - 1/12/13</td>
<td>Geological and Geophysical Studies</td>
<td></td>
</tr>
</tbody>
</table>

2.6 Suspensions for Term 2

Extended periods of flood inundation from the Cooper Creek prevented access to much of the western Cooper Basin throughout most of 2010. In response to the anticipated prolonged lack of access to the region, the JV applied for, and was granted, a suspension of the Licence work commitments for a period of six months following the end of Licence Year 2. Work commitments for Licence Year 2 of PEL 107 will now be required to be completed by June 1, 2011.

As a consequence of this suspension, the Licence Term will now expire on 1st June 2014, six months later than the original expiry date.
3 Exploration Activity

3.1 Drilling

No drilling activity took place in PEL 107 during Licence Year 2 of Term 2.

3.2 Seismic Data Acquisition

No seismic data was acquired in PEL 107 during Licence Year 2 of Term 2.

3.3 Seismic Data Processing/ Reprocessing

No Seismic Processing or Reprocessing was undertaken during Licence Year 2 of Term 2.

3.4 Other Surveys

No other surveys were conducted within the PEL 107 Licence area during Licence Year 2 of Term 2.

3.5 Geological and Geophysical Studies

Geological and Geophysical work for the permit year consisted of incorporating drilling results from adjacent acreage, as it becomes available, to re-assess prospectivity and play types in the licence area.

4 Administration

4.1 Licence and Regulatory Compliance

A Compliance Report which details the Operator’s compliance with the 2000 Petroleum Act, its Regulations, the terms and conditions of the Licence, and the agreed Statements of Environmental Objectives governing field based operations undertaken during the Licence term is attached to this Report as Appendix 1.

4.2 Management System Audits

No audits of Beach Energy’s Management Systems specific to PEL 107 were undertaken during 2010.

The Beach emergency response system which includes an Emergency Management Manual, Site Emergency Response Plans and Emergency Management Initial Response Guidelines were reviewed during 2009 with documentation being updated to meet the changing roles and responsibilities in the organisation.

As there was no field based activity in PEL 107 during the Licence Year, no Emergency Management exercise was conducted specifically for the Licence. The Beach EM system was, however, tested with a formal Emergency Response Team test drill on 9 June 2009.
4.3 Report and Data Submissions

A list of the items submitted to PIRSA during the report period is contained in Table 3 below:

<table>
<thead>
<tr>
<th>Table 3</th>
<th>PEI 107 Annual Report Licence Year 2 - Term 2 02/12/09 to 01/12/10</th>
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</thead>
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List of Reports Generated and Submitted During Licence Year 2 of Term 2

<table>
<thead>
<tr>
<th>Title</th>
<th>Date Due</th>
<th>Date Submitted to PIRSA</th>
<th>Compliant / Non Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Report for PEL 107 - Year 1, Term 2</td>
<td>1 February 2010</td>
<td>19 January 2010</td>
<td>Compliant</td>
</tr>
<tr>
<td>Quarterly Cased Hole Report for Fourth Quarter 2009</td>
<td>31st January 2010</td>
<td>29th January 2010</td>
<td>Compliant</td>
</tr>
<tr>
<td>Quarterly Cased Hole Report for First Quarter 2010</td>
<td>30th April 2010</td>
<td>28th April 2010</td>
<td>Compliant</td>
</tr>
<tr>
<td>Quarterly Cased Hole Report for Second Quarter 2010</td>
<td>30th July 2010</td>
<td>23th July 2010</td>
<td>Compliant</td>
</tr>
<tr>
<td>Quarterly Cased Hole Report for Third Quarter 2010</td>
<td>31st October 2010</td>
<td>28th October 2010</td>
<td>Compliant</td>
</tr>
</tbody>
</table>

4.4 Incidents

There were no drilling, seismic or other such field based activities and consequently there were no reportable incidents arising from operations undertaken within PEL 107 during the current Licence Reporting Year.

4.5 Threat Prevention

There are no threats foreseeable to the proposed exploration activities for PEL 107, other than the disruptive influence of occasional flooding of the Cooper Creek.

The progress of any flooding events in the headwaters of the Cooper Creek are closely monitored by satellite surveillance to predict the time of their arrival in the PEL 107 area several weeks later. Drilling and seismic schedules can be amended accordingly.
4.6 Future Work Program (Year 2, Term 2)

Geological and Geophysical work for Licence Year 3 will continue to focus on preparation and update of the prospect and leads seriatim, incorporating adjacent acreage drilling results. This assessment is expected to have a regional flavor to integrate source, seal, reservoir and structure and to examine potential migration pathways.

5 Expenditure Statement

A Licence Expenditure Summary for the period 02/12/09 to 01/12/10 (Year 2, Term 2) is presented below as Table 6:
Appendix 1: Annual Compliance Report for PEL 107 Licence Year 2 of the Second Term

Introduction

Pursuant to Regulation 33 (2) of the 2000 Petroleum Act, Beach Petroleum, as Operator of PEL 107 in the Cooper Basin, South Australia, herewith submits its report on compliance with:

- the Petroleum Act,
- its Regulations,
- the PEL Licence conditions, and
- the various Statements of Environmental Objectives (SEOs) to which Beach Energy was committed in conducting its work commitments for Year 2 of the Licence.

The work program was minimal and did not include any drilling or seismic activity. There were no instances of non compliance for the Licence Year.

Petroleum Act and Petroleum Exploration Licence

There were no instances of non-compliance with either the 2000 Petroleum Act or the terms of the Licence during Licence Year 2 of the second term with respect to PEL 107.

Regulations of the 2000 Petroleum Act and Applicable SEOs

Drilling

No drilling took place in PEL 107 during Licence Year 2 of Term 2 and there were no instances of Non-compliance with the Regulations in regard to Beach’s drilling operations in PEL 107, nor were there any instances of non-compliance with the "Statement of Environmental Objectives for Drilling in the Cooper Basin."

All reports relevant to earlier drilling had been submitted to the Authority prior to the start of Licence Year 2.

Seismic

There were no seismic field operations and no reprocessing of existing seismic data during Licence Year 2 of the second term.

There were no instances of non-compliance with the Regulations in regard to Beach’s seismic operations in PEL 107 during Year 2 of the second term of the Licence, nor were there any instances of non-compliance with the "Statement of Environmental Objectives for Seismic Operations in the Cooper Basin."
Figure 1 Location of PEL 107 in relation to Beach oil fields

Figure 1 Location of wells on PEL 107 tenement map
Figure 2: PEL 107 Well Locations