



PEL 186

Supplementary Annual Report

28 July 2011 - 27 April 2012

(Term 1, Year 5 Period)

**Otway Basin
South Australia**

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Appendix 1 - Expenditure Statement

1 Introduction

Petroleum Exploration Licence 186 (PEL 186) was granted on 28 July 2005. The Licence is located on the western margin of the Otway Basin, South Australia.

This Supplementary Annual Report for PEL 186 details the work conducted during the period 28 July 2011 - 27 April 2012 and has been prepared in accordance with the requirements of section 33 of the Petroleum and Geothermal Energy Regulations 2000.

2 Permit Summary

In March 2011 Somerton Energy Limited acquired a 100% equity in PEL 186 from Geothermal Resources Limited. In June 2011 Beach Energy Limited acquired a 66.67% equity in PEL 186 from Somerton.

The current registered interests in PEL 186 are:

- Beach Energy Limited 66.67%
- Somerton Energy Limited 33.33%

Somerton Energy Limited is the Operator of the PEL 186 Joint Venture.

The Original Work Commitments for PEL 186 are listed below:

Table 1: Original Commitments for PEL 186

Licence Year	Beginning	Ending	Minimum Work Program
Year 1	28 Jan 2005	27 Jan 2006	Gravity Survey, Geological & Geophysical Studies
Year 2	28 Jan 2006	27 Jan 2007	Gravity Survey, Geological & Geophysical Studies
Year 3	28 Jan 2007	27 Jan 2008	30 Km 2D Seismic; Data Review
Year 4	28 Jan 2008	27 Jan 2009	Drill one well
Year 5	28 Jan 2009	27 Jan 2010	Drill one well

In March 2011, PIRSA granted the last suspension of the work commitments under the licence condition for the period 28 April 2011 to 27 April 2012 and extended the licence term by the corresponding period of the suspension. The first renewal term of PEL 186 expires on 27 April 2012.

In January 2012 the Joint Venture requested a variation to the year 5 minimum work program from drill one well to acquire 50 sq.km of 3D seismic. This was based on the Geological and Geophysical studies which concluded that no drillable prospects were currently identified in the permit area and that a 3D seismic survey in the vicinity of Nunga Mia-1 is the preferred next step in the exploration of the tenement. A variation was granted by the Executive Director, Energy Resources Division, Department for Manufacturing, Innovation, Trade, Resources and Energy on the 18 January 2012. Seismic data was acquired during April 2012 to for fill the work permit requirements for PEL 186.

The Current Work Commitments for PEL 186 are listed below:

Table 2: Current Work Commitments for PEL 186

Licence Year	Beginning	Ending	Minimum Work Program
Year 1	28 Jan 2005	27 Jan 2006	Gravity Survey, Geological & Geophysical Studies
Year 2	28 Jan 2006	27 Jan 2007	Gravity Survey, Geological & Geophysical Studies
Year 3	28 Jan 2007	27 Jan 2008	Data Review
Year 4	28 Jan 2005	27 July 2009	Geological & Geophysical Studies
Year 5	28 July 2009	27 April 2012	50 sq.km 3D Seismic Acquisition

3 Regulated Activities

Pursuant to Regulations 33(2) (a), an Annual Report must include:

“A summary of the regulated activities conducted during the licence year.”

3.1 Drilling and Related Activities

No wells were drilled in PEL 186 during the current reporting period.

3.2 Seismic Data Acquisition

Nunga Mia 3D seismic program commenced in PEL 186 during the reporting period. The aim of the survey is to identify a suitable location to assess the unconventional potential of the Robe Trough, together with further evaluation of the conventional oil zones encountered in Nunga Mia-1, which was drilled in that area in 1996.

Beach Energy coordinated the operations on behalf of the joint venture on the Nunga Mia 3D. Surveying began on 22 March 2012 and seismic acquisition starting on 8 April 2012. Recording was completed on 27 April 2012. The survey was conducted by Terrex Seismic Crew # 407. The 3D grid consists of 28 Receiver and 25 Source lines and provides coverage over an area of 70 sq. km. (Source and Receiver interval was 50 m, line spaces 350 m apart providing a nominal fold of 70). There were no LTI's during the survey.

The survey was conducted to meet the environmental objectives contained in the SEO, entitled “Statement of environmental objectives for geophysical operations in the Otway Basin, South Australia” as gazetted in June 2007. To assess and measure compliance with the environmental objectives a Goal Attainment Scaling (GAS) audit was undertaken at 24 sites within the survey area. To assess levels of rehabilitation, seven Environmental Monitoring Points (EMPs), denoted by permanent markers, were established in places that typify the general terrain of the area to monitor rehabilitation over time. GAS audit sites either meet or exceeded expected result at the time of operations, however two EMP locations were worse than expected; these two sites were damaged by vehicle bogging and have been noted for extra monitoring during natural rehabilitation.

3.3 Seismic Data Processing and Reprocessing

No seismic data were processed and no seismic data were reprocessed during the current reporting period.

3.4 Geochemical, Gravity, Magnetic and other Surveys

There were no Geochemical, Gravity, Magnetic or other surveys conducted in PEL 186 during the current reporting period.

3.5 Geological and Geophysical Studies

Geological and Geophysical Studies during the reporting period consisted of a proprietary regional study, undertaken by FrOG Tech Pty Ltd, to assess and quantify the shale prospectivity within the onshore Otway Basin. The study included detailed mapping of the extent, nature and prospectivity of shale intervals within the Casterton and lower Pretty Hill Formations.

Although regional in nature, a key objective of the study was to assist in determination of the presence and location, or otherwise, of the Casterton Formation (or other prospective shale units) in PEL 186. From this study, and additional seismic interpretation completed by Somerton, it was concluded that:

- The presence and thickness of the Casterton Formation in the Robe and St Clair Troughs in PEL 186 is uncertain. If present, the Casterton is generally too deep to present an economically viable target.
- Shale within the lower Sawpit Formation probably represents the best unconventional play. However this section has not been widely drilled and its potential is speculative.
- No drillable prospect is currently identified in the permit area and a 3D seismic survey in the vicinity of Nunga Mia-1 is the preferred next step in the exploration of the tenement.

Accordingly, a 3D seismic survey of 70 sq. km was subsequently planned and was acquired during April 2012. The objective of the survey will be to develop a location where it will be possible to test a conventional trap at Nunga Mia 'oil sand' level and penetrate previously undrilled Sawpit Formation section to investigate its potential as an unconventional target.

4 Compliance Issues

4.1 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.”

The only non-compliance relates to the submission of this annual report. Submission of this report will rectify this particular non-compliance, and with a set year-on-year anniversary of the 27 April the company will meet reporting timeframes in the future.

Other than the above there was no other instances during the current reporting period in which the Joint Venture failed to comply with the requirements of the Licence, the *Petroleum and Geothermal Energy Act 2000*, the Petroleum and Geothermal Energy Regulations 2000, or the objectives of the Statements of Environmental Objectives (SEOs) under which it conducted its field operations.

Licence Conditions Non-Compliance

There were no instances during the current reporting period in which the Joint Venture failed to comply with the Conditions of the Licence.

Regulatory Non-Compliance

There were no instances during the current reporting period in which the Joint Venture failed to comply with the *Petroleum and Geothermal Energy Act 2000*, or the Petroleum and Geothermal Energy Regulations 2000.

Compliance with Statements of Environmental Objectives

There were no instances during the current reporting period in which the Joint Venture failed to comply with the Statements of Environmental Objectives related to PEL 186.

4.2 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 have, or will be taken”.

No Management System Audits were undertaken during the current reporting period.

4.3 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.”

No reports were submitted during the current reporting period.

Table 3: List of Reports and Data Submissions for the Current Reporting Period

<i>Description of Report / Data</i>	<i>Date Due</i>	<i>Date Submitted</i>	<i>Compliant / Non-Compliant</i>
Supplementary Annual Report for Year 5 of the first renewal term of PEL 186 ending 27 July 2011.	27 July 2011	27 Sept 2011	<i>Compliant</i>
Application for Variation of Year 5 Work Program for PEL 186		11 January 2012	<i>Compliant</i>
PEL 186 Application to Renew Petroleum Exploration Permit		27 February 2012	<i>Compliant</i>
Annual Report PEL 186 Year 5 – Supplementary 28 July 2011 – 27 April 2012	27 June 2012	22 August 2012	<i>Non-Compliant</i>

4.4 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”.*

There were no incidents arising from the operations undertaken on PEL 186 during the current reporting period.

4.5 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 are no threats foreseeable to any future exploration activities in PEL 186.

4.6 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”.

The Geological and Geophysical studies undertaken as part of permit year five work program concluded that 3D seismic data be acquired, processed and interpreted prior to any additional drilling in PEL 186. 70 sq. km of 3D seismic has been acquired and will be processed and interpreted during year 1 of renewal term 2.

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)”.*