



Essential
Petroleum
Resources
Limited

PEL 72

Onshore Otway Basin

South Australia

Annual and Final Report

For the Period

26 July 2006 to 25 July 2007

Year 4, Term 2

Prepared by:

Sandy Menpes, Essential Petroleum Resources Limited

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1. Introduction

Petroleum Exploration Licence No. 72 (“PEL 72”) is located in the onshore Otway Basin, South Australia. The licence covers approximately 511 km² following the relinquishment of 175 km² prior to licence renewal.

This report describes the work performed by the PEL 72 Joint Venture in Year 4, Term 2, in accordance with requirements of Section 33 of the Petroleum Regulations 2000.

PEL 72 is in good standing with all required work commitments met. The PEL 72 JV has elected to surrender the licence at the end of Year 4.

2. Administration

The northeastern portion of the original licence area (175 km² of the original 686 km²) was relinquished to satisfy the 25% relinquishment requirement at the end of Year 5, Term 1. All parties to the PEL 72 Joint Venture, with the exception of Essential Petroleum, elected to withdraw prior to licence renewal.

The licence was subsequently renewed for a period of five years expiring 25 March 2007 with Essential Petroleum as the sole participant. Beach Petroleum N.L farmed in to the licence during Year 2 and interest holders are now:

Essential Petroleum Resources Ltd	50% (Operator)
Beach Petroleum N.L.	50%

Prior to the end of Year 2 Essential Petroleum, as operator, was granted licence suspensions totaling 16 months and a 16 month extension of the licence term such that PEL 72 expired 25 July 2008.

In July 2005 Essential Petroleum, as operator of PEL 72, was granted a variation to the work program deferring the drilling commitment of Year 3 to Year 4, and bringing the Year 4 commitment of geological and geophysical review to Year 3. Year 3 commenced July 26 2005 and ended July 25 2006.

In July 2006 Essential Petroleum was granted a further variation to the work program deferring the drilling commitment to Year 5 and bringing the Year 5 commitment of 25km 2D seismic to Year 4. Year 4 commenced July 26 2006 and ended July 25 2007.

Work undertaken during Year 4 showed that there were no robust closures associated with the tilted fault blocks in the prospective part of PEL 72. In July 2007 the PEL 72 JV was granted a Year 4 work program variation changing the commitment to geological and geophysical studies. The JV was then granted approval to surrender PEL 72 effective from 25 July 2007.

A summary of the work program commitment including approved variations and the actual work program for Term 2 of PEL 72 is provided in Table 1 below:

Table 1: PEL 72 Work Program Commitment and Actual, Term 2

Year	Period	Work program commitment	Estimated expenditure	Work program Actual
Year 1	26 March 2002 – 25 March 2003	Geological and geophysical studies	\$40,000	– G & G including palynological study
Year 2	26 March 2003 – 25 July 2005*	50km 2D seismic	\$300,000	– 2003 Kongorong Gravity Survey (1109 gravity stations) – 2004 Harris Flat 2D Seismic Survey (7 lines, 64.2km)
Year 3	26 July 2005 – 25 July 2006	Geological and geophysical studies**	\$40,000	– Reprocess 2004 Harris Flat 2D seismic survey – G & G
Year 4	26 July 2006 – 25 July 2007	Geological and geophysical studies **	\$15,000	– Joint PIRSA-EPR study
	Permit	Surrendered		

* Approved extension of term

** Approved variation of original licence conditions

3. Regulated Activities

Section 33.(2) (a) of the Petroleum Regulations 2000 states that the licensee must furnish to the Minister an annual report that includes

“a summary of regulated activities conducted under the licence during the year”

Part 3, Section 10 (1) (a) of the Petroleum Act 2000 states that ***“exploration for petroleum or another regulated resource”*** is a regulated activity:

Part 3, Section 10 (3) of the Petroleum Act 2000 states that a regulated activity

“includes all operations and activities reasonably necessary for, or incidental to, that activity such as..

- (a) physical and geophysical surveys of land;***
- (b) the drilling of wells;***
- (e) the processing of substances recovered from a well”***

3.1 Physical and Geophysical Surveys

No physical or geophysical surveys were conducted during the reporting period.

3.2 Drilling

No exploration drilling was undertaken during the reporting period.

3.3 Geological and Geophysical Studies

Geological and geophysical studies undertaken during Year 4 included a joint PIRSA-EPR study in the Harris Flat area of PEL 72. The Harris Flat area is considered the most prospective part of PEL 72 due to the development of thicker lower Sherbrook Group shales sufficient to provide cross-fault seal.

Geological modelling of 2D data in 3D space incorporating fault displacement attributes was carried out (see Boulton et al, 2007). Unfortunately, the geologically improved time structure map of the “Lower Sherbrook” horizon produced as a result of this study showed that there are no robust closures associated with the tilted fault blocks in this part of PEL 72.

4. Compliance Issues

4.1 Regulatory Compliance

Section 33.(2) (b) of the Petroleum Regulations 2000 states that the 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”

Essential Petroleum Resources Limited complied with all relevant conditions under the *Petroleum Act 2000*, the *Petroleum Regulations 2000*, the licence and Statement of Environmental Objectives.

Minimum Year 4 work program requirements (geological and geophysical studies) to satisfy licence conditions have been met.

The licence is operated as per the requirements of the “Statement of environmental objectives for seismic operations in the Otway Basin, South Australia” (Cockshell and Langley, 2001) and a report issued by PIRSA entitled “The Environmental Management of Seismic Operations in the South East of South Australia” (Langley, 1996).

No environmental incidents were reported during Year 4.

4.2 Rectification of Non-compliance

Section 33.(2) (c) of the Petroleum Regulations 2000 states that the annual report must include:

“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 the recurrence of any such non-compliance”

There was no issue of non-compliance.

4.3. Management System Audits

Section 33.(2) (d) of the Petroleum Regulations 2000 states that the 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 action that has, or will be, taken”

No management system audits were undertaken during the reporting period.

4.4. Data Submissions

Section 33.(2) (e) of the Petroleum Regulations 2000 states that the annual report must include:

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

The list of reports and data as per the Petroleum Act 2000 and Petroleum Regulations 2000 are:

1. South Australian Petroleum Regulations 2000, Section 33 - Annual Report (this report)
2. Boulton, P., Menpes, S. and Wakelin-King G., 2007, “Application of Fault Plane Attribute Mapping to the Gambier Embayment of the Onshore Otway Basin, South Australia”, AAPG Bulletin, Volume 91 (2007) Program Abstracts

4.5. Safety

Section 33.(2) (f) of the Petroleum Regulations 2000 states that the annual report must include:

“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 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”***

No reportable incident occurred during the reporting period.

4.6 Threat Prevention

Section 33.(2) (g) of the Petroleum Regulations 2000 states that the annual report must include:

“a 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 a report on any corrective action that has, or will be, taken”

There were no perceived threats and no action taken.

4.7 Future Work Program

Section 33.(2) (h) of the Petroleum Regulations 2000 states that the 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 the operations proposed for the ensuing year”

PEL 72 has been surrendered effective from 25 July 2007.

5. Expenditure Statement

Section 33.(3) of the Petroleum Regulations 2000 states that the annual report must include:

“a statement of expenditure on regulated activities conducted under the licence for the relevant licence year”

An Expenditure Statement for PEL 72 for the period 26 July 2006 to 25 July 2007 is attached (Table 1).

6. References

- Boult, P., Menpes, S. and Wakelin-King G., 2007 *“Application of Fault Plane Attribute Mapping to the Gambier Embayment of the Onshore Otway Basin, South Australia”*, AAPG Bulletin, Volume 91 (2007) Program Abstracts
- Cockshell, C.D and Langley, K. R., 2001 *“Statement of environmental objectives for seismic operations in the Otway Basin, South Australia”*, Report Book 2001/020, PIRSA
- Langley, K.R., 1996 *“Environmental management of seismic operations in the south-east of South Australia”*, 4th Edition May 1996

Table 2
PEL 72 Onshore Otway Basin, South Australia,
Statement of Expenditure,
26 July 2006 – 25 July 2007, (Year 4, Term 2)

Activity	Expenditure
Section 33. (3) (a) drilling activities:	
No activity	
Section 33. (3) (b) seismic activities:	
No activity	Commercial in Confidence
Section 33. (3) (c) technical evaluation and analysis:	
G & G studies	
Section 33. (3) (d) other surveys:	
No activity	
Section 33. (3) (f) operating and administration expenses:	
Permit Maintenance	
Administrative Overheads	
Total Year 2, Term 2	