



**LAKES OIL N.L.**

(A.C.N. 004 247 214)

**PEL 66**  
**Onshore Otway Basin**  
**South Australia**

**Year 4 (Term 2)**  
**Annual Report**

**For the Period**  
**18 June 2004 to 17 June 2005**

Prepared by:  
Lakes Oil N.L.

June 2005

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## 1. INTRODUCTION

Petroleum Exploration Licence No. 66 (“PEL 66”) is located in the onshore portion of the Otway Basin, South Australia. This report covers the work performed by Lakes Oil N.L. as Operator of PEL 66 *in accordance with requirements of Section 33 of the petroleum regulations 2000*, for the period 18 June 2004 to 17 June 2005, being the fourth year of the second permit term.

## 2. ADMINISTRATION

The working interests in the permit are as follows:

Lakes Oil N.L.	100%
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The minimum work commitment for Year 4 (term 2) was for G &G studies. Changeover of ownership of this permit took place during this period and has delayed the program to some extent. The program for the fifth year will include a geochemical survey and a well.

## 3. REGULATED ACTIVITIES

*Section 33.(2) (a) a summary of the regulated activities conducted under the licence during the year:*

### 3.1 Drilling

There was no drilling in PEL 66 during the permit year.

### 3.2 Seismic Data Acquisition

There was no seismic data acquisition in PEL 66 during the permit year.

### 3.3 Seismic Data Processing/Reprocessing

There was no seismic data processing/reprocessing during the permit year.

### 3.4 Geological and Geophysical Studies

G & G studies for the permit year were mainly focussed on prospectivity analysis of potential leads that could be further upgraded to drillable status following interpretation of geochemical surveys to be conducted next permit year.

In the northern part of the permit gas shows were encountered during drilling in 1992 in Crankshaft -1 well within the Otway Group, with an indicated gas column from DST data of at least 2 metres in the Katnook Sandstone. Lakes Oil has used the latest American technology (Stimlog) to re-evaluate the Crankshaft data which indicates the presence of tight gas sands throughout the most of the Otway Group section. Successful fracture stimulation techniques have now been developed to recover gas from tight formations that have not been previously recognised as prospective in South Australia. This technology has been successfully used by Lakes Oil in the onshore Gippsland Basin to recover gas from the Lower Cretaceous Strzelecki Group. Preliminary evaluation indicates that the Otway Group at the Crankshaft location and other structures in the area may have similar potential to produce gas after hydraulic fracturing.

Within the above context, the company submitted an application to PIRSA in April 2005 for a grant to conduct hydraulic fracture stimulation in a well to be drilled within the permit.

#### **4. COMPLIANCE ISSUES**

##### **4.1 Regulatory Compliance**

*Section 33.(2) (b) a report for the year on compliance with the Act, these regulations, the licence and any relevant statement of environmental objectives.*

The Permit is operated as per the requirements of the “Statement of Environmental Objectives of Seismic Operations in the Otway Basin, South Australia”, and a report issued by PIRSA entitled “The Environmental Management of Seismic Operations in the South East of South Australia”.

No environmental incidents were reported during the Permit year.

##### **4.2 Rectification of Non-Compliance**

*Section 33.(2) I a statement concerning any action to rectify non-compliance with obligations imposed by the Act, these regulations or the licence, and to minimize the likelihood of the recurrence of any such non-compliance.*

We are aware of no instances of non-compliance. To ensure compliance in regard to report and data submission, Lakes has developed a computer database called the Permits and Lands Management System designed to track critical dates and provide prompts for impending reports and data submissions.

#### **4.3 Management System Audits**

*Section 33.(2) (d) 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.*

The only activities undertaken in PEL 66 during the permit year were geological and geophysical studies. As such, no management system audits were undertaken during the permit year.

#### **4.4 Data Submissions**

*Section 33.(3) (e) a list of all reports and data relevant to the operation of the Act generated by the licensee during the relevant licence year.*

- Annual Report (this report): - submitted 25 June 2005.

#### **4.5 Safety**

*Section 33.(2) f in relation to any incidents reported to the Minister under the Act and these regulations during the relevant licensing year-*

*Section 33.(2) f (i) an overall assessment and analysis of the incidents, including the identification and analysis of any trends that have emerged.*

*Section 33.(2) f (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 minimize the risk of recurrence of any such non-compliance.*

No reportable incidents occurred during the reporting period.

#### **4.6 Threat Prevention**

*Section 33.(2) (g) 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 Licence Conditions and Future Work Program**

*Section 33.(2) (h) 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 work obligation for Permit Year 5 is the drilling of an exploration well. Lakes Oil will also conduct a geochemical survey prior to the well. This data will assist in selecting a location for the drilling of the commitment exploration well in Year 5.

### **5 EXPENDITURE STATEMENT**

*Section 33.(3) An annual report must be accompanied by a statement of expenditure on regulated activities conducted under the licence for the relevant licence year.*

An Expenditure Statement for PEL 66 joint venture during the period 18 June 2004 to 17 June 2005 is attached.

**PEL 66 ONSHORE OTWAY BASIN, SOUTH AUSTRALIA**

**18 JUNE 2004 TO 17 JUNE 2005 (PERMIT YEAR 4)**

**STATEMENT OF EXPENDITURE**

Commercial in confidence

## 6. REFERENCES

1. K Bierbrauer, 2003. "Pel 57, Onshore Otway Basin South Australia, Honan's Scrub Seismic Survey 2002, Final Report Part B: Interpretation and Processing". Origin Energy Resources Ltd.
2. Origin Energy Resources Ltd. 2003. "2002 Summer Hill Gravity Survey Final Report Part B: Processing/ Interpretation, PEL 57, Otway Basin, South Australia".
3. Origin Energy Resources Ltd. 2003. "2002 Summer Hill Gravity Survey Final Report Part A : Acquisition, PEP 57, Otway Basin, South Australia".
4. CD Cockshell and KR Langley, 2001. "Statement of Environmental Objectives for Seismic Operations in the Otway Basin, South Australia". Primary Industries and Resources SA, Report Book 2001/020.
5. "The Environmental Management of Seismic Operations in the South East of South Australia", 4<sup>th</sup> edition 1996. Issued by the Department of Primary Industries and Resources Petroleum Division (formerly MESA).