

PEL 57

Onshore Otway Basin

South Australia

Year 1 Annual Report

For the Period

18 November 2001 To 17 November 2002

Prepared by:
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1 Introduction

Petroleum Exploration Licence No. 57 ("PEL 57") is located in the onshore portion of the Otway Basin, South Australia. This report covers the work performed by Origin Energy Resources Ltd as Operator of PEL 57 *in accordance with requirements of Section 33 of the Petroleum Regulations 2000*, for the period 18 November 2001 to 17 November 2002, being the first year of the third permit term.

2 Administration

The working interests in the permit are as follows:

Origin Energy Resources Ltd	50%
Lakes Oil NL	30%
Victoria Petroleum NL	10%
Mirboo Ridge Pty Ltd	10%

Mirboo Ridge Pty Ltd is an affiliate company of Lakes Oil NL.

In February 2002 PEL 57 was renewed with effect from 18 November 2001. The minimum work requirements for the permit require a high-resolution gravity survey and 50km 2D seismic survey in Year 1, G&G studies in Year 2, 15km 2D seismic survey in Year 3, the drilling of an exploration well in Year 4, and G&G studies in Year 5.

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 57 during the permit year.

3.2 Seismic Data Acquisition

The Honan's Scrub Seismic Survey was recorded by Trace Energy Services Pty Ltd of Perth between 8 May 2002 and 20 May 2002 in the northwestern part of PEL 57. Four lines were acquired with a total coverage of 73.71 kilometres. The survey was designed to investigate a possible structural trap at Waarre level in the footwall of the Tartwaup Fault. A secondary objective of the survey was to resolve the presence of Crayfish Group sediments and a possible structure at Pretty Hill Formation level. Full details of the seismic acquisition operations can be found in the Origin Energy Resources Ltd acquisition report¹.

Speculative Survey Licence 4 was granted to Origin Energy Resources Limited to allow the lines to be extended to the southwest into PEL 72 and into a vacant area in the north.

3.3 Seismic Data Processing/Reprocessing

Robertson Research Pty Ltd conducted the processing of the Honan's Scrub Seismic Survey in their Perth office. Full details of the reprocessing are provided in the Honan's Scrub seismic processing report².

3.4 Gravity Data Acquisition

The Summer Hill Gravity Survey was conducted from 30 April to 17 May 2002. A total of 555 gravity stations were acquired, with spacing ranging from approximately 250 to 500 metres. The data was acquired by Haines Surveys of Aldgate, South Australia. An additional 196 gravity points were acquired as part of an extension of the Summer Hill Survey into neighbouring permit PEP 151 from 26 to 31 September 2002. 8 new points were acquired within PEL 57 as part of this additional work.

The Summer Hill Gravity Survey was designed to provide high resolution gravity information over a potentially large Waarre Sandstone play located by the 2001 Summer Hill Seismic Survey data. It is anticipated that interpretation of the gravity data in conjunction with the seismic, which is of generally poor data quality, may enable confirmation of structural closure and to identify the approximate location of the crest of the structure.

Full details of the first phase of gravity acquisition operations can be found in the Summer Hill gravity acquisition report ³.

Speculative Survey Licence 2 granted to Origin Energy Resources Limited the previous year to cover the Summer Hill Seismic Survey was still current and covered stations west of the PEL boundary in SA.

3.5 Geological and Geophysical Studies

Geological and geophysical studies for the permit year included interpretation and mapping of the Summer Hill Seismic Survey data, acquired during May 2001, and planning for and monitoring of the Summer Hill high-resolution gravity survey and the Honan's Scrub Seismic Survey.

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 for Seismic Operations in the Otway Basin, South Australia"⁴, and a report issued by PIRSA entitled "The Environmental Management of Seismic Operations in the South East of South Australia"⁵.

No environmental incidents were reported during the Permit year.

A total of 55 landowners and authorities were permitted in relation to the Honan's Scrub Seismic Survey. These landowners were fully briefed on the operation and were supplied with printed material containing a description of the operation as well as a copy of the part of the Petroleum Regulations that referred to their rights. On completion of the survey all landowners were personally contacted to discuss the restoration requirements or compensation payments if necessary. There were no problems encountered during this

process and very little compensation and rehabilitation was required due to the late arrival of winter rains.

The required 21 day notice period was provided to landholders prior to commencement of the Summer Hill Gravity Survey. All landowners were supplied with a copy of the relevant Petroleum Regulations together with documentation describing the field procedures. Special requirements for each property were noted and at the end of the survey the landowners were contacted again to make sure that everything was in order. Forty landowners were involved and there were no restoration claims.

4.2 Rectification of Non-Compliance

Section 33.(2) (c) 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, Origin 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.

An environmental field audit was undertaken to assess the impact of the Honan's Scrub Seismic Survey and a detailed report is included in the final Acquisition Report. Table 1 below contains a summary of the Goal Attainment Scaling assessment of the field operations. This assessment procedure is detailed in the "Statement of Environmental Objectives for Seismic Operations in the Otway Basin, South Australia"⁴. Minimal to zero impact scores were achieved for every measure of the environmental objectives for the seismic operations.

GOAL ATTAINMENT SCALING INVENTORY

SCORE					
MEASURE	+2	+1	0	-1	-2
Impact on infrastructure	Skips avoid dwellings and gas pipeline.	All fences and gates reinstated to original condition.			
Impact on agricultural activities	No disturbance to rural or urban pursuits.				
Visual impact, pasture area		Only wheel tracks are evident.			
Visual impact, native vegetation		Doglegs used to disguise entrance to native scrub.			
Uphole site restoration		Cuttings removed, little evidence.			
Pollution or litter	No pollution or litter.				
Impact on native vegetation			5 km of line Hydro-axed. Expect regeneration 2 to 3 years maximum		
Disturbance to land surface			Some evidence of wheel tracks and pad marks.		

TABLE 1. GOAL ATTAINMENT SCALING INVENTORY - HONAN'S SCRUB SEISMIC SURVEY

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.

- Honan's Scrub Seismic Survey acquisition report: - submitted 2 September 2002
- Honan's Scrub Seismic Survey processing report: - submitted 16 October 2002
- Honan's Scrub Seismic Survey field data, stack data and CGM files:- submitted 16 October 2002
- Summer Hill Gravity Survey acquisition report (Phase 1):- submitted 17 September 2002
- Annual Report (this report):- submitted 17 January 2003

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.

The Honan's Scrub Seismic Survey and the Summer Hill Gravity Survey were completed without any lost time injuries. 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 2 is geological and geophysical studies. These studies will include interpretation of the Honan's Scrub Seismic Survey and integration into the existing 2D seismic grid in the northwestern part of PEL 57. The Summer Hill Gravity survey will also be analysed and integrated with existing seismic data.

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 57 Joint Venture during the period from 18 November 2001 to 17 November 2002 follows:

STATEMENT OF EXPENDITURE

PEL 57, ONSHORE OTWAY BASIN, SOUTH AUSTRALIA

18TH NOVEMBER 2001 TO 17TH NOVEMBER 2002 (PERMIT YEAR 1)

6. References

1. WS Thirlwell, 2002. "PEL 57, Otway Basin South Australia, Honan's Scrub Seismic Survey 2002, Final Report Part A: Acquisition". Origin Energy Resources Ltd .
2. Robertson Research Australia Pty Ltd. 2002. "Seismic Data Processing Report For Origin Energy 2002 Honan's Scrub Seismic Survey".
3. WS Thirlwell, 2002. "PEL 57, Onshore Otway Basin South Australia, Summer Hill Gravity Survey 2002. Part A: Acquisition". Origin Energy Resources Ltd.
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", 4th edition 1996. Issued by the Department of Primary Industries and Resources Petroleum Division (formerly MESA).