

ANNUAL REPORT

Petroleum Exploration Licence (PEL) 494

Cooper Basin, South Australia

Term 2 Licence Year 1

24 March 2015 to 11 November 2016

Distribution:

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1 Introduction

Petroleum Exploration Licence 494 (**PEL 494**) was granted on 24 March 2009. The Licence is located in the onshore Otway Basin, South Australia over an area of approximately 1,765 square km.

The Annual Report for PEL 494 details the work conducted during Term 2 Licence Year 1 which corresponds to the period 24 March 2015 to 11 November 2016.

This Annual Report has been prepared in accordance with the requirements of Regulation 33 of the Petroleum and Geothermal Energy Act 2000 (the Act).

2 Licence Summary

PEL 494 was originally awarded to Adelaide Energy Limited, 100% interest, effective from 24 March 2009 for an initial term of five years.

On 1 August 2012 the change of name from Adelaide Energy Limited to Adelaide Energy Pty Ltd (**Adelaide**) was registered on the Department of State Development's public register. Adelaide is a wholly owned subsidiary of Beach Energy Limited (**Beach**).

Following execution of the Farmin Agreement – PEL 494, 495 and PRL 32 dated 18 November 2013 between Cooper Energy Limited, Beach, Adelaide and Somerton Energy Pty Ltd, the registered interests in PEL 494 are:

- Adelaide Energy Pty Ltd (Operator) 70%
- Somerton Energy Pty Ltd 30%

On 11 December 2013, approval was granted pursuant to section 76A of the Act to suspend the Year 5 work commitment for a period of 12 months. The term of PEL 494 was also extended for a period of 12 months such the term of PEL 494 expired on 23 March 2015.

PEL 494 was consolidated with adjacent licence area PEL 495 effective 20 March 2015, increasing the area of PEL 494 to 2488.81 km². PEL 494 was renewed for a second term effective 24 March 2015.

The licence was suspended for a period of 12 months from 01 March 2016, with Licence expiry adjusted to 23 March 2021 accordingly. The suspension was lifted for 2 days from 11 to 12 April 2016, 3 days from 21 to 23 September 2016, 7 days from 25 to 31 October 2016 and 30 days from 01 to 30 November 2016 to allow for rehabilitation work at Jolly-1. The licence suspension remains in place until 11 April 2017.

PEL 494 Work Commitments			
Licence Year	Licence Dates	Minimum Work Program	Work Completed
Year 1 (firm)	24 March 2015 – 11 November 2016	Geological & Geophysical Studies	Geological & Geophysical Studies
Year 2	12 November 2016 – 23 March 2018	Geological & Geophysical Studies Drill 1 well	
Year 3	24 March 2018 – 23 March 2019	Geological & Geophysical Studies	
Year 4	24 March 2019 – 23 March 2020	Geological & Geophysical Studies 100 km ² 3D seismic acquisition	
Years 5	24 March 2020 – 23 March 2021	Geological & Geophysical Studies	

3 Regulated Activities

Pursuant to Regulations 33(3)(a) An annual report must include -
“a summary of the regulated activities conducted under the licence during the year”

Partial rehabilitation of Jolly 1 ST1 location was undertaken with the removal of the camp pad and lease pad. Removal of B and C section of the wellhead was completed in line with landholder requirements to allow access and operation of irrigation equipment during summer months.

4 Compliance Issues

Pursuant to Regulations 33(3)(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.”

4.1 Licence and Regulatory Compliance

There were no instances of non-compliance with the Act, the Petroleum and Geothermal Energy Regulations 2013 (Regulations) or the Licence Conditions for PEL 494 during this reporting period.

4.2 Compliance with Statement of Environmental Objectives (SEO)

The licensee complied with the Beach Energy *Statement of Environmental Objectives, Drilling, Completion and Initial Production Testing in the Otway Basin, South Australia*, November 2013, during the current reporting period. A summary of compliance with the SEO is provided in Appendix 1.

4.3 Management System Audits

Pursuant to Regulation 33(3)(d) 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 has, or will be taken”.

No management system audits specific to PEL 494 were undertaken during the licence year.

4.4 Report and Data Submissions

Pursuant to Regulation 33(3)(e)(i) 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”.

Annual Report (Regulation 33)			
Description of Report / Data	Date Due	Date Submitted	Compliant
PEL 494 Annual Report Year 6	23 May 2015	22 May 2015	Yes
PEL 494 Annual Report Year 6 Resubmission	12 August 2015	06 August 2015	Yes

4.5 Incidents

Pursuant to Regulation 33(3)(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 serious incidents during the reporting period. A serious incident is defined in section 85(1) of the Act.

There were no reportable incidents during the reporting period. A reportable incident is defined in section 85(1) and Regulation 32 of the Act.

4.6 Threat Prevention

Pursuant to Regulation 33(3)(g) An 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 new threats to report within PEL 494 during the reporting period.

4.7 Future Work Program

Pursuant to Regulation 33(3)(h) 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”.

Pursuant to Regulation 33(3)(j) An annual report must include -
“in the case of a production licence - an assessment of the development activities proposed to be undertaken under the licence, including the number of completion reports that are expected to occur, during the ensuing licence year, or such longer period as the Minister may require”.

The future work for PEL 494 will build upon the work undertaken during the previous licence years, focussing on both prospect and play evaluation. GG&E studies will focus on well evaluation and basin studies with the aim of working up conventional and unconventional prospects to drillable status.

5 Expenditure Statement

Pursuant to Regulation 33(4)
“An annual report must be accompanied by a statement of expenditure on regulated activities conducted under the licence for the relevant licence year.”

Please refer to Appendix 2 for the expenditure statement for the current reporting period.

APPENDIX 1

Compliance with Statement of Environmental Objectives Drilling, Completion and Initial Production Testing in the Otway Basin, South Australia (Beach Energy 2013)

Table A1 SEO for Drilling and Well Operations			
Objective	SEO Assessment Criteria	Compliance	Findings/Comments
1. Avoid disturbance to sites of cultural and heritage significance	No disturbance to Aboriginal and non-indigenous heritage sites	Compliant	No heritage sites were identified at the Jolly-1 well site during the pre-drilling site assessment.
2. Minimise disturbance to native vegetation and native fauna (including wetland communities)	<p><u>Well site and Access Track Construction</u></p> <p>Any sites of rare, vulnerable or endangered species or threatened communities have been identified, flagged and subsequently avoided.</p> <p>High quality or significant remnant vegetation has not been cleared.</p> <p>Activities are not carried out in parks or reserves established under the National Parks and Wildlife Act.</p> <p>No significant adverse impacts on native fauna through any stage of construction, drilling or production testing.</p> <p><u>Drilling and Production Testing Activities</u></p> <p>No fires during drilling and production activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>Refer to Assessment Criteria for Objective 4.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	Not applicable	The Jolly-1 well site and access are located in cultivated paddocks.

Table A1 SEO for Drilling and Well Operations

Objective	SEO Assessment Criteria	Compliance	Findings/Comments
3. Avoid the introduction and spread of weeds, exotic pest fauna and pathogens	Weeds, exotic pest fauna and pathogens are not introduced into, or spread in, operational areas as a consequence of activities.	Compliant	Local contractors and machinery utilised to undertake rehabilitation earthworks.
4. Minimise disturbance and avoid contamination of soil	<p><u>Well Site and Access Track Construction and Restoration</u></p> <p>No disturbance to soil profiles resulting from activities remains after restoration.</p> <p>Local erosion rates are not significantly accelerated above those of surrounding land.</p> <p>No significant increase of limestone on surface following restoration.</p> <p><u>Drilling and Production Testing Activities</u></p> <p>No soil contamination as a result of drilling and production testing activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>Soil in areas affected by any spill is removed and / or bioremediated.</p> <p>No soil contamination as a result of fuel and chemical storage and handling.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	<p>Compliant</p> <p>Compliant</p> <p>Compliant</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Compliant</p>	<p>Rehabilitation activities undertaken to restore pre-existing soil profiles.</p> <p>No reported incidents of spills associated with rehabilitation works.</p>
5. Minimise loss of reservoir and aquifer pressures and avoid aquifer contamination	<p>No aquifer contamination as a result of drilling, completion or production testing activities.</p> <p>No impact on other groundwater users due to water extraction activities.</p> <p><u>Drilling and Completion Activities</u></p> <p>No uncontrolled flow to surface (e.g. blow out).</p> <p>Sufficient barriers exist in casing annulus to prevent</p>	<p>Compliant</p> <p>Not Applicable</p> <p>Not Applicable</p>	<p>Competent cement bonds (plugs) between aquifers encountered by the well bore were established during the abandonment of the well.</p> <p>Water monitoring bores to be removed.</p>

Table A1 SEO for Drilling and Well Operations

Objective	SEO Assessment Criteria	Compliance	Findings/Comments
	<p>crossflow between separate aquifers or hydrocarbon reservoirs.</p> <p><u>Production Testing and Well Abandonment Activities</u></p> <p>No cross-flow behind casing between aquifers, and between aquifers and hydrocarbon reservoirs unless approved by the department responsible for Water (currently DEWNR).</p>	Compliant	
6. Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow groundwater resources	<p><u>Well Lease and Access Track Construction and Restoration</u></p> <p>No disruption to drainage patterns as a result of construction activities.</p> <p><u>Drilling and Production Testing</u></p> <p>No overflow of drill cuttings, muds and other drilling fluids from mud sumps.</p> <p>No contamination of surface waters and shallow groundwater resources as a result of drilling and initial production testing activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>No contamination of surface waters and shallow groundwater resources as a result of fuel or chemical storage and handling.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	<p>Compliant</p> <p>Not Applicable</p> <p>Compliant</p>	There were no spills as a result of rehabilitation activities at the Jolly-1 well site.
7. Minimise risks to the health and safety of the public, employees and other third parties	<p>No injuries to the public or third parties as a result of drilling, completion and production testing activities.</p>	Compliant	

Table A1 SEO for Drilling and Well Operations

Objective	SEO Assessment Criteria	Compliance	Findings/Comments
8. Minimise the visual impact of operations	Well site maintained in a clean and tidy condition. Restored well site contours and colour blend with the surroundings.	Compliant	
9. Minimise disturbance to the local community and other land users	No adverse impact (outside agreed disturbance / compensation areas) on land use as a result of activities. No reasonable concerns raised by stakeholders are left unresolved. No uncontrolled fires initiated during construction, drilling or rehabilitation.	Compliant Compliant Compliant	All reasonable concerns addressed
10. Minimise the impact on the environment of waste storage, handling and disposal	No soil, surface water or ground water contamination as a result of waste storage and disposal. All waste disposal is at an EPA licensed facility. No uncontained domestic waste on site. Wastewater (sewage and grey water) disposed of in accordance with the <i>Public and Environmental Health (Waste Control) Regulations 2010</i> .	Not Applicable	No camps or waste storage associated with the rehabilitation located on Jolly-1 lease
11. Remediate and rehabilitate operational areas	No reasonable stakeholder complaints left unresolved. No rubbish or litter on site. Refer to Assessment Criteria for Objective 4.	Compliant	All water materials and excess fill material removed from Jolly-1 well site as per landholder requirements.