

Adelaide Energy Limited

Annual Report

Licence Year 1

24 March 2009 – 23 March 2010

PEL 494

CONTENTS

Page No.

- 1 INTRODUCTION 3
- PERMIT SUMMARY 3
- 2 REGULATED ACTIVITIES 4
 - Drilling and Related Activities 4
 - Seismic Data Acquisition 4
 - Seismic Data Processing and Reprocessing 4
 - Geochemical, Gravity, Magnetic and other surveys 4
 - Production and Processing 4
 - Pipeline Construction and Operation 4
 - Preliminary Survey Activities 4
- 3 COMPLIANCE ISSUES 4
 - Licence and Regulatory Compliance 5
 - Compliance with Statement of Environmental Objectives 6
 - Management System Audits 10
 - Report and Data Submissions 11
 - Incidents 11
 - Threat Prevention 12
 - Future Work Program 12
- 4 EXPENDITURE STATEMENT 12
- 5 ADDITIONAL INFORMATION FOR PRODUCTION LICENCE REPORTS 12
- 6 ADDITIONAL INFORMATION FOR PIPELINE LICENCE REPORTS 12
- APPENDIX 1 EXPENDITURE STATEMENT PERMIT YEAR 1 13

1 Introduction

Petroleum Exploration Licence (PEL) 494 was granted on 24 March 2009. The licence is located in the onshore Otway Basin, South Australia. This report details the work conducted during Licence Year 1 of the licence period 24 March 2009 – 23 March 2014 (inclusive) in accordance with Regulation 33 of the *Petroleum and Geothermal Energy Act 2000*.

Adelaide Energy nominated to record 35 km 2-D seismic in the first year of the licence and the 2010 Weatherall 2D Seismic Survey acquired 35.1 km over two prospects in conjunction with program in PEL 496 and PRL 13. The extension of lines from PRL 13 into PEL 494 increased the line length to a total of 45.6 km.

Recording was completed on 16 March 2010 and data have been sent to Fugro Seismic Imaging for processing.

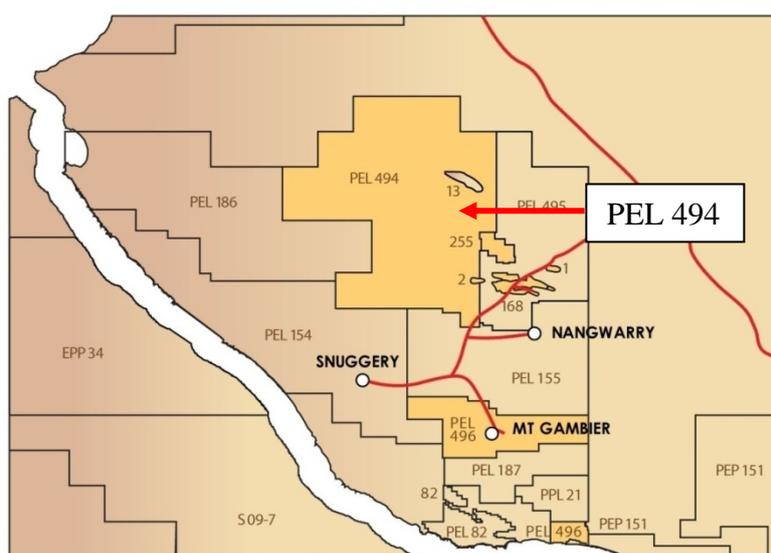


Figure 1. PEL: 494

Permit Summary

For the duration of the licence year, licensees for Petroleum Exploration Licence PEL 494 were:

- Adelaide Energy Limited 100%

The current work commitments (including all variations) associated with PEL 494 can be seen in Table 1.

Table 1 Current work commitments by licence year

Licence Year	Licence dates	Minimum Work Program
Year 1	24 March 2009 – 23 March 2010	35 km 2-D seismic Geological and Geophysical studies
Year 2	24 March 2010 – 23 March 2011	1 Well Geological and Geophysical studies
Year 3	24 March 2011 – 23 March 2012	1 Well Geological and Geophysical studies

Year 4	24 March 2012 – 23 March 2013	Geological and Geophysical studies
Year 5	24 March 2013 – 23 March 2014	Geological and Geophysical studies

Licence Year 1 concluded on 23 March 2010. The following table displays the minimum work program (after all variations) and the actual work completed up until the end of the current licence period. ADE complied with the terms of licence.

Table 2 Final work program and work completed (as of end of current reporting period) by licence year

Licence Year	Minimum Work Program	Actual Work
Year 1	35 km 2-D seismic Geological and Geophysical studies	45.6 km 2-D seismic Geological and Geophysical studies

Regulated Activities

Pursuant to Regulation 33(2)(a) under the Act, the following regulated activities were conducted by Adelaide Energy Limited in PEL 494.

Drilling and Related Activities

No well activities were conducted during the permit year.

Seismic Data Acquisition

A total of 45.6 km of 2D seismic data were recorded during the term of Year 1. The 2010 Weatherall 2D seismic survey was recorded by Terrex Seismic during Permit Year 1 between 12 March and 16 March 2010. Some lines passed through blue gum plantations and felling of trees was required for access; the affected area was kept to a minimum and ADE compensated the respective stakeholders. A final Operations report is in preparation and will be submitted to PIRSA during Year 2.

Seismic Data Processing and Reprocessing

No seismic reprocessing was conducted during the reporting period.

Geochemical, Gravity, Magnetic and other surveys

No additional surveys were recorded in PEL 494.

Production and Processing

No production and processing activities occurred during Permit Year 1 in PEL 494.

Pipeline Construction and Operation

No pipeline or construction activities occurred during Permit Year 1 in PEL 494.

Preliminary Survey Activities

Survey activities conducted during the reporting period in relation to the seismic survey included environmental and cultural heritage studies in addition to planning of the line layout.

Compliance Issues

Licence and Regulatory Compliance

Adelaide Energy Limited complied with Regulations 33(2) (b) & (c) in relation to its licence and Statement of Environmental Objectives for seismic activities in PEL 494.

Licence Non-Compliance

Table 2 List of licence non-compliances for current reporting year

No.	Stated Commitment	Reason for Non-Compliance	Rectification of Non-Compliance
	Adelaide Energy Limited complied with all conditions of licence.	ADE complied with the terms of the licence.	

Regulatory Non-Compliance

Table 3 List of regulatory non-compliances for current reporting year

No.	Date	Activity	Details of Non-Compliance	Rectification of Non-Compliance
			No instances of non-compliance.	

Compliance with Statement of Environmental Objectives

Adelaide Energy Limited complied with the terms and intent of the Statement of Environmental Objectives for Geophysical Operations in the Otway Basin, South Australia. Table 4 records the compliance with the SEO.

Table 4. Adelaide Energy compliance with the *SEO for Geophysical Operations in the Otway Basin, South Australia.*

Objective	Assessment Criteria	Compliant/Non-Compliant (inc. Compliance statement)	Comments
<p>Objective 1 Minimise the clearing and/or other impacts on native vegetation and associated wildlife habitats</p>	<p>The route of least impact (vegetation and habitat clearance) is taken and records of vegetation clearance and habitat disturbance are kept and are available for audit upon request. Slashing methods are used to facilitate regrowth and rehabilitation. The attainment of a 0, +1 or +2 GAS score for 'Impact on native vegetation – communities' and 'Impact on native vegetation – species' as listed in Appendix 4. No blading by earthmoving equipment. The major potential source of weed introduction is from vehicles and equipment brought in from other regions of the state or interstate for the various well activities. Vehicles cleaned or mobilised from safe regions</p>	Compliant	<ul style="list-style-type: none"> • This region has already been cleared and is heavily worked agricultural land. • No native vegetation affected. • Plantation timber was cleared where essential to provide access
<p>Objective 2 Avoid long-term damage or irreparable impacts to areas of high biodiversity or conservation value, including areas with rare, endangered or vulnerable species.</p>	<p>The lines have been cleared of any native vegetation and, in general, are continually exposed to cropping, burning, fertilizing, spraying and grazing. All activities planned in order to avoid sensitive areas The major potential source of weed introduction is from vehicles and equipment brought in from other regions of the state or interstate for the various well activities. Vehicles cleaned or mobilised from safe regions</p>	Compliant	<ul style="list-style-type: none"> • This region has already been cleared • Region comprises heavily worked agricultural land. • No impact to sensitive areas.

<p>Objective 3 Minimise disturbance to soil.</p>	<p>Areas sensitive to soil disturbance, such as wetlands or areas of steep gradients, should be avoided where possible or appropriate steps taken to ameliorate any impacts. There should be no observable difference in erosion patterns on-line compare to offline. Any soil contamination should be reported and treated immediately with preferred (industry standard) methods. Activities should be carried out in dry weather to minimise impacts such as bogging, rutting and a loss in soil cohesiveness. Upholes backfilled as covered with top soil to minimise visibility.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • Survey on level ground • Survey conducted in dry summer period. • No impact to watercourses • Upholes rehabilitated
<p>Objective 4 Minimise the disturbance to surface drainage patterns.</p>	<p>The attainment of a 0, +1 or +2 GAS score for 'Disturbance to land surface' as listed in Appendix 4. As no earthmoving equipment should be used in the Otway Basin for line or campsite preparation, minimal disturbance to surface drainage patterns should occur. Any creeks encountered should have minimal vegetation clearance when undergoing line preparation to minimise potential impacts such as bed and bank erosion and silting.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No disturbance to surface drainage patterns during dry summer period
<p>Objective 5 Avoid the contamination of surface and ground waters.</p>	<p>All equipment is cleaned as deemed appropriate to prevent contamination of groundwater Spills are reported on pursuant to regulatory requirements and remediation promptly initiated with appropriate and readily available equipment and procedures.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No aquifer contamination as a result of drilling upholes • Local drilling contractor with knowledge of the region used for upholes • Upholes drilled to minimum depth of weathering • No spills or litter
<p>Objective 6 Avoid the breaching of and leaking from shallow aquifers</p>	<p>No aquifers breached during uphole/shothole drilling If upholes breach aquifers the holes are backfilled and/or cemented off. The uphole should not leak and no subsidence should occur.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No aquifer flow to surface or contamination as a result of drilling upholes • Local drilling contractor with knowledge of the region used for upholes • Upholes drilled to minimum depth of weathering • No contamination of surface waters and shallow groundwater resources due to seismic operations.

<p>Objective 7 Minimise the risk of introduction and/or spread of introduced species and biosecurity threats.</p>	<p>Weeds, feral animals or plant and animal diseases are not introduced to, or spread within, the Otway Basin region. Details or logs of equipment cleaning are kept and are available for audit upon request. Records of detection (whether introduced by a geophysical operator or not), monitoring, eradication or control of introduced species are kept and are available for audit upon request. Areas of known disease infestation (such as phytophthora, phylloxera, Mundulla Yellows) are identified with landowners and relevant boards or control officers and be avoided.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No seismic activity conducted through vineyards • Vehicles washed down following movement from PEL 496 (Johnes region) • Vehicle provenance determined prior to survey and risks assessed
<p>Objective 8 Minimise the visual impacts of geophysical operations and any future third party use.</p>	<p>The attainment of a 0, +1 or +2 GAS score for 'Visual impact' as listed in Appendix 4. No wildfires caused by seismic or rehabilitation activities Vegetation, terrain variations or appropriate preparation techniques have been used to minimise line visibility.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • Survey on flat-lying land • Upholes back filled and covered with topsoil to match surrounding soil colour • No complaints from the local community or other land users. • No spills. • Winter rain will germinate indigenous seed stock.
<p>Objective 9 Avoid areas with cultural significance or heritage value.</p>	<p>Appropriately qualified and experienced personnel have scouted proposed survey area and access tracks. Any aboriginal cultural locations found are identified, recorded and reported accordingly to AARD. These sites are flagged off and detoured around</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No sites of cultural significance encountered • No sites of heritage significance affected
<p>Objective 10 Minimise the disturbance to other land users.</p>	<p>The attainment of a 0, +1 or +2 GAS score for 'Impact on infrastructure' and 'Impact on agricultural, horticultural or viticultural activities' as listed in Appendix 4. All reasonable landowner complaints are addressed and resolved. All fences are restored to a level satisfactory to the landowner.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No soil or groundwater contamination as a result of seismic operations • All waste was removed. • No impact on landowner as a result of activity. • No uncontained domestic waste on site. • Fencing modified for access but returned to original state • No complaints from landowners
<p>Objective 11 Minimise the loss of resources and optimise waste recovery.</p>	<p>Litter has been removed to authorised disposal sites within the Otway Basin. Use of recyclable materials is preferred. All fences are restored to a level satisfactory to the landowner.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • All impacts to properties restored to satisfaction of landowners. • No stock losses • No fires • No uncontrolled flow of water from shallow aquifers

<p>Objective 12 Minimise the risk of initiation and/or propagation of wildfire.</p>	<p>Appropriate plans in place and equipment available to identify hazards, initiate hazard mitigation and response training, fire-fighting equipment available and maintained Strict adherence to fire bans. A response plan is in place for the safety of crew personnel should a fire approach, or be initiated by, the seismic crew. Welding and grinding (regarded as high-risk activities) are deferred or curtailed until weather conditions are suitable. The risks of fire to crews and transport drivers are clearly defined, and a plan is in place to minimise or eliminate slasher use on defined high-risk days.</p>	<p>Compliant</p>	<ul style="list-style-type: none"> • No fires reported • Weather conditions monitored with alternative plans should work in one area be deemed high risk • Work in plantation woodlots controlled or delayed according to weather conditions and threat of fire
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Management System Audits

Adelaide Energy Limited complied with Regulation 33(2) (d) under the Act by conducting internal reviews of all operations and procedures. No significant issues were raised.

A post-operations review determined that no reportable incidents occurred during implementation of the 2010 Weatherall Seismic Survey.

Report and Data Submissions

Pursuant to Regulation 33(2) (e) under the Act, Adelaide Energy submitted the following reports

Table 5 List of report and data submissions during current licence reporting year

Description of Report/Data	Date Due	Date Submitted	Compliant / Non-Compliant
No reports were submitted – an Operations report is in preparation			

Incidents

No Lost Time Injuries occurred during field and office work conducted by Adelaide Energy Limited.

There were no reportable environmental incidents during the Jacaranda Ridge slick-line survey and pipeline construction.

Pursuant to Regulation 33(2) (f) Adelaide Energy Limited includes the following data.

Table 6 List of incidents during current licence reporting year

Date of Incident	Activity	Incident Description	Type of Loss	Action to Rectify & Effectiveness of Action	Date Reported / Reported to Whom
Nil					

Threat Prevention

Pursuant to Regulation 33(2) (g) under the Act, Adelaide Energy Limited reports that no reasonably foreseeable threats or hazards are recognised.

Future Work Program

Pursuant to Regulation 33(2) (h) under the Act, Adelaide Energy Limited plans the following activities in Permit Year 2 (24 March 2010 – 23 March 2011).

- ADE will drill the Weatherall-1 exploration well based on the 2D seismic interpretation.

2 Expenditure Statement

Pursuant to Regulation 33(3) under the Act, Adelaide Energy Limited lists the expenditure in Permit Year 1 in Appendix I.

3 Additional Information for Production Licence Reports

ADE did not produce hydrocarbons in PEL 494.

4 Additional Information for Pipeline Licence Reports

Adelaide Energy Limited did not operate any pipelines in PEL494 during the period embraced by this Permit Year 1 report.