

## **Annual Report**

### **Petroleum Production Licences**

**PPL 62 (Katnook, Ladbroke Grove and Haselgrove Fields)**

**PPL 168 (Redman Field)**

**PPL 202 (Haselgrove Field)**

### **Pipeline Licence**

**PL 19**

### **Otway Basin, South Australia**

**01 January 2018 to 31 December 2018**

**Distribution: Department for Energy and Mining, South Australia**

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## 1 Introduction

This Annual Report details the work conducted in three Petroleum Production Licences (the PPLs) and the Pipeline Licence (PL) 19 in the South Australian Otway Basin for the twelve months from 1 January 2018 to 31 December 2018. This Annual Report has been prepared in accordance with the requirements of Regulation 33 of the Petroleum and Geothermal Energy Act 2000 (the Act).

The Department of the Premier and Cabinet (DPC) approved a request by the licence holders to amalgamate the annual reports for the PPLs into a single annual report pursuant to Regulation 33(6) of the Act.

## 2 Licence Summary

### 2.1 Petroleum Production Licences

PPLs covered in this Annual Report			
PPL No.	Grant Date	End Date	Holder
62	27 November 1990	26 November 2011	Adelaide Energy Pty Ltd
	27 November 2011	-	Adelaide Energy Pty Ltd
168	26 June 1999	25 June 2020	Adelaide Energy Pty Ltd
202	2 October 2003	-	Adelaide Energy Pty Ltd

### 2.2 Pipeline Licences

Pipeline Licence (PL) covered in this Annual Report			
PL No.	Grant Date	End Date	Holder
19	20 November 2009	19 November 2030	Adelaide Energy Pty Ltd

### 2.3 Associated Activities Licences

Associated Activities Licence (AAL) covered in this Annual Report			
AAL No.	Grant Date	End Date	Holder
249	11 September 2017	10 September 2018	Adelaide Energy Pty Ltd

AAL 249 is secondary licence adjunct to PPL 62 for activities associated Haselgrove-3-ST1

Adelaide Energy Pty Ltd is the sole holder of PPLs, 62, 168, 202, PL 19 and AAL 249 (**the Permits**) and is a wholly owned subsidiary of Beach Energy Limited (**Beach**).

The Katnook, Ladbroke Grove, Haselgrove and Haselgrove South Fields are located within PPL 62 and PPL 202 while the Redman Field is within PPL 168.

PL 19 was granted to connect existing wells within Petroleum Exploration Licence 255 (PEL 255 and now PRL 32), Petroleum Retention Licence 1 (PRL 1), Petroleum Retention Licence 2 (PRL 2) and PPL 202 to existing operational flow line infrastructure which is connected to Katnook Gas Plant (refer Figure 1). PL 19 construction was completed in March 2010 and commissioned in April 2010.

### 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”

Wells drilled during the reporting period	
Well Name	Haselgrove-3
Type of well	Conventional Gas Exploration Well
Permit	PPL 62
Contractor / Rig	Ensign 965
Date Spudded	20 September 2017
Status	Plugged back and side-tracked
Rig release date	3 January 2018
Construction and drilling activities	Carried out in accordance with the SEO for Drilling, Completion and Initial Production Testing in the Otway Basin
Well Name	Haselgrove-3 ST-1
Type of well	Conventional Gas Exploration Well
Permit	PPL 62
Contractor / Rig	Ensign 965
Date Spudded	3 November 2017
Status	Cased and Suspended
Rig release date	3 January 2018
Construction and drilling activities	Carried out in accordance with the SEO for Drilling, Completion and Initial Production Testing in the Otway Basin

In well-bore activities		
Well	Date	Details
Haselgrove-3 ST-1	January 2018	Completion
Haselgrove-3 ST-1	January 2018	Cement Bond Log
Haselgrove-3 ST-1	January 2018	Static Gradient Survey
Haselgrove-3 ST-1	February – March 2018	Initial Production Test/ Pressure Build Up/ Static Gradient Survey
Ladbroke Grove-3	February 2018	Set Plug
Ladbroke Grove-2	February 2018	Set Plug
Haselgrove-3 ST-1	August 2018	Static Gradient Survey
Haselgrove-1	August 2018	Micro-string Removal
Haselgrove South-1 DW-1	August 2018	Micro-string Removal
Redman-1	August 2018	Micro-string Removal
Haselgrove-1	December 2018	Static Gradient Survey and Gyro Survey

Civil Works		
Well/Location	Date	Details
Katnook-2	April – June 2018	Earthworks to re-establish larger well lease
Ladbroke Grove-3	April – June 2018	Earthworks to re-establish larger well lease
Katnook Plant	April – June 2018	Civil works to construct pad for future camp
Haselgrove-4	November - December 2018	Civil works to construct well lease

Flowlines		
Field	Date	Details
Haselgrove	December 2018	Hydrotesting of the gathering lines

Other		
Site	Date	Details
Haselgrove-4	December 2018	Geotechnical survey of wellsite

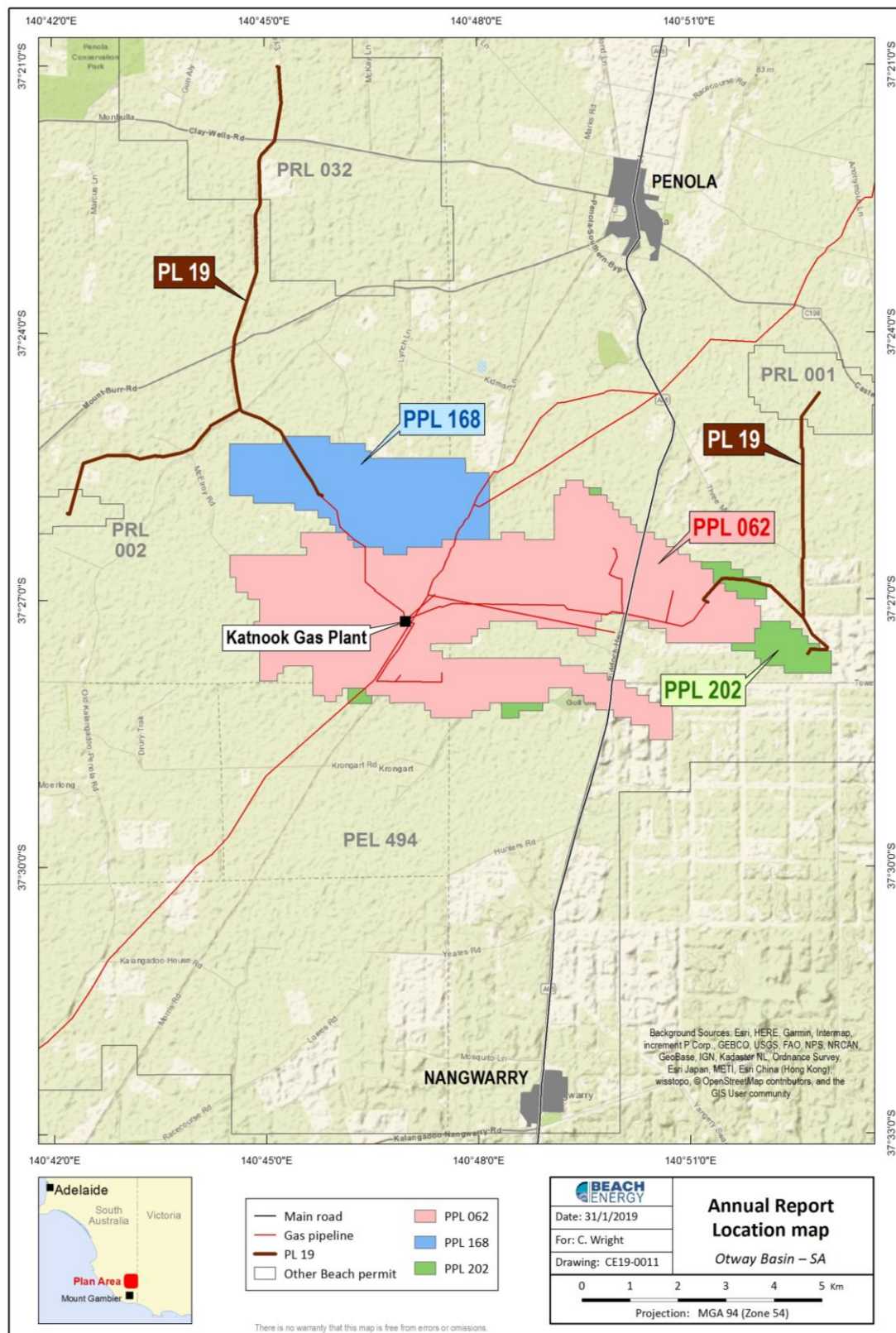


Figure 1: Location of the Katnook Gas Plant, PPL 62, 168, 202 and PL 19

## 4 Compliance

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 cases of non-compliance with the licence conditions or the relevant Statements of Environmental Objects (SEO) during the reporting period.

There were five instances of non-compliance with the Regulations during the reporting period, caused by data submission after its due date. Details of non-compliance are included in Section 6. The Operator will apply to extend at risk submission deadlines to prevent future non-compliance of this nature.

### 4.2 Compliance with Statement of Environmental Objectives (SEO)

Drilling activities conducted in the production licenses must comply with the *Statement for Environmental Objectives: Drilling, Completion and Initial Production Testing in the Otway Basin* (Beach Energy, November 2013). A summary of compliance with the SEO is provided in Appendix 1.

Activities conducted in the production licenses and pipeline licence must comply with the *Statement for Environmental Objectives for the Production and Processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants, Otway Basin South Australia* (Adelaide Energy, April 2011). A summary of compliance with the SEO is provided in Appendix 2.

## 5 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”.

Beach Energy continued its commitment to health, safety & environmental management in the Otway Basin during 2018. During the reporting period, the operational activities were specific to the completions of the Haselgrove-3 Drilling operations. The close out of the HSE management systems audit that was conducted on the Drilling operations was supported by ongoing HSE inspections till the completion of the project.

There were no other operational activities involving the Beach facilities in the area. However general upkeep of the facilities was maintained and where required, job specific Job Safety Analysis (JSA's) were developed prior to the undertaking of any non-routine operations.

## 6 Report and Data submissions

Pursuant to Regulation 33(3)(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)			
Report / Data	Date Due	Date Submitted	Compliant
Otway Basin PPLs 2017 Annual Report	1 March 2018	1 March 2018	Yes
Otway Basin PPLs 2017 Annual Report Resubmission	24 January 2019	14 January 2019	Yes

Quarterly Incident Report (Regulation 32)			
Report / Data	Date Due	Date Submitted	Compliant
Quarterly Incident Report Q4 2017	31 January 2018	31 January 2018	Yes
Quarterly Incident Report Q1 2018	30 April 2018	27 April 2018	Yes
Quarterly Incident Report Q2 2018	31 July 2018	23 July 2018	Yes
Quarterly Incident Report Q3 2018	31 October 2018	29 October 2018	Yes

Quarterly Cased Hole Well Activity Report (Regulation 41)			
Report / Data	Date Due	Date Submitted	Compliant
Quarterly Cased Hole Report Q4 2017	31 January 2018	31 January 2018	Yes
Quarterly Cased Hole Report Q1 2018	30 April 2018	30 April 2018	Yes
Quarterly Cased Hole Report Q2 2018	31 July 2018	31 July 2018	Yes
Quarterly Cased Hole Report Q3 2018	31 October 2018	24 October 2018	Yes



Quarterly Interim Project Reports			
Description of Report / Data	Date Due	Date Submitted	Compliant
Q1 Haselgrove Deep Interim Project Report	30 April 2018	30 April 2018	Yes
Q2 Haselgrove Deep Interim Project Report	31 July 2018	27 July 2018	Yes
Q3 Haselgrove Deep Interim Project Report	31 October 2018	31 October 2017	Yes

Wireline logs (Regulation 39)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1 Final Wireline Logs	13 April 2018*	13 April 2018	Yes
Haselgrove-3 Final LWD Logs	13 April 2018*	19 July 2018	No
Haselgrove-3 ST-1 Final LWD Logs	13 April 2018*	19 July 2018	No

Well Completion Reports (Regulation 40)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1	15 August 2018	15 August 2018	Yes

Well Test Analysis Reports (Regulation 42)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1	14 September 2018	17 August 2018	Yes

Petroleum Reservoir Fluid Analysis Report (Regulation 43)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1	14 September 2018	17 August 2018	Yes

Down Hole Diagrams (Regulation 44)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1 completion	11 March 2018	19 March 2018	No

Haselgrove-1 micro-string removal	25 October 2018	10 September 2018	Yes
Haselgrove South-1 DW-1 micro-string removal	26 October 2018	26 October 2018	Yes
Redman-1 micro-string removal	28 October 2018	26 October 2018	Yes

Other Technical Reports (Regulation 47)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST_1 Gradient Survey Report	10 March 2018	27 March 2018	No
Haselgrove-3 ST_1 Gradient Survey Report	14 May 2018	11 April 2018	Yes
Haselgrove-3 ST_1 Gradient Survey Report	8 October 2018	14 August 2018	Yes
Haselgrove-1 Gradient Survey Report	8 February 2019	13 December 2018	Yes
Haselgrove-1 Gyro Survey Report	8 February 2019	13 December 2018	Yes

Well Samples (Regulation 48)			
Report / Data	Date Due	Date Submitted	Compliant
Haselgrove-3 ST-1	3 July 2018	20 July 2018	No
Haselgrove-3 ST-1 CBL	19 March 2018*	14 March 2018	Yes

\*Extension Granted

## 7 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 within the permits. A serious incident is defined in section 85(1) of the Act.

During the annual reporting period, one incident was formally reported to DEM through quarterly compliance reporting and is summarised in the table below. A reportable incident is defined in section 85(1) and regulation 32 of the Act.

List of Reportable Incidents				
Site	Date	Incident	Cause	Rectification
Katnook (PPL 62)	11 December 2018	Spillage of dusty/dirty water whilst pigging the Haselgrove gathering lines.	Increased pressure and non-secured hose.	Spill area cleaned up. Discharge hose was secured into the containment tank.

## 8 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 are no new threats to report.

## 9 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 completions that are expected to occur, during the ensuing licence year, or such longer period as the Minister may require”

Work planned during 2019 includes:

- Drilling Haselgrove-4 appraisal well. Pending success of the well, initial production testing and evaluation of Haselgrove-4 well.
- Tie-in of the Haselgrove-3 ST1 discovery well and construction of a new 10 TJ/d gas processing facility to be located at the existing Katnook site. Rehabilitation of the Katnook site would be undertaken as part of this project.
- Subsurface decommissioning of Katnook 2 and Ladbroke Grove 3 wellbores and associated infrastructure; and
- Regular annulus pressure surveys
- Routine well integrity maintenance and testing.

## 10 Estimated Production

Pursuant to Regulations 33(3) (i) under the Act, an annual report must contain:

“In the case of a production licence – an estimate of the volume of petroleum likely to be produced, wasted, stored or sold under the licence during the ensuing year, or such longer period as the Minister may require”;

Production from the new 10 TJ/d gas processing facility is targeted for 31 December 2019 with a probabilistic completion date ranging from December 2019 to February 2020.

## 11 Pipeline

Pursuant to Regulations 33(3)(k) under the Act, an annual report must contain:

“In the case of a pipeline licence –the volume of any regulated substance transported during the relevant licence year”;

### Volume of Regulated Substance Transported

No regulated substances were transported within the pipeline during the reporting period.

### Pipeline Patrol Activities

During the reporting period no material issues occurred during the patrolling or other routine maintenance activities on the PL 19 pipeline. Regular road patrols were completed in accordance with AS2885.3 requirements ensuring the following:

- Signage is in suitable condition and if not, repairs are made as soon as is practically possible;
- There are no unauthorized activities occurring along the pipeline route or at any of the facilities;
- Soil erosion due to wind and water is addressed and restored in accordance with the SEO;
- There was no loss of the pipeline depth of cover during the reporting period;
- There are no leaks occurring at any of the pipeline facilities or along the pipeline route;
- All sites are secure and kept in a good, clean and tidy state;
- Maintenance activities including touching up above ground pipe coating condition, restoring fences, gates, padlocks, signage and fire extinguishers along with other housekeeping activities such as weeds are addressed as required.

### Leakage Detection

During the reporting period there were no instances of any leaking valves or equipment on the pipeline/flowline system. Beach monitors the pipelines and flowline for leakage:

- Through ground patrols as staff travel along the pipeline. Operations personnel look for signs of gas leakage such as dust plumes, the sound of escaping gas and affected vegetation.

### Cathodic Protection

The PL19 pipeline permanent cathodic protection system was last surveyed in February 2011. Results show that the pipeline is adequately protected along the entire length with all instantaneous off

potential readings being within the accepted AS 2832.1 criteria of greater than 0.85 volts with respect to a copper/copper sulphate reference electrode.

The pipeline is currently in preservation mode and cathodic protection will be reviewed prior to re-commission.

#### Emergency Response Exercises

No emergency response exercises relating to PL19 were carried out during 2018.

## **12 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 3 for the expenditure statement for the current reporting period.

## APPENDIX 1

Compliance with the SEO for the Drilling, Completion and Initial Production Testing in the Otway Basin			
Objectives	Assessment Criteria	Compliance	Comments
1. Avoid disturbance to sites of cultural and heritage significance	No disturbance to Aboriginal and non-indigenous heritage sites	Compliant	No disturbance to Aboriginal and non-indigenous heritage sites.
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>	Compliant	<p>Environmental assessments prepared to identify and minimise disturbance to vegetation prior to construction.</p> <p>No removal of rare, vulnerable or endangered flora.</p> <p>No native fauna injured.</p> <p>No development resulted in the removal or damage to native vegetation.</p> <p>No bushfires associated with drilling activities.</p>

Compliance with the SEO for the Drilling, Completion and Initial Production Testing in the Otway Basin			
Objectives	Assessment Criteria	Compliance	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	No incidents of weeds exotic pest fauna and pathogens being introduced to well leases
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>	Compliant	<p>Topsoil stockpiled during well lease construction.</p> <p>In the event of a spill, fluids are contained, affected areas remediated and reporting and investigation procedures followed.</p> <p>Causes of incidents are identified and where appropriate inform the revision of, or implementation of new systems, procedures, and design modifications, to reduce the chance of reoccurrence.</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>	Compliant	The Haselgrove 3 well was designed, installed and maintained to prevent crossflow between aquifers.

Compliance with the SEO for the Drilling, Completion and Initial Production Testing in the Otway Basin			
Objectives	Assessment Criteria	Compliance	Comments
	<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 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>		
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>	Compliant	<p>Minimal disruption to local drainage patterns as a result of lease construction activities.</p> <p>Groundwater monitoring program undertaken at Haselgrove-3 well site. No adverse results.</p>



Compliance with the SEO for the Drilling, Completion and Initial Production Testing in the Otway Basin			
Objectives	Assessment Criteria	Compliance	Comments
	<u>Waste Management</u> Refer to Assessment Criteria for Objective 10.		
7. Minimise risks to the health and safety of the public, employees and other third parties	No injuries to the public or third parties as a result of drilling, completion and production testing activities.	Compliant	Emergency response procedures are implemented in the event of an emergency.  No incidents of risk to public health and safety during the reporting period.
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	Site left in a clean and tidy state following the completion of drilling activities
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	No reported adverse impacts on land users.
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</i>	Compliant	No evidence of ground water contamination associated with drilling activities.  All waste removed from site and disposed of at a licenced waste facility by licenced contractors.  Site left in a clean and tidy state following the completion of drilling activities.

Compliance with the SEO for the Drilling, Completion and Initial Production Testing in the Otway Basin			
Objectives	Assessment Criteria	Compliance	Comments
	<i>Environmental Health (Waste Control) Regulations 2010.</i>		
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	Site left in a clean and tidy state following the completion of drilling activities.

## APPENDIX 2

Compliance with the SEO for the Production and processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants			
Objectives	Assessment Criteria	Compliance	Comments
1. Avoid surface water, groundwater and soil contamination	<p>No contamination of surface water, groundwater or soil as a result of operation activities.</p> <p>No spills outside areas designed to contain them.</p> <p>No cross flow behind casing in production wells.</p> <p>Water reinjection from evaporation ponds in compliance with EPA licence conditions</p> <p>No evidence of impacts to soil, water and vegetation as a result of water disposal (i.e. soil erosion, dead vegetation, water discoloration) or pipeline operation/ maintenance.</p> <p>All domestic wastes are disposed of in accordance with EPA licensing requirements.</p> <p>No evidence of rubbish or litter on easement or at facilities.</p> <p>For excavations, surface drainage profiles restored.</p> <p>For existing easement, drainage is maintained to pre-existing conditions or better</p>	Compliant	<p>No incidents involving contamination to groundwater.</p> <p>No spills or leaks occurred outside areas designed to contain them.</p> <p>Wellhead pressure surveys indicate no casing failures.</p> <p>Wells constructed with appropriate barriers in place.</p> <p>Regular patrols undertaken to look for evidence of erosion, abnormal vegetation growth or death.</p>

Compliance with the SEO for the Production and processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants			
Objectives	Assessment Criteria	Compliance	Comments
2. Minimise disturbance to native vegetation and native fauna	<p>Species abundance and distribution on reinstated areas is consistent with the surrounding area (assessment will take into account that regrowth is a time and rainfall dependent process)</p> <p>'Significant environmental benefit' obligations for native vegetation clearance satisfied / implemented.</p> <p>No rare, vulnerable or endangered fauna removed without appropriate permits</p> <p>No removal of habitat for rare, vulnerable or endangers fauna without appropriate permits</p> <p>Native fauna injuries and casualties due to operations are restricted to as low as reasonably practical</p> <p>Site rehabilitation results in native vegetation to be consistent with surrounding area</p>	Compliant	<p>No native fauna injured.</p> <p>No development resulted in the removal or damage to native vegetation.</p>
3. Avoid the spread of weeds and pathogens	<p>No new weed/pathogen or pest infestations due to site activities reported</p> <p>The presence of weeds and pathogens at facility sites and on pipeline easements is consistent with or better than adjacent land</p> <p>No new introduction or spread of weeds, pathogen or pest plants and animals due to operational activities</p>	Compliant	<p>No introduced exotic weed species as a consequence of activities.</p> <p>Presence of weeds and pathogens consistent with or better than adjacent land.</p>

Compliance with the SEO for the Production and processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants			
Objectives	Assessment Criteria	Compliance	Comments
4. Avoid disturbance to sites of Aboriginal and European heritage significance	No unauthorised disturbance to Aboriginal or European heritage areas	Compliant	No activities conducted outside current operating areas.  No disturbance to Aboriginal and non-indigenous heritage sites.
5. Minimise the risk to the public and other third parties	Reasonable measures implemented to ensure no injuries or incidents involving the public or third parties	Compliant	No injuries to the public as a result of facility processes  Permit-to-Work system is used to manage workplace / worksite safety.  Emergency Response Plans and procedures are in place.
6. Avoid disturbance to stakeholders and their associated infrastructure.	No unresolved reasonable complaints from stakeholders.  No un-remediated subsidence due to pipeline maintenance operations  No new evidence of subsoil on surface due to pipeline maintenance operations  No new evidence of soil compaction due to pipeline maintenance operations  Soil is consistent with the surrounding areas and no unresolved reasonable complaints from stakeholders  The extent of soil erosion on the easement is consistent with surrounding land.	Compliant	No complaints received from land users.

Compliance with the SEO for the Production and processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants			
Objectives	Assessment Criteria	Compliance	Comments
7. Minimise atmospheric emissions	<p>Compliance with the <i>Environment Protection Act 1993</i></p> <p>No reasonable stakeholder complaints left unresolved</p> <p>Reasonable practical measures implemented in design and operation to minimise emissions</p>	Compliant	No production
8. Minimise impact of noise due to operations	<p>No reasonable stakeholder complaints left unresolved</p> <p>Noise emissions comply with EPA requirements</p>	Compliant	<p>No production</p> <p>Noise emissions from site falls within EPA noise emissions requirements.</p>
9. Remediate and rehabilitate operational areas to agreed standards	<p><u>Production Facility Abandonment</u></p> <p>Surface structures are removed and the ground surface re-contoured to approximate pre-existing contours unless alternative agreement is reached with the regulator and stakeholders.</p> <p>Contaminated sites are remediated in accordance with criteria developed with the principles of the National Environment Protection Measure for contaminated sites and in consultation with the EPA</p> <p><u>Pipeline Abandonment</u></p>	Compliant	No remediation work undertaken

**Compliance with the SEO for the Production and processing of Petroleum Products and Associated Activities at the Katnook and Ladbroke Grove Gas Plants**

Objectives	Assessment Criteria	Compliance	Comments
	Attainment of the following (unless otherwise agreed with stakeholders and approved by the regulatory authority):  No evidence of waste, redundant equipment / infrastructure or signs and markers on abandoned pipelines  Refer to criteria for contaminated site remediation under this objective (above)		