



2012 Annual Report

Petroleum Production Licences

PPL 204 (Sellicks)

PPL 205 (Christies / Silver Sands)

PPL 210 (Aldinga)

PPL 212 (Kiana)

PPL 220 (Callawonga)

PPL 224 (Parsons)

PPL 239 (Middleton / Brownlow)

Cooper Basin

South Australia

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1 INTRODUCTION

This Annual Report details the work conducted by Beach Energy Limited (**Beach**) in seven (7) Petroleum Production Licences (**PPLs**) in the South Australian Cooper Basin for the twelve months from 1 January 2012 to 31 December 2012 (PPL 239 for the period 17 August 2012 to 31 December 2012). 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 PPLs include:

- PPL 204 (Sellicks Field)
- PPL 205 (Christies and Silver Sands Fields)
- PPL 210 (Aldinga Field)
- PPL 212 (Kiana Field)
- PPL 220 (Callawonga Field)
- PPL 224 (Parsons Field)
- PPL 239 (Middleton/Brownlow)

Figure 1 shows the location of the PPLs.

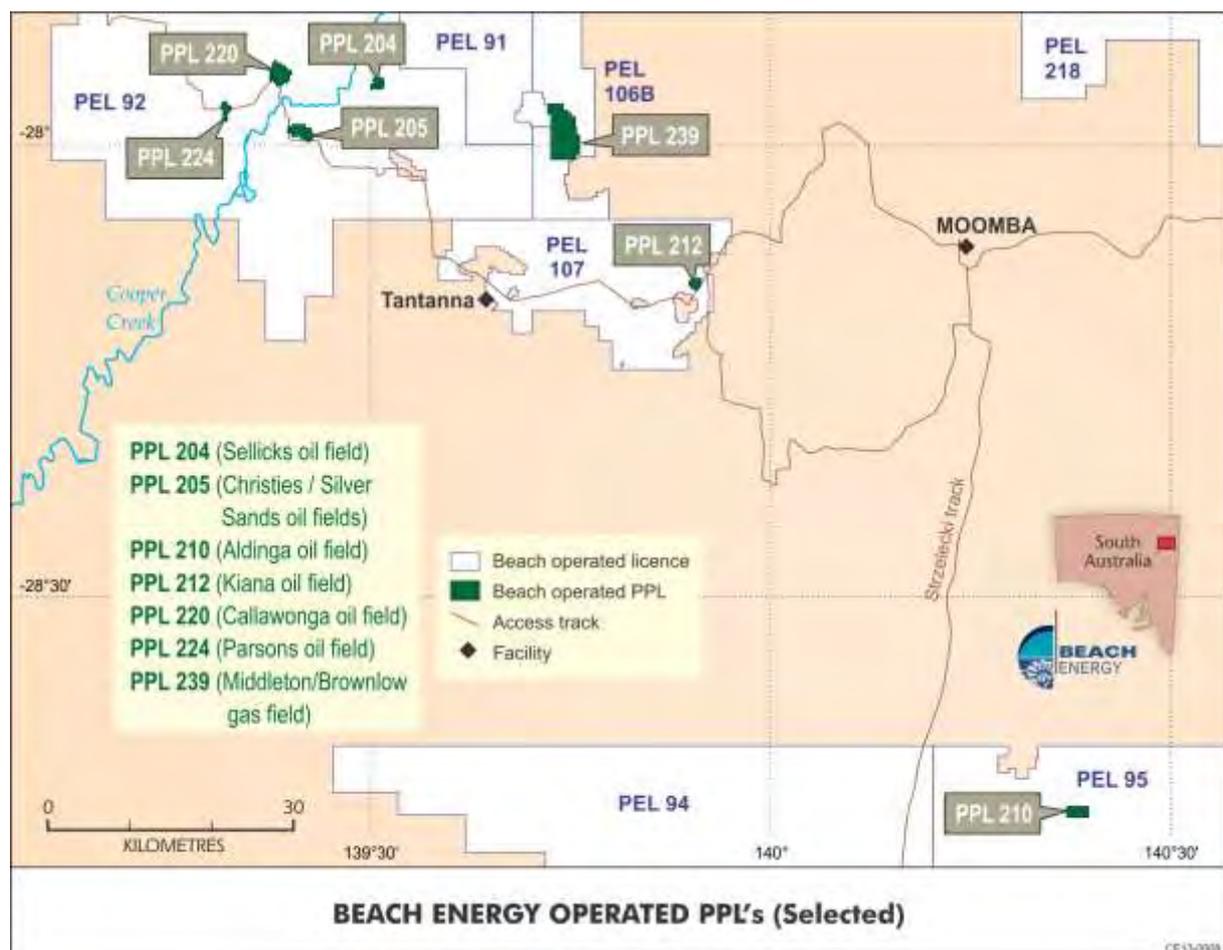


Figure 1: Beach Operated Petroleum Production Licences in the Cooper Basin, South Australia

2 LICENCE SUMMARY

2.1 Petroleum Production Licences

PPL 204 (Sellicks Field) was originally granted on 11 September 2003 to Beach Petroleum Limited and Cooper Energy NL. PPL 204 is located within PEL 92 and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 75%
- Cooper Energy Limited 25%

PPL 205 (Christies and Silver Sands Fields) was originally granted on 11 October 2004 to Beach Petroleum Limited and Cooper Energy NL. The area of PPL 205 was amended on 14 August 2007 to include production from the Silver Sands-1 well. PPL 205 is located within PEL 92 and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 75%
- Cooper Energy Limited 25%

PPL 210 (Aldinga Field) was originally granted on 23 December 2004 to Beach Petroleum Limited and Magellan Petroleum (NT) PL. PPL 210 is located within PEL 95 and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 50%
- Strike Energy Ltd 50%

PPL 212 (Kiana Field) was originally granted on 23 January 2006 to Beach Petroleum Limited, Great Artesian Oil and Gas Ltd and, Magellan Petroleum (Southern) Pty Ltd. PPL 212 is located within PEL 107, and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 40%
- Great Artesian Oil and Gas Ltd 30%
- Drillsearch Gas Pty Ltd 30%

PPL 220 (Callawonga Field) was originally granted on 14 September 2007 to Beach Petroleum Limited and Cooper Energy Limited. PPL 220 is located within PEL 92 and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 75%
- Cooper Energy Limited 25%

PPL 224 (Parsons Field) was originally granted on 9 October 2008 to Beach Petroleum Limited and Cooper Energy Limited. PPL 224 is located within PEL 92 and has the following registered interests as at 31 December 2011:

- Beach Ltd (Operator) 75%
- Cooper Energy Limited 25%

PPL 239 (Middleton and Brownlow Fields) was originally granted on 17 August 2011 to Beach Energy Limited and Great Artesian Oil and Gas Limited. PPL 239 is located within PEL 106 Brownlow Block (PEL 106B) and has the following registered interests as at 31 December 2012:

- Beach Energy Limited (Operator) 50%
- Great Artesian Oil and Gas Limited 50%

2.2 Associated Activities Licences (previously Associated Facilities Licences)

As at 31 December 2012, Beach Limited held seven (7) active Associated Activities Licences adjunct to PPLs within their South Australian production operation:

- **AAL 18** was granted as AFL 18 on 13 April 2005 as a secondary licence to PPL 205 (Christies field). The area covered by the AAL is approximately 2.1 km². The AAL was awarded for the expansion and operation of a dewatering facility at Christies.
- **AAL 82** was granted as AFL 82 on 30 January 2007 as a secondary licence to PPL 205 (Christies field). The area covered by the AAL is approximately 1.97 km². The AAL was granted as a storage area for materials and equipment on vacant land.
- **AAL 98** was granted as AFL 98 on 14 November 2007 as a secondary licence to PPL 220 (Callawonga field). The area covered by the AAL is a corridor, 50 metres wide straddling the route of the flowline connecting the Callawonga oil field to the Tantanna unloading facility via the Christies oil field. The AAL will provide ongoing access for maintenance of the buried flowline for the life of the fields. The flowline was commissioned on 8 August 2008.
- **AAL 128** was applied for as a secondary licence to PPL 205 (Christies field) and granted as AFL 128 on 5 February 2008. The AAL was required for construction and operation of the end of line and fiscal metering facilities associated with the Callawonga to Tantanna flowline and the Tantanna unloading terminal. The area covered by AAL 128 is 0.49 hectares.
- **AAL 146** was granted as AFL 146 on 9 October 2008 as a secondary licence to PPL 224 (Parsons). The area covered by the AAL is approximately 0.62 km². The AAL was granted to allow the joint venture to carry out the construction and operation of a flowline between PPL 224 (Parsons field) and PPL 220 (Callawonga field).
- **AAL 157** was granted on the 16 November 2010 as a secondary licence to PPL 220 (Callawonga). This licence covers a total combined area of 1.26 km² to allow for the construction and operation of Butlers Airstrip and the construction and occupancy of a Permanent Accommodation Camp close to the Callawonga Oil field.
- **AAL 162** was granted on the 17 August 2011 as a secondary licence to PPL 239 (Middleton/Brownlow). This licence covers a total combined area of 0.6 km² to allow for the construction, operation and maintenance of Middleton to Moonanga flowline.

3 REGULATED ACTIVITIES

Pursuant to Regulations 33(2) (a), an Annual Report must include:

“a summary of the regulated activities conducted during the licence year.”

3.1 Drilling

Two development wells, Christies 6 and Christies 7, were drilled within PPL 205 during 2012. Both of the development wells were cased and suspended as future oil producers. Further details of the drilling of Christies 6 and Christies 7 are provided in Table 1. The location of these wells is also shown in Figure 2.

No drilling activities were undertaken in PPL 210, PPL 212, PPL 220, PPL 224 or PPL 239 during 2012.

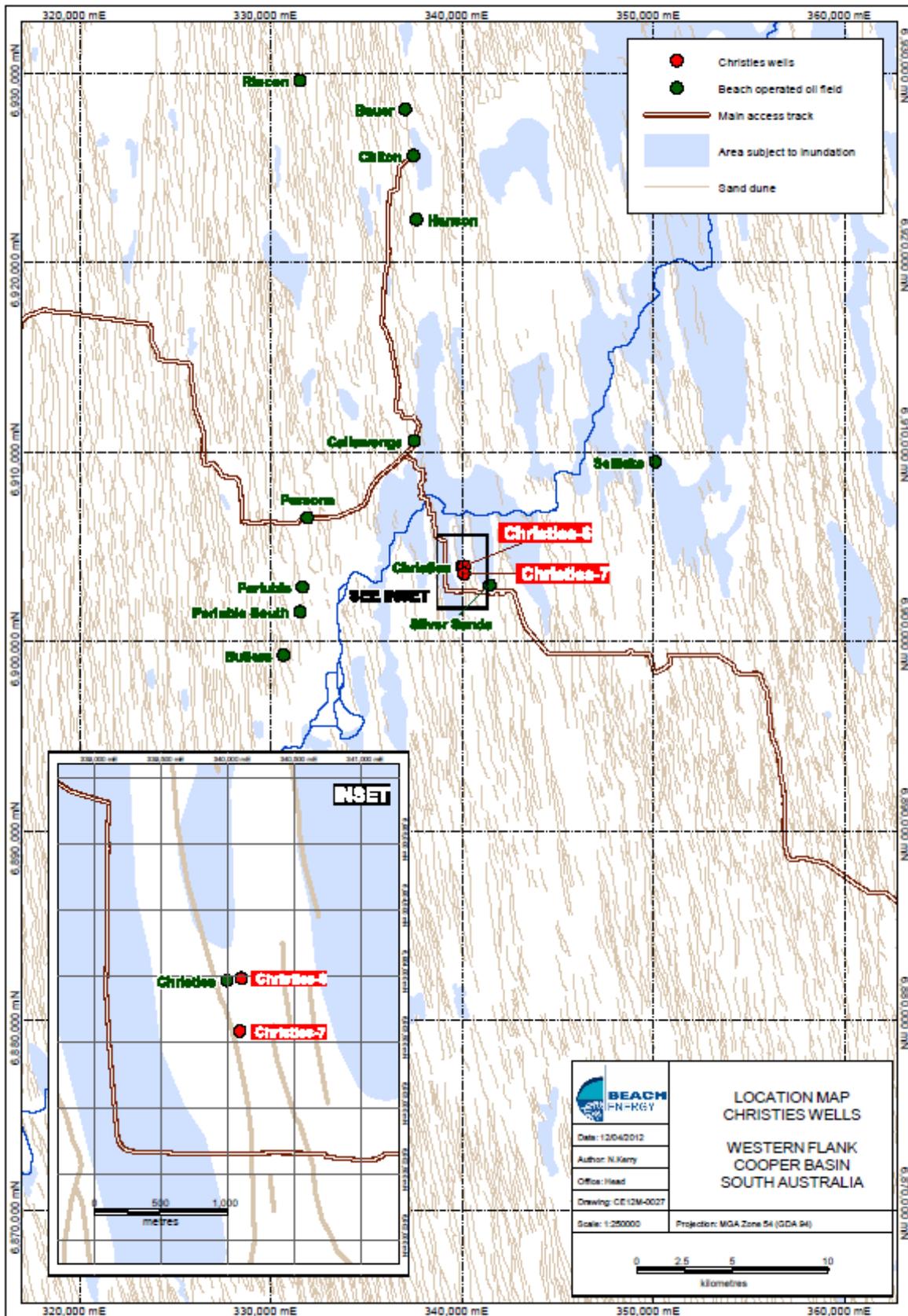


Figure 2: Development Wells in PPL 205 (Christies Field)

Table 1: Summary of Wells Drilled in PPL 205

Well Name	Christies-6
Type of well	Oil Development well
Contractor	Ensign International
Rig	Ensign Rig 30
Date Spudded	30 May 2012
Formations Intersected (and at what depths)	Full representation of Eromanga and Cooper Basin strata was intersected. The depths at which each of the formation tops was intersected is provided to DMITRE in the Well Completion Report
Evaluated hydrocarbon pay	Full petrophysical report is provided to DMITRE in the Well Completion Report
Status	Cased & Suspended
Rig release date	20 June 2012
Track and Pad construction	An access track and standard well lease was constructed. Earthworks commenced on 6 May 2012 and were completed on 21 May 2012.
Borrow Pit construction	Borrow pits were excavated for construction of the access track and lease. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	Christies-7
Type of well	Oil Development well
Contractor	Ensign International
Rig	Ensign Rig 30
Date Spudded	26 June 2012
Formations Intersected (and at what depths)	Full representation of Eromanga and Cooper Basin strata was intersected. The depths at which each of the formation tops was intersected is provided to DMITRE in the Well Completion Report
Evaluated hydrocarbon pay	Full petrophysical report is provided to DMITRE in the Well Completion Report
Status	Cased & Suspended
Rig release date	6 July 2012
Track and Pad construction	An access track and standard well lease was constructed. Earthworks commenced on 12 May 2012 and were completed on 22 May 2012.
Borrow Pit construction	Borrow pits were excavated for construction of the access track and lease. Rehabilitation will be undertaken in accordance with guidelines.

3.2 Seismic Data Acquisition

There was no seismic data acquired in the areas of the Beach operated Cooper Basin PPLs during 2012

3.3 Seismic Data Processing / Reprocessing

No seismic processing or reprocessing relevant to the PPL areas was undertaken during 2012.

3.4 Geochemical, Gravity, Magnetic and other surveys

There were no other geological, geophysical or geochemical surveys conducted in the areas of the Beach operated Cooper Basin PPLs during 2012.

3.5 Production and Processing

The production activities undertaken in each field during the reporting period are summarised in Table 2 below. No processing activities outside of basic water separation were undertaken by Beach.

Table 2: Production Activities Summary for Beach Operated PPLs Licences

PPL 204	Sellicks Field
Maintenance Activities	Sellicks field was shut-in due to imminent flooding in February 2010 with tanks and flowlines purged and filled with water to protect the environment. Receding flood water in 2012 enabled access to the site for a review of the facility. No significant damage to the facility was evident.
Emergency Response Exercises	As per Callawonga.
Associated Activities	No Associated Activities conducted during 2012 due to restricted access.

PPL 205	Christies / Silver Sands Fields
Maintenance Activities	On-going maintenance of roads included the construction of new roads to divert around floods and scheduled maintenance of facilities.
Emergency Response Exercises	As per Callawonga.
Associated Activities	Ongoing operation and maintenance of Christies dewatering facility under AAL 18. Ongoing operation and maintenance of Callawonga-Tantanna flowline metering

	facilities under AAL 128.
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PPL 210	Aldinga Field
Maintenance Activities	On-going maintenance of the lease access road and scheduled maintenance of facilities.
Emergency Response Exercises	As per Callawonga.
Associated Activities	No Associated Activities conducted during 2012.

PPL 212	Kiana Field
Maintenance Activities	Kiana-1 well was shut-in throughout 2012. The well is currently uneconomic to produce. The Kiana Facility was partially dismantled during 2011 with the jet pump removed for storage and possible future use at another location, and the 2x storage tanks moved to Parsons for bulk diesel storage to support the PEL 91 and PEL 92 drilling program while the Cooper Creek was in flood.
Emergency Response Exercises	As per Callawonga.
Associated Activities	No Associated Activities conducted during 2012.

PPL 220	Callawonga Field
Maintenance Activities	On-going maintenance of roads included the construction of new roads to divert around floods and scheduled maintenance of facilities.
Emergency Response Exercises	<ul style="list-style-type: none"> The exercise tested timing for deployment of ELF lighting for a night-time RFDS medivac using crew, vehicles, communication, Operational procedures (POP's), practicality of handling lighting, ERP contents and ERT/EMT activation in the Adelaide Head Office which included Employment Services involvement.
Associated Activities	<ul style="list-style-type: none"> Ongoing construction, maintenance and operation of a 40-man permanent camp near Callawonga Oilfield under AAL 157. Ongoing maintenance and operation of an aircraft Landing strip near Butlers Oilfield under AAL 157. Ongoing maintenance and operation of Callawonga – Tantanna flowline under AAL 98.

PPL 224	Parsons Field
Maintenance Activities	On-going maintenance of roads included the construction of new roads to divert around floods and scheduled maintenance of facilities.
Emergency Response Exercises	As per Callawonga.
Associated Activities	Ongoing maintenance and operation of Parsons – Callawonga flowline under AAL146. Additional interceptor pond installed and rehabilitation of existing holding ponds.

PPL 239	Middleton / Brownlow Fields
Maintenance Activities	On-going maintenance of roads included the construction of new roads to divert around floods and scheduled maintenance of facilities. A new road constructed between Lycium and Middleton turn off on Lake Hope Road (Growler Road)
Emergency Response Exercises	As per Callawonga.
Associated Activities	Middleton separation facility was shut in 1 October 2012 due to commercial issues. Pipelines to connect Canunda -1 installed. Connection to Middleton facility planned for early 2013.

3.6 Flowline Construction and Operation

Beach operated six buried flowlines. All were commissioned prior to 2012.

The 3.8 km Perlubie to Parsons flowline was commissioned in May 2009. The 5" GRE buried flowline, has a 285 bbl capacity. Produced well fluids (oil and water) from Perlubie-1 and Perlubie South-1 wells are piped to the Parsons Oil Facility through this line.

The 7.6 km flowline from the Butlers-1 to Parsons Oil Facility was commissioned in December 2009. The 5" GRE buried flowline, has a 580 bbl capacity. From December 2011 this line has been used to carry clean oil from the newly constructed Butlers Facility (processing Butlers-1, Butlers-2, Butlers-3, Butlers-4, Germein-1 wells) to the Parsons Oil Facility.

The 7.5 km flowline from the Parsons Facility to Callawonga Facility was commissioned in September 2008. The 5" GRE buried flowline, has a 570bbl capacity. This flowline carries clean oil from the Parsons Facility to the Callawonga Facility.

The 47 km flowline from the Callawonga Facility to the Tantanna Oil Field was commissioned on the 8 August 2008. This flowline carries clean oil from the Callawonga Facility to the Tantanna Facility. This flowline was altered to connect with the newly constructed Lycium Facility in late October 2012. The 5" GRE buried flowline Callawonga to Lycium has a 2,000 bbl capacity and Lycium to Tantanna has a 1,370 bbl capacity. Since early December 2012 only the flowline section Callawonga to Lycium has been operated. Plans are in progress for the long term storage of the flowline section Lycium to Tantanna.

All buried GRE pipelines installed by Beach are done so in accordance with Beach Design and Construct Procedure 15 – GRE Flowlines, using the same construction technique, which consists of a grader and bulldozer to clear and stockpile vegetation, topsoil and excavated soil along the right-of-way. Most of the pipe is installed using 'over-the-trench' assembly machines with sidebooms or excavators being used to lower pipe into those sections of the trench which require deeper excavation.

Flowline integrity is verified using hydrostatic testing in accordance with AS 2885.5-2007.

Warning signs are installed along the easement as per AS2885.1-2007.

Newly constructed above ground flowlines

Two new above-ground flowlines were installed during 2012.

A 900m above ground flowline was installed between Parsons-5 and the existing Parsons-2 flowline connecting to the Parsons Oil Facility. The flowline passes through culverts in two locations (road crossings). Both Parsons-2 and Parsons-5 wells are protected by backflow prevention in the event that well pressures differ.

A 700m above ground flowline was installed between Elliston-1 connecting to the inlet manifold at the Parsons Oil Facility.

Above-ground flowlines are installed in accordance with *Beach Design and Construct Procedure 08 – EUE Flowlines*. Standard procedure is to select routes which minimise disturbance to local vegetation during construction and to facilitate ongoing monitoring and inspections. The routes are usually

adjacent to access roads, but set away from the edge of the road to minimise the risk of vehicle impact.

Environmental assessments are conducted by appropriately experienced personnel, which take into account the impacts to native vegetation and habitat prior to the construction of all flowlines. From an environmental perspective 'above ground' flowlines are very low impact because depending upon location they require very little, if any, clearing of native vegetation.

4 COMPLIANCE ISSUES

Pursuant to Regulations 33(2) (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 Legislative, Regulatory, Licence and SEO Compliance

Regulatory Non-compliances

There were three cases in 2012 where Beach failed to comply with the Petroleum and Geothermal Energy Regulations 2000 for activities carried out under PPLs. These non-compliances were due to late submissions of wireline logs and well completion report for Christies development wells. Details of the non-compliance are provided in Table 3.

Table 3 – Regulatory Non-compliances

Activity	Details of Non-Compliance	Rectification of Non-Compliance
Submission of Christies-6 and Christies-7 Wireline logs	Regulation 39 – wireline logs not submitted within 2 months from acquisition due to late submission of data from contractor	Ongoing discussions with contractors regarding resourcing issues. Operator to apply for an extension of time to avoid non-compliance
Submission of Christies-6 Well Completion Report	Regulation 40 – Well Completion Report not submitted within 6 months from rig release due to late submission of data from contractor	Ongoing discussions with contractors regarding resourcing issues. Operator to apply for an extension of time to avoid non-compliance

Non-compliance with Drilling SEO

Beach reported one incident of non-compliance with Objective 5 of the Statement of Environmental Objectives for Cooper Basin Drilling and Well Operations (Drilling SEO). The lease for Christies-6 well was partly constructed outside the area that had been cleared by cultural heritage representatives.

Rectification activities included issuance of HSE alert to staff and contractors of requirements instances of non-compliance. A Compliance Report which details the Operator's compliance with the Drilling SEO for operations undertaken in PPL 205 is attached as Appendix 1.

Non-compliance with Production SEO

The granting of PPLs is conditional on Beach committing to achieving the objectives defined in Beach's "Statement of Environmental Objectives – Cooper Basin Petroleum Production Operations Production SEO)".

There were two instances during the reporting period in which Beach failed to comply with the requirements of its Production SEO. These instances related to spills of oil outside areas that have been specifically designed to contain them. Root causes were identified and where appropriate, informed the revision of, or implementation of new systems and procedures to reduce the chance of reoccurrence. A Compliance Report which details the Operator's compliance with the Production SEO for field operations undertaken in PPLs in 2012 is attached as Appendix 1.

Beach complies with relevant Australian Standards. Beach operates and maintains flowlines in accordance with AS2885.1-2007. The flowlines comprise individual lines conveying wellstream fluids from well to production facilities, gathering lines collecting wellstreams from more than one well to a facility, and trunklines transporting crude oil or gas between facilities. Flowline materials are screwed and coupled steel drill tubulars installed above ground on supports, buried screwed and coupled glass reinforced epoxy (GRE) or buried spooled GRE with spooled sections connected via steel joiners.

Beach have systems and procedures in place to ensure that all flowlines are routinely inspected and maintained, a single high level tracking register is in place to record observations and corrective actions.

Frequency of maintenance activities include:

- Daily observations during operator well rounds
- fortnightly patrol of well and gathering flowlines and end of line equipment
- routine inspection of pig traps prior to pigging operations
- monthly patrol of buried flowline easements
- annual review of operating flows and pressures

Surveillance activities focus on:

- evidence of leaks
- pipe supports
- sand drift/erosion
- thermal movement
- corrosion protection coating
- insulation joints
- UV protection
- signs and markers

4.2 Management System Audits

Pursuant to Regulation 33(2) (d) under the Act, 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”.

An independent HSE Management Systems Audit was commissioned by Beach in 2011 to assess compliance with national benchmark: AS/NZS 4801 OHS Management systems. The HSE System Audit satisfies a condition of Beach’s low supervision classification for production operations. The audit showed a significant improvement in Beach’s HSE Systems performance.

The HSE Systems Audit identified a number of areas for improvement including training, environmental compliance, third party audit schedules and, continuous review and improvement of operating procedures and risk assessment processes. Implementation of the recommendations was ongoing during 2012.

4.3 Report and Data Submissions

Pursuant to Regulation 33(2) (e) under the Act, 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”.

Table 4 - List of Report, Data and Sample Submissions to DMITRE

<i>Description of Report / Data</i>	<i>Date Due</i>	<i>Date Submitted</i>	<i>Compliant / Non-Compliant</i>
Annual Production Report for 2011	29 February 2012	28 February 2012	Compliant
December 2011 Monthly Production Report	29 February 2012	24 January 2012	Compliant
January 2012 Monthly Production Report	31 March 2012	27 February 2012	Compliant
February 2012 Monthly Production Report	30 April 2012	16 March 2012	Compliant
March 2012 Monthly Production Report	31 May 2012	26 April 2012	Compliant
April 2012 Monthly Production Report	30 June 2012	28 May 2012	Compliant
May 2012 Monthly Production Report	31 July 2012	21 June 2012	Compliant
June 2012 Monthly Production Report	31 August 2012	23 July 2012	Compliant
July 2012 Monthly Production Report	30 September 2012	21 August 2012	Compliant
August 2012 Monthly Production Report	31 October 2012	20 September 2012	Compliant
September 2012 Monthly Production Report	30 November 2012	25 October 2012	Compliant
October 2012 Monthly Production Report	31 December 2012	26 November 2012	Compliant
November 2012 Monthly Production Report	31 January 2013	3 January 2013	Compliant

<i>Description of Report / Data</i>	<i>Date Due</i>	<i>Date Submitted</i>	<i>Compliant / Non-Compliant</i>
Quarterly Compliance Report Q4 2011	31 January 2012	31 January 2012	Compliant
Quarterly Compliance Report Q1 2012	30 April 2012	30 April 2012	Compliant
Quarterly Compliance Report Q2 2012	31 July 2012	30 July 2012	Compliant
Quarterly Compliance Report Q3 2012	31 October 2012	31 October 2012	Compliant
Quarterly Cased Hole Report Q4 2011	31 January 2012	31 January 2012	Compliant
Quarterly Cased Hole Report Q1 2012	30 April 2012	30 April 2012	Compliant
Quarterly Cased Hole Report Q2 2012	31 July 2012	30 July 2012	Compliant
Quarterly Cased Hole Report Q3 2012	31 October 2012	31 October 2012	Compliant
Activity Notification Christies 6	27 May 2012	19 April 2012	Compliant
Activity Notification Christies 7	3 June 2012	19 April 2012	Compliant
Christies 6 Completion Program	n/a	31 August 2012	n/a
Christies 7 Completion Program	n/a	31 August 2012	n/a
Christies 6 Completion Downhole Diagram	13 October 2012	3 September 2012	Compliant

<i>Description of Report / Data</i>	<i>Date Due</i>	<i>Date Submitted</i>	<i>Compliant / Non-Compliant</i>
Christies 7 Completion Downhole Diagram	11 October 2012	3 September 2012	Compliant
Christies-6 Wireline logs	17 August 2012	5 September	Non-Compliant ⁽¹⁾
Christies-7 Wireline logs	31 August 2012	5 September	Non-Compliant ⁽¹⁾
Christies 6 SBT-GR-CCL	5 October 2012	19 September 2012	Compliant
Christies 7 SBT-GR-CCL	5 October 2012	19 September 2012	Compliant
Christies 6 Perforation Program	n/a	15 November 2012	n/a
Christies 7 Perforation Program	n/a	15 November 2012	n/a
Christies-6 Well Completion Report	20 December 2012	10 January 2013	Non-compliant ⁽¹⁾
Christies-6 Well Samples	7 December 2012	7 January 2013	Complaint ⁽³⁾
Christies-7 Well Completion Report	18 January 2012 ⁽²⁾	16 January 2013	Complaint
Christies-7 Well Samples	30 January 2013	30 January 2012	Complaint ⁽³⁾

(1) Non-compliant due to late submission

(2) Extension of time granted by DMITRE for submission

(3) Extension of time granted by DMITRE for submission and noting closures/capacity of core library

4.4 Incidents

Pursuant to Regulation 33(2) (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”.*

Table 5: List of Reportable Incidents During 2012: Beach Operated Petroleum Production Licences

Field	Date	Quantity / Area Affected	Incident Description	Root Cause	Steps taken for clean-up and rehabilitation	Steps taken for prevention of recurrence
Parsons	6/03/2012		Temporary repair to holding pond wall breached.	Risk Management	A water pump was started to reduce any further discharge and sand bags were placed along the breach. Earthmovers were brought in to repair pond wall.	Enhance JSA process to accommodate 'specific' weather events/impacts.
Parsons	10/03/2012		Discharge poly pipe had floated up off its support stand on the intake side, the outlet was below water level & pipe had some dips in it, resulting in pond overflowing & washing away approximately 10 metres of the bank.	Risk Management	A water pump was started to reduce any further discharge, and sand bags were placed along the breach. Dunn's earthmoving were brought in to repair pond wall.	Increased supervision of contractors. Review Pond Design to potentially include post installation testing of clay permeability and use of liners if no suitable clay available.
Middleton Production Facility	6/06/2012	Small amount of gas released to atmosphere.	A leak was identified on the gas flow line between the separator and the metering skid (second Tec-Loc from the separator).	Design	Immediately shut-in gas wells and isolated flow line. De-pressurized and replaced damaged seal.	Beach conducting internal investigation.

Field	Date	Quantity / Area Affected	Incident Description	Root Cause	Steps taken for clean-up and rehabilitation	Steps taken for prevention of recurrence
Callawonga - Christies Bypass Road	10-Nov-12	5L / 5m ²	Loaded crude tanker road train rolled over at bend in road.	Work Practice	Emergency Response Plan activated; Driver received first aid & Medevac'd to Moomba. Contents of tanker evacuated & Road Train removed from site. Contaminated Soil was removed & taken to remediation area then excavated area was treated with urea for small amount of residue that remained.	Official caution Speed Alert issued by OBL management alerting all driver to drive through accident area at 15 kph.
Callawonga Tank Farm	5-Dec-12	3L	Outback driver stopped at loading ramp to check wheel bearings and noticed crude weeping from under 3 rd compartment on the lead trailer.		Beach Operator was contacted to advise of a leak and to bring a spill kit. Once operator arrived and assessed the situation, spill was cleaned up and the truck was taken to the load out pad at Callawonga and the compartment was pumped out.	As this was a new tanker, the importance of keeping under 50km on the roads was reiterated to reduce damage to vehicle.
Callawonga Facility	12-Dec-12	5L / 3m ²	Ground around the bunds for the shipping pump, pigging and chemical storage areas stained.	Monitoring and Maintenance Design	Clean up insitu	Adequacy of current bunds to be assessed.
Callawonga Facility	12-Dec-12	6L / 2m ²	Several stains to ground around water pumping station, outside of bunded areas, spills from refuelling, leaking water pipes, engines, pumps etc	Monitoring and Maintenance Design	Clean up insitu	Integrity of pipes/joints along with adequacy of current bunds to be assessed.
Christies 6	Incident occurred 06-May-12, noticed in last quarter	20m ²	Lease constructed outside of WAC cleared area	Pending findings of internal investigation	An internal investigation is currently underway. Dieri Work Area Clearance Crew are on site assessing impact, steps forward will be agreed with them as part of the investigation and close out process.	Pending results of internal investigation

4.5 Threat Prevention

Pursuant to Regulation 33(2) (g) under the Act, 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.

4.6 Future Work Program

Pursuant to Regulation 33(2) (h) under the Act, 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”.

Table 6: Future Work Programs for Petroleum Production Licences Operated by Beach

PPL	FIELD	ANTICIPATED WORK PROGRAM for 2013
PPL 204	Sellicks	Re-commissioning of the Sellicks Production Facility. Re-commencement of production from Sellicks Field possible in late 2013.
PPL 205	Christies	Facility expansion to enable two new wells to be produced. Construction of flowlines for Christies-6 and Christies-7. Commencement of production from Christies-6 and Christies-7.
PPL 210	Aldinga	Normal operations.
PPL 212	Kiana	No production anticipated due to the well currently being uneconomic to produce.
PPL 220	Callawonga	Normal Operations. Possible artificial lift upgrade project if deemed economic. Drilling of development wells
PPL 224	Parsons	Normal Operations.
PPL 239	Middleton/Brownlow	Expect commercial production to recommence during 2013. Connection of Canunda-12 to Middleton facility planned. No development activities planned

5. EXPENDITURE STATEMENT

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

“An annual report must be accompanied by a statement of expenditure on regulated activities conducted under the licence for the relevant licence year, showing expenditure under each of the following headings:

- (a) drilling activities;*
- (b) seismic activities;*
- (c) technical evaluation and analysis;*
- (d) other surveys;*
- (e) facility construction and modification;*
- (f) operating and administration expenses (not already covered under another heading)”.*

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

6. ADDITIONAL INFORMATION FOR PRODUCTION LICENCE REPORTS

Pursuant to Regulations 33(2) (i) and (j) under the Act, an annual report must contain:

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

“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 year, or such longer period as the Minister may require”.

Table 7: Field Production and Proposed Field Development Activities

PPL 204	SELICKS
Production for 2012 :	Oil: 0 bbl
	Water: 0 bbl
Production <u>Forecast</u> for 2013	Oil: 0 bbl
	Water: 0 bbl
<i>Development activities proposed to be undertaken</i> : Refer to Table 5	

PPL 205	CHRISTIES / SILVER SANDS
Production for 2012 :	Oil: 43,428 bbl
	Water: 1,657,640 bbl
Production <u>Forecast</u> for 2013 :	Oil : 244,000 bbl
	Water : 4,980,000 bbl
<i>Development activities proposed to be undertaken</i> : Refer to Table 5	

PPL 210	ALDINGA
Production for 2012 :	Oil : 4,076 bbl
	Water : 404 bbl
Production <u>Forecast</u> for 2013 :	Oil : 4,000 bbl
	Water : 400 bbl
<i>Development activities proposed to be undertaken</i> : No further wells are currently planned for this field.	

PPL 212	KIANA
Production for 2012 :	Oil : 0 bbl
	Water : 0 bbl
Production <u>Forecast</u> for 2013 :	Oil : 0 bbl
	Water : 0 bbl
<i>Development activities proposed to be undertaken</i> : Refer to Table 6	

PPL 220	CALLAWONGA
Production for 2012 :	Oil : 384,026 bbl
	Water : 8,985,404 bbl
Production <u>Forecast</u> for 2013 :	Oil : 644,000 bbl
	Water : 13,417,000 bbl
<i>Development activities proposed to be undertaken</i> : Refer to Table 6	

PPL 224	PARSONS
Production for 2012 :	Oil : 696,947 bbl
	Water : 5,004,935 bbl
Production <u>Forecast</u> for 2013 :	Oil : 360,000 bbl
	Water : 4,444,000 bbl
<i>Development activities proposed to be undertaken</i> : Refer to Table 6	

PPL 239	MIDDLETON / BROWNLOW
Production for 2012 ⁽¹⁾ :	Gas : 1,040 mmscf
	Liquids: 9,727 bbls
	Water : 3,644 bbls
Production <u>forecast</u> for 2013 :	Gas: 3.37 bcf
<i>Development activities proposed to be undertaken</i> : Refer to Table 6	

⁽¹⁾ Monthly Production for reporting period August 2012 to December 2012, noting that the well was shut-in by the buyer on 1 October 2012.

APPENDIX 1

Compliance with Statements of Environmental Objectives

Table A1: Compliance with the SEO for Cooper Basin Drilling and Well Operations – Drilling of Christies-6 and Chisties-7 in PPL 205

Note 1: The Santos SEO for Drilling and Well Operations has been adopted by Beach for its Drilling and Well Operations in the South Australian sector of the Cooper Basin. References to 'Appendix 1 Table A2' and 'Appendix 1 Table A3' refer to tables included in Santos' South Australia Cooper Basin Statement of Environmental Objectives: Drilling and Well Operations November 2009.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p><u>Objective 1:</u> Minimise risks to the safety of the public and other third parties.</p>	<p>Reasonable measures implemented to ensure no injuries or health risks to the public or to third parties.</p>	<p>Compliant</p>	<p>Communication of all potential hazards to safety associated with drilling and other well site operations including rig moves to all affected parties, prior to the commencement of such activities.</p> <p>Beach maintained regular contact with landholders and associated stakeholders during drilling operations.</p> <p>The design and operation of wells was undertaken in accordance with Beach safety policies, standards and guidelines.</p> <p>All employees visiting or working on the rig undertook a safety induction prior to commencing work in the field and will undertake a refresher course if/when required.</p> <p>Signage was erected along each of the access roads to advise that only authorised personnel are permitted onto the respective well sites.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
			<p>Beach's Permit to Work System was in operation during drilling operations to control potentially dangerous situations.</p> <p>Accident / incident reporting systems were in place as defined in the Beach Drilling Operation Manual. Records are reviewed regularly to assess trends.</p> <p>Beach Safety Management Plans are updated and reviewed on a regular basis.</p> <p>Appropriate Personal Protective Equipment (PPE) was issued to all personnel involved in the drilling operations.</p> <p>The Beach Emergency Response System which includes; Emergency Management Manual, Site Emergency Response Plans and Emergency Management Initial Response Guidelines were reviewed during 2009 with documentation being updated to meet the changing roles and responsibilities in the organisation.</p>
<p><u>Objective 2 :</u> Minimise disturbance and avoid contamination to soil.</p>	<p><u>Well Site and Access Track Construction</u></p> <p>0, +1 or +2 GAS criteria are attained for "Minimise impacts on soil" objective as listed in Appendix 1 Table A1* and "To minimise the visual impact" as listed in Appendix 1 Table A2*.</p> <p>No unauthorised off-road driving or creation of shortcuts.</p>	<p><i>Compliant</i></p>	<p>The well sites were constructed in accordance with the procedures outlined in Beach's "<i>Guidelines for Lease Construction and Restoration</i>".</p> <p>Topsoil was stockpiled for subsequent respreading when restoration activities are conducted.</p> <p>Potential impacts on the environment were carefully considered prior to constructing track and wellsite. Existing routes were utilised where feasible.</p> <p>Vehicle movements were strictly limited to the defined access track and well pad areas – areas which had been given cultural heritage clearance for the drilling operations.</p> <p>Beach, In accordance with the guidelines set down in DMITRE's Field Guide for the Environmental Assessment of Abandoned Petroleum Wellsites in the Cooper Basin, South Australia, always strives to attain the highest feasible GAS rating.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
	<p>No construction activities are carried out on salt lakes or steep tableland slopes or wetlands land systems (as defined in Santos' EIR).</p> <p><u>Borrow pit construction and restoration</u></p> <p>0, +1 or +2 GAS criteria are attained for "Minimise visual impacts" and "Minimise impact on soil" objectives as listed in Appendix 1 Table A3*.</p> <p><u>Production Testing / Well Blowdowns</u></p> <p>No soil contamination as a result of production testing or well blowdown operations.</p>	<p><i>Compliant</i></p>	<p>Borrow pits will be rehabilitated and restored in accordance with the guidelines set down in DMITRE's Field Guide for the Environmental Assessment of Abandoned Petroleum Wellsites in the Cooper Basin, South Australia, to attain the highest feasible GAS rating.</p>

	<p><u>Fuel and Chemical Storage and Handling</u></p> <p>No spills/leaks outside of areas designed to contain them.</p> <p>Level of hydrocarbon continually decreasing for in situ remediation of spills.</p> <p>Soils remediated to a level as determined by the Soil Health Index process.</p>	<p>Compliant</p>	<p>There were no spills during the drilling operations outside of areas that were designed to contain them. Beach's Oil Spill Contingency Plan is included in the Emergency Response Plan. Refuelling was undertaken as per Drilling Contractors' procedures.</p> <p>There were no spills during the drilling operations that required reporting or corrective action to be taken in accordance with the Beach Incident Reporting System</p>
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	<p><u>Waste Disposal (domestic, sewage and sludges)</u></p> <p>All domestic wastes are disposed of in accordance with EPA licensing requirements.</p> <p>0, +1 or +2 GAS criteria are attained for "Site to be left in a clean and tidy condition" objective listed in Appendix 1 Table A2*.</p> <p>No spills or leaks from sewage treatment processing.</p> <p>Refer to Assessment Criteria for Objective 11.</p>	<p>Compliant</p>	<p>Wastes are managed in accordance with the practices recommended in the Cooper Basin Drilling & Well Operations EIR.</p> <p>Wastes are collected, stored and transported in covered bins / containers, and all rubbish is disposed of at a licensed waste facility.</p> <p>Beach is establishing its own soil remediation area (SRA) to treat any soils which may become contaminated in the future.</p>
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<p><u>Objective 3 :</u> Avoid the introduction or spread of pest plants and animals and implement control measures as necessary.</p>	<p>No weeds or feral animals are introduced to, or spread in operational areas as a consequence of activities.</p>	<p>Compliant</p>	<p>The Ensign drilling rig and associated equipment is washed down prior to entering and leaving different state borders as per Beach Policy.</p>
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<p><u>Objective 4 :</u> Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow ground water resources</p>	<p><u>Well Lease and Access Track Construction</u></p> <p>Well sites and access tracks are located and constructed to maintain pre-existing water flows (i.e. channel contours are maintained on floodplains and at creek crossings).</p> <p><u>Drilling Mud Sumps and Flare Pits</u></p> <p>No overflow of drill cuttings, muds and other drilling fluids from mud sumps.</p> <p>No waste material disposal to sumps and flare pits.</p> <p><u>Well Heads (Oil and Gas Systems)</u></p> <p>No leaks/spills outside of areas designed to contain them.</p>	<p>Compliant</p>	<p>The drill pads and access track for were constructed and located to avoid the possibility of flood waters being diverted from their natural direction of drainage in the event of local inundation.</p> <p>All drill cuttings, muds, and non toxic drill fluids were contained within designated mud sumps with adequate freeboard at the completion of operations to allow for a 1m cover of clean fill at remediation.</p>
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	<p><u>Well Blowdown/Production Testing</u></p> <p>No water (surface or groundwater) contamination as a result of production testing or well blowdown operations.</p> <p><u>Fuel/Chemical Storage and Handling</u></p> <p>No leaks/spills outside of areas designed to contain them.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 11.</p>	<p><i>Compliant</i></p>	<p>Fuel, oil and chemicals were stored in accordance with relevant standards. Refuelling was undertaken as per Drilling Contractors' procedures.</p> <p>There were no spills during the drilling operations within PPL 224 outside of areas designed to contain them.</p> <p>Beach's Oil Spill Contingency Plan is included in Beach's Emergency Response Plan. No Emergency Management exercise was conducted specifically for PPL 205.</p> <p>Waste was removed from the well sites. Bins are covered to prevent access by wildlife and prevent spread of rubbish by wind.</p> <p>Non-putrescible waste material (including hazardous material) was stored safely on site for later removal to an EPA approved disposal facility.</p>
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<p><u>Objective 5 :</u></p> <p>Avoid disturbance to sites of cultural and heritage significance</p>	<p>Proposed well sites and access tracks have been surveyed and any sites of Aboriginal and non-Aboriginal heritage identified.</p> <p>Any identified cultural and heritage sites have been avoided.</p> <p><u>Note:</u> <i>Where a negotiated agreement or determination for heritage clearance is in place, compliance with the negotiated agreement or determination takes precedence over the above criteria.</i></p>	<p><i>Non-compliant</i></p>	<p>Beach has an agreement with the Dieri Aboriginal Corporation Native Title Claimant group which specifies the requirements for scouting proposed well sites and access tracks to identify and avoid areas of heritage value and archaeological significance.</p> <p>Joint site visits were carried out with the Native Title Claimant group. The proposed drilling locations and access routes were agreed and given heritage clearance.</p> <p>Areas of significance were recorded and marked as exclusion zones.</p> <p>The part of the lease for Christies-6 was constructed outside of the area that had been cleared by cultural heritage survey. A subsequent visit by the Dieri confirmed no areas of significance were disturbed as a result of the non-compliance. Supervisors are to ensure all contractors follow procedure to work to designated, cleared lease areas and access tracks. Beach is adopting better flagging of work cleared areas.</p>
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	<p><u>Waste Management</u> Refer to assessment criteria for Objective 11.</p> <p><u>Fuel and Chemical Storage and Management</u> Refer to assessment criteria for Objectives 2 and 4.</p>	<i>Compliant</i>	<p>Beach's Drilling Operations Manual sets out the Company's policy in relation to storage, use and disposal of hazardous material.</p> <p>At the well site, wastes were managed as described in the Drilling & Well Operations EIR. Wastes were collected, stored and transported in covered bins / containers.</p> <p>All rubbish was disposed of at a licensed waste facility.</p>
<p><u>Objective 8 :</u></p> <p>Minimise air pollution and greenhouse gas emissions.</p>	<p>Compliance with EPA requirements.</p>	<i>Compliant</i>	<p>Well Testing is undertaken in accordance with appropriate industry accepted standards and with a minimal amount of gas flaring.</p>
<p><u>Objective 9:</u></p> <p>Maintain and enhance partnerships with the Cooper Basin community.</p>	<p>No unresolved reasonable complaints from the community.</p>	<i>Compliant</i>	<p>Beach maintained regular contact with landholders and associated stakeholders prior to, and while undertaking drilling operations.</p>

	<p>Attainment of GAS criteria for "Site to be left in clean, tidy and safe condition" objective during well site restoration (refer Appendix 1 Table A2).</p> <p>Attainment of GAS criteria for "Site left in clean and tidy condition" objective during borrow pit restoration (refer Appendix 1 Table A3).</p>		
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<p><u>Objective 12</u> Remediate and rehabilitate operational areas to agreed standards.</p>	<p>No unresolved reasonable stakeholder complaints.</p> <p><u>Contaminated Site Remediation</u> Contaminated sites are remediated to a level as determined by the approved SHI process.</p> <p>Prior to the finalisation and approval of the SHI process, 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>Well Site and Access Track Restoration</u></p> <p>The attainment of 0, +1 or +2 GAS criteria for the objectives (refer Appendix 1 Table A2):</p>	<p><i>Compliant</i></p>	<p>Once production from Christies-6 and -7 ceases, the well sites will be fully 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>Any contaminated sites are remediated in accordance with Beach Guidelines and Industry Standards.</p> <p>Discussions will be undertaken with the landowners to determine whether they wish to have any rehabilitation work undertaken on the access tracks constructed for drilling operations.</p> <p>Beach will complete post drill audits of both sites after floodwaters have receded and rehabilitation work has been completed.</p>
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<p><u>Objective 12</u> <u>(continued)</u></p> <p>Remediate and rehabilitate operational areas to agreed standards.</p>	<p>"To minimise the visual impact"</p> <p>"The revegetation of indigenous species"</p> <p><u>Borrow Pit Restoration</u> The attainment of 0, +1 or +2 GAS criteria for (refer Appendix 1 Table A3):</p> <p>"Rejuvenation of indigenous species"</p> <p>"Minimise impact on soil"</p> <p>Minimise visual impacts"</p> <p>"Site to be left in a clean and tidy condition"</p> <p><i>Note: Well abandonment issues are addressed under Objective 6</i></p>	<p><i>Compliant</i></p>	<p>Borrow pits will be rehabilitated and restored using effective contouring in accordance with the guidelines set down in PIRSA's Field Guide for the Environmental Assessment of Abandoned Petroleum Wellsites in the Cooper Basin, South Australia, to attain the highest feasible GAS rating.</p>
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Appendix 1

Compliance with Statement of Environmental Objectives

Table A2: Compliance with the Cooper Basin Production and Processing Operations Statement of Environmental Objectives

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 1. To avoid unnecessary disturbance to 3rd party infrastructure, landholders or land use</p>	<p>Where disturbance is unavoidable or accidental, infrastructure or land use is restored to as is reasonably appropriate to the original undisturbed condition or as agreed with the landholder</p> <p>No unresolved reasonable landholder / 3rd party complaints</p> <p>Landholder activities not restricted or disturbed as a result of activities unless by prior arrangement.</p>	<p><i>Compliant</i></p>	<p>Rehabilitation of all production sites will be undertaken in consultation with the landowner when production ceases.</p> <p>All facilities are at least 10 km from the nearest dwelling, which is inhabited only periodically.</p> <p>Regular liaison with landowners provides advance warning of any significant developments or activities.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 2. To maintain soil stability / integrity</p>	<p>The extent of soil erosion is consistent or less than surrounding land.</p> <p>Vegetation cover is consistent with surrounding land</p> <p>No evidence of significant subsoil on surface (colour).</p> <p>No production activities undertaken on salt lakes, steep tableland land systems or wetlands land systems (as defined in the EIR)</p> <p>Abandoned areas (e.g. borrow pits) are remediated and rehabilitated to be reasonably consistent with the surrounding area</p> <p>0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained (Appendix B)</p>	<p><i>Compliant</i></p>	<p>No significant erosion has been reported either at the facilities or along the access roads. Topsoil was stockpiled when the sites were originally cleared for the drilling operations.</p> <p>Rehabilitation of the fields will be undertaken when production ceases.</p> <p>None of the fields are located on or within salt lakes, steep tableland areas or wetlands.</p> <p>Production sites and access tracks are located both in dune field and floodplain environments and production activities are carefully controlled to minimise impact on these areas.</p> <p>All vehicle movements are restricted to the designated access roads and the production facility areas.</p> <p>Clay surfaces on the access roads minimise disturbance to the soil beneath.</p> <p>Rehabilitation of the production sites and access tracks will be undertaken in consultation with the landowner when production ceases.</p> <p>Borrow pits will be remediated and rehabilitated to be reasonably consistent with the surrounding topography.</p> <p>Landholder has requested that no rehabilitation be undertaken on any clay-top roads constructed by Beach.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 3. To minimise disturbance to native vegetation</p>	<p>Species abundance and distribution on the reinstated areas was consistent with the surrounding area</p> <p>Note: assessment of the consistency with surrounding areas will take into account that regrowth is a time and rainfall dependent process</p> <p>0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained (Appendix B).</p>	<p><i>Compliant</i></p>	<p>Rehabilitation of production sites will be undertaken in consultation with the landowner when production ceases.</p> <p>Vegetation along the flowline corridors are generally consistent with surrounding area.</p>
	<p>Vegetation clearing is limited to previously disturbed areas or areas assessed to be of lowest sensitivity</p> <p>No rare, vulnerable or endangered flora removed without appropriate permits</p> <p>No production activities undertaken on salt lakes, steep tableland land systems or wetlands land systems (as defined in the EIR)</p> <p>0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained (Appendix B).</p>	<p><i>Compliant</i></p>	<p>Minor vegetation clearing was undertaken during the reporting period for the establishment of both temporary and permanent access tracks, facilities and accommodation camps.</p> <p>Where possible, areas with low vegetation density were utilised.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
	<p>Vegetation clearing is limited to previously disturbed areas or areas assessed to be of lowest sensitivity</p> <p>No rare, vulnerable or endangered fauna removed without appropriate permits</p> <p>0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained (Appendix B)</p> <p>Works in aquatic habitats (e.g. flowing watercourses) have been approved by DMITRE</p>	<p><i>Compliant</i></p>	<p>No record of rare, vulnerable or endangered fauna near any of the production areas or flowline corridors.</p> <p>Most facilities are several kilometres from the nearest significant watercourse (Cooper Creek) which flows only during large flood events (1 in 5 years). 2010-11 saw a major 1 in 20 year flood event which impacted significantly on Beach operations.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 4. To prevent the introduction or spread of weeds, pathogens and pest fauna	<p>The presence of weeds and pathogens is consistent with or better than adjacent land</p> <p>No new outbreak or spread of weeds reported</p>	<p><i>Compliant</i></p>	<p>No new outbreak or spread of weeds reported.</p> <p>Operations personnel regularly undertake inspections of operational areas including flowline corridors. There have been no reports of weed outbreaks</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 5.</p> <p>To minimise the impact of the production operations on water resources</p>	<p>For excavations, surface drainage profiles area restored to be as reasonably consistent with surrounding area as possible.</p> <p>For existing easements, drainage is maintained similar to pre-existing conditions.</p> <p>Volume of water produced is recorded.</p> <p>No uncontrolled flow to the surface (i.e. no free flowing bores)</p> <p>Note: the “Cooper Basin Drilling and well Operations” SEO provides detail on aquifer issues.</p>	<p><i>Compliant</i></p>	<p>Beach production operations had no effect on the flow of the Cooper Creek.</p> <p>The volume of water extracted during production operations is monitored and recorded.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 6. To avoid land or water contamination</p>	<p>No evidence of any spills or leaks to areas not designated to contain spills</p> <p>In the event of a spill, the spill was:</p> <ul style="list-style-type: none"> ▪ Contained ▪ Reported ▪ Cleaned-up ▪ Cause investigated and corrective and/or preventative action implemented <p>Compliance with the Environment Protection Act, Australian Standard 1940 and the Australian Dangerous Goods Code.</p> <p>Contamination restricted to known areas and remediation strategies investigated and implemented where practical. Level of hydrocarbon contamination continually decreasing, ultimately to meet Environment Protection Authority (EPA) guidelines</p> <p>No evidence of rubbish or litter on easements or at facilities.</p>	<p><i>Non Compliant</i></p>	<p>Incidents of oil leaks/stains at Callawonga facility were reported in quarterly compliance report were contained within designated areas and/or were outside production areas and therefore complied with SEO (please refer Table 5 for further detail).</p> <p>The cause of incidents and the measures taken to minimise the chance of reoccurrence are discussed during the Weekly Production Meetings between field operators and office based staff.</p> <p>Root causes of incidents were identified and where appropriate informed the revision of, or implementation of new systems and procedures to reduce the chance of reoccurrence.</p> <p>Similarly design modifications have being undertaken, where practicable, to reduce the possibility of spills through equipment failure.</p> <p>A Soil Rehabilitation Area (SRA) has been approved at the Christies Facility. Due to restricted access caused by floods the construction of the SRA did not commence in 2012. Beach is considering revising plans and seeking approval to construct the SRA near Callawonga.</p> <p>Contaminated soil is remediated in situ or stock piled to be treated in the recently approved but not yet constructed Soil Remediation Area.</p> <p style="text-align: center;">48</p> <p>A recycle system is in operation at Callawonga.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 6 (Continued):	<p>No evidence that waste material is not contained and disposed of in accordance with Beach approved procedures.</p> <p>Evidence of waste tracking certificates for prescribed wastes.</p> <p>Evidence of compliance with any waste disposal licence conditions (e.g. EPA permits)</p>	<i>Compliant</i>	<p>All waste material has been and continues to be disposed of in accordance with Beach approved procedures.</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)</p>	<i>Compliant</i>	<p>All water continues to be disposed of in accordance with Beach approved procedures.</p>
	<p>No evidence of non-compliance with local or state government regulations</p>	<i>Compliant</i>	<p>Waste water is disposed of in accordance with State Government regulations.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 6 (Continued):</p>	<p>Water monitoring results indicated levels of Total Petroleum Hydrocarbons (TPH) below 30mg/L in bunded holding ponds and 10mg/L in bunded and / or freeform evaporation ponds</p> <p>No evidence of overflow of product from interceptor pit.</p> <p>No evidence of hydrocarbon contamination immediately adjacent to bunded ponds</p> <p>Periodic reports as required detail quantity, level of contamination and proposed ongoing operation of the Land Treatment Unit.</p>	<p><i>Compliant</i></p>	<p>Produced water from the fields is separated from the oil – firstly in separator tanks, and then further separated in a skimmer pond, before final disposal into evaporation ponds. Hydrocarbon levels in the disposed water at each facility are routinely monitored and when found to be above acceptable limits investigations are carried out to determine and rectify the cause.</p> <p>Parsons Ponds have where possible been upgraded or decommissioned and relocated.</p> <p>A Soil Rehabilitation Area (SRA) has been approved at the Christies Facility. Due to restricted access caused by floods the construction of the SRA did not commence in 2012. Beach is considering revising plans and seeking approval to construct the SRA near Callawonga.</p> <p>In the event that soil becomes contaminated, it will either be treated in situ or stock piled in a lined/bunded area to await treatment at the SRA.</p>

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
<p>Objective 7.</p> <p>To minimise the risk to public health and safety</p>	<p>No injuries or incidents involving the public</p> <p>Demonstrated compliance with relevant standards</p> <p>Emergency procedures implemented and personnel trained</p>	<p><i>Compliant</i></p>	<p>An incident involving roll-over of tanker occurred and the Emergency Response was implemented.</p> <p>The tanker incident did not cause any injuries to public. The haul roads from the Christies, Sellicks, Kiana, Aldinga, Callawonga and Parsons facilities are not available for use by the public.</p>
	<p>No uncontrolled operations related fires</p> <p>Emergency procedures implemented and personnel trained</p> <p>No unauthorised activity</p>	<p><i>Compliant</i></p>	<p>No fires occurred at any facility during the reporting period.</p> <p>Landowner (and Government) have given approval that, in the event of a fire at either facility, if the first attack on the fire fails, it can be left to burn itself out.</p> <p>There were no incidents of unauthorised entry to any of the Sellicks, Christies, Kiana, Aldinga, Callawonga or Parsons facilities.</p>

<p>Objective 8. To minimise impact of emergency situations</p>	<p>Emergency response procedures are effectively implemented in the event of an emergency</p> <p>Emergency response exercises are aligned with credible threats and consequences identified in the risk assessment</p> <p>Refer to previous criteria (Objective 1, 2, 3 & 6)</p>	<p><i>Compliant</i></p>	<p>An incident involving roll-over of tanker occurred and the Emergency Response was implemented.</p> <p>Beach Petroleum HSE system includes periodic simulation of Emergency situations at production facilities. An emergency response exercise was carried during 2012 to test the timing for deployment of ELF lighting for a night-time RFDS medivac using crew, vehicles, communication, Operational procedures (POP's), practicality of handling lighting, ERP contents and ERT/EMT activation in the Adelaide Head Office which included Employment Services involvement (Refer Table 2).</p>
<p>Objective 9. To minimise noise due to operations</p>	<p>Operational activities have taken reasonable practical measures to comply with noise regulations, under the Environment Protection Act 1993</p> <p>No unresolved reasonable complaints.</p>	<p><i>Compliant</i></p>	<p>Sellicks Christies, Kiana, Aldinga, Callawonga and Parsons facilities are all at least 10 kilometres from the nearest dwelling.</p>

<p>Objective 10. To minimise atmospheric emissions</p>	<p>Reasonable practical measures implemented in design and operation to minimise emissions</p> <p>Annual Report includes atmospheric emissions data</p> <p>No reasonable complaints received</p> <p>No dust related injuries recorded</p>	<p><i>Compliant</i></p>	<p>Sources of atmospheric emissions at Sellicks, Christies, Kiana, Aldinga, Callawonga and Parsons are limited to the diesel engines driving the beam pumps or jet pumps on the well heads.</p> <p>Atmospheric emissions are being reported on a financial year basis as part of Beach's obligations under the <i>National Greenhouse and Energy Reporting Act</i> (NGER).</p> <p>Sellicks Christies, Aldinga, Kiana, Callawonga and Parsons facilities are all at least 10 km from the nearest dwelling.</p> <p>Flowlines connect Beach operated fields on the western flank of the Cooper Basin with Moomba via Santos' Tantanna facility.</p> <p>When access is not restricted by floods, oil is also trucked to Santos' Tantanna unloading terminal. The clay top haul roads are continually watered and maintained to minimise dust.</p>
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<p>Objective 11 To adequately protect cultural heritage sites and values during operations and maintenance</p>	<p>Proposed construction areas and access tracks surveyed by relevant cultural heritage group</p> <p>Any new sites identified are recorded and reported to appropriate authority</p> <p>No impact to identified sites</p>	<p><i>Compliant</i></p>	<p>Beach have an agreement which ensures that the Dieri Aboriginal Corporation Claimant Group conduct cultural heritage surveys prior to the construction of any production related infrastructure, often times the Dieri grant conditional clearances whereby designated areas are to be avoided.</p>
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