Annual Report

Licence Year 7

First Renewal Term

5 November 2012 to 4 November 2013

PEL 92

Cooper / Eromanga Basin

South Australia

Contents

1 Introduction

Petroleum Exploration Licence (PEL) 92 was originally granted on 5 November 2001. The permit was renewed for a further five year term effective from 5 November 2006. PEL 92 is situated on the southwestern margin of the Cooper/Eromanga Basin, South Australia.

This report details the work completed by the holders of PEL 92 during the period 5 November 2012 to 4 November 2013 which represents Year 7 of the first renewal term. This Annual Report has been prepared in accordance with the requirements of Section 33 of the *Petroleum and Geothermal Energy Regulations 2013* ***(the Regulations)*****.**

2 Permit Summary

2.1 Permit Interests

The registered interests in PEL 92 are:

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

There were no changes to the interests in PEL 92 during the licence year.

During the current term, the holders of PEL 92 applied for five (5) Petroleum Production Licences (PPLs) over the Butlers, Perlubie South, Germein, Elliston and Windmill Fields. PPL 245 over the Butlers field was granted effective from 28 October 2013 to Beach (75%) and Cooper (25%).

2.2 Suspensions / Extensions

No extensions and/or suspensions of the PEL 92 licence conditions occurred during the current term.

As a result of previous suspensions and extensions of work commitments under Licence Condition 1, the first renewal term of PEL 92 expired on 4 November 2013. The Licence carries the rights to one further renewal subject to the provisions of the *Petroleum and Geothermal Energy Act 2000 (****the Act****)*. An extension of time to apply for renewal of PEL 92 was granted by DMITRE. Application to renew PEL 92 for a further term was submitted on 1 November 2013.

2.3 Work Program

There have been no variations to the work program since the PEL 92 renewal was awarded. The work commitments for the first renewal term of PEL 92 are detailed in Table 1.

Table 1 Work Program Commitments by Licence Year

Licence Year	Licence dates	Minimum Work Program
Year 1	5 Nov 2006 to 4 Nov 2007	Geological and Geophysical Studies
Year 2	5 Nov 2007 to 4 Nov 2008	Acquire 100km^2 3D seismic; Geological and Geophysical Studies
Year 3	5 Nov 2008 to 4 Nov 2009	Geological and Geophysical Studies
Year 4	5 Nov 2009 to 4 Nov 2012	Drill one well; Geological and Geophysical Studies
Year 5	5 Nov 2010 to 4 Nov 2013	Geological and Geophysical Studies

Table 2 summarises the work completed by the holders of PEL 92 as at 4 November 2013. The minimum work commitments for the first renewal term have been exceeded with the drilling of 38 wells (27 exploration wells and 11 appraisal/development wells); the acquisition of over 1300 km^2 of 3D seismic data and 500 km of 2D seismic data; and reprocessing of vintage seismic data.

Table 2 Work Program and Work Completed by Licence Year

Licence Year	Minimum Work Program	Actual Work
Year 1	Geological and Geophysical studies	• Acquisition of 277 km^2 Neritus 3D seismic • Drilled Callawonga-2 oil appraisal well and Sheringa-1 exploration well
Year 2	Acquire 100 km^2 3D seismic Geological and Geophysical studies	• Drilled Parsons-1 exploration well (oil discovery) and Parsons-2 appraisal well • Acquisition of 195 km^2 Modiolus 3D seismic • Acquisition of 119 km Padollus 2D seismic • Reprocessed of 80 km^2 Neritus 3D seismic
Year 3	Geological and Geophysical studies	• Drilled 8 exploration wells (1)
Year 4	Drill one well Geological and Geophysical studies	• Acquisition of 230 km of Heliacus 2D seismic, 55 km Fusinus 2D seismic; 105 km Porcatus 2D seismic, • Acquisition of 210 km^2 Calpurnus 3D seismic; 197 km^2 Rincon 3D; 295 km^2 Irus 3D seismic • Reprocessed extra 150 km of archive 2D data with Heliacus survey data, and extra 100 km^2 of archive 3D data with Calpurnus data. • Drilled 12 exploration wells (2) and 6 appraisal/development wells (3)

Year 5	Geological and Geophysical studies	• Acquisition of Caselous 3D seismic; • Drilled 5 exploration wells and 3 appraisal / development wells [4]

[1] Gunyah-1, Perlubie-1, Tumby-1, Perlubie South-1, Butlers-1, Cheetima-1, Willunga-1 and Murninnie-1
[2] Parham-1, Stenhouse-1, Turton-1, Westall-1, Wheatons-1, Rincon-1, Elliston-1, Germein-1, Jaffa-1, Riley-1, Windmill-1, Tinah-1
[3] Butlers-2, Butlers-3, Butlers-4, Perlubie-2, Butlers-5, Butlers-6
[4] Rincon North-1, Sharples-1, Wyomi-1, Mills-1, Hooper-1, Windmill-2, Butlers-7, Butlers-8

2.4 Associated Activities Licence (AAL)

Two temporary AALs were active during the current term as adjuncts to PEL 92 to facilitate the acquisition of the Rincon 3D seismic survey and Irus 3D seismic survey in areas outside the PEL 92 permit boundary.

- AAL 171 granted on 17 January 2012 for a 12 month period
- AAL 181 granted on 10 August 2012 for a 12 month period

Both AALs expired, without renewal, 12 months from the commencement of the respective terms.

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 Seismic Data Acquisition

Two seismic surveys were acquired in PEL 92 during the reporting period. Terrex Seismic was contracted to record the surveys.

Table 3 Seismic Surveys

Survey	Start Date	Completion Date	Area of survey (in PEL 92)
Caseolus 3D Survey [1]	12 February 2013	14 June 2013	164 km^2
Irus 3D Survey [2]	8 September 2012	17 November 2012	295 km^2

(1) The Caseolus 3D seismic survey was acquired over PEL 92 and PEL 91 – total area of 631km^2
(2) The Irus 3D seismic survey was acquired over PEL 92, PEL 91, PEL 106 – total area of 582km^2

3.2 Seismic Data Processing / Reprocessing

The processing for both the Caseolus 3D and Irus 3D seismic surveys are ongoing. The Caseolus 3D seismic survey is being processed by Geokinetics Inc, in Houston and is expected to be completed in early 2014. The Irus 3D seismic survey is being processed by CGGVeritas Services in Perth and is expected to be completed in early 2014.

3.3 Drilling Activities

Five oil exploration/appraisal wells were drilled in the current reporting year. Rincon North-1 was cased and suspended as future oil producer. One appraisal well was drilled in the Windmill field and two development wells were drilled in the Butlers field, all of which were cased and suspended as future oil producers.

Table 4 Wells Drilled

Well Name	**Rincon North-1**
Type of well	Exploration well
Contractor	Ensign International
Rig	Ensign Rig 948
Date Spudded	6 April 2013
Status	Cased & Suspended
Rig release date	20 April 2013
Track and Pad construction	An access track approx. 1.7 km long extending north from the existing Rincon-Bauer access road and a standard well lease were constructed. Earthworks commenced on 21 February 2013 and were completed on 5 March 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Sharples-1**
Type of well	Exploration well
Contractor	Ensign International
Rig	Ensign Rig 930
Date Spudded	13 April 2013
Status	Plugged & Abandoned
Rig release date	22 April 2013
Track and Pad construction	An access track approx. 3.6 km long, extending north from the existing Wheatons access track and a standard well lease were constructed. Earthworks commenced on 15 March 2013 and were completed on 26 March 2013.

Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Wyomi-1**
Type of well	Exploration well
Contractor	Ensign International
Rig	Ensign Rig 948
Date Spudded	24 April 2013
Status	Plugged & Abandoned
Rig release date	3 May 2013
Track and Pad construction	An access track approx. 1.5 km long and a standard well lease were constructed. Earthworks commenced on 26 March 2013 and were completed on 11 May 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Mills-1**
Type of well	Exploration well
Contractor	Ensign International
Rig	Ensign Rig 948
Date Spudded	6 June 2013
Status	Plugged & Abandoned
Rig release date	14 June 2013
Track and Pad construction	An access track and a standard well lease were constructed. Earthworks commenced on 21 May 2013 and were completed on 29 May 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Hooper-1**
Type of well	Exploration well
Contractor	Ensign International
Rig	Ensign Rig 930
Date Spudded	6 July 2013

Status	Plugged & Abandoned
Rig release date	13 July 2013
Track and Pad construction	An access track and standard well lease were constructed. Earthworks commenced on 9 May 2013 and were completed on 16 June 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Windmill-2**
Type of well	Appraisal well
Contractor	Ensign International
Rig	Ensign Rig 930
Date Spudded	21 September 2013
Status	Cased & Suspended
Rig release date	29 September 2013
Track and Pad construction	An access track and standard well lease were constructed. Earthworks commenced on 13 September 2013 and were completed on 11 September 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	**Butlers-7**
Type of well	Development well
Contractor	Ensign International
Rig	Ensign Rig 930
Date Spudded	3 October 2013
Status	Cased & Suspended
Rig release date	10 October 2013
Track and Pad construction	An access track and standard well lease were constructed. Earthworks commenced on 15 September 2013 and were completed on 22 September 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

Well Name	Butlers-8
Type of well	Development well
Contractor	Ensign International
Rig	Ensign Rig 930
Date Spudded	15 October 2013
Status	Cased & Suspended
Rig release date	22 October 2013
Track and Pad construction	An access track and standard well lease were constructed. Earthworks commenced on 22 September 2013 and were completed on 30 September 2013.
Borrow Pit construction	Borrow pits are constructed in accordance with the SEO for Petroleum Production Operations in SA Cooper Basin which requires borrow pits to be sited at least 10 metres from all roads and 50 metres from public roads. Rehabilitation will be undertaken in accordance with guidelines.

3.4 Extended Production Testing

Extended Production Testing (EPT) of Perlubie-1, Perlubie South-1, Butlers-1, 2, 3, 4, 5 and 6, Germein-1, Elliston-1 and Windmill-1 wells continued through the period 5 November 2012 to 4 November 2013 via 6-month extensions to the original and subsequent exemptions to Section 27 (2) of the Act.

Approvals for the EPT operations at these wells was conditional on Beach committing to achieving the objectives defined in Beach Energy's "Statement of Environmental Objectives – Cooper Basin Petroleum Production Operations (November 2009)". A report on compliance against this SEO for the EPTs is provided in Appendix 2.

Flowlines / Pipelines

A flowline from Callawonga Facility to Lycium Facility was constructed and commissioned Q4 2012. The Callawonga Pipeline section between Lycium and Tantanna was mothballed and crude displaced to Tantanna in Q1 2013.

Flowlines connecting Butlers-5 and 6 to the Butlers facility were completed during the reporting period in Q1 2013 allowing these wells to be produced on EPT. Construction and commissioning of a surface laid flowline from Windmill-1 to Callawonga facility was completed the reporting period in Q3 2013.

Construction of new Facilities

Butlers production facility was completed with remaining two dewatering tanks installed Q2 2013.

3.5 Geological and Geophysical Studies

Geophysical studies during the licence year focused on the interpretation of the newly acquired seismic data and reprocessed seismic data. Geological and geophysical studies were centred on assessing and planning the 2013 exploration drilling campaign.

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 Licence Compliance

The holders of PEL 92 have complied with the PEL licence conditions during the current reporting period.

4.2 Regulatory Compliance

The PEL 92 operator received a notice of non-compliance for production from Butlers-2 and 4 without approval under section 27 of the Act. Approval to produce a regulated resource was previously granted under section 27(3) of the Act which expired on 11 and 10 August 2013 for Butlers-2 and 4, respectively. The holders of PEL 92 were granted approval to produce from Butlers-2 and 4 for a six month period from 11 October 2013.

There were cases during the current reporting period in which the PEL 92 Operator submitted technical reports later than the required timeframe pursuant to Regulation 36, Regulation 39 and Regulation 40. A summary of the non-compliance is provided in Table 5 and Table 6.

Table 5 Regulatory non-compliances

Activity	Details of Non-Compliance	Rectification of Non-Compliance
Submission of Wireline logs (logs)	Regulation 39 - Wireline logs submitted later than the required 2 months after acquisition of logs	• Ongoing discussions with contractors regarding resourcing issues and quality of data. • Operator to apply for extension of time to avoid non-compliance. • Wireline logs submitted to DMITRE within 3 months of acquisition.
Submission of well completion report (WCR)	Regulation 40 - WCR submitted later than the 6 months after rig release	• Ongoing discussions with contractors regarding resourcing issues. • Operator to apply for extension of time to avoid non-compliance.
Submission of Limbatus 3D Interpretation Report	Regulation 36 – Geophysical Interpretation Report submitted later than the 12 months after processing	• Operator to apply for extension of time to avoid non-compliance.

4.3 Compliance with the Statements of Environmental Objectives

4.2.1 Seismic

The holders of PEL 92 complied with the *Statement of Environmental Objectives for Cooper Basin Geophysical Operations (June 2006)* (the ***Seismic SEO***) for acquisition of Irus 3D and Caselous 3D. A statement of compliance against all the Seismic SEO is provided in Appendix 2.

4.2.2 Drilling

The holders of PEL 92 complied with the *Statement of Environmental Objectives for Drilling and Well Operations (November 2009)* (the ***Drilling SEO***) for the activities associated with the drilling of wells during the reporting period. A statement of compliance against all the Drilling SEO is provided in Appendix 2.

4.2.3 Production

The holders of PEL 92 complied with the *Statement of Environmental Objectives for Petroleum Production Operations* (the ***Production SEO***). A statement of compliance against all the Production SEO is provided in Appendix 2.

4.4 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 audit of the application of Beach's HSE system was conducted in February-March 2013. A subsequent report detailed the positive application of HSE within Beach's operations together with some areas for improvement. Those recommendations are addressed as part of annual HSE system objectives which are reported upon quarterly.

- Beach utilises Field HSE Advisors to assess and monitor the application of HSE systems in its operations as well as the HSE systems standards of its Contractors.

- Any contractors engaged to undertake activities for Beach operations have their HSE systems audited prior to commencement.

- Beach has undertaken an extensive independent review of its Permit to Work (PTW) process. An updated PTW method will be launched early in 2014.

4.5 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 6 List of Report, Data and Sample Submissions to DMITRE

Annual Report (Regulation 33)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
PEL 92 Annual Report	4 January 2013	4 January 2013	Compliant
Resubmission PEL 92 Annual Report	12 March 2013	12 March 2013	Compliant

Quarterly Compliance Reports (Regulation 32) and Quarterly Cased Hole Reports (Regulation 41)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
4th Quarter 2012	31 January 2013	31 January 2013	Compliant
1st Quarter 2013	30 April 2013	30 April 2013	Compliant
2nd Quarter 2013	31 July 2013	31 July 2013	Compliant
3rd Quarter 2013	31 October 2013	31 October 2013	Complaint

Activity Notifications

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Sharples-1	22 February 2013	14 December 2012	Compliant
Rincon North-1	31 January 2013	14 December 2012	Compliant
Wyomi-1	5 March 2013	26 February 2013	Compliant
Mills-1	30 April 2013 (1)	7 May 2013	Compliant
Hooper-1	18 April 2013	15 May 2013	Compliant
Windmill-2	23 August 2013	9 August 2013	Compliant
Butlers-7	25 August 2013	22 August 2013	Compliant
Butlers-8	1 September 2013	22 August 2013	Compliant

(1)*DMITRE approval to waive the 21 day notice period for construction activities at Mills-1*

Wireline logs (Regulation 39)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Butlers-6	14 November 2012	10 January 2013	Compliant
Windmill-1	10 January 2013	10 January 2013	Compliant
Tinah-1	20 December 2012	10 January 2013	Non-Compliant
Riley-1 resubmission sonic logs		9 May 2013	
Butlers-5	5 November 2012	29 May 2013	Compliant
Rincon North-1	17 June 2013	20 June 2013	Non-Compliant

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Sharples-1	17 June 2013	26 July 2013	Non-Compliant
Wyomi-1	28 June 2013	26 July 2013	Non-Compliant
Mills-1	26 August 2013	26 August 2013	Compliant
Hooper-1	24 September 2013	24 September 2013	Compliant

Note*- Ongoing issues relating to sonic logs caused delay in submission of Butlers-5 and Butlers-6 logs. For purpose of Regulation 39 this is not considered non-compliance. Non-compliance with Regulation 39 due to late submission.*

Well samples (Regulation 48)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Riley-1	25 November 2012	3 December 2012	Compliant
Butlers-5	10 March 2013	24 April 2013	Compliant
Butlers-6	19 March 2013	1 May 2013	Compliant
Windmill-1	13 April 2013	5 June 2013	Compliant
Tinah-1	26 April 2013	25 June 2013	Compliant
Rincon North-1	20 October 2013	1 November 2013	Compliant
Sharples-1	22 October 2013	24 October 2013	Compliant
Wyomi-1	3 November 2013	14 November 2013	Compliant

Note - *Well Samples (cuttings) at Challenger within 6 months but delivered late to core library. DMITRE advise that if samples are at Challenger, it is considered compliant under Regulation 48.*

Well Completion Reports (Regulation 40)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Riley-1	27 December 2013	10 January 2013	Non-Compliant
Butlers-5	10 March 2013	18 March 2013	Non-Compliant
Butlers-6	19 March 2013	19 March 2013	Compliant
Windmill-1	13 April 2013	19 April 2013	Non-Compliant
Tinah-1	8 May 2013 (1)	16 May 2013	Non-Compliant
Rincon North-1	20 October 2013	not submitted as 4 Nov 2013	Non-Compliant
Sharples-1	22 October 2013	not submitted at 4 Nov 2013	Non-Compliant
Wyomi-1	3 November 2013	not submitted at 4 Nov 2013	Non-Compliant

Seismic Reports (Regulation 35, 36, 37)

Description of Report / Data	Date Due	Date Submitted	Compliant / Non-Compliant
Limbatus 3D Geophysical Operation Report and Geophysical Data	12 January 2013	15 January 2013	Compliant
Fusinus 2D Geophysical Operation Report and Geophysical Data	8 May 2013	6 May 2013	Compliant
Rincon 3D Geophysical Operation Report and Geophysical Data	30 June 2013	28 June 2013	Compliant
Limbatus 3D Interpretation Report	12 July 2013	26 August 2013	Non-Compliant
Porcatus 2D Geophysical Operation Report and Geophysical Data	7 September 2013	5 September 2013	Compliant

4.6 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".

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

There were three reportable incidents which were formally reported to DMITRE through quarterly compliance reporting and are summarised below. A reportable incident is defined in section 85(1) and Regulation 32 of the Act.

Table 7 Reportable Incidents

Date	Incident Description	Root Cause	Rectification	Reported
16 April 2013	Discharge of Wastewater	Work Practice	Environmental inspection conducted and fluid dispersed	Quarterly Compliance Report to DMITRE
29 May 2013	Cultural heritage	Communication	Notification to all Beach Field Reps/Office Reps	Quarterly Compliance Report to DMITRE
16 April 2013	Spill	Monitoring & Maintenance	Area cleaned up and contaminated soil removed	Quarterly Compliance Report to DMITRE

4.7 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 foreseeable threats to the proposed exploration activities for PEL 92, other than the disruptive influence of occasional flooding of the Cooper Creek. Flooding events in the headwaters of the Cooper Creek are closely monitored by satellite surveillance to predict well in advance the time of their arrival in the PEL 92 area. Drilling and seismic schedules are amended accordingly. The construction of the Kudnarri Bridge provided access to PEL 92 for some periods during floods.

4.8 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".

Further exploration and appraisal/development activities are planned within PEL 92 over the next 12 months.

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)".

An Expenditure Summary for PEL 92 for the period 5 November 2012 to 4 November 2013 is presented as Appendix 1.

Appendix 2

Compliance with the SEO for Cooper Basin Geophysical Operations PEL 92 Licence Year 7 of First Renewal Term

Two seismic surveys were recorded in PEL 92 during Licence Year 7.

Line preparation for the Caseolus 3D commenced on the 16 January 2013 and was completed on the 10 May 2013. Line preparation for the Irus 3D survey commenced on the 14 August 2012 and was completed on the 1 November 2012.

Data acquisition for the Caseolus 3D survey commenced on the 12 February 2013 and was completed on the 14 June 2013. Data acquisition for the Irus 3D commenced on the 8 September 2012 and was completed on the 17 November 2012.

Government approval for Beach to undertake the Caseolus 3D and Irus 3D seismic surveys were conditional on Beach committing to the objectives defined in the "Statement of Environmental Objectives: Geophysical Operations - for the Cooper / Eromanga Basin – South Australia (June 2006)".

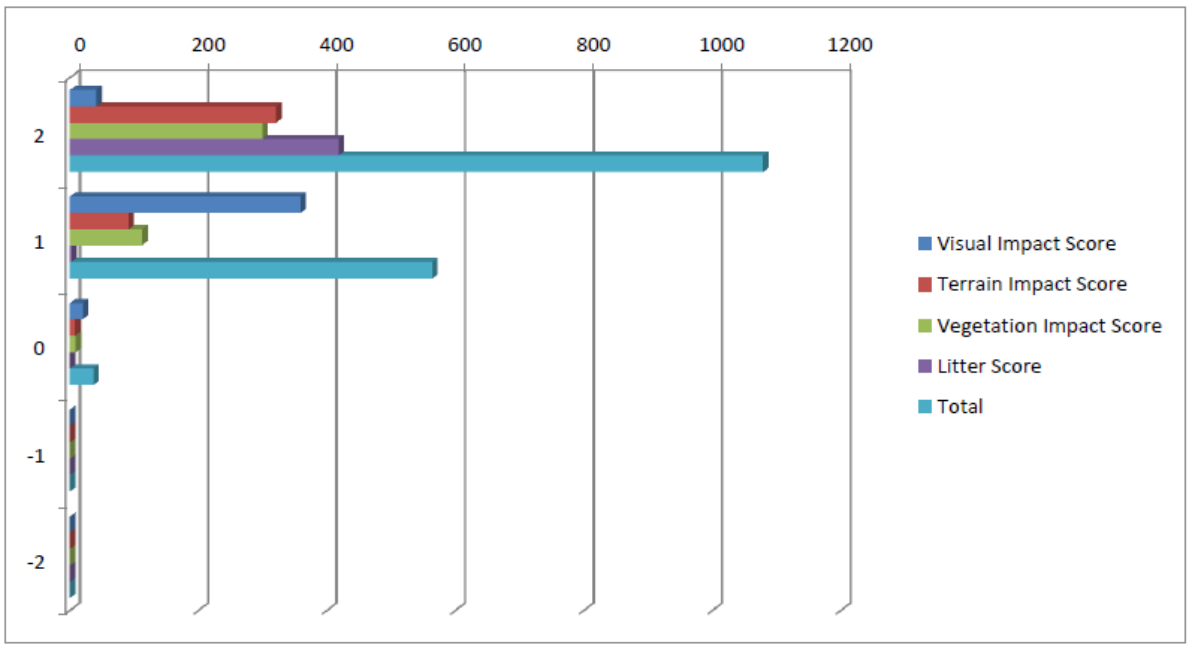
Beach's strategies for achieving each of the SEO objectives during the recording the two Surveys are outlined in the attached table.

Several Work Area Clearances were undertaken by representatives of the Dieri people in advance of the forthcoming seismic operations. These clearances occurred between December 2012 and April 2103 for the Caseolus 3D; and between June and August 2012 for the Irus 3D.

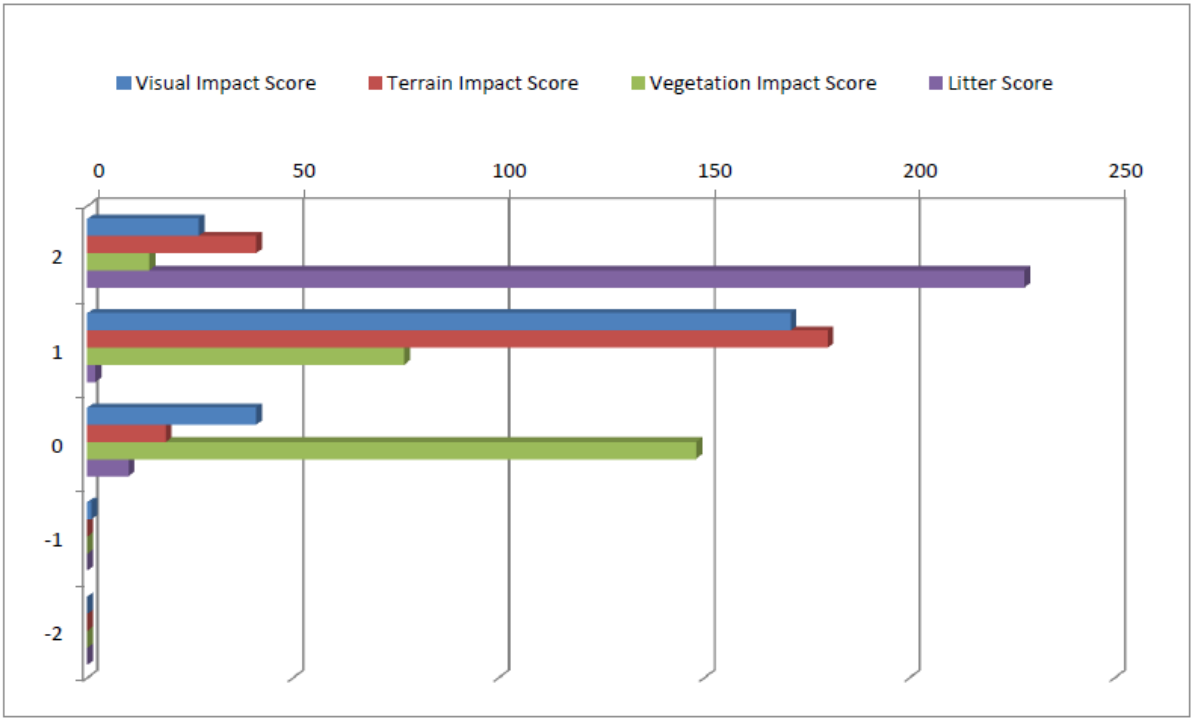
At the completion of the surveys, assessments of the impacts from the surveys were undertaken against a set of GAS criteria. 420 GAS audit scores were recorded for the Caseolus 3D Survey and 240 GAS audit scores were recorded for the Irus 3D Survey. The results of the audits against the GAS criteria are presented in the three bar charts below.

As part of the GAS audits, sites were selected as Environmental Monitoring Points (EMPs) for future photo monitoring of the rate of natural rehabilitation. Two EMPs were established on each of the surveys.

Figure A1-1 Scores from GAS Audits of Year 5 Seismic Surveys



Caseolus 3D Survey



Irus 3D Survey

Compliance with the SEO for Cooper Basin Seismic Operations
PEL 92 Licence Year 7 of First Renewal Term

Beach's strategies for achieving each of the SEO objectives during the Caseolus 3D and Irus 3D seismic surveys are outlined in Table below.

Table A1-2 SEO for Cooper Basin Seismic Operations

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 1: Minimise the visual impact of operations.	Campsite and survey line preparation Proposed survey lines and campsites have been appropriately located and prepared to minimise the visual impact. The attainment of 0, +1 or +2 GAS criteria for 'visual impact' objective listed in Appendix 3.	Compliant	660 Goal Attainment Scaling audits were taken during the two surveys. Only a few score rated below "0" for visual impact.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 2: Minimise disturbance to and contamination of soil resources.	Campsite and survey line preparation Attainment of 0, +1 or +2 GAS criteria for 'Minimise impacts to land surface' objective, as listed in Appendix 3. Proposed survey lines and campsites have been appropriately located and prepared to minimise the disturbance to soil resources.	Compliant	Of the 660 Goal Attainment Scaling audits that were taken during the two surveys, no sites received a negative score for 'Terrain Impact'.
	Fuel Storage and Handling No refuelling occurs outside designated refuelling/servicing areas. Spills or leaks are immediately reported and clean up actions initiated. Records of spill events and corrective actions are maintained in accordance with company procedures. Appropriate spill response equipment is available on site.	Compliant	There were separate incidents involving a fuel spill on the Caseolus Survey and Irus. During the Caseolus survey diesel leaked from the refuelling station through the spill mat and onto the ground. The contaminated soil was removed and new bunding and spill mats were installed. New procedures for refuelling were also put in place. During the Irus survey leakage of hydraulic fluid from grader was observed and contaminated soil removed.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 3: Minimise disturbance to native vegetation and fauna.	Campsite and survey line preparation The attainment of 0, +1 or +2 GAS criteria for 'Impact on native vegetation' objective listed in App 3. No mature trees are removed. Vehicle access to survey lines is to be via existing access tracks or pre-existing survey lines, except where they have rehabilitated. Other temporary access tracks may be utilised where such use is likely to result in less environmental impact than other options.	Compliant	At each of the locations audited for GAS scores in the survey areas, the scores for "impact on vegetation" were either "0", "+1" or "+2" indicating there were no instances where the disturbance was greater than is usual for these type of operations.
	Fuel and Chemical Storage and Management Refer to assessment criteria for objective.	Compliant	All chemicals are stored in bunded areas. There were no incidents associated with improper chemical storage and management.
	Fire Danger Season restrictions and education All personnel are fully informed on the fire danger season and associated restrictions.	Compliant	The risk of fire was identified in the risk assessment for this activity and fire monitors were employed as a result.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 4: Avoid disturbance to sites of cultural and heritage significance.	The following is one possible procedure to achieve the objective. Appropriately trained and experienced cultural/heritage advisors have scouted proposed survey line locations and access tracks. The operator has a mechanism in place to appropriately report and respond to any sites discovered during survey operations. Any sites identified have been flagged and subsequently avoided. Note: Where a negotiated agreement or determination for heritage is in place, compliance with the negotiated agreement or determination takes precedence over the above criteria. The EIR details this possible procedure.	Compliant	Beach has an agreement with the Dieri people which specifies the requirements for scouting proposed seismic lines to identify and avoid areas of heritage value and archaeological significance. Site visits were carried out with representatives from the Dieri, and proposed line locations and access routes were agreed and given heritage clearance. Areas of significance were recorded and marked as exclusion zones. The operators identified a number of sites that were discovered during the survey Note - Six cultural heritage incidents occurred during the Caseolus survey acquired in PEL 91 and PEL 92. These incidents have been previously reported in PEL 91 Annual Report for the period 5 June 2012 to 4 June 2013.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 5: Minimise disturbance to livestock, pastoral infrastructure and landholders.	The attainment of 0, +1 or +2 GAS criteria for 'Impact on infrastructure' objective listed in Appendix 3. No reasonable concerns raised by stakeholders are left unresolved. The extent to which the relevant sections of the Petroleum Act and Regulations have been followed and implemented and in particular in relation to landowner liaison and notification.	Compliant	Beach maintained regular contact with the pastoral lessees prior to, and while undertaking, survey operations. No issues of concern have been raised by the landowner in relation to these activities.
Objective 6: Avoid the introduction or spread of exotic species and implement control measures as necessary.	Weeds or feral animals are not introduced into, or spread, in operational areas	Compliant	Machinery and vehicles used for line preparation and survey recording were already working in the Cooper Basin prior to commencing the Caseolus and Irus surveys.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 7: Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow groundwater resources.	Campsite and survey line preparation Campsites and survey lines/traverses are located and constructed to avoid diversion of water flows. The attainment of 0, +1 or +2 GAS criteria for 'disturbance to land surface' objective listed in Appendix 3. No uncontrolled flows to surface from aquifers intersected in upholes/shallow boreholes. There is no unnecessary interference with natural drainage features. Fuel Storage and Handling No spills occur outside of areas designed to contain them. Refuelling occurs at least 1km from watercourses or sensitive ecological environments (wetlands). Appropriate spill response equipment is available on site. Spills or leaks are immediately reported and clean up actions initiated promptly.	Compliant	The Cooper Creek ran through both the Caseolus and Irus surveys. Special care was taken around these area and in most cases, the crew hand carried cables in and around the creek. No disturbance to water flows was observed during both surveys. No spills occurred around ecologically sensitive areas.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 8: Optimise waste reduction and recovery.	Wastes are segregated, burnt or transported to an Environment Protection Authority (EPA) approved waste disposal facility for recycling or burial in accordance with approved procedures. 0, +1 or +2 GAS criteria are attained for 'Negligible survey markers and rubbish in situ' objective listed in Appendix 3.	Compliant	Every GAS score in relation to "Pollution and litter" (control) at each of the 660 sites across the two surveys were "0", "+1" or "+2" indicating no litter was observed on any part of the survey.

Appendix 3

Compliance with Statement of Environmental Objectives

Table A2-1 Compliance with the SEO for Cooper Basin Drilling and Well Operations

Note 1: The Santos SEO for Drilling and Well Operations has been adopted by Beach Energy Limited 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
Objective 1: ***Minimise risks to the safety of the public and other third parties.***	Reasonable measures implemented to ensure no injuries or health risks to the public or to third parties.	**Compliant**	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. Beach maintained regular contact with landholders and associated stakeholders during drilling operations. The design and operation of PEL 92 wells was undertaken in accordance with Beach safety policies, standards and guidelines. 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. Signage was erected along each of the access roads to advise that only authorised personnel are permitted onto the respective well sites. Beach's Permit to Work System was in operation during drilling operations to control potentially dangerous situations. Accident / incident reporting systems were in place as defined in the Beach Drilling Operation

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 1: ***(continued)*** ***Minimise risks to the safety of the public and other third parties.***			Manual. Records are reviewed regularly to assess trends. Beach Safety Management Plans are updated and reviewed on a regular basis. Appropriate Personal Protective Equipment (PPE) was issued to all personnel involved in the drilling operations. 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.
Objective 2 : ***Minimise disturbance and avoid contamination to soil.***	**Well Site and Access Track Construction** 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*. No unauthorised off-road driving or creation of shortcuts. No construction activities are carried out on salt lakes or steep tableland slopes or wetlands land systems (as defined in	**Compliant**	The PEL 92 well sites were constructed in accordance with the procedures outlined in Beach's *"Guidelines for Lease Construction and Restoration*". Topsoil was stockpiled for subsequent respreading when restoration activities are conducted. Potential impacts on the environment were carefully considered prior to constructing track and wellsite. Existing routes were utilised where feasible. 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. 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.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
	Santos' EIR).		
Objective 2 : ***(continued)*** ***Minimise disturbance and avoid contamination to soil***	Borrow pit construction and restoration 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*.	**Compliant**	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.
	Production Testing / Well Blowdowns No soil contamination as a result of production testing or well blowdown operations.	**Compliant**	No soil contamination during testing of wells
	Fuel and Chemical Storage and Handling No spills/leaks outside of areas designed to contain them.	**Compliant**	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.
Objective 2 : ***(continued)*** ***Minimise disturbance and avoid contamination***	Level of hydrocarbon continually decreasing for in situ remediation of spills. Soils remediated to a level as determined by the Soil Health Index	**Compliant**	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.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
to soil	process.		
<u>Objective 2 :</u> ***(continued)*** ***Minimise disturbance and avoid contamination to soil***	<u>Waste Disposal (domestic, sewage and sludges)</u> All domestic wastes are disposed of in accordance with EPA licensing requirements. 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*. No spills or leaks from sewage treatment processing. Refer to Assessment Criteria for Objective 11.	**Compliant**	Wastes are collected, stored and transported in covered bins / containers, and all rubbish is disposed of at a licensed waste facility.
<u>Objective 3</u> ***Avoid the introduction or spread of pest plants and animals and implement control measures as***	No weeds or feral animals are introduced to, or spread in, operational areas as a consequence of activities	**Compliant**	Rigs and associated equipment is washed down prior to entering and leaving different state borders as per Beach Policy.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
necessary			
<u>Objective 4 :</u> ***Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow ground water resources***	<u>Well Lease and Access Track Construction</u> 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). <u>Drilling Mud Sumps and Flare Pits</u> No overflow of drill cuttings, muds and other drilling fluids from mud sumps. No waste material disposal to sumps and flare pits.	**Compliant** **Compliant**	The drill pads and access track for PEL 92 wells 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. 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.

Objective	Assessment Criteria	Compliant / Non-compliant	Comments
Objective 4 : ***(continued)*** ***Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow ground water resources***	Well Heads (Oil and Gas Systems) No leaks/spills outside of areas designed to contain them. Well Blowdown/Production Testing No water (surface or groundwater) contamination as a result of production testing or well blowdown operations. Fuel/Chemical Storage and Handling No leaks/spills outside of areas designed to contain them. Waste Management Refer to Assessment Criteria for Objective 11.	**Complaint** **Complaint** **Compliant** **Compliant**	Fuel, oil and chemicals were not stored in accordance with relevant standards. Refuelling was undertaken as per Drilling Contractors' procedures. There were no spills during the drilling operations within PEL 92 outside of areas designed to contain them. Beach's Oil Spill Contingency Plan is included in Beach's Emergency Response Plan. Waste was removed from the well sites. Bins are covered to prevent access by wildlife and prevent spread of rubbish by wind. Non-putrescible waste material (including hazardous material) was stored safely on site for later removal to an EPA approved disposal facility.

Objective 5 : ***Avoid disturbance to sites of cultural and heritage significance***	Proposed well sites and access tracks have been surveyed and any sites of Aboriginal and non-Aboriginal heritage identified. Any identified cultural and heritage sites have been avoided. *Note:* *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*.	**Compliant**	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. 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. Areas of significance were recorded and marked as exclusion zones.

Objective 6 : ***Minimise loss of aquifer pressure and avoid aquifer contamination***	Drilling & Completion Activities There is no uncontrolled flow to surface (blow out). Sufficient barriers exist in casing annulus to prevent crossflow between separate aquifers or hydrocarbon reservoirs. Relevant Government approval obtained for abandonment of any radioactive tool left downhole. Producing, Injection, Inactive and Abandoned Wells No cross-flow behind casing between aquifers, and between aquifers and hydrocarbon reservoirs unless approved by DWLBC	**Compliant** **Compliant**	The Drilling Programs for PEL 92 wells were designed to ensure minimal loss of reservoir and aquifer pressures and minimal contamination of freshwater aquifers. No radioactive tools were left in any wells. Competent cement bonds between aquifers encountered by the well bores and the Namur Sandstone hydrocarbon reservoir were established. Monitoring programs will be implemented to assess future behind casing cross-flow.

Objective 7 : ***Minimise disturbance to native vegetation and native fauna.***	Well Lease and Access Track Construction and Restoration Any sites with rare, vulnerable and endangered flora and fauna have been identified and avoided. 0, +1 or +2 GAS criteria are attained for "Minimise impact on vegetation" objective as listed in Appendix 1 Table 1A and "The revegetation of indigenous species" objective as listed in Appendix 1 Table A2, during well lease and access track site selection, construction and restoration.	**Compliant**	The PEL 92 wells are not located in or near areas of high biological or wilderness values and hence the drilling operations presented no long term impacts to any such areas. National Parks and Wildlife flora/fauna databases contain no records of vulnerable or endangered species within several kilometres of the well site. Construction of the access tracks required minimal clearance of vegetation and the routes were aligned to avoid clearing trees. Each of the well sites contained only sparse vegetation, and clearance was minimised. Trees that were present either on a site and adjacent to a site were not cleared. RPS Environment and Planning evaluated each of the sites prior to Beach undertaking activities. Facilities were designed and constructed to minimise fauna entrapment. Fauna were not encouraged to access operational areas.
	Borrow Pit Construction and Restoration 0, +1 or +2 GAS criteria are attained for "Minimise impact on vegetation" objective as listed in Appendix 1 Table A3 during borrow pit site selection construction and restoration.	**Compliant**	Borrow pits established for building the road and drill pad will be rehabilitated and restored in accordance with the guidelines set down in DMITRE's Field Guide for the Environmental Assessment of Abandoned Petroleum Well Sites in the Cooper Basin, South Australia, to attain the highest feasible GAS rating.

Objective 7 : ***(continued) Minimise disturbance to native vegetation and native fauna.***	Waste Management Refer to assessment criteria for Objective 11. Fuel and Chemical Storage and Management Refer to assessment criteria for Objectives 2 and 4.	**Compliant** **Compliant**	Beach's Drilling Operations Manual sets out the Company's policy in relation to storage, use and disposal of hazardous material. 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. All rubbish was disposed of at a licensed waste facility.
Objective 8 : ***Minimise air pollution and greenhouse gas emissions.***	Compliance with EPA requirements.	**Compliant**	Well Testing is undertaken in accordance with appropriate industry accepted standards and with a minimal amount of gas flaring.
Objective 9: ***Maintain and enhance partnerships with the Cooper Basin community.***	No unresolved reasonable complaints from the community.	**Compliant**	Beach maintained regular contact with landholders and associated stakeholders prior to, and while undertaking drilling operations.
Objective 10: ***Avoid or minimise disturbance to stakeholders and/or associated infrastructure***	No reasonable stakeholder complaints left unresolved.	**Compliant**	Beach maintained regular contact with landholders and associated stakeholders prior to and while undertaking drilling operations at each of the two well sites. The access tracks and well sites are located well away from regular tourist routes. Once testing and production has ceased, well sites with in PEL 92 will be fully rehabilitated and restored in accordance with the guidelines set down in DMITRE's Field Guide for the Environmental Assessment of Abandoned Petroleum Well sites in the Cooper Basin, South Australia to attain the highest feasible GAS rating. 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.

Objective 11 ***Optimise (in order of most to least preferable) waste avoidance, reduction, reuse, recycling, treatment and *disposal***	All wastes to be disposed of at an EPA licenced facility in accordance with EPA Licence conditions, with the exception of drilling fluids, drill cuttings and other fluids disposed during well clean-up and wastewater (see below). Wastewater (sewage and grey water) disposed of in accordance with the Public and Environmental Health (Waste Control) Regulations 1995 or to the Department of Health's satisfaction. 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). Attainment of GAS criteria for "Site left in clean and tidy condition" objective during borrow pit	**Compliant** **Compliant**	Waste was removed from the two well sites in accordance with Beach's policy set out in the company's Drilling Operations Manual. Bins are covered to prevent access by wildlife and prevent spread of rubbish by wind. Non-putrescible waste material (including hazardous material) was stored safely on site for later removal to an EPA approved disposal facility. Beach conducts post drilling audits to ensure drill sites and associated tracks are free of waste materials and left in a tidy and safe condition.

	restoration (refer Appendix 1 Table A3).		
Objective 12 ***Remediate and rehabilitate operational areas to agreed standards.***	No unresolved reasonable stakeholder complaints. Contaminated Site Remediation Contaminated sites are remediated to a level as determined by the approved SHI process. 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. Well Site and Access Track Restoration The attainment of 0, +1 or +2 GAS criteria for the objectives (refer Appendix 1 Table A2):	**Compliant**	Once production from wells 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. Any contaminated sites are remediated in accordance with Beach Guidelines and Industry Standards. 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. Beach will complete post drill audits of both sites after floodwaters have receded and rehabilitation work has been completed.

	"To minimise the visual impact" "The revegetation of indigenous species"		
Objective 12 (continued) ***Remediate and rehabilitate operational areas to agreed standards.***	BorrowPit Restoration The attainment of 0, +1 or +2 GAS criteria for (refer Appendix 1 Table A3): – "Rejuvination of indigenous species" – "Minimise impact on soil" – Minimise visual impacts" – "Site to be left in a clean and tidy condition" Note: Well abandonment issues are addressed under Objective 6.	**Compliant**	Borrow pits will be rehabilitated and restored using effective contouring 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.

Appendix 4

Compliance with the Cooper Basin Production and Processing Operations Statement of Environmental Objectives October 2003 (Revised 2008)

Beach's strategies for achieving each of the SEO objectives during the production testing in PEL 92 Fields and construction of borrow pits are outlined in Table below.

Objectives/ Goals	Assessment Criteria	Compliant / Non-compliant	Comments
1. To avoid unnecessary disturbance to 3rd party infrastructure, landholders or land use.			
1.1 To minimise disturbance or damage to infrastructure / land use and remediate where disturbance cannot be avoided.	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	**Compliant**	Rehabilitation of the 'production' site will be undertaken in consultation with the landowner when production ceases.
1.2 To minimise disturbance to landholders	No unresolved reasonable landholder/3rd party complaints Landholder activities not restricted or disturbed as a result of activities unless by	**Compliant**	All facilities are at least 30 kms from the nearest dwelling, which is inhabited only periodically. Regular liaison with landowner provides advance warning of any significant developments or activities.

Objectives/ Goals	Assessment Criteria	Compliant / Non-compliant	Comments
	prior arrangement.		
2. To maintain soil stability / integrity			
2.1 To remediate erosion as a result of production operations in a timely manner	The extent of soil erosion is consistent or less than surrounding land.	**Compliant**	No significant erosion has been reported at any of the facilities nor along the access roads to them. Topsoil was stockpiled when the sites were originally cleared for the drilling operations of each well. Rehabilitation of the production site will be undertaken when production ceases.

2.2 To prevent soil inversion ***2.3 To minimise and remediate soil disturbance***	Vegetation cover is consistent with surrounding land No evidence of significant subsoil on surface (colour) No production activities undertaken on salt lakes, steep tableland land systems or wetlands land systems (as defined in the EIR). Abandoned areas (e.g. borrow pits) are remediated and rehabilitated to be reasonably consistent with the surrounding area 0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained.	**Compliant**	None of the production sites are located on or nearby salt lakes, steep tableland areas or wetlands. The production sites and access tracks are located both in dunefield environments and floodplain environments and production activities are carefully controlled to minimise impact on these areas. All vehicle movements are restricted to the designated access roads and the immediate production facility area. Clay surfaces on the access roads minimises disturbance to the soil beneath. Rehabilitation of the production site and access tracks will be undertaken in consultation with the landowner when production ceases. Borrow pit s will be remediated and rehabilitated to be reasonably consistent with the surrounding topography. Landholder has requested that no rehabilitation be undertaken on any clay-top roads constructed by Beach.

3. To minimise disturbance to native vegetation and native fauna.			
3.1 To maintain regrowth of native vegetation on reinstated areas to be consistent with surrounding area	Species abundance and distribution on the reinstated areas was consistent with the surrounding area Note: assessment of the consistency with surrounding areas will take into account that regrowth is a time and rainfall dependent process 0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained (Appendix B).	**Compliant**	Rehabilitation of the production site will be undertaken in consultation with the landowner when production ceases. On-ground assessments of vegetation variety were conducted along pipeline corridors by experienced personnel before operations were undertaken, Recent rains have resulted in the emergence of seedlings along sections of the flowline corridors, consistent with surrounding area.
3.2 To minimise additional clearing of native vegetation as part of production activities	Vegetation clearing is limited to previously disturbed areas or areas assessed to be of lowest sensitivity No rare, vulnerable or endangered flora removed without appropriate permits No production activities undertaken on salt lakes, steep tableland land systems or wetlands land systems (as defined in the EIR) 0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained.	**Compliant**	Minor vegetation clearing was undertaken during the reporting period for installing the flow lines to facilities. Where possible, areas with low vegetation density were chosen for the routes of flowlines. Some flow line routes were reconsidered to avoid/minimise the removal of established trees. All efforts were made to preserve established / significant trees.

3.3 To achieve a significant environmental benefit for native vegetation clearance	Significant environmental benefit for native vegetation clearance approved by PIRSA (where delegated authority applies) or Native Vegetation Council. Signifcant environmental benefit obligations satisfied / implemented.	**Compliant**	As with its other production operations in the Cooper Basin, Beach Energy will assess its SEB obligations arising from disturbance of land associated with the facilities at PEL 92 fields and make SEB proposals to DMITRE for their approval, in terms of the proposals meeting the required criteria.
3.4 To ensure production activities are planned and conducted in a manner that minimises impacts on native fauna	Vegetation clearing is limited to previously disturbed areas or areas assessed to be of lowest sensitivity No rare, vulnerable or endangered fauna removed without appropriate permits 0, +1 or +2 GAS criteria for borrow pit construction and rehabilitation are attained .	**Compliant**	No record of rare, vulnerable or endangered fauna near any of the production areas or flow line corridors. Fauna escape ramps and branches were provided during the construction of flow line trenches

3.5 To minimise disturbance of aquatic habitats (specifically wetlands, permanent waterholes and flowing water courses)	Works in aquatic habitats (e.g. flowing watercourses) has been approved by DMITRE	**Compliant**	Each of the EPT facilities are located several kilometres from the nearest significant watercourse (Cooper Creek), which flows only during large flood events.
4. To prevent the introduction or spread of weeds, pathogens and pest fauna.			
4.1 To ensure that weeds, pathogens and pest fauna are controlled at a level that is at least consistent with adjacent land.	The presence of weeds and pathogens is consistent with or better than adjacent land No new outbreak or spread of weeds reported	**Compliant**	No new outbreak or spread of weeds reported. Operations personnel regularly undertake inspections of operational areas including flowline corridors. There have been no reports of weed outbreaks

5. To minimise the impact of the production operations on water resources			
5.1 To maintain current surface drainage patterns.	For excavations, surface drainage profiles area restored to as is reasonably consistent with surrounding area For existing easements, drainage is maintained similar to pre-existing conditions.	**Compliant**	Refer to comments for Section 3.5 above regarding the locations of the EPT facilities in regard to their potential for inundation from flood waters. An inspection of the flowline corridors has revealed that surface drainage profiles had been restored to be consistent with adjoining land.
5.2 To minimise impact to aquifers / groundwater volumes and flow patterns.	Volume of water produced is recorded. No uncontrolled flow to the surface (i.e. no free flowing bores) Note: the "Cooper Basin Drilling and well Operations" SEO provides detail on aquifer issues	**Compliant**	The volume of water extracted in the production operations at each of the facilities is monitored and recorded. There has been no uncontrolled flow of fluids to the surface from the producing formations in these wells. There are no water separation facilities at any of the EPT sites, and hence no evaporation ponds which could potentially cause interference with shallow groundwater, through seepage.

6. To avoid land or water contamination			
6.1 To prevent spills occurring and if they occur minimise their impact.	No evidence of any spills or leaks to areas not designated to contain spills In the event of a spill, the spill was: ▪ Contained ▪ Reported ▪ Cleaned-up ▪ Cause investigated and corrective ▪ and/or preventative action implemented Compliance with the Environment Protection Act, Australian Standard 1940 and the Australian Dangerous Goods Code.	**Compliant**	There have been no spills or leaks at any of the production sites, or along the flow-line corridors, other than in areas designed to contain spills.

6.2 To remediate and monitor areas of known contamination arising from production activities (salinisation, hydrocarbons, other production chemicals).	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[1].	**Compliant**	Contaminated soil would be remediated in situ or stock piled to be treated in the Soil Remediation Area.

[1] Soil Health Index (SHI) study is currently being undertaken by Santos, in consultation with PIRSA and EPA. The results of this study will provide a proforma for establishing site-specific bench marks for soil remediation.

6.3 To ensure that rubbish and waste material is disposed of in an appropriate manner	No evidence of rubbish or litter on easements or at facilities. No evidence that waste material is not contained and disposed of in accordance with Beach approved procedures. Evidence of waste tracking certificates for prescribed wastes. Evidence of compliance with any waste disposal licence conditions (e.g. EPA permits)	**Compliant**	All waste material has been and continues to be disposed of in accordance with Beach approved procedures.
6.4 To prevent impacts as a result of hydrotest water and waste water (e.g. washdown water) disposal.	No evidence of impacts to soil, water and vegetation as a result of water disposal (i.e. soil erosion, dead vegetation, water discoloration)	**Compliant**	
6.5 To ensure the safe and appropriate disposal of grey water (sullage, sewage).	Wastewater disposed of in a manner that minimises risk to the environment and public health Compliance with Environment Protection Ac	**Compliant**	Grey water is disposed of in accordance with State Government regulations

6.6 To minimise impacts as a result of produced formation water treatment and disposal and restrict to defined areas.	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 No evidence of overflow of product from interceptor pit. No evidence of hydrocarbon contamination immediately adjacent to bunded ponds.	**Compliant**	The fluid produced from each of the wells is pumped to the Parsons facility through flow lines for dewatering. Produced formation water is separated from the oil before final disposal into evaporation ponds. Hydrocarbon levels in the disposed water at Parsons are routinely monitored. If found to be above acceptable limits, investigations are carried out to determine and rectify the cause and monitoring frequency increases to monthly whilst the cause is being determined and rectified.
6.7 To minimise impacts as a result of land treatment units and restrict to defined areas	Periodic reports as required detail quantity, level of contamination and proposed ongoing operation of the Land Treatment Unit		In the event that soil becomes contaminated, it is currently either treated in situ, or stock piled in a lined / bunded area to await treatment at the SRA.

7. To minimise the risk to public health and safety			
7.1 To adequately protect public safety during normal production operations	No injuries or incidents involving the public. Demonstrated compliance with relevant standards Emergency procedures implemented and personnel trained.	**Compliant**	No incidents of risk to public health and safety during the reporting period. The access roads to the EPT fields are not available for use by the public.
7.2 To avoid fires associated with production activities.	No uncontrolled operations related **fires.** Emergency procedures implemented and personnel trained.	**Compliant**	No fires occurred at any facility during the reporting period. Landowner (and government) have given approval that, in the event of a fire at any facility, if the first attack on the fire fails, it can be left to burn itself out.
7.3 To prevent unauthorised access to production facilities	No unauthorised activity.	**Compliant**	There were no incidents of unauthorised entry to any of the EPT sites.

8. To Minimise impact of emergency situations			
8.1 To minimise the impact as a result of an emergency situation or incident	Emergency response procedures are effectively implemented in the event of an emergency. Emergency response exercises are aligned with credible threats and consequences identified in the risk assessment.	**Compliant**	No emergency situations arose at any of the EPT production sites during the reporting period. Beach Petroleum HSE system includes periodic simulation of Emergency situations at production facilities.
8.2 ***To restore any damage that may occur as a result of an emergency situation.***	Refer to previous criteria (Objective 1, 2, 3 & 6)	**Compliant**	
9. To minimise noise due to operations.			
9.1 ***To take reasonable practical measures to comply with noise standards***	Operational activities have taken reasonable practical measures to comply with noise regulations, under the Environment Protection Act 1993 No unresolved reasonable complaints.	**Compliant**	Each of the EPT sites are at least 10 kms from the nearest dwelling.

10. To minimise atmospheric emissions.			
10.1 To minimise uncontrolled atmospheric emissions	Reasonable practical measures implemented in design and operation to minimise emissions.	**Compliant**	Fluid produced from each of the EPT wells is transported to the Parsons facility via flow lines, rather than in road tankers.
10.2 To minimise controlled atmospheric emissions	Reasonable practical measures implemented in design and operation to minimise emissions	**Compliant**	
10.3 To minimise the generation of dust	No reasonable complaints received No dust related injuries recorded	**Compliant**	Access roads are continually watered and maintained to minimise dust.

11. To adequately protect cultural heritage sites and values during operations and maintenance			
11.1 ***To ensure that identified cultural sites are not disturbed.***	Proposed construction areas and access tracks surveyed by relevant cultural heritage group Any new sites identified are recorded and reported to appropriate authority No impact to identified sites	**Compliant**	Work Area Clearance teams, comprising representatives from the Dieri people, conducted cultural heritage surveys to give clearance for earthworks associated with installing infrastructure associated with production testing from wells in PEL 92.