



**PEL 92
Cooper/Eromanga Basin
South Australia**

**Annual Report
Licence Year 2 of Term 2**

5th November 2007 to 4th November 2008

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1 Introduction

Petroleum Exploration Licence No. 92 is situated on the southwestern margin of the Cooper/Eromanga Basin, South Australia. The second year of the second term of the licence covers the period 5th November 2007 to 4th November 2008.

This report details the work performed by the Joint Venture during this second year of the second term of the Licence, in accordance with the requirements of Section 33 of the Petroleum Regulations 2002.

Associated Facilities Licence 141 was granted on 1st July 2008. AFL 141 was applied for as a secondary licence to PEL 92. The granting of the AFL permitted access on to neighbouring PEL 91 to acquire 1.5 kilometres of seismic data as part of the PEL 92 Padollus 2D survey. The total area of the AFL was 0.2 square kilometres.

The AFL was surrendered on 8th October 2008 after survey operations had been completed.

2 Licence Summary

The working interests in PEL 92 at the end of this reporting period were:

Beach Petroleum Ltd (Operator)	75.0%
Cooper Energy Ltd	25.0%

The agreed work commitments for the second term of PEL 92 are detailed below in Table 1.

Table 1 Original Work Commitments for Term 2 by Licence Year

Licence Year	Licence dates	Minimum Work Program
Year 1 (Term 2)	5/11/06 - 4/11/07	Geological & Geophysical Studies, Administration
Year 2 (Term 2)	5/11/07 - 4/11/08	100km ² 3D seismic; Geology, Geophysics and Administration
Year 3 (Term 2)	5/11/08 - 4/11/09	Geological & Geophysical Studies, Administration
Year 4 (Term 2)	5/11/09 - 4/11/10	One well; Geological & Geophysical Studies, Administration
Year 5 (Term 2)	5/11/10 - 4/11/11	Geological & Geophysical Studies, Administration

There have been no farmin agreements or change of Operator since the Licence renewal was awarded. There have been no suspensions applying to PEL 92 since the Licence renewal was awarded.

There have been no applications to vary the work program since the Licence renewal was awarded, hence the original commitments listed above also constitute the final work program. Licence Year 2, Term 2 concluded on 4th November 2008. Table 2 below details the minimum work program and the work completed up until the end of the current reporting period.

Table 2 Final Work Program and Work Completed (as of end of current reporting period) by Licence Year

Licence Year	Minimum Work Program	Actual Work
Year 1 (05/11/06-04/11/07)	Geological and Geophysical studies	<ul style="list-style-type: none"> • Acquisition of 277 km Neritus 3D seismic; • drilled Callawonga-2 oil appraisal well ; • drilled Sheringa-1 exploration well; <ul style="list-style-type: none"> • drilled Callawonga-3 and Callawonga-4 oil field development wells (PPL 220)
Year 2 (05/11/07-04/11/08)	Acquire 100 kms 2D seismic plus Geological and Geophysical studies	<ul style="list-style-type: none"> • drilled Parsons-1 exploration well (oil discovery) ; • drilled Parsons-2 appraisal well; • acquisition of 195 km² Modiolus 3D seismic and 119 km Padollus 2D seismic; • reprocessed 80 km² Neritus 3D seismic
Year 3 (05/11/08-04/11/09)	Geological and Geophysical studies	
Year 4 (05/11/09-04/11/10)	1 well plus Geological and Geophysical studies	
Year 5 ^{*1} (05/11/10-04/11/11)	Geological and Geophysical studies	

Appropriate reductions in the size of PEL 92 were made with the awarding of two Production Licences:

- PPL 220 (Callawonga Oil Field) awarded 14 September 2007 (6 sq km),
- PPL 224 (Parsons Oil Field) awarded 9 October 2008 (1.8 sq km).

The minimum work program requirements for the full 5 year term comprise the acquisition of 100 kms of 2D seismic data, the drilling of one well (Licence Year 4) plus Geological and Geophysical Studies. By the end of the current Report Year (Year 2), the Joint Venture had acquired 472 sq kms of 3D seismic data and 119 kms of 2D seismic data, had reprocessed 80 sq km of 3D data and had drilled two exploration wells and two oil field appraisal wells.

3 Regulated Activities

3.1 Drilling.

One petroleum exploration well (Parsons-1) and one oil field appraisal well (Parsons 2) were drilled during Year 2 of Term 2. Both wells were completed as oil producers and are currently on production. Sheringa 1 was spudded during the last week of Licence Year 1 (30 October 2007), but rig release was during Licence Year 2 (9 November 2007). Details of the Sheringa-1 well, which was plugged and abandoned, were reported in the Annual Report prepared by the Joint Venture for Licence Year 1.

The locations of the three wells are shown on Figure 1. Details of the two Parsons wells are in the table below:

Table 3 Parsons-1 Status Summary

Well Name	Parsons-1
Type of well	Exploration
Contractor	Hunt Energy & Mineral Company Australia Pty Ltd
Date Spudded	18 November 2007
Status	Cased and completed oil well
Evaluated hydrocarbon pay	6.7 metres net oil pay average porosity 28 percent, average hydrocarbon saturation 60 percent (gross interval 50.35 metres)
Cased/suspended date	1 December 2007
Rig Release date	1 December 2007
Pad construction	Earthworks carried out 9 October 2007
Track construction	A two-kilometre track built to provide safe access to the Parsons-1 well site commenced from the abandoned Somerton-1 well site, located some two kilometres off the station road which follows alongside the Cooper Creek, through "Clifton Hills" and "Mungeranie" stations
Borrow Pit construction	Used existing borrow pits located on the Sellicks to Callawonga Road and the Christies to Lycium Road.
Formations Intersected	The depths at which each of the formation tops were intersected have been provided to PIRSA in the Well Completion Report, which will become 'open file' in December 2009.

*

Table 4 Parsons-2 Status Summary

Well Name	Parsons-2
Type of well	Appraisal
Contractor	Hunt Energy & Mineral Company Australia Pty Ltd
Date Spudded	18 March 2008
Status	Cased and completed oil well
Evaluated hydrocarbon pay	<ul style="list-style-type: none"> • 0.3 metres net oil pay in McKinley Sandstone, with average porosity of 26.7 percent, average hydrocarbon saturation 36.5 percent; • 0.91 metres net oil pay in the Namur Sandstone, with average porosity of 30.8 percent, average hydrocarbon saturation 53.4 percent
Cased/suspended date	28 March 2008
Rig Release date	28 March 2008
Pad construction	Earthworks commenced 13 March 2008
Track construction	Access to Parsons-2 site was via a new track commencing from Parsons-1 and heading south for approximately one kilometre
Borrow Pit construction	Used existing borrow pits located on the Sellicks to Callawonga Road, and the Christies to Lycium Road.
Formations Intersected	The depths at which each of the formation tops were intersected have been provided to PIRSA in the Well Completion Report for Parsons-2, which will become 'open file' in March 2010.

3.2 Seismic Data Acquisition

The Modiolus 3D seismic survey, covering portions of both PELs 91 and 92, commenced in PEL 92 on the 30th May 2008 and finished on the 20th of July 2008. The total area covered by the survey was 332 square kms, of which 195 square kms were in PEL 92.

The Padollus 2D survey, covering 119 line kms, was recorded in PEL 92 from 21 July to 1 August 2008.

Both surveys were recorded by Terrex. Processing of the Modiolus 3D data volume is being undertaken by WesternGeco; the Padollus 2D data set is being processed by Fugro.

3.3 Seismic Data Processing / Reprocessing

Approximately 30% (80 km²) of the 2007 Neritus 3D seismic volume was reprocessed during Year 2 and merged with the 2008 Modiolus survey data. The reprocessing is being undertaken by WesternGeco.

3.4 Geochemical, Gravity, Magnetic and other Surveys

There were no other geological, geophysical or geochemical surveys conducted in Licence Year 2, Term 2.

3.5 Geological and Geophysical Studies.

Geophysical studies during the second year of the second Licence term focused on the design, acquisition and processing of the Modiolus and Padollus seismic surveys and on the interpretation of the Neritus 3D data volume.

Geotechnical and Engineering studies were centred on the planning, monitoring, assessing and reporting for Parsons-1 and Parsons-2, the undertaking of post well assessments and reporting for Sheringa-1 (which commenced drilling in Year 1 but continued into Year 2), and in the planning of wells to be drilled in PEL 92 during Licence Year 3.

3.6 Extended Production Testing.

Following the discovery of hydrocarbons in the Parsons-1 well, Beach applied to PIRSA on 5th December, 2007 for approval to carry out Extended Production Testing (EPT) of the well, which involved:

- construction of a dewatering facility near Parsons-1,
- installation of a flowline from the Parsons-1 well head to the facility,
- construction of a freeform evaporation pond, and
- construction of a clay haul road from the Parsons field to the Callawonga field.

Following the discovery of hydrocarbons in the Parsons-2 well, drilled in March 2008, a flowline was constructed from that well head to the dewatering facility near Parsons-1, a distance of approximately one kilometre.

PIRSA granted approval for Extended Production Testing of both the Parsons-1 and Parsons-2 wells on 10th June 2008, and production commenced on 15th June. Beach then applied for a Production Licence for the Parsons field on 19th June 2008, and PIRSA granted the Licence (PPL 224) in October 2008. The volumes of oil and water produced at Parsons-1 and Parsons-2 during the five month period of the Extended Production Testing will be provided in the Annual Report for Production Operations in the Cooper Basin for (calendar year) 2008, due for submission to PIRSA by the end of February, 2009.

An assessment of the level to which the production operations at the Parsons field met the objectives specified in Beach Petroleum's *"Statement of Environmental Objectives for Production Operations in the Cooper Basin"* will also be provided in the Annual Report for Production Operations.

There were no instances of non-compliance with the Petroleum Act or any of its Regulations during the five month period of the Extended Production Testing of Parsons-1 and Parsons-2, prior to the granting of a Petroleum Production Licence for the field.

4. Compliance Issues

Licence and Regulatory Compliance

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.”

There was one instance during Year 2 of Term 2 of the PEL 92 Licence in which Beach failed to comply either with the Petroleum Act, the requirements of the Licence, the regulations of the 2000 Petroleum Act, or the objectives of the SEOs under which it conducted its field operations.

Petroleum Act or Licence Non-Compliance

There was one instance during Year 2 of Term 2 of the PEL 92 Licence in which Beach failed to comply with the 2000 **Petroleum Act**.

Table 5 List of Licence Non-compliances for Current Reporting Year

No.	Date	Activity	Details of Non-Compliance	Rectification of Non-Compliance
<i>Ex. 1</i>	<i>May 2008</i>	<i>Notification of proposed seismic survey operations.</i>	<i>Omitted to provide sufficient advance notification to AAA Energy (GEL) and TC Development (EP) regarding the proposed operations of the Modiolus 3D seismic survey. Notices of Entry were sent one week after line preparation had commenced, instead of 21 days prior to commencement, as required by Part 10 (Section 61) of the Petroleum Act 2000.</i>	<i>The two stakeholders, AAA Energy and TC Development, who hold (non-petroleum) tenements over PEL 92, have subsequently been included in Beach's Notification system as requiring Notice of Entry advice prior to the commencement of Regulated activities in PEL 92.</i>

There were no instances during Year 2 of the Licence in which Beach failed to comply with the **Conditions of the Licence**.

Regulatory Non-Compliance

There were no instances during Year 2, Term 2 of the PEL 92 Licence in which Beach failed to comply with **Regulations** of the 2000 Petroleum Act.

Compliance with Statements of Environmental Objectives

Drilling

Government approvals for Beach to drill the **Parsons-1** and **Parsons 2** wells were conditional on Beach committing to achieving the objectives defined in the “Statement of Environmental Objectives for Drilling and Well Operations in the Cooper / Eromanga Basins – South Australia (SEO)“.

Both wells intersected zones which were considered to have the potential for economic recovery of hydrocarbons and consequently both were cased and completed as producing oil wells. Both wells are currently on production.

The full assessment of Beach’s performance in achieving the SEO objectives cannot be completed until both well sites have been rehabilitated and as both wells are now producing, full rehabilitation of the sites will not be accomplished until after production ceases.

Beach is satisfied, however, that it has met all the other objectives required by the SEO for the drilling operations on this well. **Table 6** summarises the strategies that were employed to achieve this compliance.

Compliance with Statements of Environmental Objectives

Table 6 : Compliance with the SEO for Cooper Basin **Drilling Operations**

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 1:</u> <i>Minimise the risk to public and other third parties.</i></p>	<ul style="list-style-type: none"> ▪ Reasonable measures implemented to ensure no injuries to the public or third parties. 	<p>Compliant</p>	<p>The design and operation of the Parsons-1 and Parsons-2 wells was undertaken in accordance with Beach safety policies, standards and guidelines.</p> <p>All employees visiting or working on rigs undertook a safety induction prior to commencing work in the field and will undertake a refresher course if/when required.</p> <p>The two-kilometre track built to provide safe access to the Parsons-1 well site commenced from the abandoned Somerton-1 well site, located some two kilometres off the station road which follows alongside the Cooper Creek, through "Clifton Hills" and "Mungeranie" stations.</p> <p>Access to Parsons-2 site was via a new track commencing from Parsons-1 and heading south for approximately one kilometre.</p> <p>Signage was erected along both of these access roads to advise that only authorised personnel are permitted on to the well site.</p> <p>Beach Permit to Work system was in operation during the drilling operations to control potentially dangerous situations.</p>

TABLE 6 : DRILLING SEO (Continued)			
Objective	Assessment Criteria	Compliant / Non-Compliant (inc. Compliance statement)	Comments
Objective 1: (Continued)			<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 PPE was issued to all personnel involved in the drilling operations.</p>
			<p>Emergency Response Plan (ERP) Bridging documents were prepared for both the Parsons-1 and Parsons-2 drilling operations and all personnel involved in the operations were aware of the Emergency Response Plan. However, no situation arose that required the implementation of the Plan.</p> <p>Beach undertakes regular ERP exercises at selected drilling operations.</p> <p>Beach maintained regular contact with landholders and associated stakeholders during the drilling operations at each site.</p>

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 2 :</u> <i>Minimise disturbance and avoid contamination to soil.</i></p>	<p><u>Well Site and Access Track Construction</u></p> <ul style="list-style-type: none"> ▪ 0, +1 or +2 GAS criteria are attained for “Minimise visual impacts of abandoned well sites and access tracks” objective as listed in Appendix 4 for well lease and access track construction. ▪ No unauthorised off-road driving or creation of shortcuts. ▪ No construction activities are carried out on salt lakes, steep tableland land systems or wetlands land systems (as defined in EIR). <p><u>Borrow pit construction and restoration</u></p> <ul style="list-style-type: none"> ▪ 0, +1 or +2 GAS criteria are attained for “Minimise Visual Impacts for constructing borrow pits” objective as listed in Appendix 3, and “Minimise visual impacts” and “Minimise impact on soil” objectives as listed in Appendix 5. 	<p>Compliant</p>	<ul style="list-style-type: none"> • Both 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. • Vehicle movements were strictly limited to the defined access track and well pad area – areas which had been given cultural heritage clearance for the drilling operations. • The Parsons-1 and Parsons-2 wells have been both placed on production and full restoration of the well sites therefore have not been completed. Beach, 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 always strives to attain the highest feasible GAS rating. • Borrow pits will be rehabilitated and restored 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. • All fuel, oil and chemicals were stored in accordance with relevant standards. • Refuelling was undertaken as per Drilling Contractors’ procedures. • 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.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p>Objective 2: (Continued)</p> <p>(Minimise disturbance and avoid contamination to soil.)</p>	<p><u>Production Testing / Well Blowdowns</u></p> <ul style="list-style-type: none"> ▪ No soil contamination as a result of production testing or well blowdown operations. 		<ul style="list-style-type: none"> • no drill stem testing was undertaken at either Parsons-1 or Parsons-2.
	<p><u>Fuel and Chemical Storage and Handling</u></p> <ul style="list-style-type: none"> ▪ No spills/leaks outside of areas designed to contain them. ▪ Level of hydrocarbon continually decreasing for in situ remediation of spills. ▪ Soils remediated to a level as determined by the SHI process. 		<ul style="list-style-type: none"> • 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.
	<ul style="list-style-type: none"> ▪ All domestic wastes are disposed of in accordance with EPA licensing requirements. ▪ 0, +1 or +2 GAS criteria for 'Waste material' objective is attained. ▪ No spills or leaks from sewage treatment process and sludge pits. 		<ul style="list-style-type: none"> • Wastes were managed as described in the Cooper Basin Drilling & Well Operations EIR. • Wastes were collected, stored and transported in covered bins / containers. • All rubbish was disposed of at a licensed waste facility.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 3 :</u> <i>Avoid the introduction or spread of pest plants and animals and implement control measures as necessary.</i></p>	<ul style="list-style-type: none"> ▪ No weeds or feral animals are introduced to operational areas. 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> • Drilling rig and associated equipment and vehicles had already been working in the Cooper Basin prior to commencing these drilling operations .
<p><u>Objective 4 :</u> <i>Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow ground water resources.</i></p>	<p><u>Well Lease and Access Track Construction</u></p> <ul style="list-style-type: none"> ▪ Well leases 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><u>Drilling Mud Sumps and Flare Pits</u></p> <ul style="list-style-type: none"> ▪ No overflow of drill cuttings, muds and other drilling fluids from mud sumps. ▪ No waste material disposal to sumps and flare pits. 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> • Neither well site was located in an area where flooding from local watercourses was likely to occur. • The drill pads and access tracks were constructed and located to avoid the possibility of flood waters from local inundation being diverted from their natural direction of drainage flow. • All drill cuttings, muds, and non toxic drill fluids were contained within designated mud sumps with adequate freeboard. Sumps were dug sufficiently deep such that they could be back-filled with one metre of clean fill after completion of the drilling operations.
	<p><u>Well Heads (Oil and Gas Systems)</u></p> <ul style="list-style-type: none"> ▪ No leaks/spills outside of areas designed to contain them. 		

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p>Objective 4 : (Continued)</p> <p><i>(Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow ground water resources.)</i></p>	<p><u>Well Blowdown/Production Testing</u></p> <ul style="list-style-type: none"> ▪ No water (surface or groundwater) contamination as a result of production testing or well blowdown operations. 		<ul style="list-style-type: none"> • No drill stem tests were conducted at either well, and consequently there was no likelihood of contamination of groundwater from such operations.
	<p><u>Fuel/Chemical Storage and Handling</u></p> <ul style="list-style-type: none"> ▪ No leaks/spills outside of areas designed to contain them. 	<ul style="list-style-type: none"> ▪ 	<ul style="list-style-type: none"> • Specific oil spill containment / cleanup materials were on site at all times. • All fuel, oil and chemicals were in accordance with relevant standards ▪ Refuelling was undertaken as per Drilling Contractors' procedures. ▪ There were no spills during the drilling operations outside of areas designed to contain them.
			<ul style="list-style-type: none"> • Beach's Oil Spill Contingency Plan is included in the Emergency Response Plan.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 5 :</u></p> <p><i>Avoid disturbance to sites of cultural and heritage significance.</i></p>	<ul style="list-style-type: none"> ▪ 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. <p><u>Note:</u> 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.</p>	<p><i>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. 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>

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 6 :</u> <i>Minimise loss of aquifer pressures and avoid aquifer contamination.</i> 8</p>	<p>Drilling & Completion Activities :</p> <ul style="list-style-type: none"> ▪ 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. <p><u>Producing, Injection, Inactive and Abandoned Wells</u></p> <ul style="list-style-type: none"> ▪ No cross-flow behind casing between aquifers, and between aquifers and hydrocarbon reservoirs unless approved by DWLBC. 	<p><i>Compliant</i></p>	<p>The <i>Drilling</i> Programs for Parsons-1 and Parsons-2 were designed to ensure minimal loss of reservoir and aquifer pressures and minimal contamination of freshwater aquifers.</p> <p>The <i>Well Completion</i> programs were similarly designed to ensure that future production operations from these wells will cause minimal contaminants or loss of pressure in any formation aquifers.</p>

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 7:</u> Minimise disturbance to native vegetation and native fauna.</p> <p><u>Objective 7:</u> (Continued)</p> <p>(Minimise disturbance to native vegetation and native fauna)</p>	<p><u>Well Lease and Access Track Construction and Restoration</u></p> <ul style="list-style-type: none"> ▪ 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 impacts on vegetation” objective as listed in Appendix 2, during well lease and access track site selection and construction and for “Re-establish natural vegetation on abandoned well sites and access track” objective in Appendix 4. <p><u>Borrow Pits Construction and Restoration</u></p> <ul style="list-style-type: none"> ▪ 0, +1 or +2 GAS criteria are attained for “Minimise impacts on vegetation” objective as listed in Appendix 4 during borrow pit site selection and construction, and “Minimise Impact on Vegetation” objective in Appendix 5 for borrow pit restoration. <p><u>Waste Management</u></p> <ul style="list-style-type: none"> ▪ Refer to assessment criteria for Objective 11. <p><u>Fuel and Chemical Storage and Management</u></p> <ul style="list-style-type: none"> ▪ Refer to assessment criteria for Objectives 2 and 4. 	<p><i>Compliant</i></p>	<p>Neither well was 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.</p> <p>National Parks and Wildlife flora/fauna databases contain no records of vulnerable or endangered species within several kilometres of either of these well sites.</p> <p>Construction of the access tracks required minimal clearance of vegetation and the routes were aligned to avoid clearing trees.</p> <p>Both well sites contained only sparse vegetation, and clearance was minimised. Trees that were present on the site and adjacent to the site were not cleared.</p> <p>Facilities were designed and constructed to minimise fauna entrapment.</p> <ul style="list-style-type: none"> • Borrow pits established for building the road and drill pad will be rehabilitated and restored 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. • Beach’s Drilling Operations Manual sets out the company’s policy in relation to storage, use and disposal of hazardous material. • At both well sites, 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.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 8 :</u> Minimise air pollution and greenhouse gas emissions.</p>	<ul style="list-style-type: none"> ▪ Compliance with EPA requirements. 	<p><i>Compliant</i></p>	<p>No Drill Stem Tests were undertaken on either of the two wells.</p>
<p><u>Objective 9:</u> Maintain and enhance partnerships with the Cooper Basin community.</p>	<ul style="list-style-type: none"> ▪ No unresolved reasonable complaints from the community. 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> ▪ Beach maintained regular contact with landholders and associated stakeholders prior to, and while undertaking, drilling operations at these wells. • Beach sponsors local community social events including the Innamincka Races. • Beach also provides major sponsorship to the Royal Flying Doctor Service.
<p><u>Objective 10 :</u> Avoid or minimise disturbance to stakeholders and/or associated infrastructure</p>	<ul style="list-style-type: none"> ▪ No reasonable stakeholder complaints left unresolved. 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> ▪ Beach maintained regular contact with landholders and associated stakeholders prior to and while undertaking drilling operations at each of the well sites. ▪ The access tracks and well sites were located well away from regular tourist routes. ▪ Neither well site was located near cattle watering points and cattle were not present in significant numbers due to prevailing drought conditions. ▪ As both well sites have now become production sites, the drill pads will remain as work areas. Sumps and other pits built for the drilling operations have been back-filled to prevent stock becoming trapped in their boggy floors.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 10:</u> (Continued)</p> <p>(Avoid or minimise disturbance to stakeholders and/or associated infrastructure)</p>			<ul style="list-style-type: none"> • Once production from the each of Parsons-1 and Parsons-2 ceases, the respective well sites will be fully rehabilitated and restored 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. ▪ Discussions will be undertaken with the landowner to determine whether he wishes to have any rehabilitation work undertaken on either of the access tracks to the wells.
<p><u>Objective 11 :</u></p> <p>Optimise waste reduction and recovery.</p>	<ul style="list-style-type: none"> ▪ With the exception of drilling fluids, drill cuttings and other fluids disposed during well clean-up, and sewage wastes, all wastes to be disposed of at an EPA licensed facility in accordance with EPA Licence conditions. ▪ Attainment of GAS criteria for “Site left in clean, tidy and safe condition after final clean-up” objective during well site restoration (refer Appendix 4). ▪ Attainment of GAS criteria for “Site left in clean, tidy and safe condition” objective during borrow pit restoration (refer Appendix 5). 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> ▪ Waste was removed from the well sites in accordance with Beach’s policy set out in the company’s Drilling Operations Manual. • Non-putrescible waste material (including hazardous material) was stored safely on site for later removal to an EPA approved disposal facility.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 12</u> Remediate and rehabilitate operational areas to agreed standards.</p>	<ul style="list-style-type: none"> ▪ No unresolved reasonable stakeholder complaints. <p><u>Contaminated Site Remediation</u></p> <ul style="list-style-type: none"> ▪ 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><u>Well Site and Access Track Restoration</u></p> <ul style="list-style-type: none"> ▪ The attainment of 0, +1 or +2 GAS criteria for (refer Appendix 4): <ul style="list-style-type: none"> - “minimise visual impact of abandoned well sites” - “minimise visual impact of abandoned access tracks” - “re-establish natural vegetation on abandoned well sites and access tracks” 	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> ▪ Once production from the each of Parsons-1 and Parsons-2 ceases, the respective 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 landowner to determine whether he wishes to have any rehabilitation work undertaken on either of the access tracks.

TABLE 6 : DRILLING SEO (Continued)

Objective	Assessment Criteria	Compliant / Non-Compliant	Comments
<p><u>Objective 12</u> <u>(Contd.)</u></p> <p>Remediate and rehabilitate operational areas to agreed standards.</p>	<p><u>Borrow Pit Restoration</u></p> <ul style="list-style-type: none"> ▪ The attainment of 0, +1 or +2 GAS criteria (refer Appendix 5) for : “minimise impact on vegetation”, “minimise impact on soil”, “Minimise visual impacts” 		

Compliance with Statements of Environmental Objectives (Continued)

Seismic

Government approval for Beach to undertake the **Modiolus 3D and Padollus 2D** seismic surveys was 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 Modiolus 3D and Padollus 2D surveys are outlined in the attached table, **Table 7**.

At the completion of the two surveys, assessments of the impacts from the surveys were undertaken against a set of GAS criteria.

GAS audits were taken at twenty-six locations around the full spread of the **Modiolus Survey**. The results of the audits against the GAS criteria are presented in the bar chart below. Also as part of the audit, five sites were selected as Environmental Monitoring Points (EMPs) for future photo monitoring of the rate of natural rehabilitation. Three of these EMPs are located in PEL 92: two in a floodplain environment, and one in a dunefield environment.

GAS audits were taken at eight locations around the full spread of the **Padollus Survey**. The results of the audits against the GAS criteria are presented in the bar chart below. As part of the audit, three sites were also selected as Environmental Monitoring Points (EMPs), all located in dunefield environments.

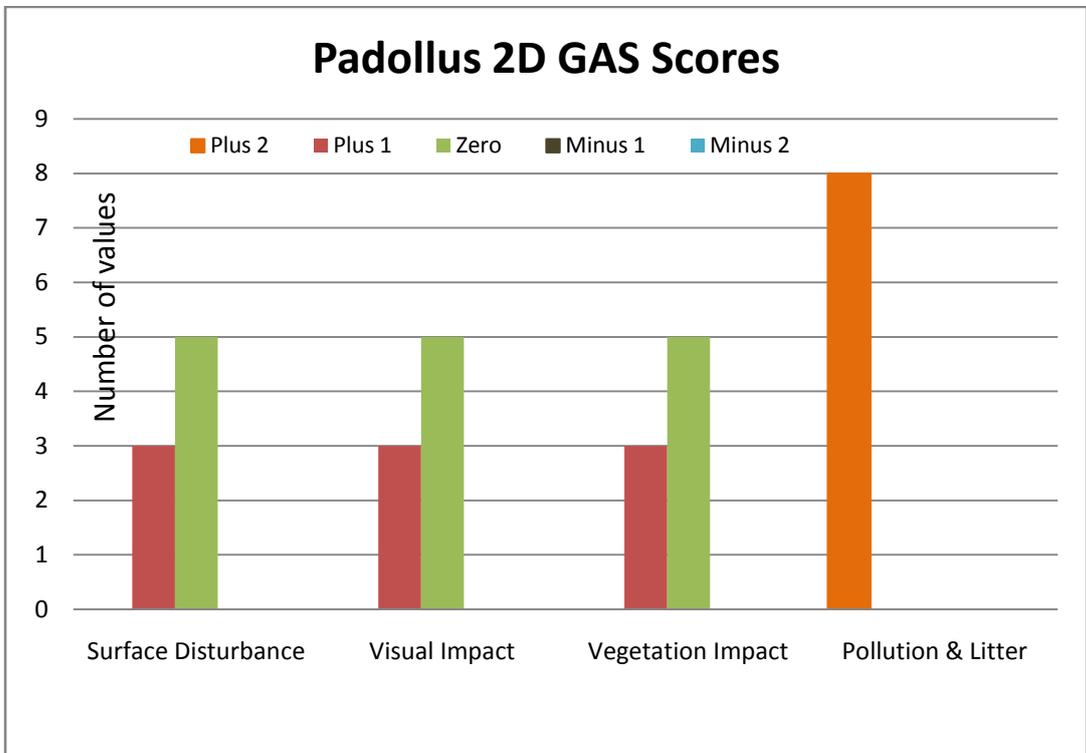
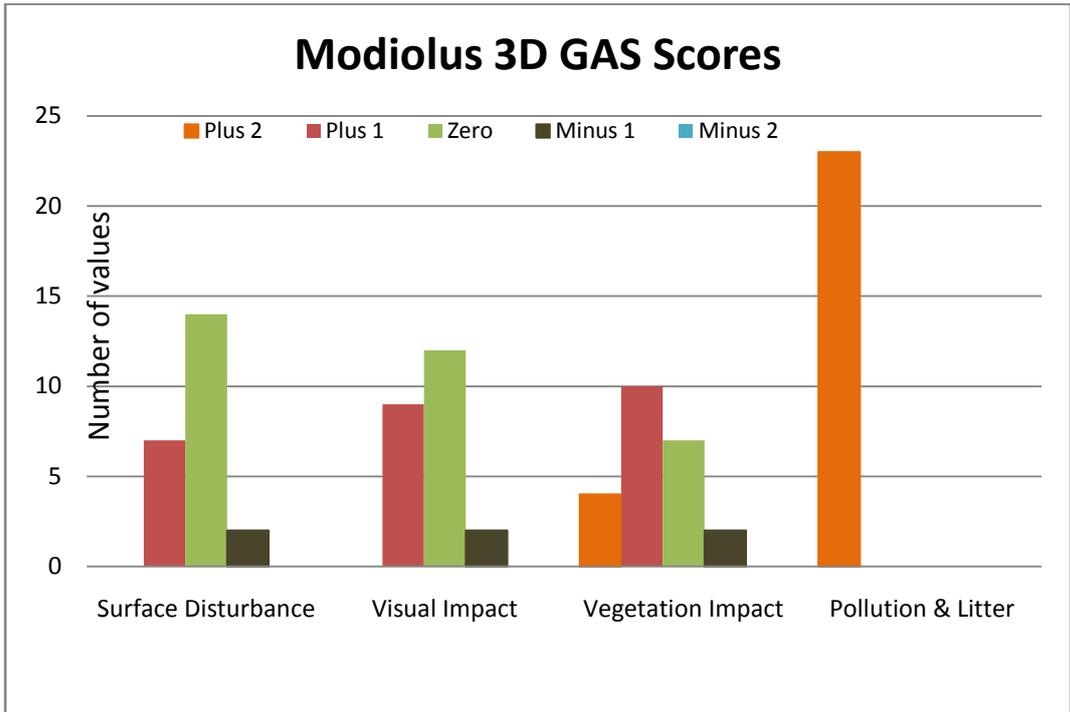


Table 7 : Compliance with SEO for Cooper Seismic Operations

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE / NON-COMPLIANCE	COMMENTS
<p>Objective 1:</p> <p><i>Minimise the visual impact of operations.</i></p>	<p><u>Campsite and survey line preparation</u></p> <p>Proposed survey lines and campsites have been appropriately located and prepared to minimise the visual impact.</p> <p>The attainment of 0, +1 or +2 GAS criteria for 'visual impact' objective listed in Appendix 3.</p>	<p><i>Compliant</i></p>	<p>Goal Attainment Scaling audits were taken at approximately 23 locations, spread throughout the 330 sq kilometres of survey lines recorded for the Modiolus 3D and 8 locations for the 120km Padollus 2D surveys. Approximately two thirds of these lines were in PEL 92.</p> <p>The main issue for this survey was access onto several salt lakes. Access was attempted to provide infill by dynamite source in drilled holes.</p> <p>A large effort was expended in obtaining specialist vehicles and drilling units which would have the minimum pressure impact on the lakes. In spite of this effort, there were several places where the bogging of vehicles and tyre tracks have caused significant visual impact .</p> <p>The Environmental Report for the survey, submitted to PIRSA, included several photos which documented this impact.</p> <p>It is expected that recovery from this impact will be slow and will require several periods of inundation.</p> <p>The situation will also be reviewed to determine if more active intervention is required. Impacts on other areas of the survey were as expected for sand dune and swale environments with mainly 0 and +1 scores (refer GAS score bar chart).</p>

TABLE 7 : SEISMIC SEO (Continued)

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE / NON-COMPLIANCE	COMMENTS
<p>Objective 2: <i>Minimise disturbance to and contamination of soil resources.</i></p>	<p><u>Campsite and survey line preparation</u> 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.</p>	<p><i>Compliant</i></p>	<p>Refer to comments above for performance in achieving Objective 1.</p> <p>There were no incidents of soil contamination arising from the survey activities.</p>
	<p><u>Fuel Storage and Handling</u> 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.</p>	<p><i>Compliant</i></p>	
<p>Objective 3: <i>Minimise disturbance to native vegetation and fauna.</i></p>	<p><u>Campsite and survey line preparation</u> The attainment of either 0, +1 or +2 GAS criteria for ‘Impact on native vegetation’ objective listed in Appendix 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.</p>	<p><i>Compliant</i></p>	<p>At each of the <i>dunefield</i> locations, the GAS scores for “impact on vegetation” were either “0” or “+1” indicating there were no instances where the disturbance was greater than is usual for these type of operations.</p>

TABLE 7 : SEISMIC SEO (Continued)

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE/ NON-COMPLIANCE	COMMENTS
<p>Objective 3: (Continued)</p> <p><i>Minimise disturbance to native vegetation and fauna.</i></p>	<p><u>Fuel and Chemical Storage and Management</u> Refer to assessment criteria for objective.</p> <p><u>Fire Danger Season restrictions and education</u> All personnel are fully informed on the fire danger season and associated restrictions.</p>		
<p>Objective 4:</p> <p><i>Avoid disturbance to sites of cultural and heritage significance.</i></p>	<p>The following is one possible procedure to achieve the objective.</p> <p>Appropriately trained and experienced cultural/heritage advisors have scouted proposed survey line locations and access tracks.</p> <p>The operator has a mechanism in place to appropriately report and respond to any sites discovered during survey operations.</p> <p>Any sites identified have been flagged and subsequently avoided.</p> <p><u>Note:</u> Where a negotiated agreement or determination for heritage is in place, compliance with the negotiated agreement or determination takes precedence over the above criteria.</p> <p>The EIR details this possible procedure.</p>	<p><i>Compliant</i></p>	<p>Beach has an agreement with the Dieri Aboriginal Corporation (DAC) Native Title Claimant group which specifies the requirements for scouting proposed seismic lines to identify and avoid areas of heritage value and archaeological significance.</p> <p>Joint site visits were carried out with representatives from the Native Title Claimant group. Proposed line locations and access routes were agreed and given heritage clearance.</p> <p>Areas of significance were recorded and marked as exclusion zones.</p>

TABLE 7 : SEISMIC SEO (Continued)

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE / NON-COMPLIANCE	COMMENTS
<p>Objective 5: <i>Minimise disturbance to livestock, pastoral infrastructure and landholders.</i></p>	<p>The attainment of 0, +1 or +2 GAS criteria for 'Impact on infrastructure' objective listed in Appendix 3.</p> <p>No reasonable concerns raised by stakeholders are left unresolved.</p> <p>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.</p>	<p><i>Compliant</i></p>	<ul style="list-style-type: none"> ▪ Beach maintained regular contact with the pastoral lessees prior to and while undertaking survey operations. ▪ None of the seismic lines interfered with cattle watering points and cattle were not present in significant numbers due to prevailing drought conditions. • Extensive seismic survey operations have been undertaken regularly in recent years on both of the pastoral leases covered by the Modiolus and Padollus Surveys. • No issues of concern have been raised by the landowner in relation to these activities.
<p>Objective 6: <i>Avoid the introduction or spread of exotic species and implement control measures as necessary.</i></p>	<p>Weeds or feral animals are not introduced into, or spread, in operational areas</p>	<p><i>Compliant</i></p>	<p>Machinery and vehicles used for line preparation and survey recording were already working in the Cooper Basin prior to commencing the Modiolus and Padollus surveys.</p>

TABLE 7 : SEISMIC SEO (Continued)

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE / NON-COMPLIANCE	COMMENTS
<p>Objective 7:</p> <p><i>Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow groundwater resources.</i></p>	<p><u>Campsite and survey line preparation</u></p> <p>Campsites and survey lines/traverses are located and constructed to avoid diversion of water flows.</p> <p>The attainment of 0, +1 or +2 GAS criteria for 'disturbance to land surface' objective listed in Appendix 3.</p> <p>No uncontrolled flows to surface from aquifers intersected in upholes/shallow boreholes.</p> <p>There is no unnecessary interference with natural drainage features.</p> <p><u>Fuel Storage and Handling</u></p> <p>No spills occur outside of areas designed to contain them.</p> <p>Refuelling occurs at least 1km from watercourses or sensitive ecological environments (wetlands).</p> <p>Appropriate spill response equipment is available on site.</p> <p>Spills or leaks are immediately reported and clean up actions initiated promptly.</p>	<p><i>Compliant</i></p>	

TABLE 7 : SEISMIC SEO (Continued)

OBJECTIVE	ASSESSMENT CRITERIA	COMPLIANCE / NON-COMPLIANCE	COMMENTS
<p>Objective 8: <i>Optimise waste reduction and recovery.</i></p>	<p>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.</p>	<p><i>Compliant</i></p>	<p>Every GAS score in relation to "Pollution and litter" (control) at each of the 26 sites was "+2", indicating no litter was observed on any part of the survey.</p>

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”.

No management system audits were undertaken during the licence year in relation to exploration activities on PEL 92.

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”.

*A list is provided in **Table 8** of the reports and data generated in relation to the operations undertaken during the licence year.*

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 reportable incidents arising from the operations undertaken on PEL 92 during the current licence reporting year.

Table 8 ; List of Reports Generated and Submitted

<u>Title</u>	Date Due	Date Submitted to PIRSA	Compliant / non Compliant
Callawonga 2 Well Logs	9 Nov 07	2 Nov 07	compliant
Parsons-1 Notification of Intention to Drill	27 Nov 07	12 July 07	compliant
Well Proposal for Parsons-1	Notification Intention to Drill submitted 11/07/07	12 Nov 07	compliant
Parsons-2 Work Area Clearance Request	18 Dec 07	17 Dec 07	compliant
Parsons-2 Notification of Earthworks	28 Jan 08	19 Dec 07	compliant
Neritus 3D Final Operations Report and Support Data	7 Jan 08	21 Dec 07	compliant
Neritus 3D Field Tapes and Data	7 Jan 08	21 Dec 07	compliant
Sheringa-1 Hardcopy and Digital Well Logs	8 Jan 07	21 Dec 07	compliant
Parsons-1 Hardcopy and Digital Well Logs	30 Dec-07	21 Dec 07	compliant
Neritus 3D Geophysical Operations Report	7 Jan 08	21 Dec 07	compliant
Modiolus 3D Seismic Work Area Clearance Request	30 March 08	5 Jan 08	compliant
Sheringa-1 Well Samples	9 May 08	21 Jan 08	compliant
Annual Report for PEL 92 - Term 2 Year 1	25 Jan 08 ⁽¹⁾	25 Jan 08	compliant
Parsons-2 Notification Intention to Drill	26 Feb 08	8 Feb 08	compliant
Well Proposal for Parsons-2	Notification Intention to Drill submitted 08/02/08	8 Feb 08	compliant
Parsons-1 Well Samples	30 May 08	18 Feb 08	compliant
Callawonga-2 Cement Bond Log Hardcopy and CD		25 Feb 08	
Callawonga-2 Well Completion Report	9 Mar 08	6 Mar 08	compliant

<u>Title</u>	Date Due	Date Submitted to PIRSA	Compliant / non Compliant
Modiolus 3D Seismic AFL Application	10 April 08	26 March 08	compliant
Modiolus 3D Seismic PIRSA Notification	25 April 08	1 April 08	compliant
Padollus 2D Seismic PIRSA Notification	16 June 08	11 April 08	compliant
Padollus 2D Seismic AFL Application	1 June 08	14 April 08	compliant
Parsons-2 Hardcopy and Digital Well Logs	28 April 08	16 April 08	compliant
Sheringa-1 Well Completion Report	9 May 08	6 May 2008	compliant
Parsons-1 Well Completion Report	30 May 08	28 May 2008	compliant
Gunyah-1 Work Area Clearance Request	16 Oct 08	14 July 08	compliant
Perlubie Work Area Clearance Request	7 Nov 08	14 July 08	compliant
Gunyah-1 Notification of Earthworks	27 Nov 08	17 July 08	compliant
Parsons-2 Well Samples	28 Sept 08	28 July 2008	compliant
Parsons-2 Well Completion Report	12 Oct 08	7 Oct 08	compliant
Cadulus 2D Seismic Survey Interpretation Report (PEL 92)	14 Oct 08	14 Oct 08	compliant
Neritus 3D Seismic Survey Interpretation Report	27 Oct 08	27 Oct 08	compliant
Perlubie-1 Notification of Earthworks	19 Dec 08	29 Oct 08	compliant

⁽¹⁾ On 18 December 2007, Beach was granted a 3 week extension for submission of its Annual Report for Year 1 of Term 2, the due date for submission becoming 25 January 2008.

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 presents, 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 threats foreseeable to the proposed exploration activities for PEL 92, other than the disruptive influence of occasional flooding of the Cooper Creek.

The progress of any flooding events in the headwaters of the Cooper Creek are closely monitored by satellite surveillance to predict the time of their arrival in the PEL 92 area several weeks later. Drilling and seismic schedules are amended accordingly.

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”.

Drilling Program :

A minimum of two exploration wells are planned to be drilled in PEL 92 during the course of Year 3: Gunyah-1 and Perlubie-1, both located on trend with and to the south of the Parsons oil field. The locations of these proposed wells are shown in Figure 2. Further field development drilling will also take place in PPLs that have been excised from the Exploration Licence.

Geological and Geophysical Studies :

Geophysical studies will be directed at finalising the processing of the Modiolus 3D and Padollus 2D seismic surveys, at investigating static problems within the Licence area and at interpreting and mapping the Modiolus / merged Neritus 3D and Padollus 2D seismic data sets.

Geological and Geophysical studies will be directed at further defining prospectivity within the Licence area, at prospect generation and evaluation, preparing well proposals / well completion reports and well monitoring, evaluation and reporting.

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)”.

Appendix 1 provides the expenditure statement for PEL 92 for the current reporting period.

Commercial in Confidence

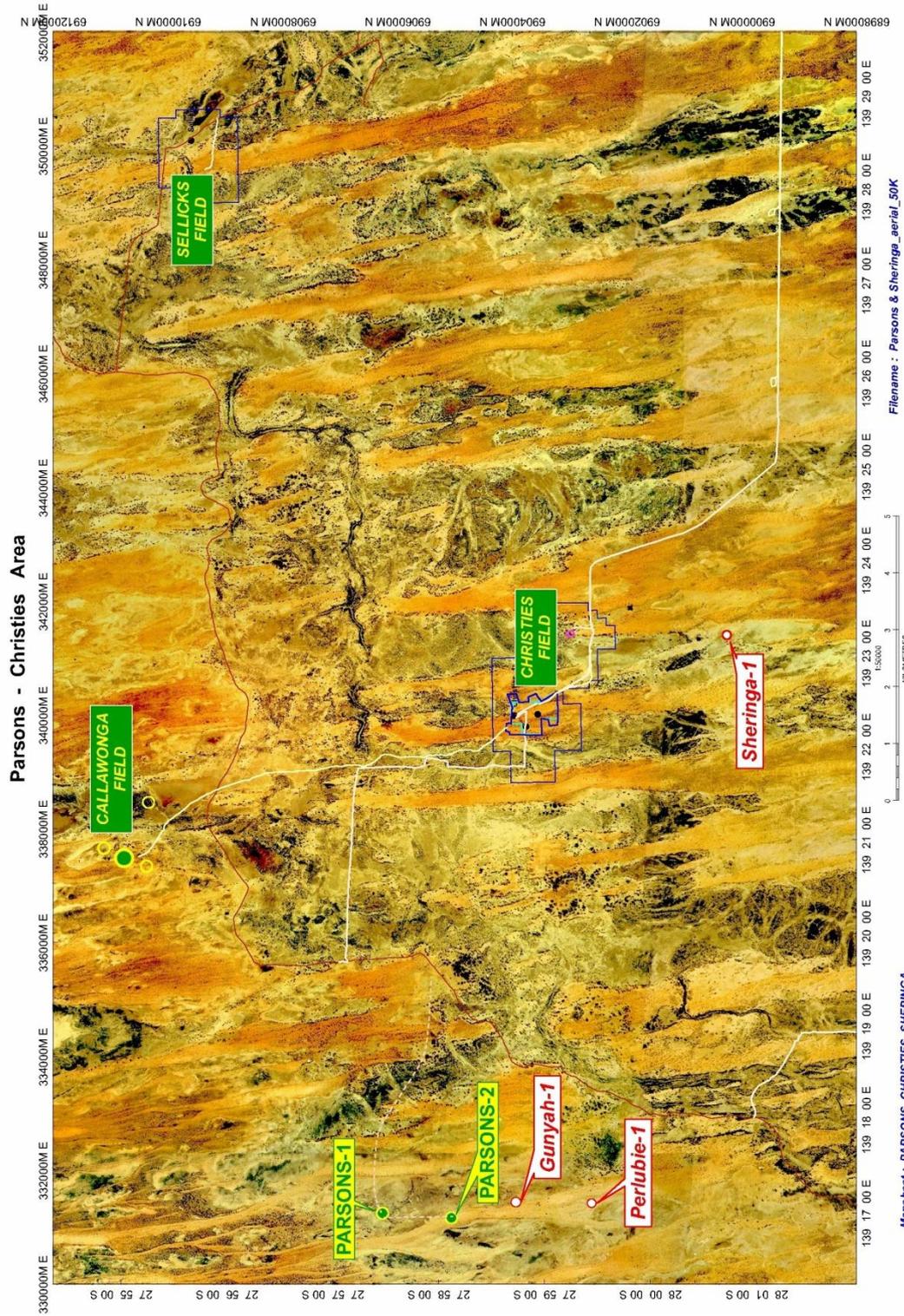


Figure 1: Location of Sheringa-1, Parsons-1 and Parsons-2 wells

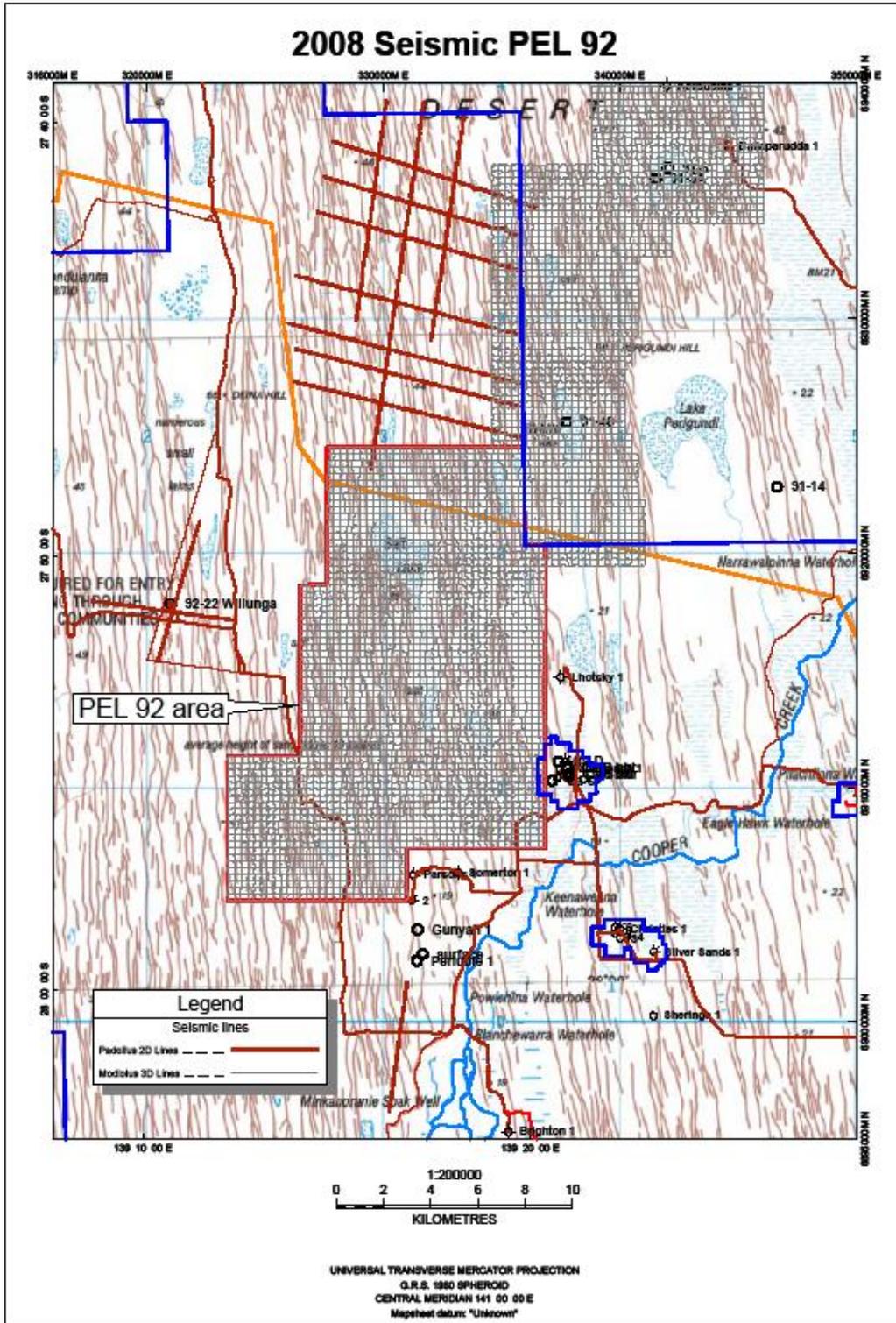


Figure 2. Location of Modiolus 3D and Padollus 2D Seismic Surveys PEL 92