



A wholly owned subsidiary of Drillsearch Energy Limited

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**PEL 106**

**COOPER/EROMANGA BASIN**

**SOUTH AUSTRALIA**

**ANNUAL REPORT**

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**PERMIT YEAR 4**

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**9TH OCTOBER 2011 TO 8TH OCTOBER 2012**

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## 1 INTRODUCTION

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Petroleum Exploration Licence 106 (“PEL 106” or “the Licence”) was granted to Great Artesian Oil and Gas Limited (“GAOG”) on 9<sup>th</sup> April 2003. The Licence was renewed on 9 October 2008 for a further five years.

The Licence area is located in the Cooper Basin, South Australia and is situated on the south-western margin of the Patchawarra Trough, one of the major depocentres in the South Australian portion of the Cooper Basin.

PEL 106 covers an area of approximately 483 square kilometres and is shown in Figure 1.

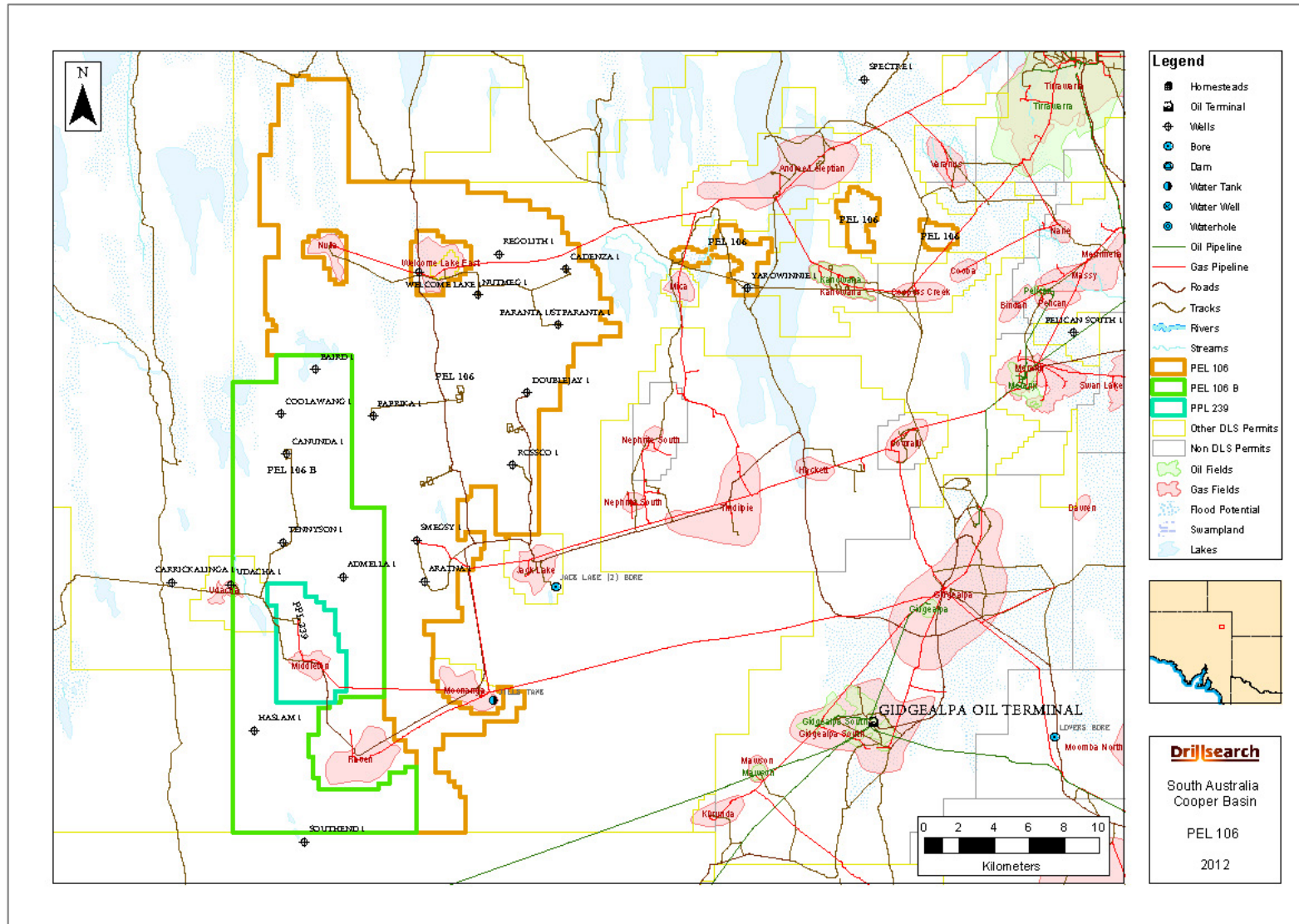


FIGURE 1 - PEL 106 MAP

This report details the work conducted in the Licence from 9<sup>th</sup> October 2011 to 8<sup>th</sup> October 2012 inclusive (“the Reporting Period”), in accordance with Regulation 33 (*Petroleum and Geothermal Energy Regulations 2000* - “the Regulations”) under the *Petroleum and Geothermal Energy Act 2000* (“the Act”).

## 2 PERMIT SUMMARY

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Petroleum Exploration Licence PEL 106 was renewed on 9 October 2008. The fourth Licence Year (Licence Year 4) of the second term, the first and final renewal period, commenced on 9 October 2011.

The original work commitments set out in Condition 1 associated with the renewal of PEL 106 are set out in Table 1.

TABLE 1 - ORIGINAL WORK COMMITMENTS FOR RENEWAL PERIOD (TERM 2) BY LICENCE YEAR

Licence Year	Licence dates	Minimum Work Program
Year 1	09/10/2008 – 08/10/2009	Geological and Geophysical Studies
Year 2	09/10/2009 – 08/10/2010	Geological and Geophysical Studies
Year 3	09/10/2010 – 08/10/2011	Geological and Geophysical Studies
<b>Year 4</b>	<b>09/10/2011 – 08/10/2012</b>	<b>Geological and Geophysical Studies</b>
Year 5	09/10/2012 – 08/10/2013	Drill one well and Geological and Geophysical Studies

The year 3 work program has been extended through three suspensions of the Licence granted by PIRSA (now DMITRE) for an aggregate of twelve months as follows:

- In June 2010 PIRSA granted a suspension of licence condition 1 for the period from and including 9 October 2010 to 8 March 2011, suspending Licence Year Three for a period of six months. The term of the License was also extended by six months.
- In January 2011 PIRSA granted a suspension of licence condition 1 for the period from and including 9 March 2011 to 8 September 2011, suspending Licence Year Three for a further period of five months. The term of the License was also extended by a further five months.
- In June 2010 PIRSA granted a suspension of licence condition 1 for the period from and including 9 September 2011 to 8 October 2011, suspending Licence Year Three for a further period of one month. The term of the License was also extended by a further one month.

Licence Year 3 runs for the period 9 October 2010 – 8 October 2011. However, the year 3 work program covers the period 9 October 2010 – 8 October 2012.

PEL106 is now due to expire on 8 October 2014.

The new Licence dates and associated minimum work program are now set out in Table 2.

TABLE 2 - REVISED WORK COMMITMENTS FOR RENEWAL PERIOD (TERM 2) BY LICENCE YEAR

Licence Year	Licence dates	Minimum Work Program
Year 1	09/10/2008 – 08/10/2009	Geological and Geophysical Studies
Year 2	09/10/2009 – 08/10/2010	Geological and Geophysical Studies
Year 3	09/10/2010 – 08/10/2011	<b>Geological and Geophysical Studies</b>
<b>Year 4</b>	<b>09/10/2011 – 08/10/2012</b>	
Year 5	09/10/2011 – 08/10/2013	Geological and Geophysical Studies
Year 6	09/10/2012 – 08/10/2014	Drill one well and Geological and Geophysical Studies

### 3 PERMIT INTERESTS

The Permit Interests during the Reporting Period were GAOG 100% except for the following equitable interests:

TABLE 3 - EQUITABLE INTERESTS BLOCKS IN PEL106

Holder	Nature of Equitable Interest Held
<b>Beach Farmin Block (PEL 106B)</b>	<p>Subsequent to the terms of a Letter Agreement dated 18 October 2004, Beach Energy Limited ("Beach Energy") has successfully farmed into the Brownlow Block (PEL106B).</p> <p>On 24 November 2010, a Memorandum entering notation of the Joint Operating and Production Agreement – Brownlow Joint Venture dated 4 November 2010 between Beach Energy and GAOG was entered on the public register. Subsequently on 12 January 2011 a Memorandum entering notation of the Deed of Assignment– Brownlow Joint Venture dated 4 November 2010 between Beach Energy and GAOG was entered on the public register.</p> <p>These documents evidenced the finalisation of the farmin arrangements.</p>
<b>Udacha Block</b>	<p>In accordance with the Unitisation and Operating agreement dated 20 January 2006 the following companies have interests in the Udacha Block:</p> <p>GAOG- 35%, Drillsearch Gas Pty Limited (fellow subsidiary of GAOG, 100% owned by Drillsearch Energy Limited)- 40%, Beach Energy - 15%, Rawson Resources - 10%.</p>

PPL 239 was granted on 17 August 2011, as the Petroleum Production Licence covering the Middleton-1 and Brownlow-1 wells previously within PRL 25 and PEL 106 (PEL106B) respectively. The total area of PEL 106 was reduced from 499 km<sup>2</sup> to 483 km<sup>2</sup> approximately.

### 4 REGULATED ACTIVITIES

Pursuant to Regulation 33(2)(a) under the Act .

#### 4.1 DRILLING AND RELATED ACTIVITIES

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During the Reporting Period four wells were drilled:

- Admella-1 – plugged and abandoned.
- Baird-1 – cased and suspended for further testing.
- Coolawang-1 – completed for production and tested.
- Haslam-1 – completed for production and tested.

Cement bond logs were run on cased and suspended wells Paprika-1 and Cadenza-1.

Short flare test and gas sampling was executed on Paranta-1.

#### 4.2 SEISMIC DATA ACQUISITION

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No regulated activities undertaken in the Reporting Period.

#### 4.3 SEISMIC DATA PROCESSING AND REPROCESSING

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Substantial time was spent by both GAOG and Beach Energy assessing whether further reprocessing of the Spinel 3D would provide additional data integrity and information. A trial reprocessing was commenced in November 2011.

Based on the reprocessing trial, GAOG commenced reprocessing of the complete Spinel-Raven-Paranta 3D seismic surveys. The reprocessed dataset is expected in the first half of 2013.

#### 4.4 GEOCHEMICAL, GRAVITY, MAGNETIC AND OTHER SURVEYS

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Subsequent to the end of the Reporting Period, GAOG executed a LIDAR and high resolution aerial photography program over PEL 106 and PEL 513.

No regulated activities undertaken in the Reporting Period.

#### 4.5 PRODUCTION AND PROCESSING

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Haslam-1 and Coolawang-1 were completed with production strings and extended production tests (EPT) were completed during the Reporting Period. Condensate was produced and transported for sale, whilst produced gas was flared. The results of the testing are currently subject to commercial evaluation.

Production from Brownlow-1 and Middleton-1 within PPL 239 commenced in January 2012 and is the subject of the PPL 239 annual report.

#### 4.6 PIPELINE CONSTRUCTION AND OPERATION

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Pipeline construction and operation activities are the subject of the PPL 239 annual report.

No regulated activities undertaken in the Reporting Period.

#### 4.7 PRELIMINARY SURVEY ACTIVITIES

No regulated activities undertaken in the Reporting Period.

### 5 COMPLIANCE ISSUES

#### Licence and Regulatory Compliance

Pursuant to Regulations 33(2) (b) & (c)

Detailed information on the individual instances of non-compliance is provided below in designated sections.

#### 5.1 LICENCE NON-COMPLIANCE

There were no instances of licence non-compliance arising from operations in PEL106 during the Reporting Period.

#### 5.2 REGULATORY NON-COMPLIANCE

No.	Date	Activity	Details of Non-Compliance	Rectification of Non-Compliance
1	12/03/2012	Submission of annual report.	Late submission of Annual Report Permit Year 3 2010-2011, report due 08/12/11, submitted 12/03/12.	Additional resources applied to reporting compliance.
2	08/10/2012	Submission of other technical reports pursuant to Regulation 47.	Other technical reports not submitted.	Audit being conducted to ascertain unreported items. Additional resources applied to reporting compliance.
3	08/10/2012	Submission of well test analysis reports pursuant to Regulation 42.	Well test analysis reports not submitted.	Audit being conducted to ascertain unreported items. Additional resources applied to reporting compliance.
4	08/10/2012	Submission of petroleum reservoir fluid analysis reports.	Petroleum reservoir fluid analysis reports not submitted.	Audit being conducted to ascertain unreported items. Additional resources applied to reporting compliance.
5	31/05/2012	Submission of Wireline logs.	Coolawang-1 wireline logs late submission, due to late submission of data from contractors.	Ongoing discussions with contractors regarding resourcing issues. Operator to apply for extension of time to avoid non-compliance.
6	05/09/2012	Submission of well completion report.	Coolawang-1 well completion report late submission due to late submission of data from	Ongoing discussions with contractors regarding resourcing issues. Operator to apply for extension of time to avoid non-

No.	Date	Activity	Details of Non-Compliance	Rectification of Non-Compliance
			contractors.	compliance.

## 6 COMPLIANCE WITH STATEMENT OF ENVIRONMENTAL OBJECTIVES

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### Drilling

Exploration drilling during the Reporting Period was compliant with "*Cooper Basin Drilling and Well Operations Statement of Environmental Objectives - November 2009*".

### Seismic

No seismic surveys were conducted in PEL106 during the Reporting Year.

### Production Testing

There was one instance during the reporting period in which the PEL 106B Operator failed to comply with objective 6 of the "*Cooper Basin Drilling and Well Operations Statement of Environmental Objectives - November 2009*".

The incident involved a spill at Coolawang-1 field during production testing of the well and is summarised in Table 7.

## 7 MANAGEMENT SYSTEM AUDITS

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### Pursuant to Regulation 33(2) (d)

GAOG completed an annual HSE MS Self-Assessment in accordance with DMITRE framework. Drillsearch Energy Ltd (parent company to GAOG) has recently commissioned a new HSE MS and is presently rolling it out at an operational level in both QLD and SA operations.

In addition, continual improvement processes have been ongoing with policies and procedures reviewed and updated.

## 8 REPORT AND DATA SUBMISSIONS

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### Pursuant to Regulation 33(2) (e)

TABLE 4 - COMPLIANCE AND CASED HOLE REPORTING

Description of Report/ Data	Date Due	Date Submitted	Compliant/ Non-Compliant
Operations Quarterly Compliance Report 3Q 2011	30/10/11	28/10/11	Compliant
Operations Quarterly Compliance Report 4Q 2011	31/01/12	31/01/12	Compliant



<b>Description of Report/ Data</b>	<b>Date Due</b>	<b>Date Submitted</b>	<b>Compliant/ Non-Compliant</b>
Operations Quarterly Compliance Report 1Q 2012	30/04/12	30/04/12	<i>Compliant</i>
Operations Quarterly Compliance Report 2Q 2012	31/07/12	30/07/12	<i>Compliant</i>
Quarterly Cased Hole Report 3Q 2011	30/10/11	28/10/11	<i>Compliant</i>
Quarterly Cased Hole Report 4Q 2011	31/01/12	31/01/12	<i>Compliant</i>
Quarterly Cased Hole Report 1Q 2012	30/04/12	30/04/12	<i>Compliant</i>
Quarterly Cased Hole Report 2Q 2012	31/07/12	30/07/12	<i>Compliant</i>

TABLE 5 - WELL REPORTS

<b>Description of Report/ Data</b>	<b>Date Due</b>	<b>Date Submitted</b>	<b>Compliant/ Non-Compliant</b>
Baird-1 Wireline logs	21/02/12	24/02/12	<i>Compliant<sup>(1)</sup></i>
Admella-1 Wireline logs	23/03/12	10/04/12	<i>Compliant<sup>(1)</sup></i>
Coolawang-1 Wireline logs	25/04/12	30/05/12	<i>Non-Compliant<sup>(2)</sup></i>
Haslam-1 Wireline logs	04/06/12	04/06/12	<i>Compliant</i>
Baird-1 Well Completion Report	31/06/12	02/07/12	<i>Compliant<sup>(1)</sup></i>
Admella-1 Well Completion Report	03/08/12	03/08/12	<i>Compliant</i>
Coolawang-1 Well Completion Report	01/09/12	05/09/12	<i>Non-Compliant<sup>(2)</sup></i>
Baird-1 Well samples	31/06/12	29/03/12	<i>Compliant</i>
Admella-1 Samples	02/08/12	30/04/12	<i>Compliant</i>
Coolawang-1 Well samples	01/09/12	05/06/12	<i>Compliant</i>
NOTES: (1) DMITRE approved extension of submission date (2) Late submission			

TABLE 6 – DAILY DRILLING REPORTS

Description of Report/ Data	Date Due	Date Submitted	Compliant/ Non-Compliant
Admella-1 Daily Drilling Reports Daily Geological Reports		04/01/12-02/02/12 09/01/12-01/02/12	<i>Compliant</i>
Baird-1 Daily Drilling Reports Daily Geological Reports		07/12/11-31/12/11 07/12/11-28/12/11	<i>Compliant</i>
Coolawang-1 Daily Drilling Reports Daily Geological Reports		09/02/12-01/03/12 09/02/12-28/02/12	<i>Compliant</i>
Haslam-1 Daily Drilling Reports Daily Geological Reports		20/03/12-10/04/12 20/03/12-08/04/12	<i>Compliant</i>

## 9 INCIDENTS

Pursuant to Regulation 33(2) (f)

TABLE 7 - LIST OF REPORTABLE INCIDENTS IN PEL 106B FOR REPORTING PERIOD

Field	Date	Quantity / Area Affected	Incident Description	Root Cause	Steps taken for clean-up and rehabilitation	Steps taken for prevention of recurrence
Coolawang	8-Aug-12	50L / 5m <sup>2</sup>	Contractor was transferring condensate from their 100bbl tank into the 500bbl Frac Tank for the first time. Condensate started leaking onto the ground from one of the drain valves on the tank that was very slightly cracked open. The operators had checked all valves on the tank prior to transfer but had not noticed this one slightly cracked. The valve was not doubly isolated. The Contractor immediately stopped the transfer and closed the valve.	Design	Contaminated soil will be removed and transferred to lined, interceptor pond at Hanson Facility.	Petroleum Engineer was informed and he immediately spoke to Contractor who had supplied the tank and requested additional fittings be provided to ensure all tank outlets are doubly isolated in future.

## 10 THREAT PREVENTION

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Pursuant to Regulation 33(2) (g)

No threats have been identified to the proposed exploration activities for PEL 106 for the Reporting Period.

## 11 FUTURE WORK PROGRAM

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Pursuant to Regulation 33(2) (h) under the Act

### **Operations proposed for the 12 months after the Reporting Period.**

The PEL 106B joint venture has proposed the drilling of four exploration wells.

The PPL 239 joint venture commenced production of raw gas from Middleton-1 and Brownlow-1 in January 2012. Production will continue as required during the year.

The PEL106A Operator (Drillsearch) is proposing to drill four wells and conduct cased-hole DSTs on Paprika-1 and Cadenza-1.

Finalisation of the reprocessing of the Spinel-Raven-Paranta 3D seismic survey will occur in the first half of 2013.

## 12 EXPENDITURE STATEMENT

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Pursuant to Regulation 33(3) under the Act

Confidential (attached under separate cover).