

**INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR  
GEOTHERMAL EXPLORATION LICENCE GEL 281**

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1. 14 November 2007      Geothermal Exploration Licence GEL 281 granted  
  
   Interests:      Osiris Energy Pty Ltd      100%  
  
   Expiry Date: 13 November 2012
2. 14 November 2007      Memorandum entering GEL 281 on the public register
3. 22 November 2007      Gazettal of Grant of Licence
4. 16 June 2010              Memorandum entering notation of change of name on the  
   public register.  
  
   From:              Osiris Energy Pty Ltd  
   To:                 Osiris Energy Ltd
5. 12 August 2011         Variation of licence conditions
6. 12 August 2011         Memorandum entering variation of licence conditions on  
   the public register.

**Petroleum and Geothermal Energy Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 281 and 502**

1. Variation of licence conditions is hereby entered on the public register.



**BARRY A. GOLDSTEIN  
Executive Director  
Petroleum and Geothermal Division  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources Development**

Date: 12 August 2011

Ref: 27/2/447  
27/2/567

# **Petroleum and Geothermal Energy Act 2000**

## **VARIATION OF GEOTHERMAL EXPLORATION LICENCE GEL 281**

I, BARRY ALAN GOLDSTEIN, Executive Director, Petroleum and Geothermal Division, Minerals and Energy Resources, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Tom Koutsantonis, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009, hereby vary the conditions of the above-mentioned licences, held by -

**Osiris Energy Ltd**  
ACN 116 203 019

Condition 1 of the licence is omitted and the following substituted:

- “ 1. During the term of the licence, the Licensee shall carry out or cause to be carried out exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Year one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

| <b>Year of Term of Licence</b> | <b>Minimum Work Requirements</b>   |
|--------------------------------|--|
| One                            | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Two                            | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Three                          | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Four                           | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Five                           | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li><li>• <i>Year 5 work program to be conducted anywhere within the boundaries of GELs 281 and 502.</i></li></ul> |

”

Dated: 12 August 2011



**BARRY A. GOLDSTEIN**  
**Executive Director**  
**Petroleum and Geothermal Division**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources Development**

***Petroleum and Geothermal Energy Act 2000***  
**S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES**  
**GELs 220, 221, 223 and 281**

1. Notation of change of company name –

From: Osiris Energy Pty Ltd  
To: Osiris Energy Ltd

is hereby entered on the public registers.



**BARRY A. GOLDSTEIN**  
**Director Petroleum and Geothermal**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources**  
**Development**

Date: 16 June 2010

File: 27/2/370  
27/2/371  
27/2/373  
27/2/447

## PETROLEUM ACT 2000

*Grant of Geothermal Exploration Licence—GEL 281*

NOTICE is hereby given that the undermentioned Geothermal Exploration Licence has been granted under the provisions of the Petroleum Act 2000, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573.

| No. of Licence | Licensee              | Locality     | Expiry           |
|----------------|-----------------------|--------------|------------------|
| GEL 281        | Osiris Energy Pty Ltd | Cooper Basin | 13 November 2012 |

*Description of Area—GEL 281*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°32'00"S GDA94 and longitude 140°06'00"E GDA94, thence east to longitude 140°10'00"E GDA94, south to latitude 27°42'00"S GDA94, east to longitude 140°13'00"E GDA94, south to latitude 27°46'00"S GDA94, west to longitude 140°11'00"E GDA94, south to latitude 27°47'00"S GDA94, west to longitude 140°10'00"E GDA94, south to latitude 27°48'00"S GDA94, west to longitude 140°09'00"E GDA94, north to latitude 27°45'00"S GDA94, west to longitude 140°01'00"E GDA94, north to latitude 27°40'30"S GDA94, west to longitude 139°54'00"E GDA94, north to latitude 27°36'45"S GDA94, east to longitude 139°57'30"E GDA94, north to latitude 27°34'00"S GDA94, east to longitude 140°06'00"E GDA94 and north to the point of commencement.

Area: 482 km<sup>2</sup> approximately.

Dated 14 November 2007.

B. A. GOLDSTEIN, Director Petroleum and Geothermal  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources Development

**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCE  
GEL 281**

1. This Licence granted on 14 November 2007 is hereby entered on the public register.
2. Interests in the licence are:-

Osiris Energy Pty Ltd

100%



**BARRY A. GOLDSTEIN  
Director Petroleum and Geothermal  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources  
Development**

Date: 14 November 2007

Ref: 27/2/447

# PETROLEUM ACT 2000

## GEOTHERMAL EXPLORATION LICENCE

### GEL 281

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Primary Industries and Resources, in the State of South Australia pursuant to the provisions of the *Petroleum Act 2000* and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegation dated 28 March 2002, (refer Government Gazette dated 11 April 2002 page 1573), HEREBY GRANT to:

**Osiris Energy Pty Ltd**  
ACN 116 203 019

(hereinafter referred to as the Licensee) an Exploration Licence in relation to a source of geothermal energy in respect of the area set out below, to have effect for a period of five years and to expire on *13 November* 2012 but carrying the right of renewal under the *Petroleum Act 2000*.

### DESCRIPTION OF AREA

The land comprised in this licence is that part of the State of South Australia described in the Schedule hereto:

### CONDITIONS

1. During the term of the licence, the Licensee shall carry out or cause to be carried out, exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Year one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

| Year of Term of Licence | Minimum Work Requirements  |
|-------------------------|--|
| One                     | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Two                     | <ul style="list-style-type: none"><li>• Geological and geophysical studies.</li></ul>  |
| Three                   | <ul style="list-style-type: none"><li>• Reprocess and reinterpret 150 line km of 2D seismic data.</li></ul>  |
| Four                    | <ul style="list-style-type: none"><li>• Conduct shallow pilot drilling to 600-800m for more detailed thermal measurements or undertake such measurements in an existing suitable well.</li></ul>   |
| Five                    | <ul style="list-style-type: none"><li>• Drill a deep well or re-complete an existing suitable petroleum well to a depth of 2700m to assess the geothermal energy and reservoir quality of a suitable sedimentary heat exchanger.</li></ul> |

2. The Licensee must take all reasonable precautions to minimise the risks of its activities resulting in a significant loss of petroleum reserves or a significant reduction in the recovery of petroleum reserves.
3. The Licensee must:
  - (a) upon commencement of regulated activities under this licence, maintain in force during the term of this licence public liability insurance to cover regulated activities under this licence (including sudden and accidental pollution) in the name of the Licensee for a sum not less than twenty million dollars (\$20,000,000.00) or such greater sum as specified by the Minister and make such amendments to the terms and conditions of the insurance as the Minister may from time to time require;
  - (b) maintain in force during the drilling of any well or operation in any well, control of well insurance in the name of the Licensee for a sum not less than ten million dollars (\$10,000,000.00) or such greater sum as specified by the Minister and make such amendments to the terms and conditions of the insurance as the Minister may from time to time require;
  - (c) upon request by the Minister, provide the Minister with a cover note or certificate of currency of each insurance policy referred to in paragraphs (a) and (b).
4. The Minister in specifying the levels of insurance accepts no liability for the completeness of their listing, the adequacy of the sum insured, the limit of liability, the scoped coverage, the conditions or exclusions of these insurances in respect to how they may or may not respond to any loss, damage or liability.
5. The Licensee will ensure, when preparing an Environmental Impact Report under Part 12 of the *Petroleum Act 2000*, that the report also includes an assessment of the potential economic consequences for other licensees under the *Petroleum Act 2000* or *Mining Act 1971* and owners of land, arising out of proposed regulated activities to be carried out in the licence area.
6. The Licensee must keep confidential any measurements made in a well which would enable the estimation of petroleum reserves ("Confidential Information") and must not disclose the Confidential Information without first obtaining the written consent of the licensee of the overlapping compatible licence, unless:
  - (a) it is a disclosure required under the Act, this licence or any other law;
  - (b) it is a disclosure which is for the purposes of prosecuting or defending any legal proceedings; or
  - (c) it is information which is or becomes public knowledge other than by breach of this licence condition.
7. A contract or agreement entered into by the licensee to transfer or accept liability for any well or facility constructed for the purpose of undertaking a regulated activity under the *Petroleum Act 1940* or *2000* cannot transfer, limit or exclude liability under the *Petroleum Act 2000* unless written consent of the Minister is obtained.
8. In the event that the Licensee during any year of the term of this licence (a year being the period of twelve calendar months ending on the anniversary of the date upon which the licence comes into force) fails to comply with the work program requirements of this licence, it is an express term of this licence that the Minister then may use discretion to either cancel this licence or authorise such variation to these requirements as the Minister thinks fit.

9. The Licensee shall during periods determined by the Minister, lodge and maintain with the Minister, for the satisfaction of obligations arising under the Act or this licence, a security of \$50,000 (fifty thousand dollars) or such greater sum as specified by the Minister from time to time.

("the Security").

9.1 The Security shall be lodged in the form of either;

(a) cash; or

(b) an unconditional, irrevocable bank guarantee or letter of credit in a form, and from a financial institution, approved by the Minister,

9.2 Interest will not be payable by the Minister to the Licensee on any cash Security.

9.3 All charges incurred by the Licensee in obtaining and maintaining the Security, shall be met by the Licensee.

9.4 If upon expiry, this Licence is not renewed and the Minister is satisfied that there are no further obligations under this Licence or the Act, the Minister will return the Security to the Licensee.

Date: ..... 14 Nov ..... 2007



.....  
**BARRY A. GOLDSTEIN**  
**Director Petroleum and Geothermal**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources Development**

Signed by the said LICENSEE

Date: 6<sup>th</sup> November ..... 2007



.....  
Authorised Representative

IAN REID  
.....

Name

DIRECTOR  
.....

Position

OSIRIS ENERGY PTY LTD  
.....

Company

# GEOTHERMAL EXPLORATION LICENCE

## GEL 281

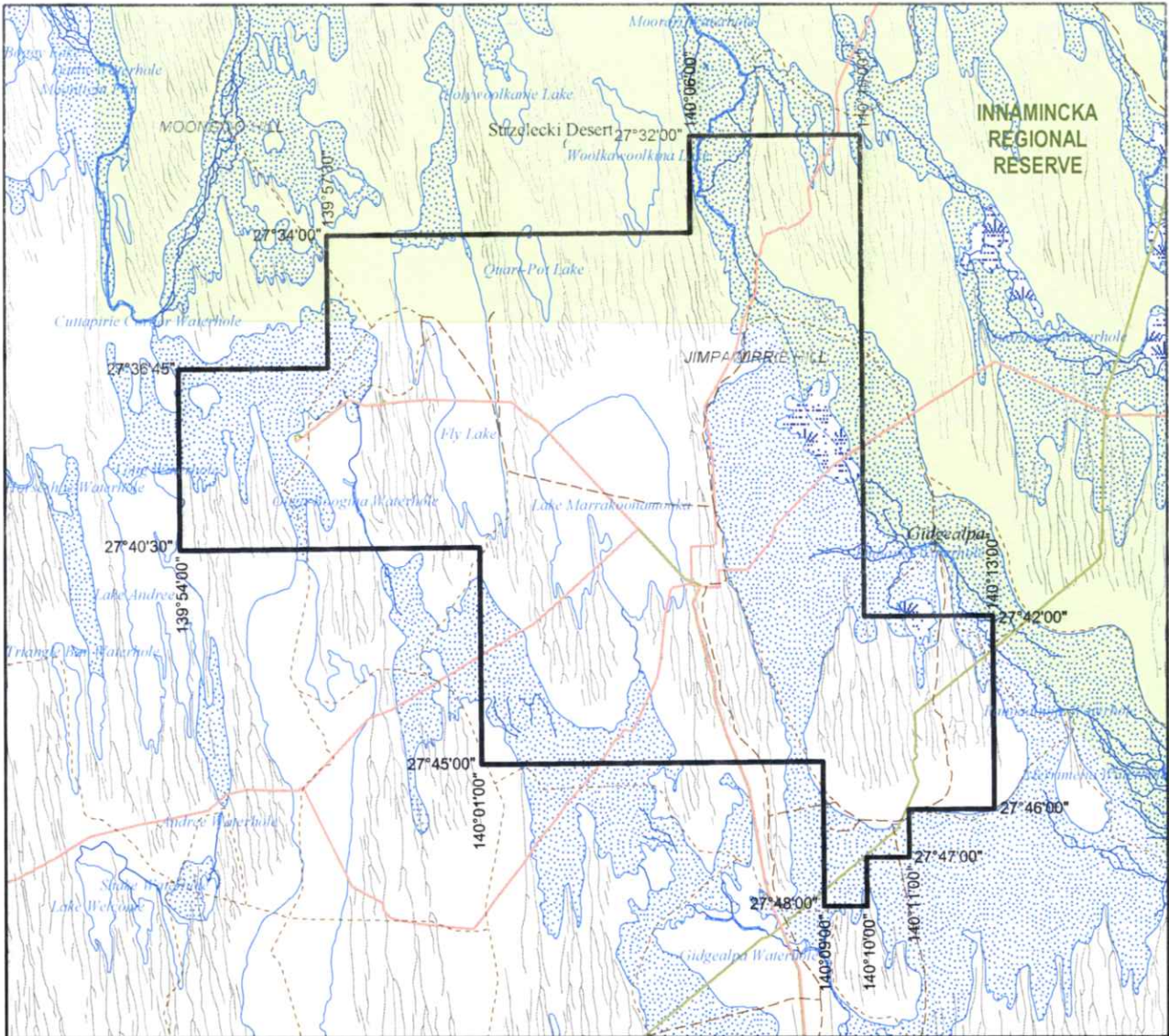
### THE SCHEDULE

#### Description of Area

All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 27°32'00"S GDA94 and longitude 140°06'00"E GDA94, thence east to longitude 140°10'00"E GDA94, south to latitude 27°42'00"S GDA94, east to longitude 140°13'00"E GDA94, south to latitude 27°46'00"S GDA94, west to longitude 140°11'00"E GDA94, south to latitude 27°47'00"S GDA94, west to longitude 140°10'00"E GDA94, south to latitude 27°48'00"S GDA94, west to longitude 140°09'00"E GDA94, north to latitude 27°45'00"S GDA94, west to longitude 140°01'00"E GDA94, north to latitude 27°40'30"S GDA94, west to longitude 139°54'00"E GDA94, north to latitude 27°36'45"S GDA94, east to longitude 139°57'30"E GDA94, north to latitude 27°34'00"S GDA94, east to longitude 140°06'00"E GDA94, and north to the point of commencement.

AREA: **482** square kilometres approximately.



SCALE 1:250 000



Note: There is no warranty that the boundary of this licence is correct in relation to other features of the map. The boundary is to be ascertained by reference to the Geocentric Datum of Australia (GDA94) and the schedule.

THE PLAN HEREINBEFORE REFERRED TO

## GEOTHERMAL EXPLORATION LICENCE NO: 281



Government of South Australia  
Primary Industries and Resources SA

SR 27/2/447

AREA: 482 sq km (approx)