

## INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR GEOTHERMAL EXPLORATION LICENCE GEL 213

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1. 22 September 2005      Memorandum entering GEL 213 on the public register.  
  
   Expiry Date: 21 September 2010
2. 22 September 2005      Geothermal Exploration Licence GEL 213  
  
   Interests: Green Rock Energy Limited    100%
3. 22 September 2005      Memorandum of notation of lodgement of security.
4. 29 September 2005      Gazettal of Grant of GEL 213.
5. 6 October 2005          Erratum of Gazettal of Grant of GEL 213.
6. 7 June 2006              Suspension of GEL 213 from and including 7 June 2006 to 14 February 2007.  
  
   New Expiry Date: 1 June 2011
7. 7 June 2006              Memorandum entering suspension on the public register.
8. 15 June 2006              Gazettal of Suspension
9. 30 May 2007              Memorandum entering variation on the public register.
10. 27 April 2009            Suspension of licence from and including 30 April 2009 to 31 July 2009.  
  
   New expiry date of GEL 213 is now 2 September 2011.
11. 27 April 2009            Memorandum entering suspension of licence on the public register.
12. 30 April 2009            Gazettal of suspension of licence.
13. 15 December 2009      Variation of Licence Conditions.
14. 15 December 2009      Memorandum entering variation on public register.
15. 23 December 2016      Memorandum entering notation of discharge of security on the public register.

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

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES**  
**GELs 128, 206, 213, 244, 245, 246, 247, 248, 282, 283, 284, 366,**  
**367, 368, 369, 370, 371, 372, 373, 374, 375, 376 and 557**

1. Notation of discharge of security is hereby entered on the public registers.



**BARRY A. GOLDSTEIN**  
**Executive Director**  
**Energy Resources Division**  
**Department of State Development**  
**Delegate of the Minister for Mineral Resources and Energy**

Date: 23 December 2016

Ref: 27/2/00230  
27/2/00335  
27/2/00356  
27/2/00403 – 27/2/00407  
27/2/00448 – 27/2/00450  
27/2/00521  
F2010/000241

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

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 128, 129, 161, 162, 163, 206 and 213**

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



**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: 15 December 2009

Ref: 27/2/230; 27/2/231; 27/2/275;  
27/2/276; 27/2/277; 27/2/335;  
27/2/356;

# Petroleum and Geothermal Energy Act 2000

## VARIATION OF GEOTHERMAL EXPLORATION LICENCE GEL 213

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, 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 Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009 vary the conditions of the above-mentioned licence, held by -

### Green Rock Energy Limited

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

- “ 1. During the term of the licences, the Licensee shall carry out or cause to be carried out exploratory operations on the area comprised in the licences 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>• Borehole breakout analysis of Blanche No. 1 well – to ascertain magnitude of principal horizontal stresses.</li><li>• Geological and geophysical studies.</li></ul> <i>Note: Year 1 work program to be conducted anywhere within the boundaries of GELs 128, 129, 161, 162, 163, 206 and 213.</i>
Two	<ul style="list-style-type: none"><li>• Mini-fracture stimulation in Blanche No. 1 well</li><li>• Geological and geophysical studies</li></ul> <i>Note: Year 2 work program to be conducted anywhere within the boundaries of GELs 128, 129, 161, 162, 163, 206 and 213.</i>
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></ul>

”

Dated: 15 December 2009



BARRY 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

*Suspension of Geothermal Exploration Licences—  
GELs 128, 129, 161, 162, 163, 206 and 213*

PURSUANT to section 90 of the Petroleum Act 2000, notice is hereby given that the abovementioned Geothermal Exploration Licences have been suspended under the provisions of the Petroleum Act 2000, from and including 30 April 2009 until 31 July 2009, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573.

The expiry date of GELs 128, 129, 161, 162 and 163 is now determined to be 2 September 2009.

The expiry date of GEL 206 is now determined to be 2 September 2010.

The expiry date of GEL 213 is now determined to be 2 September 2011.

Dated 27 April 2009.

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

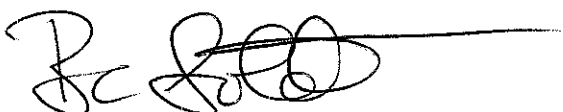
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***Petroleum Act 2000***  
**S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 128, 129, 161, 162, 163, 206 AND 213**

1. Suspension of licences from and including 30 April 2009 to 31 July 2009 is hereby entered on the public register.
2. The expiry date of GELs 128, 129, 161, 162 and 163 is now 2 September 2009.
3. The expiry date of GEL 206 is now 2 September 2010.
4. The expiry date of GEL 213 is now 2 September 2011.



**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: 27 April 2009

Ref:	27/2/230	27/2/277
	27/2/231	27/2/335
	27/2/275	27/2/356
	27/2/276	

***Petroleum Act 2000***  
**S.90**

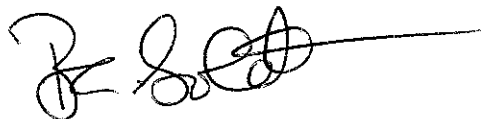
**SUSPENSION OF  
GEOTHERMAL EXPLORATION LICENCES  
GELs 128, 129, 161, 162, 163, 206 AND 213**

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Department of 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 delegated powers dated 28 March 2002, Gazetted 11 April 2002, page 1573 –

(a) suspend geothermal exploration licences exploration licence GELs 128, 129, 161, 162, 163, 206 and 213 for the period from and including 30 April 2009 to 31 July 2009.

1. No regulated activities are permitted to be carried out during the period of the suspension.
2. The expiry date of GELs 128, 129, 161, 162 and 163 is now 2 September 2009.
3. The expiry date of GEL 206 is now 2 September 2010.
4. The expiry date of GEL 213 is now 2 September 2011.

Dated: 27 April 2009



**BARRY 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

## VARIATION OF GEOTHERMAL EXPLORATION LICENCE GEL 213

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Division, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 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 delegated powers dated 28 March 2002, Gazetted 11 April 2002, page 1573 vary the conditions of geothermal exploration licence GEL 213, held by -

### Green Rock Energy Limited

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:-

Year of Term of Licence	Minimum Work Requirements
One	<ul style="list-style-type: none"><li>• Borehole breakout analysis of Blanche No. 1 well – to ascertain magnitude of principal horizontal stresses.</li><li>• Geological and geophysical studies.</li></ul> <p><i>Note: Year 1 work program to be conducted anywhere within the boundaries of GELs 128, 129, 161, 162, 163, 206 and 213.</i></p>
Two	<ul style="list-style-type: none"><li>• Mini-fracture stimulation in Blanche No. 1 well.</li><li>• Geological and geophysical studies.</li></ul> <p><i>Note: Year 2 work program to be conducted anywhere within the boundaries of GELs 128, 129, 161, 162, 163, 206 and 213.</i></p>
Three	<ul style="list-style-type: none"><li>• Drill a deep well (4,500 to 6,000 metres).</li><li>• Fracture stimulation.</li><li>• Microseismic monitoring.</li></ul> <p><i>Note: Year 3 work program to be conducted anywhere within the boundaries of GELs 128, 129, 161, 162, 163, 206 and 213.</i></p>
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></ul>
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Dated: 30 May 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**

***Petroleum Act 2000***  
**S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES**  
**GEL 128, 129, 161, 162, 163, 206 and 213**

1. Variation of Licence Conditions is hereby entered on the public register.



**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: 30 May 2007

Ref: 27/2/230  
27/2/231  
27/2/275  
27/2/276  
27/2/277  
27/2/355  
27/2/356

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PETROLEUM ACT 2000*Suspension of Geothermal Exploration Licences—  
GEL 206 and GEL 213*

PURSUANT to section 90 of the Petroleum Act 2000, notice is hereby given that pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573, the abovementioned Exploration Licences have been suspended under the provisions of the Petroleum Act 2000 as follows:

GEL 206—from and including 7 June 2006 to 18 July 2006;

GEL 213—from and including 7 June 2006 to 14 February 2007.

The expiry date of Exploration Licences GEL 206 and GEL 213 is now determined to be 1 June 2010 and 1 June 2011 respectively.

Dated 7 June 2006.

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

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***Petroleum Act 2000***  
**S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCE  
GEL 213**

1. Suspension of licence from and including 7 June 2006 to 14 February 2007 is hereby entered on the public register.
2. Expiry date of GEL 213 is now 1 June 2011.



**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: 7 June 2006

Ref: 27/2/356

***Petroleum Act 2000***  
**S.90**

**SUSPENSION OF  
GEOTHERMAL EXPLORATION LICENCE GEL 213**

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Department of 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 delegated powers dated 28 March 2002, Gazetted 11 April 2002, page 1573 –

- (a) suspend geothermal exploration licence GEL 213 for the period from and including 7 June 2006 to 14 February 2007.
- 1. No regulated activities are permitted to be carried out during the period of the suspension.
- 2. The expiry date of GEL 213 is now determined to be 1 June 2011.

Dated: 7 June 2006



**BARRY 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

## ERRATUM

*Grant of Geothermal Exploration Licence—GEL 213*

NOTICE is hereby given that the abovementioned grant of a Geothermal Exploration Licence was incorrectly described in *Gazette* No. 93 dated 29 September 2005, page 3531. Details of the amended notice are as follows:

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	Area in km <sup>2</sup>	Reference
GEL 213	Green Rock Energy Limited	Near Roxby Downs, South Australia	206	27/02/356

*Description of Area—GEL 213*

All that part of the State of South Australia, bounded as follows: Commencing at a point being the intersection of latitude 30°22'20"S GDA94 and longitude 136°36'00"E GDA94, thence east to longitude 136°41'06"E GDA94, south to latitude 30°36'00"S GDA94, west to longitude 136°36'00"E GDA94 and north to the point of commencement.

Area: 206 km<sup>2</sup> approximately.

Dated 22 September 2005.

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

## PETROLEUM ACT 2000

*Grant of Geothermal Exploration Licence—GEL 207*

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	Area in km <sup>2</sup>	Reference
GEL 213	Green Rock Energy Limited	Near Roxby Downs, South Australia	206	27/02/356

*Description of Area—GEL 213*

All that part of the State of South Australia, bounded as follows: Commencing at a point being the intersection of latitude 30°22'20"S GDA94 and longitude 136°36'00"E GDA94, thence east to longitude 136°41'06"E GDA94, south to latitude 30°36'00"S GDA94, west to longitude 136°36'00"E GDA94 and north to the point of commencement.

Area: 206 km<sup>2</sup> approximately.

Dated 22 September 2005.

B. A. GOLDSTEIN, Director Petroleum,  
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 LICENCES**  
**GELs 128, 129, 161, 162, 163, 206 and 213**

1. Notation of lodgement of security is hereby entered on the public register.

A handwritten signature in black ink, appearing to read 'Barry Goldstein', with a long horizontal stroke extending to the right.

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

Date: 22 September 2005

File: 27/2/356



**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCE  
GEL 213**

1. This Licence granted on 22 September 2005 is hereby entered on the public register.
2. Interests in the licence are:-

Green Rock Energy Limited	100%
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**BARRY A. GOLDSTEIN  
Director Petroleum  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources Development**

Date: 22 September 2005

Ref: 27/2/356

# **PETROLEUM ACT 2000**

## **GEOHERMAL EXPLORATION LICENCE**

### **GEL 213**

I, BARRY ALAN GOLDSTEIN, Director Petroleum, 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:

**Green Rock Energy Limited ACN 094 551 336**

(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 21 September 2010 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:-

<b>Year of Term of Licence</b>	<b>Minimum Work Requirements</b>
<b>One</b>	<ul style="list-style-type: none"><li>• Geological and geophysical review.</li></ul>
<b>Two</b>	<ul style="list-style-type: none"><li>• Re-entry (if possible) and geophysical logging of a drill hole.</li></ul>
<b>Three</b>	<ul style="list-style-type: none"><li>• Drilling or deepening of existing stratigraphic well to 1500-2000 metres.</li></ul>
<b>Four</b>	<ul style="list-style-type: none"><li>• Geological and geophysical review.</li><li>• Economic re-evaluation</li><li>• Design of pilot programme.</li></ul>
<b>Five</b>	<ul style="list-style-type: none"><li>• Drill 1 pilot well.</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: 22 September.....2005



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BARRY A. GOLDSTEIN

**Director Petroleum**

**Minerals and Energy Resources**

**Primary Industries and Resources SA**

**Delegate of the Minister for Mineral Resources Development**

Signed by the said LICENSEE

Date:.....07. 09. ....2005

.....*Adrian Larking*.....  
Authorised Representative

.....ADRIAN LARKING.....  
Name

.....MANAGING DIRECTOR.....  
Position

.....GREEN ROCK ENERGY LIMITED.....  
Company

.....*Nigel Hooder*.....  
Witness

.....NIGEL HOODER.....  
Name

.....COMPANY SECRETARY.....  
Position

.....GREEN ROCK ENERGY LIMITED.....  
Company

# **GEOHERMAL EXPLORATION LICENCE**

**GEL 213**

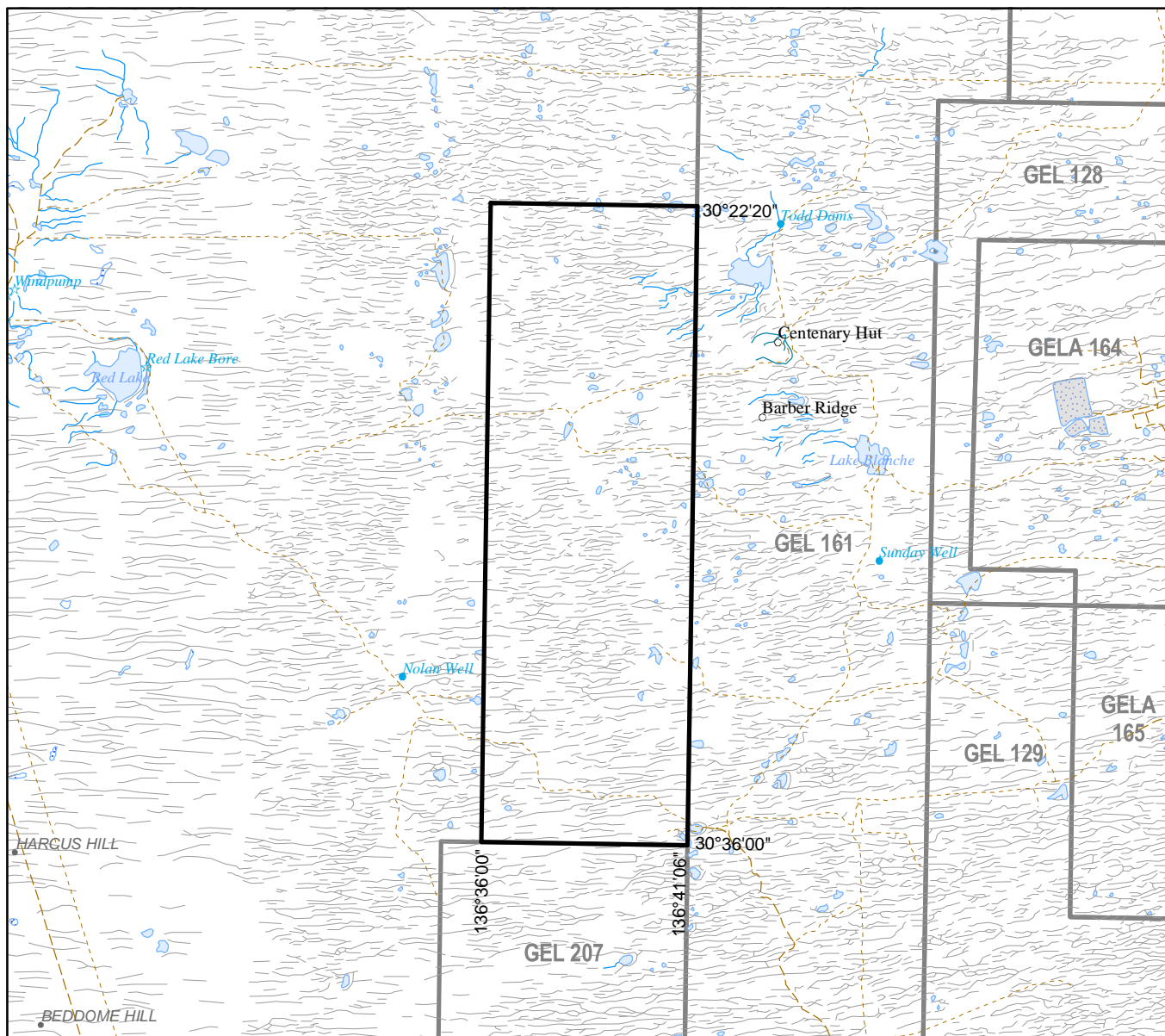
## **THE SCHEDULE**

### **Description of Area**

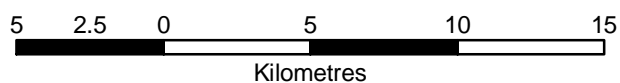
All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 30°22'20"S GDA94 and longitude 136°36'00"E GDA94, thence east to longitude 136°41'06"E GDA94, south to latitude 30°36'00"S GDA94, west to longitude 136°36'00"E GDA94, and north to point of commencement.

AREA: **206** 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

**GEOHERMAL EXPLORATION LICENCE NO: 213**



**Government of South Australia**  
Primary Industries and Resources SA

**SR 27/2/356**

**AREA: 206 sq km (approx)**