

## **INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR GEOTHERMAL EXPLORATION LICENCE GEL 234**

- |                      |  |
|----------------------|--|
| 1. 5 July 2006       | Memorandum entering GEL 234 on the public register.  |
| 2. 5 July 2006       | Geothermal Exploration Licence GEL 234<br><br>Interests:    Torrens Energy Limited    100%   |
| 3. 13 July 2006      | Gazettal of Grant of GEL 234   |
| 4. 28 June 2007      | Notation of receipt of security.   |
| 5. 28 June 2007      | Memorandum entering variation on the public register.  |
| 6. 28 June 2007      | Variation of licence.  |
| 7. 10 September 2008 | Memorandum entering notation of the following registrable dealing on the public register:<br><br>Alliance Agreement dated 8 July 2008 between Torrens Energy Limited and AGL Energy Limited.<br>Ref:    SA 2008-21 |
| 8. 24 March 2010     | Variation of licence conditions.   |
| 9. 24 March 2010     | Memorandum entering variation of licence conditions on the public register.  |
| 10. 7 July 2010      | Consolidation of licence area with GELs 230, 231, 232, 233, 235 and subsequent revocation of licence.  |
| 11. 7 July 2010      | Memorandum entering consolidation of licence area and revocation of licence on the public register.  |

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

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 230, 231, 232, 233, 234 and 235**

1. Consolidation of the adjacent licence areas of GELs 230, 231, 232, 233, 234 and 235, whereby the consolidated licence area is now designated as GEL 230 is hereby entered on the public register.

The total area of GEL 230 is now 2,952 square kilometres approximately.

2. Revocation of GELs 231, 232, 233, 234 and 235 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: 7 July 2010

Ref: 27/2/387 27/2/390  
27/2/388 27/2/391  
27/2/389 27/2/392

# **Petroleum and Geothermal Energy Act 2000**

## **Consolidation of licence areas Geothermal Exploration Licences GELs 230, 231, 232, 233, 234 and 235**

## **Revocation of licences Geothermal Exploration Licences GELs 231, 232, 233, 234 and 235**

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 82 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, hereby;

1. consolidate with effect from 7 July 2010, the adjacent areas of Geothermal Exploration Licences GELs 230, 231, 232, 233, 234 and 235 held by –

**Torrens Energy Limited**  
ACN 118 065 704

The consolidated licence area shall be designated as:

### **Geothermal Exploration Licence GEL 230**

#### **DESCRIPTION OF CONSOLIDATED AREA**

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

Commencing at a point being the intersection of longitude 138°08'20"E GDA94 and latitude 30°57'30"S GDA94, thence south to latitude 31°01'40"S GDA94, east to longitude 138°10'50"E GDA94, south to latitude 31°05'15"S GDA94, east to longitude 138°13'55"E GDA94, south to latitude 31°07'25"S GDA94, east to longitude 138°15'20"E GDA94, south to latitude 31°12'30"S GDA94, east to longitude 138°16'00"E GDA94, south to latitude 31°32'30"S GDA94, west to longitude 138°14'50"E GDA94, south to latitude 31°38'00"S GDA94, west to longitude 138°12'20"E GDA94, south to latitude 31°40'55"S GDA94, west to longitude 138°08'20"E GDA94, south to latitude 31°49'10"S GDA94, west to longitude 138°07'00"E GDA94, south to latitude 31°52'20"S GDA94, west to longitude 138°03'30"E GDA94, south to latitude 31°54'40"S GDA94, west to longitude 138°01'50"E GDA94, south to latitude 31°57'35"S GDA94, west to longitude 137°58'55"E GDA94, south to latitude 32°01'20"S GDA94, west to longitude 137°57'50"E GDA94, south to latitude 32°13'05"S GDA94, west to longitude 137°46'00"E GDA94, north to the southern boundary of Lake Torrens National Park, thence generally northerly along the boundary of the said National Park to latitude 30°57'30"S GDA94 and east to the point of commencement.

AREA: **2952** square kilometres approximately.

2. consequently revoke Geothermal Exploration Licences GELs 231, 232, 233, 234 and 235, with effect from 7 July 2010

As a consequence of the consolidation, the work program forming 'condition 1' of the consolidated GEL 230 comprises:

Year of Term of Licence	Minimum Work Requirements
One	<ul style="list-style-type: none"><li>• Geological and geophysical review. <i>(to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234 and 235.)</i></li></ul>
Two	<ul style="list-style-type: none"><li>• Geological and geophysical review. <i>(to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278 and 285.)</i></li></ul>
Three	<ul style="list-style-type: none"><li>• Complete and case 5 fully cored heat flow holes to a depth of 400 to 500 metres for a total depth of 2000 to 2500 metres; and</li><li>• Geological and geophysical review. <i>(to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278, 285, 407, 408, 409 and 410.)</i></li></ul>
Four	<ul style="list-style-type: none"><li>• Geological and geophysical review. <i>(to be conducted anywhere within the boundaries of GELs 230, 278, 285 and 407.)</i></li></ul>
Five	<ul style="list-style-type: none"><li>• Drill 1 test well to a depth of 4000 to 5000 metres <i>(to be conducted anywhere within the boundaries of GELs 230, 278, 285 and 407.)</i></li></ul>

Dated: 7 July 2010



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

The following signature evidences the consent of the licensee to the consolidation of GELs 230, 231, 232, 233, 234 and 235 as set out in this document and made pursuant to Section 82 of the *Petroleum and Geothermal Energy Act 2000*.

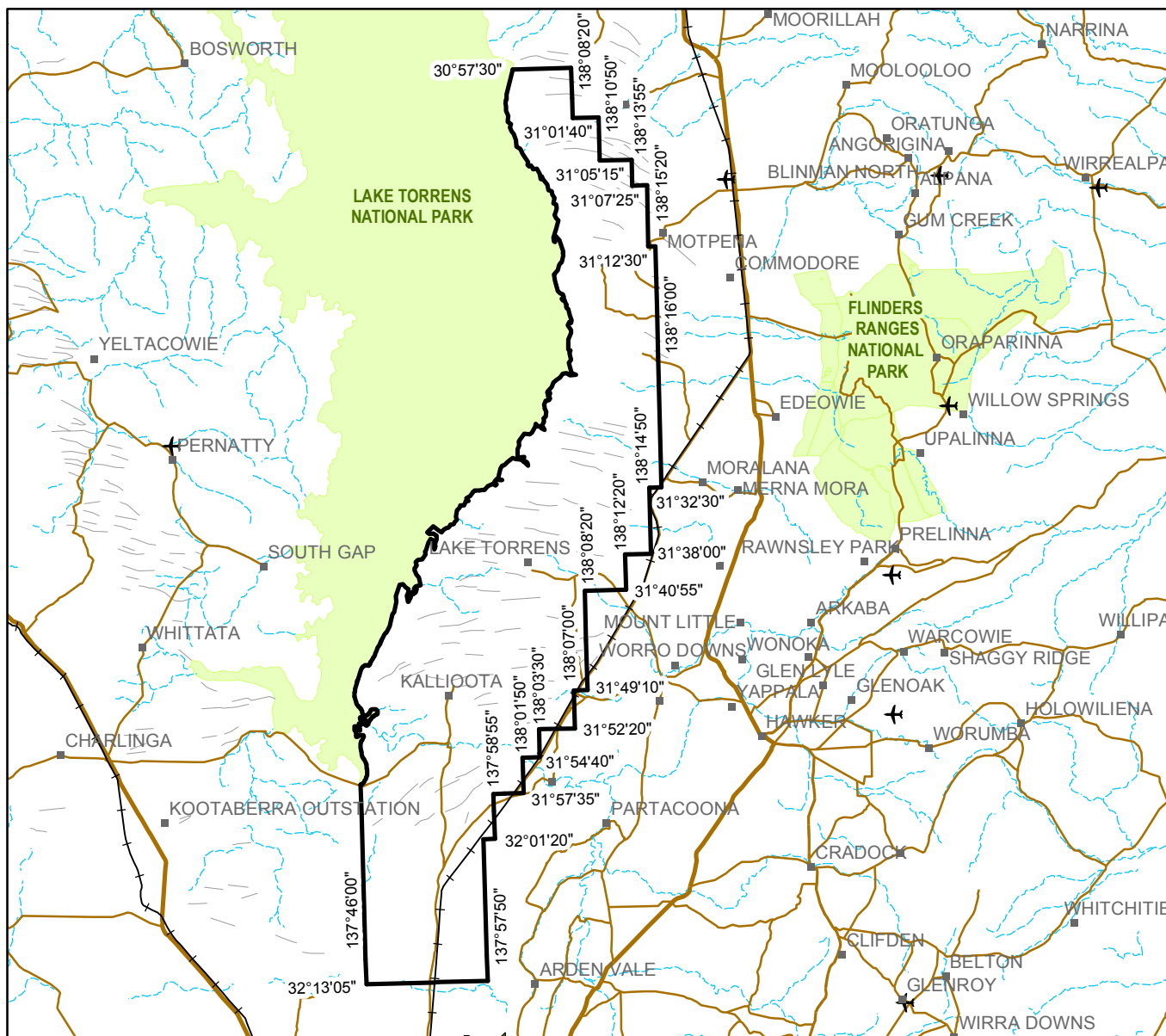
Signed for and on behalf of **Torrens Energy Limited** by its authorised representative:

.....23/6/2010.....  
Date

..........  
Authorised Representative

.....JEROME RANDABEL.....  
Name

.....EXPLORATION MANAGER.....  
Position



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: 230**



Government of South Australia  
Primary Industries and Resources SA

SR 27/2/387

AREA: 2952 sq km (approx)

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

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 230, 231, 232, 233,  
234, 235, 278 AND 285**

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: 24 March 2010

Ref: 27/2/387	27/2/391
27/2/388	27/2/392
27/2/389	27/2/442
27/2/390	27/2/451

# Petroleum and Geothermal Energy Act 2000

## VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 230, 231, 232, 233, 234 AND 235

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 licences, held by -

### **Torrens 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>Geological and geophysical review.</li></ul> <i>to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234 and 235</i>
Two	<ul style="list-style-type: none"><li>Geological and geophysical review.</li></ul> <i>to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278 and 285</i>
Three	<ul style="list-style-type: none"><li>Complete and case 5 fully cored heat flow holes to a depth of 400 to 500 metres for a total depth of 2000 to 2500 metres; and</li><li>Geological and geophysical review.</li></ul> <i>to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278, 285, 407, 408, 409 and 410</i>
Four	<ul style="list-style-type: none"><li>Geological and geophysical review.</li></ul> <i>to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278, 285, 407, 408, 409 and 410</i>
Five	<ul style="list-style-type: none"><li>Drill 1 test well to a depth of 4000 to 5000 metres</li></ul> <i>to be conducted anywhere within the boundaries of GELs 230, 231, 232, 233, 234, 235, 278, 285, 407, 408, 409 and 410</i>

Dated: 24 March 2010



**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 226, GEL 227, GEL 228, GEL 229, GEL 230, GEL 231,**  
**GEL 232, GEL 233, GEL 234, GEL 235, GEL 260, GEL 261,**  
**GEL 262, GEL 263, GEL 278, GEL 285, and GEL 293**

SA 2008-21

Notation of registrable dealing as evidenced by Alliance Agreement dated 8 July 2008 between Torrens Energy Limited and AGL Energy Limited 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: 10 September 2008

27/2/383 - 27/2/392  
27/2/419 - 27/2/422  
27/2/442  
27/2/451  
27/2/460

# Petroleum Act 2000

## VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 230, 231, 232, 233, 234 and 235

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 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 the above-mentioned geothermal exploration licences, held by -

### **Torrens Energy Limited** ACN 118 065 704

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

" 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 review. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 and 235)</li></ul>
Two	<ul style="list-style-type: none"><li>Geological and geophysical review. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234, 235, 278 and 285)</li></ul>
Three	<ul style="list-style-type: none"><li>Complete and case 5 fully cored heat flow holes to a depth of 400 to 500 metres for a total depth of 2000 to 2500 metres.</li><li>Geological and geophysical review. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234, 235, 278 and 285)</li></ul>
Four	<ul style="list-style-type: none"><li>Geological and geophysical review. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234, 235, 278 and 285)</li></ul>

Five	<ul style="list-style-type: none"> <li>• Drill 1 test well to a depth of 4000 to 5000 metres. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234, 235, 278 and 285)</li> </ul>
------	---

Dated: 28 June 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  
GELs 230, 231, 232, 233, 234 and 235**

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: 28 June 2007

Files: 27/2/387      27/2/388  
         27/2/389      27/2/390  
         27/2/391      27/2/392

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

**MEMORANDUM**

**GEO THERMAL EXPLORATION LICENCES**  
**GELs 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 260, 261,**  
**262, 263, 278 and 285**

1. Notation of receipt of security 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: 28 June 2007

Files:	27/2/383	27/2/384
	27/2/385	27/2/386
	27/2/387	27/2/388
	27/2/389	27/2/390
	27/2/391	27/2/392
	27/2/419	27/2/420
	27/2/421	27/2/422
	27/2/442	27/2/451

## PETROLEUM ACT 2000

*Grant of Geothermal Exploration Licences—GEL 226, GEL 227, GEL 228, GEL 229, GEL 230, GEL 231, GEL 232, GEL 233, GEL 234 and GEL 235*

NOTICE is hereby given that the undermentioned Geothermal Exploration Licences have been granted with effect from and including 5 July 2006, 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	Licensees	Locality	Date of Expiry	Reference
GEL 226	Torrens Energy Ltd	Adelaide area, South Australia	4 July 2011	27/2/383
GEL 227	Torrens Energy Ltd	Adelaide area, South Australia	4 July 2011	27/2/384
GEL 228	Torrens Energy Ltd	Adelaide area, South Australia	4 July 2011	27/2/385
GEL 229	Torrens Energy Ltd	Mid North area, South Australia	4 July 2011	27/2/386
GEL 230	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/387
GEL 231	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/388
GEL 232	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/389
GEL 233	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/390
GEL 234	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/391
GEL 235	Torrens Energy Ltd	Lake Torrens area, South Australia	4 July 2011	27/2/392

*Description of Area—GEL 226*

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

Commencing at a point being the intersection of latitude 34°17'15"S GDA94 and longitude 138°15'25"E GDA94, thence east to longitude 138°25'35"E GDA94, south to latitude 34°19'30"S GDA94, east to longitude 138°27'55"E GDA94, south to latitude 34°24'35"S GDA94, east to longitude 138°30'25"E GDA94, south to latitude 34°28'30"S GDA94, east to longitude 138°33'05"E GDA94, south to latitude 34°33'50"S GDA94, west to longitude 138°24'10"E GDA94, north to latitude 34°32'30"S GDA94, west to longitude 138°22'35"E GDA94, north to latitude 34°31'15"S GDA94, west to longitude 138°20'35"E GDA94, north to latitude 34°26'55"S GDA94, west to longitude 138°19'00"E GDA94, north to latitude 34°22'15"S GDA94, west to longitude 138°17'25"E GDA94, north to latitude 34°19'40"S GDA94, west to longitude 138°15'25"E GDA94 and north to the point of commencement.

Area: 495 km<sup>2</sup> approximately.

*Description of Area—GEL 227*

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

Commencing at a point being the intersection of latitude 34°15'35"S GDA94 and longitude 138°46'50"E GDA94, thence east to longitude 139°02'05"E GDA94, south to latitude 34°26'55"S GDA94, west to longitude 138°46'50"E GDA94 and north to the point of commencement.

Area: 490 km<sup>2</sup> approximately.

*Description of Area—GEL 228*

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

Commencing at a point being the intersection of latitude 34°04'15"S GDA94 and longitude 138°46'50"E GDA94, thence east to longitude 139°02'05"E GDA94, south to latitude 34°15'35"S GDA94, west to longitude 138°46'50"E GDA94 and north to the point of commencement.

Area: 491 km<sup>2</sup> approximately.

*Description of Area—GEL 229*

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

Commencing at a point being the intersection of latitude 33°14'00"S GDA94 and longitude 138°34'40"E GDA94, thence east to longitude 138°45'55"E GDA94, south to latitude 33°29'15"S GDA94, west to longitude 138°34'40"E GDA94 and north to the point of commencement.

Area: 492 km<sup>2</sup> approximately.

*Description of Area—GEL 230*

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

Commencing at a point being the intersection of longitude 138°08'20"E GDA94 and latitude 30°57'30"S GDA94, thence south to latitude 31°01'40"S GDA94, east to longitude 138°10'50"E GDA94, south to latitude 31°05'15"S GDA94, east to longitude 138°13'55"E GDA94, south to latitude 31°07'25"S GDA94, east to longitude 138°15'20"E GDA94, south to latitude 31°12'30"S GDA94, east to longitude 138°16'00"E GDA94, south to latitude 31°17'30"S GDA94, west to the eastern boundary of Lake Torrens National Park, thence generally northerly along the boundary of the said Park to latitude 30°57'30"S GDA94 and east to the point of commencement.

Area: 485 km<sup>2</sup> approximately.

*Description of Area—GEL 231*

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

Commencing at a point being the intersection of longitude 138°16'00"E GDA94 and latitude 31°17'30"S GDA94, thence south to latitude 31°32'30"S GDA94, west to the eastern boundary of Lake Torrens National Park, thence generally north-easterly along the boundary of the said National Park to latitude 31°17'30"S GDA94 and east to the point of commencement.

Area: 496 km<sup>2</sup> approximately.

*Description of Area—GEL 232*

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

Commencing at a point being the intersection of longitude 138°14'50"E GDA94 and latitude 31°32'30"S GDA94, thence south to latitude 31°38'00"S GDA94, west to longitude 138°12'20"E GDA94, south to latitude 31°40'55"S GDA94, west to the eastern boundary of Lake Torrens National Park, thence generally north-easterly along the boundary of the said National Park to latitude 31°32'30"S GDA94 and east to the point of commencement.

Area: 492 km<sup>2</sup> approximately.

*Description of Area—GEL 233*

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

Commencing at a point being the intersection of longitude 138°08'20"E GDA94 and latitude 31°40'55"S GDA94, thence south to latitude 31°49'10"S GDA94, west to the eastern boundary of Lake Torrens National Park, thence generally north-easterly along the boundary of the said National Park to latitude 31°40'55"S GDA94 and east to the point of commencement.

Area: 492 km<sup>2</sup> approximately.

*Description of Area—GEL 234*

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

Commencing at a point being the intersection of longitude 138°07'00"E GDA94 and latitude 31°49'10"S GDA94, thence south to latitude 31°52'20"S GDA94, west to longitude 138°03'30"E GDA94, south to latitude 31°54'40"S GDA94, west to longitude 138°01'50"E GDA94, south to latitude 31°57'35"S GDA94, west to longitude 137°58'55"E GDA94, south to latitude 31°59'00"S GDA94, west to longitude 137°46'00"E GDA94, north to the southern boundary of Lake Torrens National Park, thence generally northerly along the boundary of the said National Park to latitude 31°49'10"S GDA94 and east to the point of commencement.

Area: 494 km<sup>2</sup> approximately.

*Description of Area—GEL 235*

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

Commencing at a point being the intersection of latitude 31°59'00"S GDA94 and longitude 137°46'00"E GDA94, thence east to longitude 137°58'55"E GDA94, south to latitude 32°01'20"S GDA94, west to longitude 137°57'50"E GDA94, south to latitude 32°13'05"S GDA94, west to longitude 137°46'00"E GDA94 and north to the point of commencement.

Area: 492 km<sup>2</sup> approximately.

Dated 5 July 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

**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GEL 226, GEL 227, GEL 228, GEL 229, GEL 230  
GEL 231, GEL 232, GEL 233, GEL 234 and GEL 235**

1. These Licences granted on 5 July 2006 are hereby entered on the public register.
2. Interests in the licence are:-

Torrens Energy Limited                      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: 5 July 2006

Ref: 27/2/383  
27/2/384  
27/2/385  
27/2/386  
27/2/387  
27/2/388  
27/2/389  
27/2/390  
27/2/391  
27/2/390




# **PETROLEUM ACT 2000**

## **GEOHERMAL EXPLORATION LICENCE**

### **GEL 234**

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:

**Torrens Energy Limited** ACN 118 065 704

(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 4 July 2011 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> (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 & 235)
<b>Two</b>	<ul style="list-style-type: none"><li>• Geological and geophysical review.</li><li>• 100km 2D seismic</li></ul> (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 & 235)
<b>Three</b>	<ul style="list-style-type: none"><li>• Complete and case up to 5 fully cored heat flow holes to a depth of 400 to 500 metres.</li><li>• Geological and geophysical review.</li></ul> (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 & 235)

<b>Four</b>	<ul style="list-style-type: none"> <li>• Geological and geophysical review. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 &amp; 235)</li> </ul>
<b>Five</b>	<ul style="list-style-type: none"> <li>• 1 well to a depth of 3 to 4 km. (to be conducted anywhere in the area covered by GELs 230, 231, 232, 233, 234 &amp; 235)</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:.....*5 July*.....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**

**Signed by the said LICENSEE**

Date:.....30/6.....2006

.....*Chris Matthews*.....  
Authorised Representative

.....Chris Matthews.....  
Name

.....Chief Executive Officer.....  
Position

.....Torrens Energy Ltd.....  
Company

.....*Michele Haynes*.....  
Witness

.....MICHELE HAYNES.....  
Name

.....  
Position

.....  
Company

# GEOTHERMAL EXPLORATION LICENCE

## GEL 234

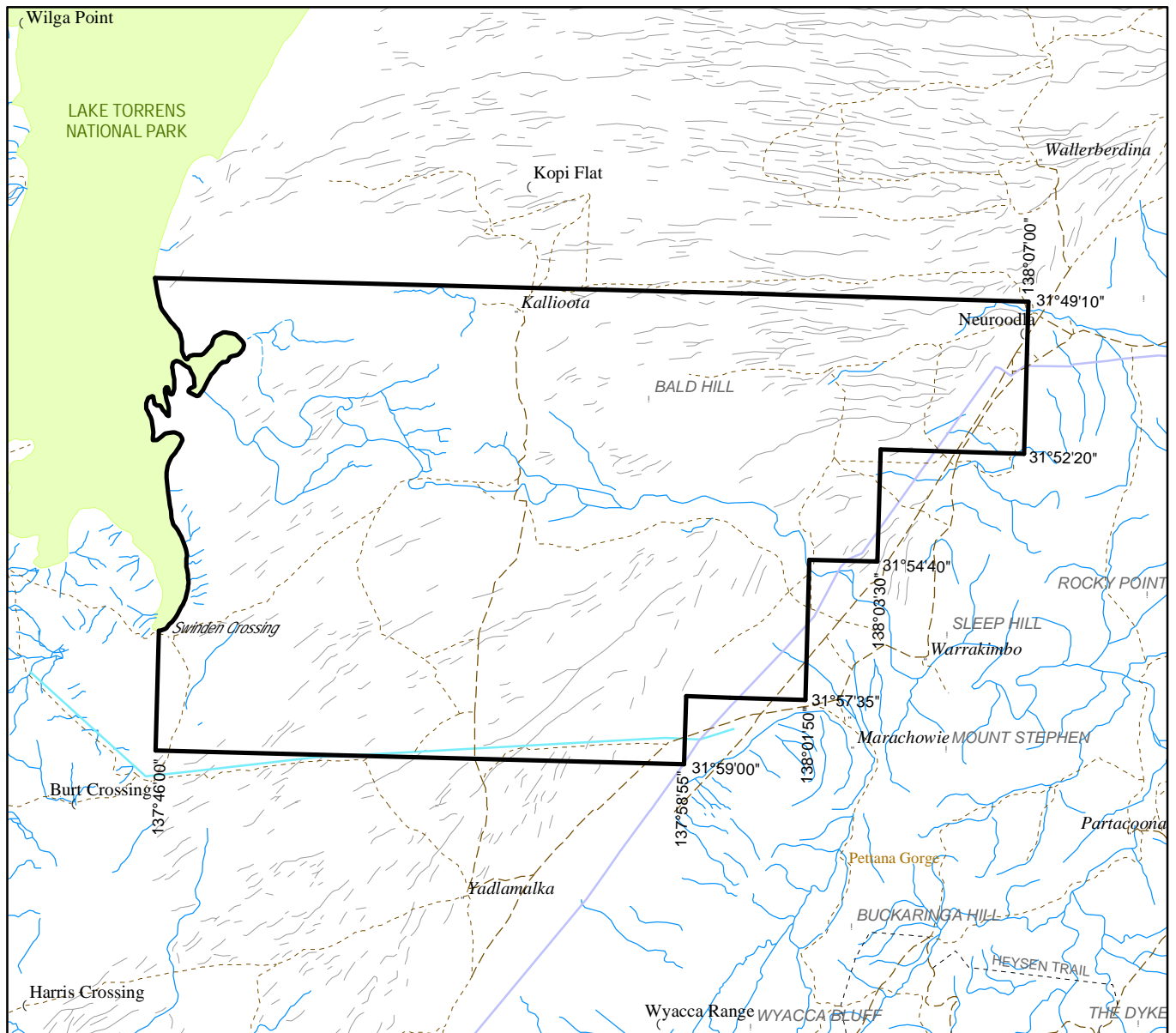
### THE SCHEDULE

#### Description of Area

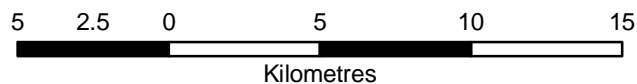
All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of longitude 138°07'00"E GDA94 and latitude 31°49'10"S GDA94, thence south to latitude 31°52'20"S GDA94, west to longitude 138°03'30"E GDA94, south to latitude 31°54'40"S GDA94, west to longitude 138°01'50"E GDA94, south to latitude 31°57'35"S GDA94, west to longitude 137°58'55"E GDA94, south to latitude 31°59'00"S GDA94, west to longitude 137°46'00"E GDA94, north to the southern boundary of Lake Torrens National Park, thence generally northerly along the boundary of the said National Park to latitude 31°49'10"S GDA94 and east to the point of commencement.

AREA: **494** 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: 234**



Government of South Australia  
Primary Industries and Resources SA

SR 27/2/391

AREA: **494** sq km (approx)