

**INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR  
GEOTHERMAL EXPLORATION LICENCE GEL 451**

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1. 17 November 2009      Geothermal Exploration Licence GEL 451 granted  
  
   Interests:  
  
   Gradient Energy Limited                      100%  
  
   Expiry Date: 16 November 2014
2. 17 November 2009      Memorandum entering the grant of GEL 451 on the public register.
3. 26 November 2009      Gazettal of grant of licence.
4. 18 August 2011           Surrender of licence with effect from 16 August 2011.
5. 18 August 2011           Memorandum entering surrender of licence on the public register.
6. 25 August 2011           Gazettal of surrender of licence.

## PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

*Surrender of Geothermal Exploration Licences—GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461*

NOTICE is hereby given that I have accepted surrender of the abovementioned Geothermal Exploration Licences under the provisions of the Petroleum and Geothermal Energy Act 2000, pursuant to delegated powers dated 1 October 2009.

No. of Licence	Licensee	Locality	Date of Surrender	Reference
GEL 448				
GEL 449				
GEL 450				
GEL 451				
GEL 452				
GEL 453				
GEL 454	Gradient Energy Limited	Cooper/Eromanga Basin, South Australia	16 August 2011	27/02/545
GEL 455				
GEL 456				
GEL 457				
GEL 458				
GEL 459				
GEL 460				
GEL 461				

Dated 18 August 2011.

B. 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 448, 449, 450, 451, 452, 453, 454,**  
**455, 456, 457, 458, 459, 460 and 461**

1. Surrender of the abovementioned Geothermal Exploration Licences with effect from 16 August 2011 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: 18 August 2011

Ref: 27/2/545

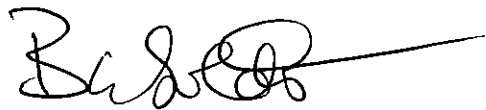
## ***Petroleum and Geothermal Energy Act 2000***

### **SURRENDER OF GEOTHERMAL EXPLORATION LICENCES GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461**

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 the provisions of section 89(2) 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 –

- a) hereby accept the surrender of Geothermal Exploration Licences GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461 held by Gradient Energy Limited with effect from 16 August 2011.

Dated: 18 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

*Grant of Geothermal Exploration Licences—GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461*

NOTICE is hereby given that the undermentioned Geothermal Exploration Licences have been granted with effect from and including 17 November 2009, under the provisions of the Petroleum and Geothermal Energy Act 2000, pursuant to delegated powers dated 1 October 2009.

No. of Licence	Licensee	Locality	Date of Expiry	Reference
GEL 448	Gradient Energy Ltd	Leigh Creek, South Australia	16/11/2014	27/2/545
GEL 449				
GEL 450				
GEL 451				
GEL 452				
GEL 453				
GEL 454				
GEL 455				
GEL 456				
GEL 457				
GEL 458				
GEL 459				
GEL 460				
GEL 461				

*Description of Area—GEL 448*

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

Commencing at a point being the intersection of latitude 30°23'30"S GDA94 and longitude 137°56'00"E GDA94, thence east to longitude 138°05'00"E GDA94, south to latitude 30°26'00"S GDA94, east to longitude 138°05'30"E GDA94, south to latitude 30°37'32"S GDA94, west to longitude 137°55'00"E GDA94, north to latitude 30°33'00"S GDA94, east to longitude 137°56'00"E GDA94 and north to the point of commencement.

Area: 404 km<sup>2</sup> approximately.

*Description of Area—GEL 449*

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

Commencing at a point being the intersection of latitude 29°57'00"S GDA94 and longitude 137°57'30"E GDA94, thence east to longitude 138°09'00"E GDA94, south to latitude 30°11'30"S GDA94, west to longitude 137°57'30"E GDA94 and north to the point of commencement.

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

*Description of Area—GEL 450*

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

Commencing at a point being the intersection of latitude 30°11'30"S GDA94 and longitude 137°46'00"E GDA94, thence east to longitude 138°05'00"E GDA94, south to latitude 30°23'30"S GDA94, west to longitude 137°56'00"E GDA94, north to latitude 30°18'00"S GDA94, west to longitude 137°48'00"E GDA94, north to latitude 30°14'00"S GDA94, west to longitude 137°46'00"E GDA94 and north to the point of commencement.

Area: 489 km<sup>2</sup> approximately.

*Description of Area—GEL 451*

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

Commencing at a point being the intersection of latitude 29°57'00"S GDA94 and longitude 137°46'00"E GDA94, thence east to longitude 137°57'30"E GDA94, south to latitude 30°11'30"S GDA94, west to longitude 137°46'00"E GDA94 and north to the point of commencement.

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

*Description of Area—GEL 452*

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

Commencing at a point being the intersection of latitude 29°57'00"S GDA94 and longitude 138°09'00"E GDA94, thence east to longitude 138°15'00"E GDA94, south to latitude 29°58'00"S GDA94, east to longitude 138°16'00"E GDA94, south to latitude 29°59'00"S GDA94, east to longitude 138°17'00"E GDA94, south to latitude 30°00'00"S GDA94, east to longitude 138°18'00"E GDA94, south to latitude 30°01'00"S GDA94, east to longitude 138°19'00"E GDA94, south to latitude 30°02'00"S GDA94, east to longitude 138°20'00"E GDA94, south to latitude 30°04'00"S GDA94, east to longitude 138°21'00"E GDA94, south to latitude 30°05'00"S GDA94, east to longitude 138°22'00"E GDA94, south to latitude 30°06'00"S GDA94, east to longitude 138°23'00"E

GDA94, south to latitude 30°07'00"S GDA94, east to longitude 138°23'30"E GDA94, south to latitude 30°07'30"S GDA94, east to longitude 138°24'00"E GDA94, south to latitude 30°11'30"S GDA94, west to longitude 138°09'00"E GDA94 and north to the point of commencement.

Area: 500 km<sup>2</sup> approximately.

*Description of Area—GEL 453*

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

Commencing at a point being the intersection of latitude 30°11'30"S GDA94 and longitude 138°05'00"E GDA94, thence east to longitude 138°16'30"E GDA94, south to latitude 30°26'00"S GDA94, west to longitude 138°05'00"E GDA94 and north to the point of commencement.

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

*Description of Area—GEL 454*

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

Commencing at a point being the intersection of latitude 30°08'00"S GDA94 and longitude 138°24'00"E GDA94, thence east to longitude 138°25'00"E GDA94, south to latitude 30°09'00"S GDA94, east to longitude 138°26'00"E GDA94, south to latitude 30°10'00"S GDA94, east to longitude 138°27'00"E GDA94, south to latitude 30°11'00"S GDA94, east to longitude 138°28'00"E GDA94, south to latitude 30°12'00"S GDA94, east to longitude 138°29'00"E GDA94, south to latitude 30°13'00"S GDA94, east to longitude 138°30'00"E GDA94, south to latitude 30°14'00"S GDA94, east to longitude 138°31'00"E GDA94, south to latitude 30°15'00"S GDA94, east to longitude 138°32'30"E GDA94, south to latitude 30°22'00"S GDA94, west to longitude 138°16'30"E GDA94, north to latitude 30°11'30"S GDA94, east to longitude 138°24'00"E GDA94 and north to the point of commencement.

Area: 493 km<sup>2</sup> approximately.

*Description of Area—GEL 455*

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

Commencing at a point being the intersection of latitude 30°22'00"S GDA94 and longitude 138°29'00"E GDA94, thence east to longitude 138°40'30"E GDA94, south to latitude 30°36'30"S GDA94, west to longitude 138°29'00"E GDA94 and north to the point of commencement.

Area: 493 km<sup>2</sup> approximately.

*Description of Area—GEL 456*

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

Commencing at a point being the intersection of latitude 30°15'00"S GDA94 and longitude 138°32'30"E GDA94, thence east to longitude 138°33'00"E GDA94, south to latitude 30°16'00"S GDA94, east to longitude 138°36'00"E GDA94, south to latitude 30°17'00"S GDA94, east to longitude 138°40'00"E GDA94, south to latitude 30°18'00"S GDA94, east to longitude 138°43'00"E GDA94, south to latitude 30°19'00"S GDA94, east to longitude 138°46'00"E GDA94, south to latitude 30°20'00"S GDA94, east to longitude 138°48'00"E GDA94, south to latitude 30°21'00"S GDA94, east to longitude 138°51'00"E GDA94, south to latitude 30°22'00"S GDA94, east to longitude 138°53'00"E GDA94, south to latitude 30°23'00"S GDA94, east to longitude 138°56'00"E GDA94, south to latitude 30°28'30"S GDA94, west to longitude 138°40'30"E GDA94, north to latitude 30°22'00"S GDA94, west to longitude 138°32'30"E GDA94 and north to the point of commencement.

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

*Description of Area—GEL 457*

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

Commencing at a point being the intersection of latitude 30°28'30"S GDA94 and longitude 138°40'30"E GDA94, thence east to longitude 138°56'00"E GDA94, south to the northern boundary of the Nepabunna Aboriginal Lands, thence generally south-westerly and south-easterly along the boundary of the Nepabunna and Nantawarrinna Aboriginal Lands to longitude 138°56'00"E GDA94, south to latitude 30°39'00"S GDA94, west to longitude 138°40'30"E GDA94 and north to the point of commencement.

Area: 464 km<sup>2</sup> approximately.

*Description of Area—GEL 458*

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

Commencing at a point being the intersection of latitude 30°39'00"S GDA94 and longitude 138°39'30"E GDA94, thence east to longitude 138°55'00"E GDA94, south to latitude 30°40'00"S GDA94, west to longitude 138°54'00"E GDA94, south to latitude 30°41'00"S GDA94, west to longitude 138°53'00"E GDA94, south to latitude 30°42'00"S GDA94, west to longitude 138°52'00"E GDA94, south to latitude 30°43'00"S GDA94, west to longitude 138°50'00"E GDA94, south to latitude 30°45'00"S GDA94, west to longitude 138°48'00"E GDA94, south to latitude 30°46'00"S GDA94, west to longitude 138°46'00"E GDA94, south to latitude 30°47'00"S GDA94, west to longitude 138°45'00"E GDA94, south to latitude 30°48'00"S GDA94, west to longitude 138°44'00"E GDA94, south to latitude 30°49'00"S GDA94, west to longitude 138°43'00"E GDA94, south to latitude 30°50'00"S GDA94, west to longitude 138°42'00"E GDA94, south to latitude 30°51'00"S GDA94, west to longitude 138°41'00"E GDA94, south to latitude 30°52'00"S GDA94, west to longitude 138°39'30"E GDA94 and north to the point of commencement.

Area: 323 km<sup>2</sup> approximately.

*Description of Area—GEL 459*

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

Commencing at a point being the intersection of latitude 30°45'29"S GDA94 and longitude 138°20'06"E GDA94, thence east to longitude 138°21'30"E GDA94, south to latitude 30°47'00"S GDA94, east to longitude 138°39'30"E GDA94, south to latitude 30°52'00"S GDA94, west to longitude 138°38'30"E GDA94, south to latitude 30°55'30"S GDA94, west to longitude 138°36'00"E GDA94, south to latitude 30°57'00"S GDA94, west to longitude 138°33'00"E GDA94, south to latitude 30°58'00"S GDA94, west to longitude 138°30'30"E GDA94, south to latitude 30°59'00"S GDA94, west to longitude 138°25'30"E GDA94, north to latitude 30°57'46"S GDA94, east to longitude 138°26'40"E GDA94, north to latitude 30°54'18"S GDA94, east to longitude 138°30'25"E GDA94, north to latitude 30°50'54"S GDA94, west to longitude 138°18'13"E GDA94, north to latitude 30°47'11"S GDA94, east to longitude 138°19'09"E GDA94, north to latitude 30°46'21"S GDA94, east to longitude 138°20'06"E GDA94 and north to the point of commencement.

Area: 454 km<sup>2</sup> approximately.

*Description of Area—GEL 460*

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

Commencing at a point being the intersection of latitude 30°36'30"S GDA94 and longitude 138°29'00"E GDA94, thence east to longitude 138°40'30"E GDA94, south to latitude 30°39'00"S GDA94, west to longitude 138°39'30"E GDA94, south to latitude 30°47'00"S GDA94, west to longitude 138°21'30"E GDA94, north to latitude 30°45'29"S GDA94, west to longitude 138°21'11"E GDA94, north to latitude 30°44'51"S GDA94, east to longitude 138°22'07"E GDA94, north to latitude 30°44'04"S GDA94, east to longitude 138°23'10"E GDA94, north to latitude 30°39'46"S GDA94, west to longitude 138°21'27"E GDA94, north to latitude 30°38'33"S GDA94, east to longitude 138°29'00"E GDA94 and north to the point of commencement.

Area: 498 km<sup>2</sup> approximately.

*Description of Area—GEL 461*

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

Commencing at a point being the intersection of latitude 30°22'00"S GDA94 and longitude 138°16'30"E GDA94, thence east to longitude 138°19'00"E GDA94, south to latitude 30°37'32"S GDA94, west to longitude 138°05'30"E GDA94, north to latitude 30°26'00"S GDA94, east to longitude 138°16'30"E GDA94 and north to the point of commencement.

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

Dated 17 November 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

## RAIL SAFETY ACT 2007

*Exemption*

TAKE notice that pursuant to section 7 (1) of the Rail Safety Act 2007 (the Act), I, Patrick Frederick Conlon, Minister for Transport in the State of South Australia, do hereby exempt from the provisions of the Act the Adelaide Aqua D&C Consortium.

This exemption takes effect from 1 December 2009 and remains valid for the period for which the underground railway is operated by Adelaide Aqua D&C Consortium for constructing the salt water intake and outfall tunnels of the Adelaide Desalination Plant at Port Stanvac.

The Minister may, at any time, by further notice in the *Gazette* vary or revoke this exemption or impose any condition on this exemption.

Dated 11 November 2009.

PATRICK CONLON, Minister for Transport

ROADS (OPENING AND CLOSING) ACT 1991:  
SECTION 24**NOTICE OF CONFIRMATION OF ROAD  
PROCESS ORDER***Road Opening and Closing  
Broster Road, Angle Vale*

BY Road Process Order made on 20 August 2009, the City of Playford ordered that:

1. Portion of allotment 1 in Deposited Plan 80049, more particularly delineated and numbered '9' in Preliminary Plan No. 09/0024 be opened as road forming an extension of Broster Road.

2. The whole of the unnamed public road situate west of Riverbanks Road and dividing allotment 2 and 3 in Deposited Plan 80049, more particularly delineated and lettered 'A' in Preliminary Plan No. 09/0024 be closed.

3. Issue a Certificate of Title to the City of Playford for the whole of the land subject to closure which land is being retained by the Council for merging with the adjoining Council land.

On 26 October 2009 that order was confirmed by the Minister for Infrastructure conditionally upon the deposit by the Registrar-General of Deposited Plan 82375 being the authority for the new boundaries.

Pursuant to section 24 (5) of the Roads (Opening and Closing) Act 1991, NOTICE of the order referred to above and its confirmation is hereby given.

Dated 26 November 2009.

P. M. KENTISH, Surveyor-General

## ROAD TRAFFIC ACT 1961

*Authorised Officers to Conduct Breath Analysis*

I, MALCOLM ARTHUR HYDE, Commissioner of Police, pursuant to section 47K (3) (a) of the Road Traffic Act 1961, do hereby certify that on 18 November 2009, the following Police Officers were authorised to conduct breath analysis:

PD Number	Officer Name
79622	Bartle, Colin Stuart
79980	Bretag, Jeremy Charles
72081	Browne, Matthew James
47867	Climatianos, Vasilios
72335	Korte, James Rainer
72222	Milosevic, Martina
72285	Roche, John Joseph
79329	Scanlan, Brendan Walter
72276	Wurst, Darren Ian

Dated 18 November 2009.

MALCOLM ARTHUR HYDE, Commissioner of Police

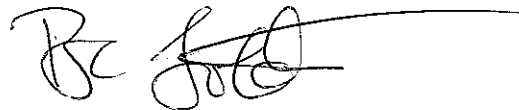
**Petroleum and Geothermal Energy Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GELs 448, 449, 450, 451, 452, 453, 454, 455,  
456, 457, 458, 459, 460 AND 461**

1. These Licences granted with effect from and including 17 November 2009 are hereby entered on the public register
2. Interests in the licences are:-

Gradient Energy 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: 17 November 2009

Ref: 27/2/545



# PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

## GEOTHERMAL EXPLORATION LICENCE

### GEL 451

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 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 GRANT to:

**Gradient Energy Ltd**  
ACN 128 437 507

(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 *16 November* 2014 but carrying the right of renewal under the *Petroleum and Geothermal Energy Act 2000*. *17 NOV 09*

### 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. <i>(to be conducted anywhere within the area covered by GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461)</i></li></ul>
Two	<ul style="list-style-type: none"><li>• Geological and geophysical studies. <i>(to be conducted anywhere within the area covered by GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461)</i></li></ul>

<b>Three</b>	<ul style="list-style-type: none"> <li>• Shallow (&lt;2m) surface temperature surveys;</li> <li>• 80 line km of reconnaissance magneto-telluric geophysics; and</li> <li>• Geological and geophysical studies.</li> </ul> <p><i>(to be conducted anywhere within the area covered by GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462 and 463)</i></p>
<b>Four</b>	<ul style="list-style-type: none"> <li>• 80 line km 3D Magneto-telluric survey;</li> <li>• Drill one shallow drill hole approximately 1,000m in depth; and</li> <li>• Geological and geophysical studies.</li> </ul> <p><i>(to be conducted anywhere within the area covered by GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461)</i></p>
<b>Five</b>	<ul style="list-style-type: none"> <li>• Drill one test well to 2,000-3,500m in depth or two 1,000m narrow drill holes; and</li> <li>• Geological and geophysical studies.</li> </ul> <p><i>(to be conducted anywhere within the area covered by GELs 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460 and 461)</i></p>

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 and Geothermal Energy Act 2000*, that the report also includes an assessment of the potential economic consequences for other licensees under the *Petroleum and Geothermal Energy 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 the *Petroleum and Geothermal Energy Act 2000* cannot transfer, limit or exclude liability under the *Petroleum and Geothermal Energy 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;

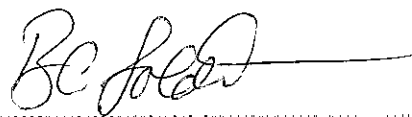
- (a) cash; or
- (b) an unconditional, irrevocable bank guarantee or letter of credit in a form, and from a financial institution, approved by the Minister,

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: 17 November 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

**Signed by the said LICENSEE**

Date: 03.11.2009



Authorised Representative

Stephen Nuno

Name

Exploration Manager

Position

Gradient Energy Ltd

Company

# GEOTHERMAL EXPLORATION LICENCE

**GEL 451**

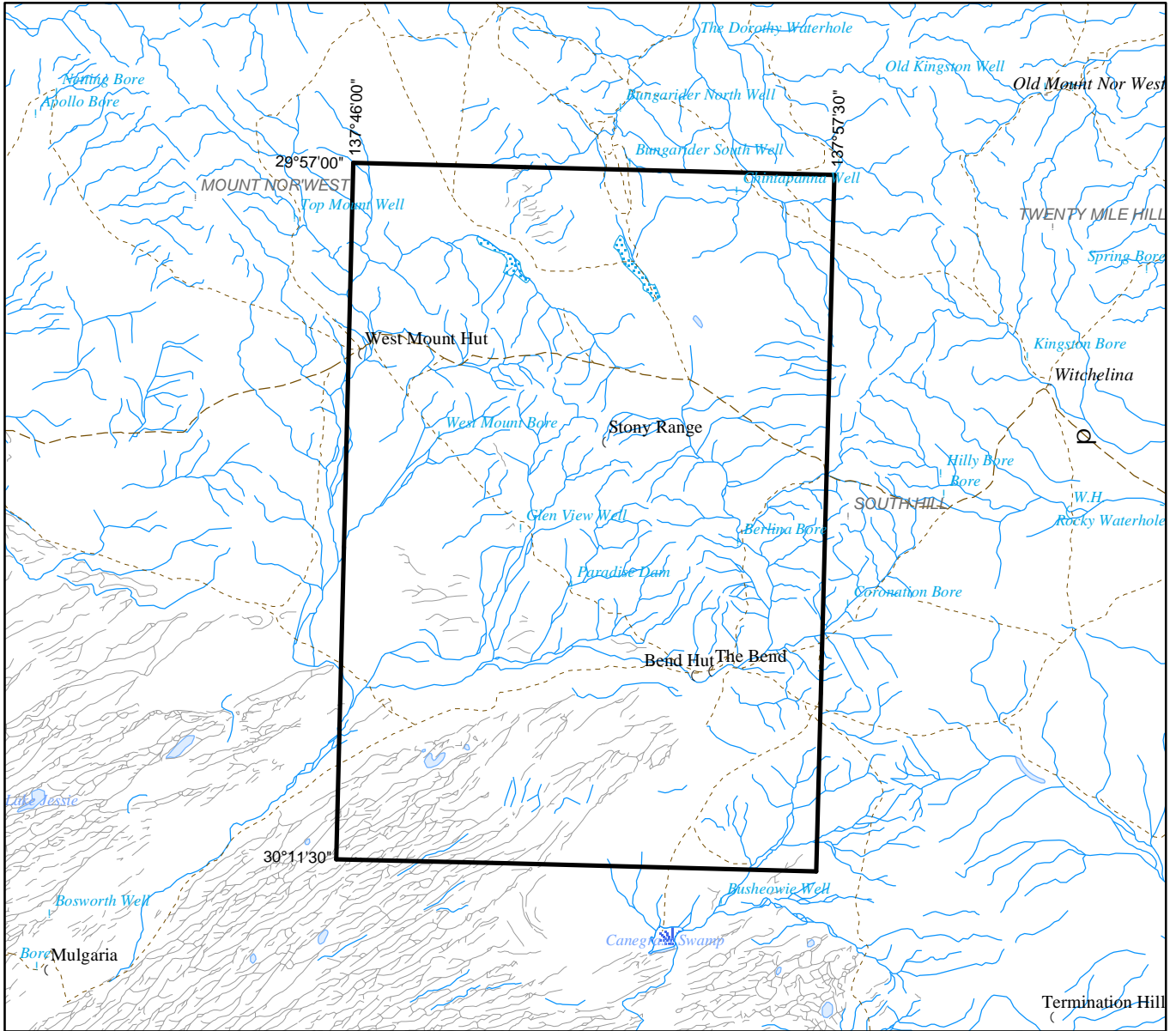
## THE SCHEDULE

### Description of Area

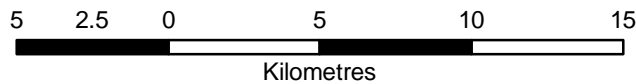
All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 29°57'00"S GDA94 and longitude 137°46'00"E GDA94, thence east to longitude 137°57'30"E GDA94, south to latitude 30°11'30"S GDA94, west to longitude 137°46'00"E GDA94, and north to the point of commencement.

AREA: **496** 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: 451**



Government of South Australia  
Primary Industries and Resources SA

SR 27/2/545d

AREA: 496 sq km (approx)