INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR GEOTHERMAL EXPLORATION LICENCE GEL 246

1.	15 November 2007	Memorandum entering GEL 246 on the public register. Expiry Date: 14 November 2012
2.	15 November 2007	Memorandum entering notation of receipt of security on the public register.
3.	15 November 2007	Geothermal Exploration Licence GEL 246. Interests: Green Rock Energy Limited 100%
4.	22 November 2007	Gazettal of Grant of GEL 246.
5.	13 April 2012	Variation of licence conditions.
6.	13 April 2012	Memorandum entering variation of licence conditions on the public register.
7.	23 December 2016	Memorandum entering notation of discharge of security on the public register.

Petroleum and Geothermal Energy Act 2000
S.115

MEMORANDUM

GEOTHERMAL 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

GEOTHERMAL EXPLORATION LICENCES
GELs 244, 245, 246, 247 and 248

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

BARRY A. GOLDSTEIN
Executive Director
Energy Resources Division
Department for Manufacturing, Innovation, Trade, Resources and Energy
Delegate of the Minister for Mineral Resources and Energy

Date: 13 April 2012

Ref: 27/2/403
27/2/404
27/2/405
27/2/406
27/2/407

Petroleum and Geothermal Energy Act 2000

VARIATION OF
GEOTHERMAL EXPLORATION LICENCES
GELs 244, 245, 246, 247 and 248

I, BARRY ALAN GOLDSTEIN, Executive Director, Energy Resources Division, Department for Manufacturing, Innovation, Trade, Resources and Energy, 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 Tom Koutsantonis, Minister for Mineral Resources and Energy (Minister), pursuant to delegated powers dated 21 March 2012 vary the conditions of the above-mentioned licences, held by -

Green Rock Energy Limited
ACN 094 551 336

Condition 1 of the licence 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	• Geological and geophysical studies.
Two	• Geological and geophysical studies. • Re-entry (if possible) and geophysical logging of existing drill holes to measure in-situ rock temperatures. • Conduct thermal conductivity measurements on existing core samples.
Three	• Economic studies
Four	• Geological and geophysical studies.
Five	• Geological and geophysical studies.

"

Dated: 13 April 2012

BARRY A. GOLDSTEIN
Executive Director
Energy Resources Division
Department for Manufacturing, Innovation, Trade, Resources and Energy
Delegate of the Minister for Mineral Resources and Energy

PETROLEUM ACT 2000

Grant of Geothermal Exploration Licences—GEL 244, GEL 245, GEL 246, GEL 247 and GEL 248

NOTICE is hereby given that the undermentioned Geothermal Exploration Licences have 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^2	Reference
GEL 244	Green Rock Energy Limited	Adjacent Spencer Gulf	246	27/02/403
GEL 245	Green Rock Energy Limited	Adjacent Spencer Gulf	341	27/02/404
GEL 246	Green Rock Energy Limited	Adjacent Spencer Gulf	391	27/02/405
GEL 247	Green Rock Energy Limited	Adjacent Spencer Gulf	470	27/02/406
GEL 248	Green Rock Energy Limited	Adjacent Spencer Gulf	490	27/02/407

Description of Area—GEL 244

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

Area 1—Commencing at a point being the intersection of latitude 33°06′00″S GDA94 and longitude 137°21′00″E GDA94, thence north to latitude 33°01′00″S GDA94, east to longitude 137°28′00″E GDA94, north to the southern boundary of the Cultana Army Land Proposed Extensions, thence generally easterly and north-easterly along the boundary of the said Proposed Extensions to the western boundary of the BHP Indenture Act 1937 land, thence generally south-easterly along the boundary of the said Indenture Act land to a line being High Water Mark (highest astronomical tide, Spencer Gulf), thence generally south-westerly along the said line to latitude 33°06′00″S GDA94 and west to the point of commencement.

Area 2—Commencing at a point being the intersection of the southern boundary of the Cultana Army Land and a line being High Water Mark (highest astronomical tide, Spencer Gulf), Fitzgerald Bay area, thence generally south-easterly and north-westerly along the said line to the eastern boundary of the BHP Indenture Act 1937 land, thence generally north-westerly and south-westerly along the boundary of the said Indenture Act land to the Lincoln Highway (eastern side), thence generally northerly along the boundary of the said highway to the southern boundary of the Cultana Army Land Proposed Extensions, thence generally north-easterly along the boundary of the said Proposed Extensions to the southern boundary of the Cultana Army Land, thence generally south-easterly and north-easterly along the boundary of the said Army Land to the point of commencement.

Area: 246 km^2 approximately.

Description of Area—GEL 245

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

Commencing at a point being the intersection of latitude 33°06′00″S GDA94 and longitude 137°21′00″E GDA94, thence east to a line being High Water Mark (highest astronomical tide), Spencer Gulf, thence generally south-westerly along the said line to latitude 33°25′00″S GDA94, west to longitude 137°14′00″E GDA94, north to latitude 33°21′00″S GDA94, east to longitude 137°16′00″E GDA94, north to latitude 33°13′00″S GDA94, east to longitude 137°19′00″E GDA94, north to latitude 33°10′00″S GDA94, east to longitude 137°21′00″E GDA94 and north to the point of commencement but excluding Munyaroo Conservation Park.

Area: 341 km^2 approximately.

Description of Area—GEL 246

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

Commencing at a point being the intersection of longitude 137°57′00″E GDA94 and latitude 32°33′00″S GDA94, thence south to latitude 32°40′00″S GDA94, east to longitude 137°59′00″E GDA94, south to latitude 32°44′00″S GDA94, east to longitude 138°03′00″E GDA94, south to latitude 32°54′00″S GDA94, west to a line being High Water Mark (highest astronomical tide), Spencer Gulf, thence generally north-easterly along the said line to latitude 32°33′00″S GDA94 and east to the point of commencement but excluding Winninowie Conservation Park and Mount Remarkable National Park.

Area: 391 km^2 approximately.

Description of Area—GEL 247

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

Commencing at a point being the intersection of longitude 138°03′00″E GDA94 and latitude 32°54′00″S GDA94, thence south to latitude 32°58′00″S GDA94, east to longitude 138°06′00″E GDA94, south to latitude 33°04′00″S GDA94, east to longitude 138°09′00″E GDA94, south to latitude 33°11′00″S GDA94, west to longitude 138°07′00″E GDA94, south to latitude 33°13′00″S GDA94, west to a line being High Water Mark (highest astronomical tide), Spencer Gulf, thence generally north-easterly and northerly to latitude 32°54′00″S GDA94, and east to the point of commencement but excluding Telowie Gorge Conservation Park and Mount Remarkable National Park.

Area: 470 km^2 approximately.

Description of Area—GEL 248

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 33°13′00″S GDA94, thence south to latitude 33°15′00″S GDA94, west to longitude 137°58′00″E GDA94, south to latitude 33°18′00″S GDA94, east to longitude 138°00′00″E GDA94, south to latitude 33°24′00″S GDA94, east to longitude 138°02′00″E GDA94, south to latitude 33°33′00″S GDA94, west to a line being High Water Mark (highest astronomical tide), Spencer Gulf, thence generally north-westerly along the said line to latitude 33°13′00″S GDA94 and east to the point of commencement.

Area: 490 km^2 approximately.

Dated 15 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

GEOTHERMAL EXPLORATION LICENCES
GEL 244, GEL 245, GEL 246, GEL 247 and GEL 248

1. These Licences granted on 15 November 2007 are hereby entered on the public register.

2 Interests in the licence are:-

Green Rock Energy Limited	100%

3. 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: 15 November 2007

Ref. 27/2/403
27/2/404
27/2/405
27/2/406
27/2/407

PETROLEUM ACT 2000

GEOTHERMAL EXPLORATION LICENCE

GEL 246

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:

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 14 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	• Geological and geophysical studies.
Two	• Geological and geophysical studies. • Re-entry (if possible) and geophysical logging of existing drill holes to measure in-situ rock temperatures. • Conduct thermal conductivity measurements on existing core samples
Three	• Economic studies

Four	• Drill (or deepen an existing well) to a depth of 2,000-3,000 metres. • Evaluate temperature, stress regimes and rock properties at depth.
Five	• Economic studies. • Geological and geophysical studies. • Design of a pilot programme.

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: 15 November 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: 9 NOVEMBER 2007

Adrian Carking

Authorised Representative

ADRIAN CARKING

Name

MANAGING DIRECTOR

Position

GREEN ROCK ENERGY LIMITED

Company

GEOTHERMAL EXPLORATION LICENCE

GEL 246

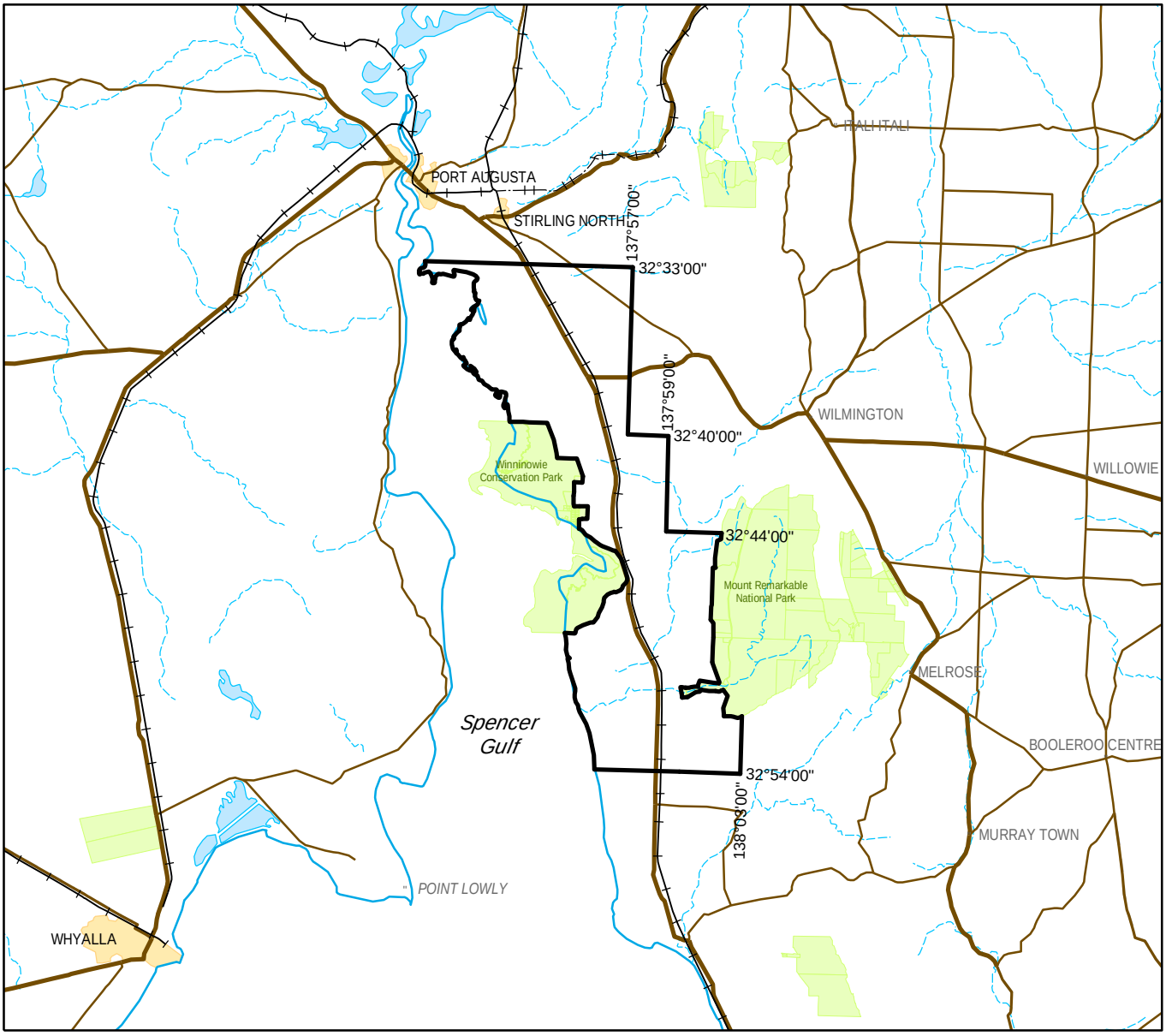
THE SCHEDULE

Description of Area

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

Commencing at a point being the intersection of longitude 137°57'00"E GDA94 and latitude 32°33'00"S GDA94, thence south to latitude 32°40'00"S GDA94, east to longitude 137°59'00"E GDA94, south to latitude 32°44'00"S GDA94, east to longitude 138°03'00"E GDA94, south to latitude 32°54'00"S GDA94, west to a line being High Water Mark (highest astronomical tide), Spencer Gulf, thence generally northeasterly along the said line to latitude 32°33'00"S GDA94, and east to the point of commencement but excluding Winninowie Conservation Park and Mount Remarkable National Park.

AREA: **391** square kilometres approximately.



SCALE 1:500 000

10 5 0 10 20 30

Kilometres

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: 246

Government of South Australia
Primary Industries and Resources SA

SR 27/2/405

AREA: **391** sq km (approx)