

PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

Surrender of Geothermal Exploration Licences—GELs 346, 347 and 348

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 346	AAA Energy Pty Ltd	Cooper Basin, South Australia	19 February 2011	27/2/508
GEL 347				
GEL 348				

Description of Area—GEL 346

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

Commencing at a point being the intersection of latitude 28°34'00"S GDA94 and longitude 140°24'00"E GDA94, thence east to longitude 140°33'00"E GDA94, south to latitude 28°38'00"S GDA94, east to longitude 140°34'00"E GDA94, south to latitude 28°39'00"S GDA94, east to longitude 140°35'00"E GDA94, south to latitude 28°40'00"S GDA94, east to longitude 140°37'00"E GDA94, south to latitude 28°56'00"S GDA94, west to longitude 140°33'00"E GDA94, north to latitude 28°45'00"S GDA94, west to longitude 140°24'00"E GDA94 and north to the point of commencement.

Area: 499 km² approximately.

Description of Area—GEL 347

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

Commencing at a point being the intersection of latitude 28°33'00"S GDA94 and longitude 140°41'00"E GDA94, thence east to longitude 140°49'00"E GDA94, south to latitude 28°39'00"S GDA94, west to longitude 140°48'00"E GDA94, south to latitude 28°47'00"S GDA94, west to longitude 140°47'00"E GDA94, south to latitude 28°48'00"S GDA94, west to longitude 140°45'00"E GDA94, south to latitude 28°49'00"S GDA94, west to longitude 140°42'00"E GDA94, south to latitude 28°51'00"S GDA94, west to longitude 140°40'00"E GDA94, south to latitude 28°53'00"S GDA94, west to longitude 140°37'00"E GDA94, north to latitude 28°40'00"S GDA94, east to longitude 140°41'00"E GDA94 and north to the point of commencement.

Area: 499 km² approximately.

Description of Area—GEL 348

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

Commencing at a point being the intersection of latitude 28°32'00"S GDA94 and longitude 140°57'00"E GDA94, thence east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°47'00"S GDA94, west to longitude 140°48'00"E GDA94, north to latitude 28°39'00"S GDA94, east to longitude 140°49'00"E GDA94, north to latitude 28°33'00"S GDA94, east to longitude 140°57'00"E GDA94 and north to the point of commencement.

Area: 494 km² approximately.

Dated 21 June 2011.

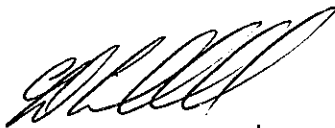
C. D. COCKSHELL,
Acting Executive Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

Petroleum and Geothermal Energy Act 2000
S.115

MEMORANDUM

GEOHERMAL EXPLORATION LICENCES
GELs 346, 347 and 348

1. Surrender of the abovementioned Geothermal Exploration Licences with effect from 19 February 2011 is hereby entered on the public register.



C. D. COCKSHELL
A/Executive Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

Date: 21 June 2011

Ref: 27/2/508

Petroleum and Geothermal Energy Act 2000

SURRENDER OF GEOTHERMAL EXPLORATION LICENCES GELs 346, 347 and 348

I, CYRIL DAVID COCKSHELL, Acting Executive 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 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 surrender of Geothermal Exploration Licences – GELs 346, 347 and 348 in the name of AAA Energy Pty Ltd with effect from 19 February 2011.

Dated: 21 June 2011



**C. D. COCKSHELL
A/Executive Director Petroleum and Geothermal
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 346, 347 and 348**

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



**C. D. COCKSHELL
A/Executive Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development**

Date: 21 June 2011

Ref: 27/2/508

Petroleum and Geothermal Energy Act 2000

VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 346, 347 and 348

I, CYRIL DAVID COCKSHELL, Acting Executive 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 Tom Koutsantonis, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009, hereby vary the conditions of the above-mentioned licences, held by -

AAA Energy Pty Ltd
ACN 127 282 268

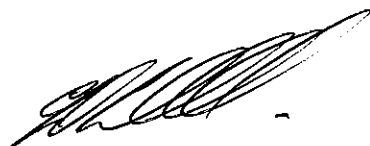
Condition 1 of the licence is omitted and the following substituted:

- “ 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">• Geological and geophysical studies. <i>Year 1 work program to be conducted anywhere within the boundaries of GELs 346, 347 and 348.</i>
Two	<ul style="list-style-type: none">• Geological and geophysical studies. <i>Year 2 work program to be conducted anywhere within the boundaries of GELs 346, 347 and 348.</i>
Three	<ul style="list-style-type: none">• Geological and geophysical studies. <i>Year 3 work program to be conducted anywhere within the boundaries of GELs 346, 347 and 348.</i>
Four	<ul style="list-style-type: none">• Drill 1 well to a depth of 3500-4500 metres; and• Flow testing of well. <i>Year 4 work program to be conducted anywhere within the boundaries of GELs 346, 347 and 348.</i>
Five	<ul style="list-style-type: none">• Drill 1 well up to a depth of 3500-4500 metres; and• Demonstrate a circulating system via flow tests. <i>Year 5 work program to be conducted anywhere within the boundaries of GELs 346, 347 and 348.</i>

”

Dated: 21 June 2011



C.D. COCKSHELL
A/Executive Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

PETROLEUM ACT 2000

Grant of Geothermal Exploration Licences—GELs 340, 341, 342, 343, 344, 345, 346, 347 and 348

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 340	AAA Energy Pty Ltd	Cooper Basin	494	27/02/507
GEL 341	AAA Energy Pty Ltd	Cooper Basin	494	27/02/507
GEL 342	AAA Energy Pty Ltd	Cooper Basin	499	27/02/507
GEL 343	AAA Energy Pty Ltd	Cooper Basin	496	27/02/507
GEL 344	AAA Energy Pty Ltd	Cooper Basin	496	27/02/507
GEL 345	AAA Energy Pty Ltd	Cooper Basin	484	27/02/507
GEL 346	AAA Energy Pty Ltd	Cooper Basin	499	27/02/508
GEL 347	AAA Energy Pty Ltd	Cooper Basin	499	27/02/508
GEL 348	AAA Energy Pty Ltd	Cooper Basin	494	27/02/508

Description of Area—GEL 340

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

Commencing at a point being the intersection of latitude 27°22'25"S GDA94 and longitude 139°16'00"E GDA94, thence east to longitude 139°28'15"E GDA94, south to latitude 27°35'40"S GDA94, west to longitude 139°16'00"E GDA94 and north to the point of commencement.

Area: 494 km² approximately.

Description of Area—GEL 341

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

Commencing at a point being the intersection of latitude 27°22'25"S GDA94 and longitude 139°28'15"E GDA94, thence east to longitude 139°40'30"E GDA94, south to latitude 27°35'40"S GDA94, west to longitude 139°28'15"E GDA94 and north to the point of commencement.

Area: 494 km² approximately.

Description of Area—GEL 342

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

Commencing at a point being the intersection of latitude 27°17'08"S GDA94 and longitude 139°41'20"E GDA94, thence east to the western boundary of the Innamincka Regional Reserve, thence southerly along the boundary of the said Regional Reserve to latitude 27°31'30"S GDA94, west to longitude 139°40'30"E GDA94, north to latitude 27°22'25"S GDA94, east to longitude 139°41'20"E GDA94 and north to point of commencement.

Area: 499 km² approximately.

Description of Area—GEL 343

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

Commencing at a point being the intersection of latitude 27°35'40"S GDA94 and longitude 139°16'00"E GDA94, thence east to longitude 139°28'15"E GDA94, south to latitude 27°49'00"S GDA94, west to longitude 139°16'00"E GDA94 and north to the point of commencement.

Area: 496 km² approximately.

Description of Area—GEL 344

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

Commencing at a point being the intersection of latitude 27°35'40"S GDA94 and longitude 139°28'15"E GDA94, thence east to longitude 139°40'30"E GDA94, south to latitude 27°49'00"S GDA94, west to longitude 139°28'15"E GDA94 and north to the point of commencement.

Area: 496 km² approximately.

Description of Area—GEL 345

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

Commencing at a point being the intersection of latitude 27°31'30"S GDA94 and longitude 139°40'30"E GDA94, thence east to the western boundary of the Innamincka Regional Reserve, thence southerly and easterly along the boundary of the said Regional Reserve to longitude 139°54'00"E GDA94, south to latitude 27°39'00"S GDA94, west to longitude 139°49'00"E GDA94, south to latitude 27°40'00"S GDA94, west to longitude 139°48'00"E GDA94, south to latitude 27°47'00"S GDA94, west to longitude 139°43'00"E GDA94, south to latitude 27°49'00"S GDA94, west to longitude 139°40'30"E GDA94 and north to the point of commencement.

Area: 484 km² approximately.

Description of Area—GEL 346

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

Commencing at a point being the intersection of latitude 28°34'00"S GDA94 and longitude 140°24'00"E GDA94, thence east to longitude 140°33'00"E GDA94, south to latitude 28°38'00"S GDA94, east to longitude 140°34'00"E GDA94, south to latitude 28°39'00"S GDA94, east to longitude 140°35'00"E GDA94, south to latitude 28°40'00"S GDA94, east to longitude 140°37'00"E GDA94, south to latitude 28°56'00"S GDA94, west to longitude 140°33'00"E GDA94, north to latitude 28°45'00"S GDA94, west to longitude 140°24'00"E GDA94 and north to the point of commencement.

Area: 499 km² approximately.

Description of Area—GEL 347

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

Commencing at a point being the intersection of latitude 28°33'00"S GDA94 and longitude 140°41'00"E GDA94, thence east to longitude 140°49'00"E GDA94, south to latitude 28°39'00"S GDA94, west to longitude 140°48'00"E GDA94, south to latitude 28°47'00"S GDA94, west to longitude 140°47'00"E GDA94, south to latitude 28°48'00"S GDA94, west to longitude 140°45'00"E GDA94, south to latitude 28°49'00"S GDA94, west to longitude 140°42'00"E GDA94, south to latitude 28°51'00"S GDA94, west to longitude 140°40'00"E GDA94, south to latitude 28°53'00"S GDA94, west to longitude 140°37'00"E GDA94, north to latitude 28°40'00"S GDA94, east to longitude 140°41'00"E GDA94 and north to the point of commencement.

Area: 499 km² approximately.

Description of Area—GEL 348

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

Commencing at a point being the intersection of latitude 28°32'00"S GDA94 and longitude 140°57'00"E GDA94, thence east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°47'00"S GDA94, west to longitude 140°48'00"E GDA94, north to latitude 28°39'00"S GDA94, east to longitude 140°49'00"E GDA94, north to latitude 28°33'00"S GDA94, east to longitude 140°57'00"E GDA94 and north to the point of commencement.

Area: 494 km² approximately.

Dated 20 February 2008.

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
GELs 340, 341, 342, 343, 344, 345, 346, 347 and 348**

1. These Licences granted with effect from and including 20 February 2008 are hereby entered on the public register.
2. Interests in the licences are:-

AAA Energy Pty Ltd	100%
--------------------	------



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

Date: 20 February 2008

Ref: 27/2/507
27/2/508

PETROLEUM ACT 2000

GEOTHERMAL EXPLORATION LICENCE

GEL 347

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:

AAA Energy Pty Ltd
ACN 127 282 268

(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 19 FEBRUARY 2013 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 (Note: Minimum work requirements may be conducted anywhere within GELs 346, 347 or 348)
One	<ul style="list-style-type: none">• Geological and geophysical studies.
Two	<ul style="list-style-type: none">• Drill 2 shallow wells to a depth of 500 metres.
Three	<ul style="list-style-type: none">• Drill 4 shallow wells to a depth of 500 metres.
Four	<ul style="list-style-type: none">• Drill 1 well to a depth of 3500 - 4500 metres; and• Flow testing of well.
Five	<ul style="list-style-type: none">• Drill 1 well to a depth of 3500 - 4500 metres; and• Demonstrate a circulating system via flow tests

- 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

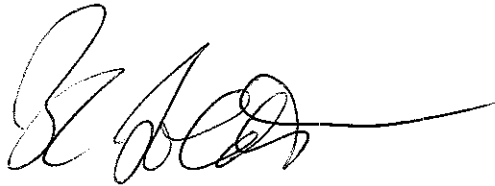
(b) an unconditional, irrevocable bank guarantee or letter of credit in a form, and from a financial institution, approved by the Minister,

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.

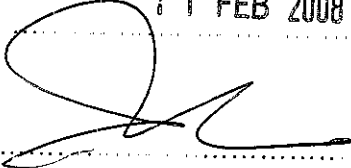
Date: 20 FEBRUARY 2008



.....
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: 11 FEB 2008 2008



Authorised Representative

JOHN PALERMO
Name

DIRECTOR
Position

AAA ENERGY PTY LTD
Company

GEOHERMAL EXPLORATION LICENCE

GEL 347

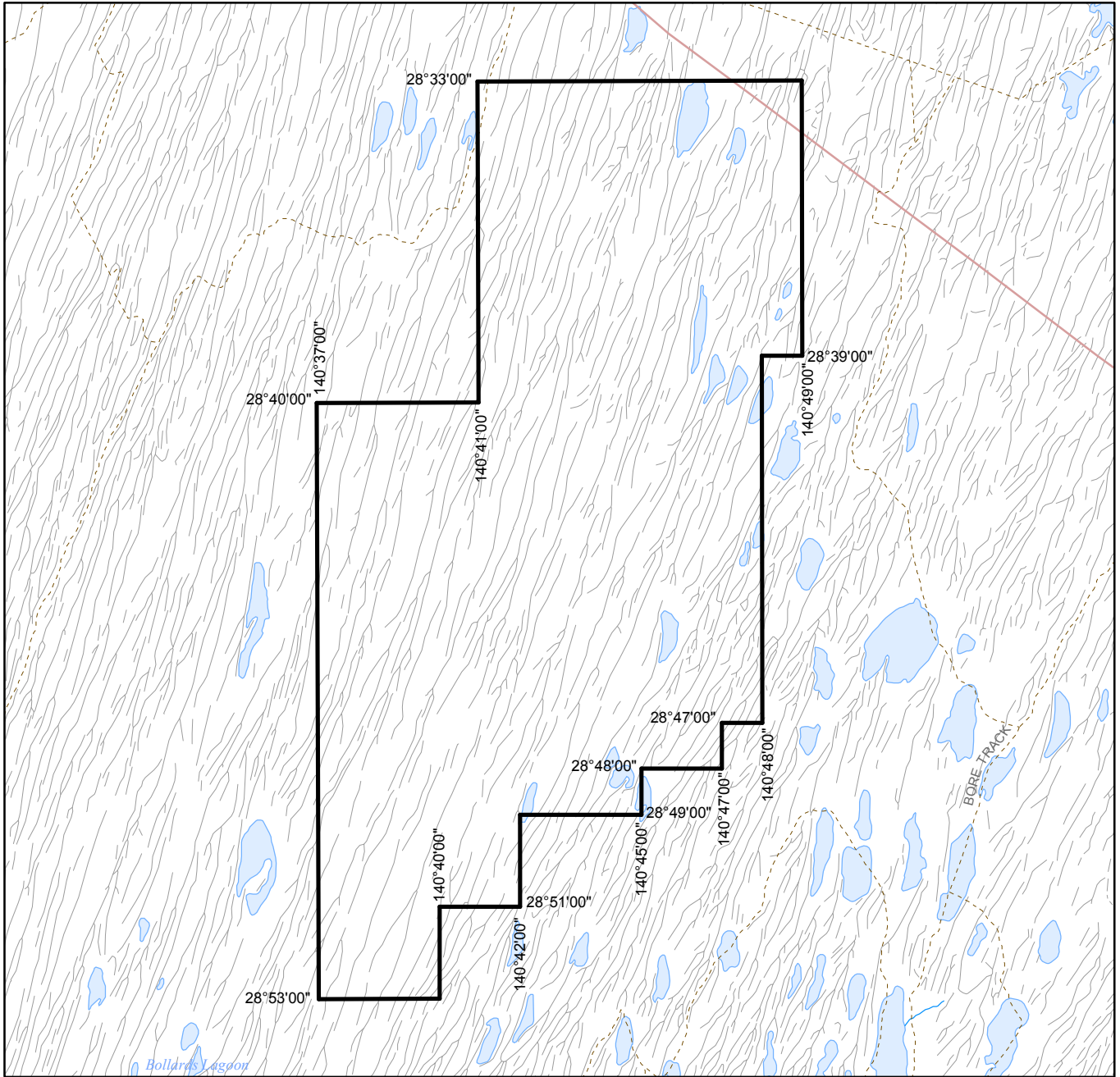
THE SCHEDULE

Description of Area

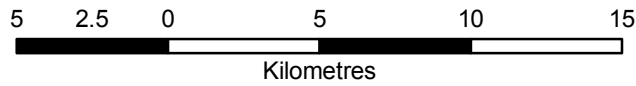
All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 28°33'00"S GDA94 and longitude 140°41'00"E GDA94, thence east to longitude 140°49'00"E GDA94, south to latitude 28°39'00"S GDA94, west to longitude 140°48'00"E GDA94, south to latitude 28°47'00"S GDA94, west to longitude 140°47'00"E GDA94, south to latitude 28°48'00"S GDA94, west to longitude 140°45'00"E GDA94, south to latitude 28°49'00"S GDA94, west to longitude 140°42'00"E GDA94, south to latitude 28°51'00"S GDA94, west to longitude 140°40'00"E GDA94, south to latitude 28°53'00"S GDA94, west to longitude 140°37'00"E GDA94, north to latitude 28°40'00"S GDA94, east to longitude 140°41'00"E GDA94, and north to the point of commencement.

AREA: **499** 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: 347



Government of South Australia
 Primary Industries and Resources SA

SR 27/2/508b

AREA: **499** sq km (approx)