

**INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR  
GEOTHERMAL EXPLORATION LICENCE GEL 98**

1. 2 October 2001      Memorandum entering GEL 98 on the public register.
  
2. 2 October 2001      Geothermal Exploration Licence GEL 98  
  
   Interests:      Geodynamics Ltd                      100%
  
3. 11 October 2001      Gazettal of Grant of GEL 98
  
4. 23 June 2005          Notation of revision to security arrangements.
  
5. 29 September 2006    Memorandum entering variation on the public register.
  
6. 29 September 2006    Variation of licence conditions.
  
7. 5 October 2006        Gazettal of Variation of GEL 98

## PETROLEUM ACT 2000

## SECTION 25 (5) (b)

*Variation of Geothermal Exploration Licence—GEL 98*

NOTICE is hereby given that under the provisions of the Petroleum Act 2000, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573, the conditions of the abovementioned Exploration Licence have been varied as follows:

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. These exploratory operations shall include but not necessarily be limited to:

Year of Term of Licence	Minimum Work Requirements
One	Selection of injection well test site.
Two	Drilling of one injection well.
Three	Multi stimulation of granite.
Four	Drilling of first production well; conduct circulation tests.
Five	Reservoir studies and economic analysis.

This variation provides for the removal of the drilling of a second production well, three well circulation test and power station and surface construction. The revised work requirements as a result of this variation would not have altered the outcome of the original competitive tender process.’

Dated 29 September 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

## VARIATION OF GEOTHERMAL EXPLORATION LICENCE GEL 98

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Division, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 of the *Petroleum Act 2000* and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 28 March 2002, Gazetted 11 April 2002, page 1573 vary the conditions of petroleum exploration licence PEL 106, held by -

**Geodynamics Limited** ABN 55 095 006 090

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. Years one exploratory operations area guaranteed. These exploratory operations shall include but not necessarily be limited to:-

Year of Term of Licence	Minimum Work Requirements
One	Selection of injection well test site.
Two	Drilling of one injection well.
Three	Multi stimulation of granite.
Four	Drilling of first production well; Conduct circulation tests.
Five	Reservoir studies and economic analysis.

Dated: 29 September 2006



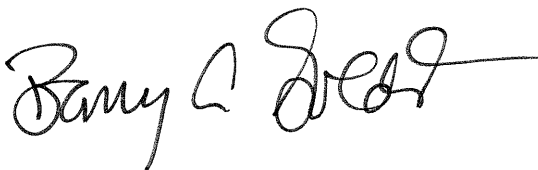
**BARRY A. GOLDSTEIN**  
**Director Petroleum and Geothermal**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources Development**

**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCE  
GEL 98**

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: 29 September 2006


Ref: 27/2/216

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

**MEMORANDUM**

**GEOHERMAL EXPLORATION LICENCES  
GEL 97 AND GEL 98**

1. Notation of revision to security arrangements is hereby entered on the public register of licences.



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

Date: 23 June 2005

File: 27/2/215  
27/2/216

## GRANT OF EXPLORATION LICENCE No. GEL 98

Office of Minerals and Energy Resources, Adelaide, 2 October 2001

NOTICE is hereby given that the undermentioned exploration licence for geothermal energy has been granted under the provisions of the Petroleum Act 2000, pursuant to delegated powers dated 25 September 2000, *Gazetted* 28 September 2000, page 2289.

R. A. LAWS, Director Petroleum, Office of Minerals and Energy Resources, Delegate of the Minister for Minerals and Energy

No. of Licence	Licensee	Locality	Date of Expiry	Area in km <sup>2</sup>	Reference
98	Geodynamics Limited	Cooper Basin of South Australia	1 October 2006	494	SR.27.2.216

*Description of the Area*

All that part of the State of South Australia bounded as follows: commencing at a point being the intersection of latitude 27°40'S GDA94 and longitude 140°46'E GDA94, thence east to longitude 140°56'E GDA94, south to latitude 27°49'S GDA94, west to longitude 140°54'E GDA94, south to latitude 27°50'S GDA94, west to longitude 140°51'E GDA94, south to latitude 27°52'S GDA94, west to longitude 140°41'E GDA94, north to latitude 27°41'S GDA94, east to longitude 140°46'E GDA94 and north to the point of commencement.

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

## PETROLEUM ACT 2000

*Statement of Environmental Objectives for Regulated Activities*

PURSUANT to section 104 (1) of the Petroleum Act 2000 (the Act) I, Robert Anthony Laws, Director Petroleum, Office of Minerals and Energy Resources, Department of Primary Industries and Resources SA, Delegate of the Minister for Minerals and Energy, pursuant to Delegation dated 25 September 2000, *Gazetted* 28 September 2000, do hereby publish the following document as having been approved as a statement of environmental objectives under the Act.

Document:

Statement of Environmental Objectives for Pipeline Preliminary Survey Activities in South Australia, October 2001, approved 8 October 2001.

This document is available for public inspection on the Environmental Register section of the Petroleum Group's web-site ([www.petroleum.pir.sa.gov.au](http://www.petroleum.pir.sa.gov.au)) or at the Public Office determined pursuant to section 107 (1) of the Act to be at:

Minerals and Petroleum Centre  
Office of Minerals and Energy Resources  
Ground Floor  
101 Grenfell Street  
Adelaide, S.A. 5000

Dated 11 October 2001.

R. A. LAWS, Delegate of the Minister for Minerals and Energy Resources.

## PETROLEUM ACT 2000

*Statement of Environmental Objectives for Existing Regulated Activities*

PURSUANT to section 6 (1) of the Schedule and 134 (1) to the Petroleum Act 2000 (the Act) I, Robert Anthony Laws, Director Petroleum, Office of Minerals and Energy Resources, Department of Primary Industries and Resources SA, Delegate of the Minister for Minerals and Energy, pursuant to delegation dated 25 September 2000, *Gazetted* 28 September 2000, do hereby vary item 4 of the gazette notice dated 2 November 2000, page 2889, to read as follows:

4. Origin Energy alternative arrangements approved on 22 September 2000 under regulation 16 (2) of the Petroleum Regulations 1989 for Production and Processing of Petroleum and Associated Activities in the Otway Basin of South Australia. This is subject to review and assessment in accordance with the requirements of Part 12 of the Petroleum Act 2000 by 31 March 2002.

This document is available for public inspection on the Environmental Register Section of the Petroleum Group's web-site ([www.petroleum.pir.sa.gov.au](http://www.petroleum.pir.sa.gov.au)) or at the Public Office determined pursuant to section 107 (1) of the Act to be at:

Minerals and Petroleum Centre  
Office of Minerals and Energy Resources  
Ground Floor  
101 Grenfell Street  
Adelaide, S.A. 5000

Dated 8 October 2001.

R. A. LAWS, Delegate of the Minister for Minerals and Energy

99/1581

## ROADS (OPENING AND CLOSING) ACT 1991

*Road Closure—Public Road, north of the Town of Gordon*

NOTICE is hereby given, pursuant to section 10 of the Roads (Opening and Closing) Act 1991, that THE FLINDERS RANGES COUNCIL proposes to make a Road Process Order to close and vest in the Crown for addition to Crown Lease Volume 1423, Folio 26, held by MARK VINCENT McAULEY and CHRISTOPHER GERVASE McAULEY portion of the unnamed public road (intersecting the Kanyaka Homestead Ruins) adjacent to the Quorn-Hawker Road and adjoining section 536 in the Hundred of Kanyaka more particularly delineated and lettered 'A' on the Preliminary Plan No. PP32/0685.

A copy of the plan and a statement of persons affected are available for public inspection at the office of the Council, Seventh Street, Quorn and the Adelaide office of the Surveyor-General during normal office hours.

Any application for easement or objection must set out the full name, address and details of the submission and must be fully supported by reasons.

The application for easement or objection must be made in writing to the Council, P.O. Box 43, Quorn, S.A. 5433 WITHIN 28 DAYS OF THIS NOTICE and a copy must be forwarded to the Surveyor-General, G.P.O. Box 1354, Adelaide, S.A. 5001. Where a submission is made, the Council will give notification of a meeting at which the matter will be considered.

Dated 10 October 2001.

P. M. KENTISH, Surveyor-General

# MEMORANDUM

## GEOHERMAL EXPLORATION LICENCE NO. (G)EL 98

1. This Licence granted on  
Petroleum Register.

21/10 / 2001 is hereby entered on the

2. Interests in the Licence are:

Geodynamics Ltd

100%



**R A LAWS**  
**Director Petroleum Group**  
**Office of Minerals and Energy Resources**  
**Delegate of the Minister for Minerals and Energy**

Date: 21/10 / 2001

SR 27/2/216

# **PETROLEUM ACT 2000**

## **EXPLORATION LICENCE NO. 98**

I, ROBERT ANTHONY LAWS, Director Petroleum, Office of Minerals and Energy 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 Wayne Anthony Matthew, Minister for Minerals and Energy (Minister), pursuant to delegation dated 25 September 2000, (refer Government Gazette dated 28 September 2000 page 2289), HEREBY GRANT to Geodynamics Ltd (ACN 095 006 090), (hereinafter referred to as the Licensees) 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 *1 October* 2006 but carrying the rights 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. These exploratory operations shall include *but not necessarily be limited to:-*
  - a) in the first year of the term of the licence, selection of injection test site at a total estimated cost of \$365,000 (three hundred and sixty five thousand dollars);
  - b) in the second year of the term of the licence, drilling of one injection well at a total estimated cost of \$5,000,000 (five million dollars);
  - c) in the third year of the term of the licence, multi stimulation of granite at a total estimated cost of \$3,000,000 (three million dollars);
  - d) in the fourth year of the term of the licence, drilling of first production well, first circulation tests at a total estimated cost of \$8,000,000 (eight million dollars);
  - e) in the fifth year of the term of the licence, drilling of a second production well, three well circulation test, power station and surface construction at a total estimated cost of \$32,000,000 (thirty two million dollars).




2. The Licensee and any staff, consultants and contractors of the Licensee shall abide by any rules the Minister may from time to time establish for safe driving on roads and use of roads in the Cooper Basin region (herein defined to be that area bounded by 29°30' south latitude, 139° east longitude and the border of South Australia with Queensland).
3. 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.
4. 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);
  - (d) for such periods determined by the Minister, give security for an amount and in such manner acceptable to the Minister, for the satisfaction of obligations arising under the *Petroleum Act, 2000* ("Act") or this licence from time to time.
  - (e) 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 10 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 a security of \$50,000 (fifty thousand dollars) with the Minister in the form acceptable to the Minister for the satisfaction of obligations arising under the Act or this licence.

Signed by the Director Petroleum,  
Office of Minerals and Energy Resources at Adelaide

this second day of October 2001

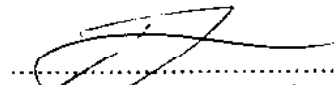
  
 .....  
**R A LAWS**  
**Director Petroleum**  
**Office of Minerals and Energy Resources**  
**Delegate of the Minister for Minerals and Energy**

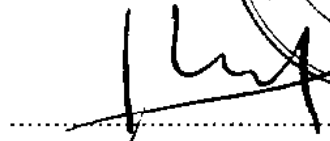
Signed sealed and delivered  
by the said LICENSEE

this ..... day of ..... 2001

The Common Seal of Geodynamics Ltd  
was hereto affixed by



  
.....  
SECRETARY P. FROESLIUS

  
.....  
L. de Graaf DIRECTOR

## **EXPLORATION LICENCE NO 98**

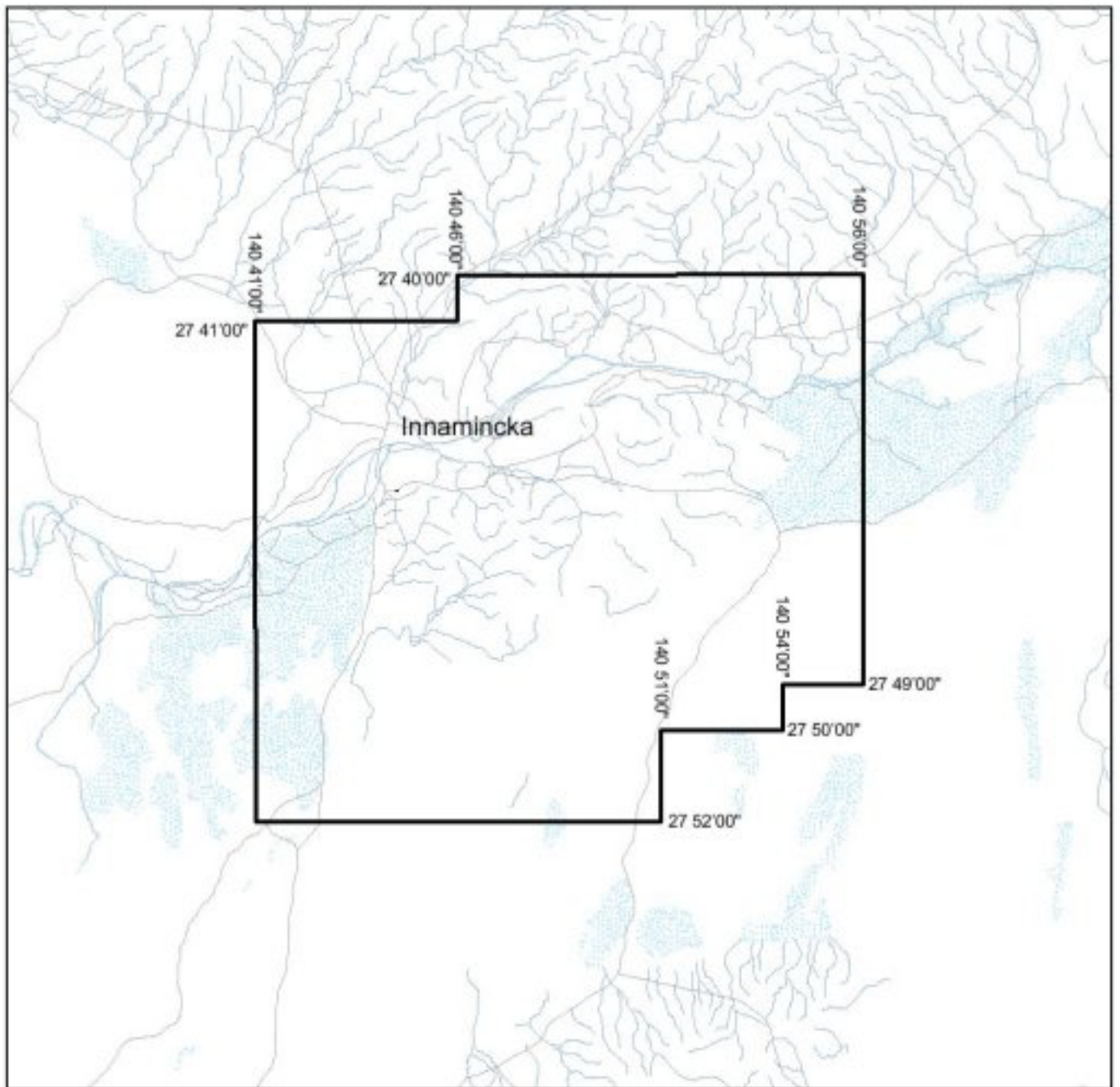
### **THE SCHEDULE**

#### **Description of Area**

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

Commencing at a point being the intersection of latitude 27°40'S GDA94 and longitude 140°46'E GDA94, thence east to longitude 140°56'E GDA94, south to latitude 27°49'S GDA94, west to longitude 140°54'E GDA94, south to latitude 27°50'S GDA94, west to longitude 140°51'E GDA94, south to latitude 27°52'S GDA94, west to longitude 140°41'E GDA94, north to latitude 27°41'S GDA94, east to longitude 140°46'E GDA94, and north to the point of commencement.

AREA: 494 square kilometres approximately.



SCALE 1:250000



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 HEREBEFORE REFERRED TO  
GEODYNAMICS LTD.

GEOTHERMAL EXPLORATION LICENCE NO: 98