



Annual Report

Term 2, Licence Year 2, 14
November 2012 to 13
November 2013

Geothermal Exploration
Licence 211

Environmental



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CONTENTS

| | | |
|-----------|--|----------|
| 1. | INTRODUCTION | 4 |
| 2. | PERMIT SUMMARY | 4 |
| 3. | REGULATED ACTIVITIES | 5 |
| 3.1 | Drilling..... | 5 |
| 3.2 | Seismic Data Processing and Reprocessing..... | 5 |
| 3.3 | Geochemical, Gravity, Magnetic and other surveys | 5 |
| 3.4 | Pipeline/Flowline Construction and Operation..... | 5 |
| 3.5 | Preliminary Survey Activities | 5 |
| 4. | COMPLIANCE ISSUES | 5 |
| 4.1 | Licence and Regulatory Compliance..... | 5 |
| 4.1.1 | Licence Non-Compliance | 5 |
| 4.1.2 | Regulatory Non-Compliance | 5 |
| 4.2 | Compliance with Statement of Environmental Objectives..... | 6 |
| 4.3 | Management System Audits | 6 |
| 4.4 | Report and Data Submissions..... | 6 |
| 4.5 | Incidents | 6 |
| 4.6 | Threat Prevention | 6 |
| 4.7 | Future Work Program..... | 6 |
| 5. | EXPENDITURE STATEMENT | 7 |

1. INTRODUCTION

Licence renewal of Geothermal Exploration Licence 211 (GEL 211) was granted to Geodynamics for five (5) years taking effect from 14/11/2011 to 13/11/2016.

This report details the work conducted during Licence Year 2 (14/11/2012 to 13/11/2013) of the renewed licence period in accordance with Regulation 33 of the *Petroleum & Geothermal Energy Act 2000*.

2. PERMIT SUMMARY

For the duration of the licence year, licensees for Geothermal Exploration Licence 211 (GEL 211) were:

- Geodynamics Limited 70% (operator)
- Origin Energy Limited 30%

| Year of Term of Licence | Minimum Work Requirement | Actual Work Completed |
|-------------------------|--|---|
| 1 | Assessment and analysis of results following drilling of Habanero 4 | As per minimum work |
| 2 | Interpretation of the results from Habanero 4 drilling and stimulation, in terms of the implication for prospectivity GEL 211. | Geodynamics has undertaken the production of a Field Development Plan (FDP) to assess the feasibility of future work in the Cooper Basin. |
| 3 | Analysis of the distribution of natural fractures in the Innamincka Granite based on crustal strain modelling and applicability to GEL 211 (<i>completed December, 2011 - Term 2, Year 1</i>). | Minimum work program item was completed in December 2011. <i>Updated anticipated work for Year 3: Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified.</i> |
| 4 | Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified. | Future Work Program |

| Year of Term of Licence | Minimum Work Requirement | Actual Work Completed |
|-------------------------|--|-----------------------|
| 5 | Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified. | Future Work Program |

3. REGULATED ACTIVITIES

3.1 Drilling

No drilling activities were performed within the GEL 211 Licence area during the reporting period.

3.2 Seismic Data Processing and Reprocessing

No seismic data processing and reprocessing was undertaken during the reporting period.

3.3 Geochemical, Gravity, Magnetic and other surveys

No geochemical, gravity, magnetic or other surveys were undertaken during the reporting period.

3.4 Pipeline/Flowline Construction and Operation

No pipeline/flowline construction and operation was undertaken during the reporting period.

3.5 Preliminary Survey Activities

No preliminary survey activities were undertaken during the reporting period.

4. COMPLIANCE ISSUES

4.1 Licence and Regulatory Compliance

There were no instances in which Geodynamics was non-compliant during the Licence year.

4.1.1 Licence Non-Compliance

Nil.

4.1.2 Regulatory Non-Compliance

Nil.

4.2 Compliance with Statement of Environmental Objectives

Due to no activity in the Licence Area a compliance check has not been carried out.

4.3 Management System Audits

No management system audits were undertaken during the Licence Year in relation to GEL 211.

4.4 Report and Data Submissions

In the previous licence year on 8/12/2011, GDY submitted a CSIRO Report to DMITRE titled '*Predicting fracture zones in Cooper-basin granites: insights from continuum damage mechanics finite-element modelling*'. This analysis report covered our Term 2, Year 3 commitment for '*Analysis of the distribution of natural fractures in the Innamincka Granite based on crustal strain modelling and the applicability to GEL 211*'. The report was not limited to GEL 211. Technically this commitment was completed in Term 2, Year 1 however this was not stated in the Term 2, Year 1 report. It has been confirmed that no further analysis is currently planned. Please refer to the updated Table for Future Work Program Section 4.7.

The Year 1 Annual Report for GEL 211 Term 2, Year 1 report was due on 13 January 2013 and submitted on 11 January 2013.

4.5 Incidents

There were no incidents on GEL 211 during the Licence Year.

4.6 Threat Prevention

There are no threats foreseeable to any future exploration activities in GEL 211. Should a new activity arise an activity notification application will be completed and threats assessed as part of this process.

4.7 Future Work Program

As stated in Section 4.4 the minimum work commitment stated in our Term 2, Year 1 report for Term 2, Year 3 has already been completed. An updated work program table is below:

| Year of Term of Licence | Minimum Work Requirement |
|-------------------------|--|
| 3 | <p>Analysis of the distribution of natural fractures in the Innamincka Granite based on crustal strain modelling and applicability to GEL 211 (<i>completed December, 2011 - Term 2, Year 1</i>).</p> <p><i>Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified.</i></p> |
| 4 | <p>Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified.</p> |

| Year of Term of Licence | Minimum Work Requirement |
|--------------------------------|--|
| 5 | Ongoing monitoring of developments in the geothermal industry, particularly in relation to the development of appropriate and cost effective exploration techniques applicable to further defining the prospectivity of GEL 211, with a view to deploying these techniques where identified. |