

GEODYNAMICS LIMITED **ANNUAL REPORT** 2009



# CORPORATE DIRECTORY

## BOARD OF DIRECTORS

Mr Martin Albrecht AC

### **Non-executive Chairman**

Mr Gerry Grove-White

### **Managing Director**

Mr Banmali Agrawala

### **Non-executive Director**

Mr Pieter Britz

### **Non-executive Director**

Dr Prame Chopra

### **Non-executive Director**

Mr Robert Davies

### **Non-executive Director**

Dr Jack Hamilton

### **Non-executive Director**

Mr Keith Spence

### **Non-executive Director**

Mr Andrew Stock

### **Non-executive Director**

## COMPANY SECRETARY and CFO

Mr Paul Frederiks FCPA FCIS FAICD

## PRINCIPAL and REGISTERED OFFICE

Level 2, 23A Graham Street

MILTON QLD 4064

Telephone: +61 7 3721 7500

Facsimile: +61 7 3721 7599

## POSTAL ADDRESS

PO Box 2046 MILTON QLD 4064

## INTERNET

[www.geodynamics.com.au](http://www.geodynamics.com.au)

## EMAIL

[info@geodynamics.com.au](mailto:info@geodynamics.com.au)

## BANKERS

Westpac Banking Corporation

## AUDITORS

Ernst & Young

## SOLICITORS

DLA Phillips Fox

## SHARE REGISTRY

Computershare Investor Services Pty Limited  
GPO Box 523 BRISBANE QLD 4001

Telephone Australia: 1300 552 270

Telephone International: +61 7 3237 2100

Facsimile: +61 7 3229 9860

## ABN

55 095 006 090

## GEOTHERMAL REPORTING CODE STATEMENT

The information in this report that relates to Geothermal Resources is based upon information compiled by Dr Doone Wyborn, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Dr Wyborn is employed by Geodynamics Limited. Dr Wyborn has sufficient experience which is relevant to the style of geothermal play under consideration to qualify as a Competent Person as defined in Edition 1 (2008) of the 'Geothermal Reporting Code, 2008'. Dr Wyborn consents to the inclusion in the report of the above information in the form and context in which it appears.

## Annual General Meeting

The annual general meeting of Geodynamics Limited will be held in the Grand Ballroom, 2nd Level of the Stamford Plaza Brisbane, Cnr Edward and Margaret Streets Brisbane, Qld on Monday 30 November, 2009 commencing at 4.00 pm.

## Securities Exchange Listing

Geodynamics Limited shares are listed on the Australian Securities Exchange. The home branch is Brisbane, Ticker: **GDY**.

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ABN 55 095 006 090



**GEODYNAMICS**  
LIMITED



## OUR VISION

**Geodynamics will become a world-leading geothermal energy company, supplying competitive zero carbon energy and base-load power to the Australian market.**



**Innamincka 1 MW Power Plant**

# ABOUT GEODYNAMICS AND ITS OBJECTIVES

## Geodynamics growing shareholder base and market capitalisation

Geodynamics first listed on the Australian Stock Exchange in September 2002 with a market capitalisation of \$20 million. The Company has grown steadily since then, and as at 30 June 2009 boasted more than 16,800 shareholders holding a total of 290.1 million fully paid shares. Market confidence in Geodynamics has continued to rise in the new financial year, with Geodynamics supported by more than 17,100 shareholders with a market capitalisation of \$274m on 30 September, 2009. Substantial shareholders, or those owning more than five per cent of shares, comprise Trust Energy Resources (Tata Power) with a 10% share holding, National Nominees (7.3%), Origin Energy Limited (6.8%) and Mr Robert Healy (5.5%).

## An outstanding resource position underpins the vision

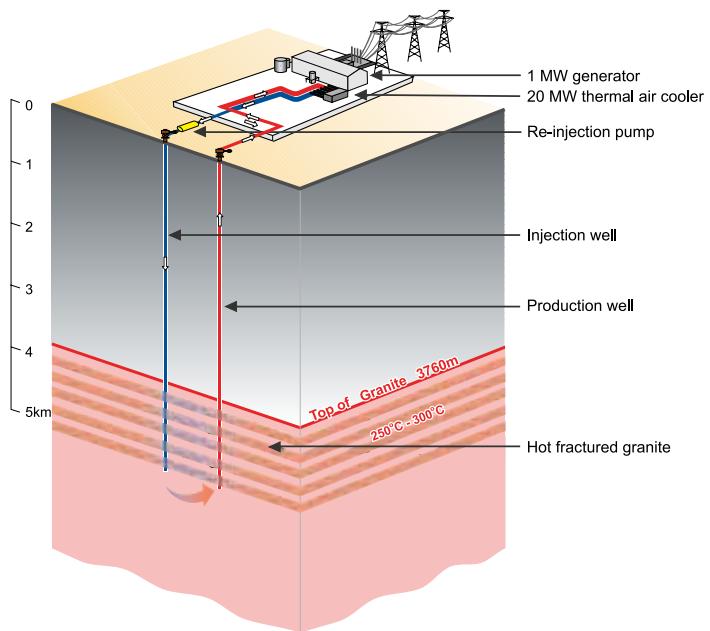
Geodynamics has accumulated geothermal exploration licences covering more than 3,500 km<sup>2</sup> across several Australian states, with an excellent resource and a proven concept. The Company's current focus is in the Cooper Basin in South Australia, where our licence areas cover 1,962 km<sup>2</sup>. Benefits of the Geodynamics tenements include:

- A known resource proven by drilling and supporting gravity and seismic surveys;
- The hottest rocks of this type and at this depth on earth with measured temperatures of 273-283°C at 4,911 metres (Jolokia 1);
- An estimated thermal resource of approximately 400,000 PJ; with current reported inferred resource of 230,000 PJ; and
- Estimated energy to support power development of between 5,000 and 10,000 MW.

In addition to those in South Australia, Geodynamics holds geothermal exploration licences in New South Wales and has accepted offers for Exploration Permits Geothermal (EGPs) in Queensland.

## Power generation from enhanced geothermal systems

Enhanced Geothermal Systems (EGS) use the natural warmth of the earth to heat fluid which in turn drives a turbine generator to produce electricity without producing the emissions of conventional fossil fuel generation.



### 1 MW Power Plant and doublet

EGS is a well known geothermal technique that is ideally suited to our Cooper Basin resource with its temperatures of at least 250°C at the projected well depth. During the process, water (geofluid) is injected into a well at a specific depth where it passes through a fracture system in the rock, extracting heat from the hot rock mass. It is then returned to the surface through adjacent wells. At the surface, the heat is transferred to a secondary working fluid via a heat exchanger, forcing the secondary fluid to expand before being passed through a turbine generator. The two fluids remain separated in their own closed loops, with the geofluid returned to the fracture system while the secondary fluid cycles between the heat exchanger, the turbine and downstream air coolers which are used to condense the secondary fluid, eliminating all water loss.

Granite, like that in Geodynamics Cooper Basin tenement, is an ideal rock mass as it typically exhibits similar properties extending over many tens to hundreds and even thousands of cubic kilometres, with families of natural fractures extending over long distances. The fracture permeability in granites can be considerably higher than the permeability of sedimentary rocks.

## Geodynamics has proven the concept

In March 2009, Geodynamics announced that it had successfully proven its ability to extract heat from hydraulically stimulated hot fractured rock to create power. The achievement of 'Proof of Concept' is one of the major milestones for Geodynamics since its inception nine years ago and marked the completion of Stage 1 of its business plan.

Proof of Concept followed a successful closed loop test between Habanero 1 and Habanero 3 and an independent analysis of the test results by US-based geothermal consultants GeothermEx. The achievement was the culmination of six years of hard work by Geodynamics staff. Key elements demonstrated by the proof of concept testing included:

- resource definition;
- ability to drill and complete wells;
- ability to hydraulically stimulate fractures;
- ability to develop a substantial reservoir volume;
- achievement of well productivity and injectivity;
- confirmed fluid circulation between production and injection wells; and
- forecasting of resource degradation.

Through the development process Geodynamics has demonstrated:

- **The resource is naturally fractured granite and full of water.** The natural fractures are full of water (a brine with salinity of about 60% that of seawater). As a result the original concept of Hot Dry Rocks was modified to Hot Fractured Rocks.
- **Closed system ensures no fluid losses.** The brine-filled fractures mean it will be possible to circulate the natural brine (geofluid) in a closed loop without any inherent fluid losses.

- **High temperatures.** The granite is very hot with temperatures of 237°C at its top, increasing to more than 280°C at a depth of 4,911 metres. This body of granite, extending over an area of at least 1,000 km<sup>2</sup>, is believed to comprise the hottest such rocks known at this depth.
- **Ideal horizontal reservoirs stimulated over large areas.** The extraction of heat from the granite and its production at the surface is enhanced by an effective and conductive fracture system allowing injection of water under high pressure to increase flow performance. Previous lessons learned at Habanero 1 have allowed development of the world's largest underground heat exchanger and it has been demonstrated that more than one fracture zone can be stimulated.
- **Convective heat replenishment potential.** The water-filled fractures and increasing temperature with depth suggest the potential for convection to bring heat from greater depth up to the reservoir area. This upside has not been factored into project modelling.
- **Hydraulic connection between wells established.** Pressure measurements between Habanero 1 and Habanero 3 have proven hydraulic connection between the two wells.
- **Extraction of geothermal heat demonstrated.** Flow testing has demonstrated production of geothermal energy from hot rocks with a peak production of 40 kg/sec.
- **Valuable early lessons.** The Habanero 3 incident, while regrettable, came early in the project life and has provided valuable lessons for future design, materials and techniques. It has proven team ability to manage such unforseen events as attested to by Cudd Well Control and has contributed to a recalibrated Company risk management posture reflecting the developing maturity of the project. The intellectual property gained in dealing with Habanero 3 will be widely sought after.
- **Proven Concept remains valid.** Geodynamics met a major milestone in 2009 with 'Proof of Concept'. A review by GeothermEx after the Habanero 3 incident confirmed that Proof of Concept remains valid.

## The commercialisation challenge

Now that the concept has been proven, the challenge for the Company is to demonstrate the extraction of geothermal heat and production of power on a commercial scale at a competitive price.

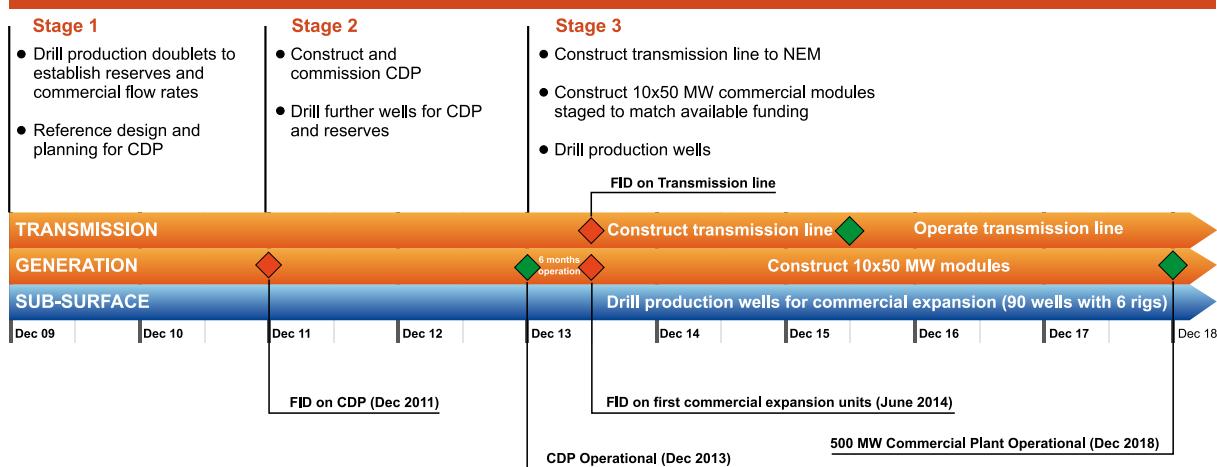
Geodynamics is confident that the information it has gained to date and the work program over the next 18 to 24 months will put the company and its joint venture party Origin Energy in a position to be able to take the investment decision on a commercial sized demonstration plant. To be able to take that decision, the work program has been designed to focus on the following four areas:

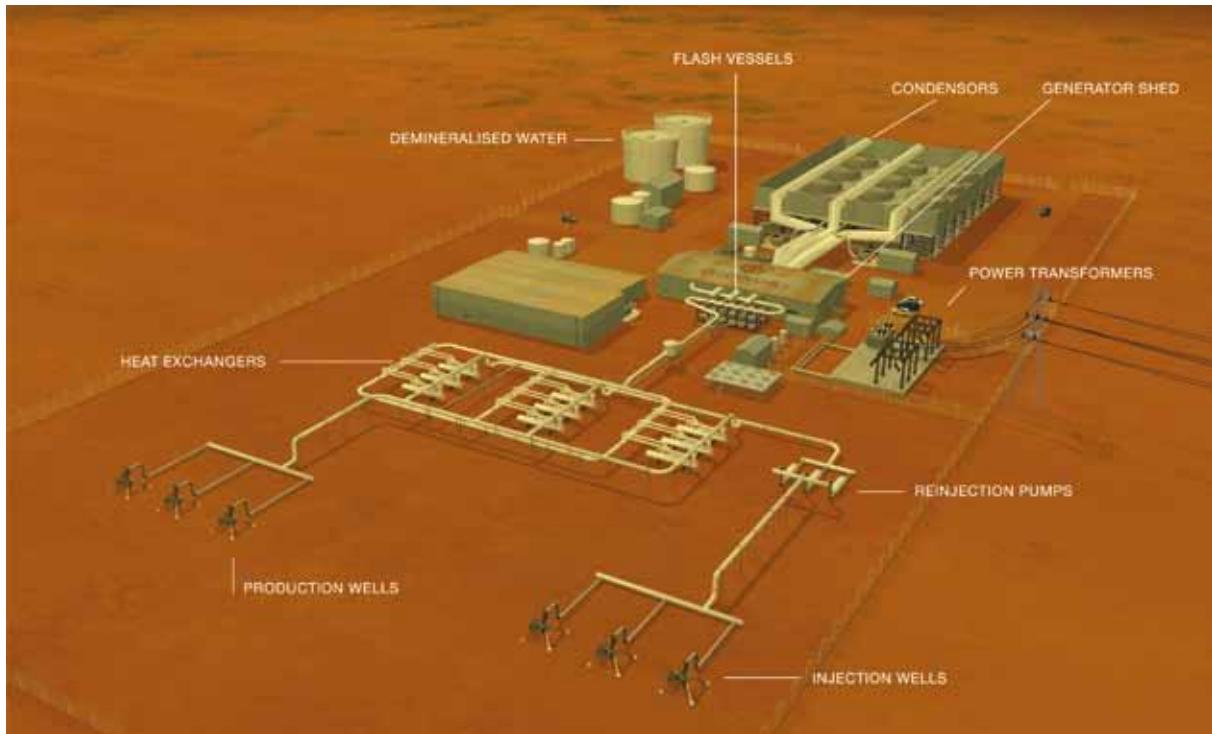
1. Proving up resources/reserves in the Cooper Basin – demonstrating the granite formation conditions are consistent across the tenement area;
2. Demonstrating heat extraction at commercial volumes – producing the required flow rates from wells;
3. Demonstrating a pathway to long term economics – reducing costs;
4. Proving execution capability – delivering on key milestones.

### Closed loop pipeline between Habanero 1 and 3



## COOPER BASIN DEVELOPMENT PLAN





The Company believes that a successfully operating commercial demonstration plant will allow access to debt markets to finance the commercial expansion and transmission infrastructure required to bring this vast resource to the national electricity market.

**Artist's impression of a 25 MW Commercial Demonstration Unit**



## Data centre feasibility study

Geodynamics has forged ahead with stage two of its three-stage business plan by investigating the possibility of co-locating a communications and storage data centre with its commercial demonstration plant. A detailed feasibility study is being conducted into the viability of the project by the Strategic Directions Group. The Company believes the concept of a co-located data centre is feasible due to the following key factors:

- Data centres are intensive consumers of electricity and the commercial demonstration plant (CDP) will be ideally placed to provide long term electricity supply contracts at competitive prices.
- The CDP will be in a position to provide the data centre with a perfect hedge against the volatility of fossil fuel prices and carbon emission prices.
- Communications infrastructure costs (laying underground optical fibre) are considerably lower than high voltage transmission costs.

**Left: Artist's impressions of the data centre concept (not actual design)**

# HIGHLIGHTS OF THE YEAR 2008-2009

**It has been a tumultuous year for Geodynamics with many highs tempered by a few lows. Whilst there have been some setbacks, the lessons learned during the year are of significant value to the Company, and indeed to the geothermal industry as a whole.**

A summary of the year's significant highlights follows.

## Overview of drilling activities

During the period, drilling efforts were focused on Jolokia 1 and Savina 1.

### Jolokia 1

During July 2008, the Company revised the target depth for Jolokia 1 from 4,250 m to 5,000 m. The well was completed at 4,911 m, making it the hottest well on mainland Australia. It is 10 degrees hotter than the Habanero wells located 9 km away.

In April 2009, Rig 100 was successfully redeployed at Jolokia 1 and used to clean out the well in preparation for deep stimulation. Successful stimulation of Jolokia 1 will confirm the capacity to create heat exchange reservoirs at locations spread across the resource and satisfy one of the key milestones for proceeding with the commercial demonstration plan. The Joint Venture is currently procuring necessary equipment and materials to undertake the stimulation in light of the findings from the Habanero 3 incident.

### Savina 1 – free flowing fractures intersected

During January 2009, Geodynamics intersected free flowing, overpressured fracture whilst drilling the Savina 1 well. This fracture was interpreted to be highly productive and more overpressured than at either Jolokia 1 or Habanero 3. The existence of this fracture is indicative of a saturated and over pressured reservoir comparable to those observed at both the Jolokia and Habanero locations.



Drilling floor on Rig 100 based at Jolokia 1

## **Savina 1 – stuck drill pipe and the way forward**

While efforts saw Savina 1 drilled to 3,700 m, the well was secured with a cement plug at 2,640 m after a program of actions to recover stuck drill pipe was unsuccessful.

The Joint Venture parties are considering the forward work program that may include returning to drill a sidetrack at Savina 1. The well remains a valuable asset and will be completed at a later date.

## **Closed loop testing and Proof of Concept**

Successful circulation of 50,000 tonnes of brine under test conditions marked completion of the closed loop testing on February 25, 2009. The test results were analysed at research laboratories in Germany and Japan and results of the analysis were the subject of an independent external review and validation by GeothermEx Inc of the USA.

On March 31, 2009, GeothermEx confirmed Geodynamics had achieved Proof of Concept; the Company had demonstrated resource definition, the ability to drill and complete wells, hydraulically stimulate fractures and develop a substantial reservoir volume. Proof of Concept also demonstrates well productivity and injectivity, confirms fluid circulation between production and injection wells, mitigation of currently identified operational constraints and the absence of adverse environmental impacts.

This was a major milestone for the Company and was the culmination of six years effort.

**“ In summary, based on its independent review of all relevant information... GeothermEx concludes that the Cooper Basin project of Geodynamics has successfully completed the Proof-of-Concept. ”**

**Sabir K. Sanyal, PhD  
President, GeothermEx  
March 26, 2009**

## **The well control incident at Habanero 3**

The well control incident at Habanero 3 (and subsequent activities) occupied much of the final quarter of the year.

### **An overview**

Late on the evening of 24 April 2009, a loud noise was heard followed by a rapid release of steam and water found to be escaping from the Habanero 3 well head. This was the first time a geothermal well in Australia had behaved in such a fashion.

Geodynamics received help from Origin Energy, Santos and international experts, Cudd Well Control, to design and implement a program to control the well. Flow was stopped 28 days after the original incident date.

Of utmost importance, nobody was injured during the management of the incident. Since the incident occurred, drilling activities have been in abeyance, and as a precautionary measure, equipment and personnel were demobilised from the Habanero camp.

### **Independent review**

Geodynamics engaged Sinclair Knight Mertz to independently assess the events that caused the flow at Habanero 3. A detailed investigation of the well incident found that the casing material had cracked due to hydrogen embrittlement, which was caused by dissolved gases in the reservoir fluid.

GeothermEx, the independent expert who validated Geodynamics Proof of Concept results earlier in the year, has since confirmed that the Company's Proof of Concept program, the results of the testing and the positive conclusion remain valid.



**Habanero 3 well site during the incident**

### **Moving forward**

As Habanero 1 and 2 could also be prone to hydrogen embrittlement, actions have been taken to secure both wells. Habanero 2 and 3 are now secure and the Company is currently planning to secure Habanero 1.

As Jolokia 1 and Savina 1 have not had contact with reservoir fluid, is the Company has no concern about the immediate integrity of those wells. However, completion actions are required to both wells to ensure that when utilised in the future, the wells will not be subject to the same hydrogen embrittlement that affected Habanero 3. At the time of writing, your Company was procuring the necessary materials to undertake this completion and preparing for the commencement of deep stimulation at Jolokia 1.

The Joint Venture has undertaken a detailed review of the forward work program. Further detail is contained in the Managing Director's Review. The Company's business plan remains sound and the revised work program will ensure field activities re-commence early in 2010 with the deep stimulation of Jolokia 1 and the drilling of Jolokia 2 to create a working doublet for long term reservoir flow testing, 10 km from the original Habanero site.

### **1 MW Power Plant and Visitor Centre**

Prior to the incident at Habanero 3, your Company was moving ahead with plans to commission the 1 MW Power Plant and Visitor Centre. Hot commissioning of the 1 MW Power Plant had been planned for 27 April 2009.

While there is never a good time for an incident like the one at Habanero 3 to occur, it is Geodynamics firm view that it was far better the incident occurred prior to the

plant becoming operational and before any more wells were drilled to the same design using the same casing.

### **The 1 MW Power Plant**

During the period, despite numerous delays with the pump and heat exchangers, the 1 MW Power Plant was days away from commissioning prior to the Habanero 3 incident occurring. All plant is in place and a transmission line has been erected between the plant and the township of Innamincka. No power has yet been run through the line from the 1 MW Power Plant to the township.

Geodynamics maintains the view that the successful operation of the 1 MW is extremely important for the Company. As well as being symbolic as the first EGS powered electricity generation plant in Australia it will provide the Company with invaluable experience in the long term operation of the production system, brine heat exchangers, injection pumps and the remainder of plant. Obviously without a fuel source currently available the power plant is not operational. The Joint Venture will determine the future location and commissioning timeline for the 1 MW as the work program unfolds and well locations are determined.

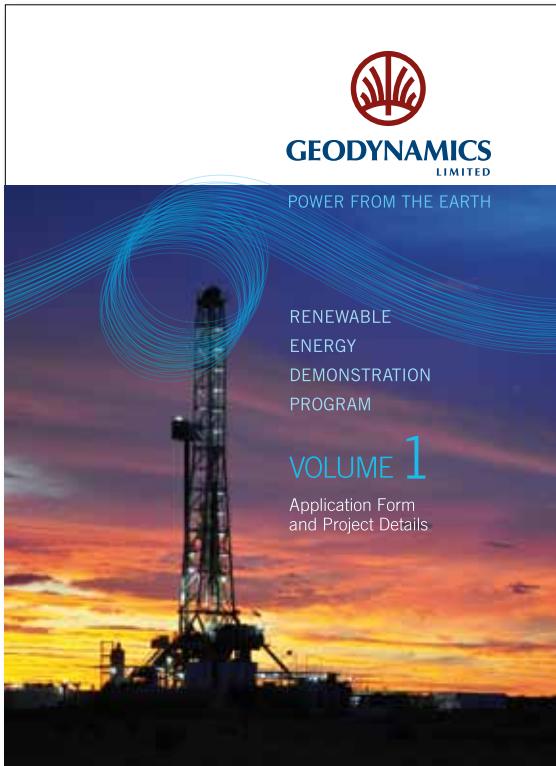
### **The Visitor Centre**

It has been estimated that 50,000 tourists visit Innamincka each year due to its historical significance and interest in Geodynamics operations. A Visitor Centre has been established to educate passing tourists and investors on the concept of geothermal energy and Geodynamics operations.

The Visitor Centre is now open between 10 – 11 am daily and is situated at Geodynamics Habanero camp which is approximately 15 minutes drive towards Moomba from Innamincka down the New Strelzlecki Track.



Senate Select Committee on Fuel and Energy visit the 1 MW Power Plant and Visitor Centre September 2009



## Government funding overview

During the period, your Company was the successful beneficiary of two grants:

- In November 2008, a \$10 million grant from the NSW government was awarded for the development of the Hunter Valley Geothermal Project under the NSW Climate Change Fund Renewable Energy Development Program following a competitive two stage process.
- During April 2009, a \$560,000 grant was awarded to fund 50% of the cost of the power line from the 1 MW Power Plant to the township of Innamincka, under the Regional Development Infrastructure Fund (RDIF), an initiative of the South Australian government.

During April 2009, Geodynamics submitted an application for \$90 million of funding under the Federal Government's Renewable Energy Demonstration Program (REDP). The application followed the successful achievement of Proof of Concept. Geodynamics satisfied all of the eligibility and merit criteria of the program in relation to the development of a Commercial Demonstration Plant (CDP). At the time of writing, the result of this application was still pending.

## Investor activity

During July 2008, Origin Energy confirmed the achievement of the Joint Venture's first milestone - completion of the Habanero 3 well and the open circulation test between Habanero 1 and 3 on time and within budget and consequently committed a further \$9.6 million to the project expenditure.

In September 2008, Tata Power, India's largest private utility, became a cornerstone investor when they subscribed for 11.4% of the Company's then issued share capital at \$1.50 per share for an investment of \$44.1m. The investment by Tata Power also saw Mr Banmali Agrawala appointed to the Board of Geodynamics to represent Tata Power's interest.

Early in 2009, the Company announced a bonus option issue where shareholders were given one option for every four shares held with a conversion price of \$1.50. The options issued under this program expire on 8 December 2009.



Steam flow from Habanero 3 in March 2008

# GEOTHERMAL ENERGY IN AUSTRALIA

## A significant geothermal energy industry has emerged.

As at September 2009, there are now 48 companies pursuing geothermal energy in Australia, including 19 listed companies, with 391 geothermal tenements covering 362,000 km<sup>2</sup>. The Industry has invested \$325m between 2000 and 2008 and is forecast to invest \$1,528m Australia-wide by 2012.

Every State, and the Northern Territory, has now put in place the required legislation or regulations that enable the industry to develop. Most of the activity is centered in South Australia, as indicated in the figure below.

## The Australian geothermal energy industry is well organised

The companies working in the sector formed the Australian Geothermal Energy Association (AGEA) in 2007 to represent their particular interests. ASEA has quickly become a respected industry body. In addition to providing comment to Federal and State Governments, it has commissioned several key independent reports, all of which clearly demonstrate the value of the geothermal industry to Australia's future. For example, an assessment of the early growth potential of the industry indicated that it has the opportunity to have a generating capacity between 1,000 MW (low estimate) to 2,200 MW (high estimate) by 2020. More recently it released a report addressing the value of new transmission lines from the Cooper Basin area to the national grid at Port Augusta. Susan Jeanes, ASEA's Chief Executive, summarized the report:

"The benefits of bringing forward lower priced geothermal energy were estimated to be \$860m for South Australian customers and \$2.8bn for customers across the Australian NEM. This, according to the report, follows as a direct result of lower cost geothermal energy displacing higher cost forms of renewable energy".

Geodynamics' Managing Director, Gerry Grove-White, was the founding chairman of ASEA and the Company continues to be an active participant. The various reports and other information are available on ASEA's website at <http://www.asea.org.au/>.

The growth in activity over the last few years also led to the establishment of the Australian Geothermal Energy Group (AGEG) in 2006 as a broad association of organizations involved in the industry. It now has a membership comprising over 101 organisations (companies, government departments and agencies and academic and research institutions). AGEG is hosted by South Australia's Department of Primary Industries and Resources (PIRSA): see <http://www.pir.sa.gov.au/geothermal/ageg>. Importantly, it has established Technical Interest Groups (TIGs) designed to collaboratively pursue technical issues of common interest. Geodynamics Dean Hindle leads the TIG concerning Drilling and Well Construction and the Company is an active participant in most of the TIGs, including Reservoir Development and Engineering.

Australia is a member of the International Partnership for Geothermal Technology, along with the U.S. and Iceland. This organization was established in 2008 and is designed to facilitate international collaboration in technology development. Australia's industry representative on the IPGT Steering Committee is Geodynamics Dr Adrian Williams.



**Government stewardship of geothermal exploration licences,  
Courtesy of PIRSA**

## Government policies and initiatives are favorable to the geothermal energy industry

Federal and State Governments are increasingly supportive of renewable energy, including geothermal energy. The Federal Government has announced its commitment for a Carbon Pollution Reduction Scheme (CPRS) that will see a price attached to the emission of carbon, and it has passed its Renewable Energy Target (RET) legislation that is designed to see over 20% (45,000 GWh) of Australia's electricity come from renewable sources by 2020.

The Federal Government has decided to establish a new Australian Centre for Renewable Energy (ACRE) to manage its investments into renewable energy. It will be established during the current financial year with an initial budget of \$465 million. Two important initiatives have been launched under this fund. The first was the \$50 million Geothermal Drilling Program, offering assistance of up to \$7 million per drilling project that will prove a geothermal concept and to assist companies access drilling rigs: two awards have been made while a second call for proposals has closed and is anticipated to exhaust the program with a further five awards late in 2009. The second initiative comprises the first round under the Renewable Energy Demonstration Program which is designed to support the commercial scale demonstration of renewable technologies. Geodynamics has submitted a proposal to this program seeking \$90 million to assist its first commercial scale demonstration project in the Cooper Basin, with a decision by the Government anticipated late in 2009.

The Federal Government has also worked with the Geothermal Industry to develop a Geothermal Industry Development Framework and a Technology Roadmap. These strategic documents provide a framework to assist both governments and the industry to develop as quickly and as efficiently as possible.

The Ministerial Council on Energy (MCE) has initiated a review to be undertaken by the Australian Energy Markets Commission (AEMC) into the capacity of existing electricity market mechanisms to cope with the expanded RET and proposed introduction of the CPRS.

State Governments have also been active, with four Geothermal Centres being established with universities in Queensland, Victoria, South Australia, and Western Australia. CSIRO has also increased its commitment to geothermal technology as part of its new energy research portfolio.

## Federal White paper is looking at energy policy out to 2030

The Federal Government is preparing a White Paper to guide its energy policy out to 2030. Discussion papers have been released and responses submitted to the government. The final paper is expected to be released late in 2009.

For more information go to [http://www.ret.gov.au/energy/Documents/facts%20statistics%20publications/Terms\\_of\\_Reference\\_Energy\\_White\\_paper.pdf](http://www.ret.gov.au/energy/Documents/facts%20statistics%20publications/Terms_of_Reference_Energy_White_paper.pdf).

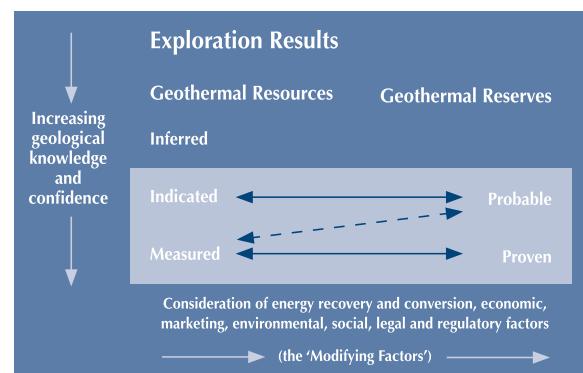
## Annual Conference brings the Geothermal Industry together

A highlight of the geothermal year is the annual conference that is sponsored by both AGEA and AGEG. The 2009 conference will be in Brisbane on 10-13 November, with an anticipated attendance of over 350 from across the Australian and international geothermal industry. Geodynamics is a strong participant with two papers and a company update. For more information go to <http://www.impactenviro.com.au/ausgeothermal/>.

## Australia has the world's first Geothermal Reporting Code

The Geothermal Code Committee, under the sponsorship of AGEG and AGEA, has developed the Australian Geothermal Reporting Code (2008). The Code is designed to promote transparency and consistency in the way companies report their exploration results and estimates of resources and reserves. The Geothermal Code aligns with the JORC Code that operates successfully in the mining industry, with a framework shown in the figure below. The Code is available via the AGEG or AGEA websites. The first year has succeeded in ensuring the quality of public reports and a second edition is due for release in November 2009. All AGEA member companies are required to comply with this Code.

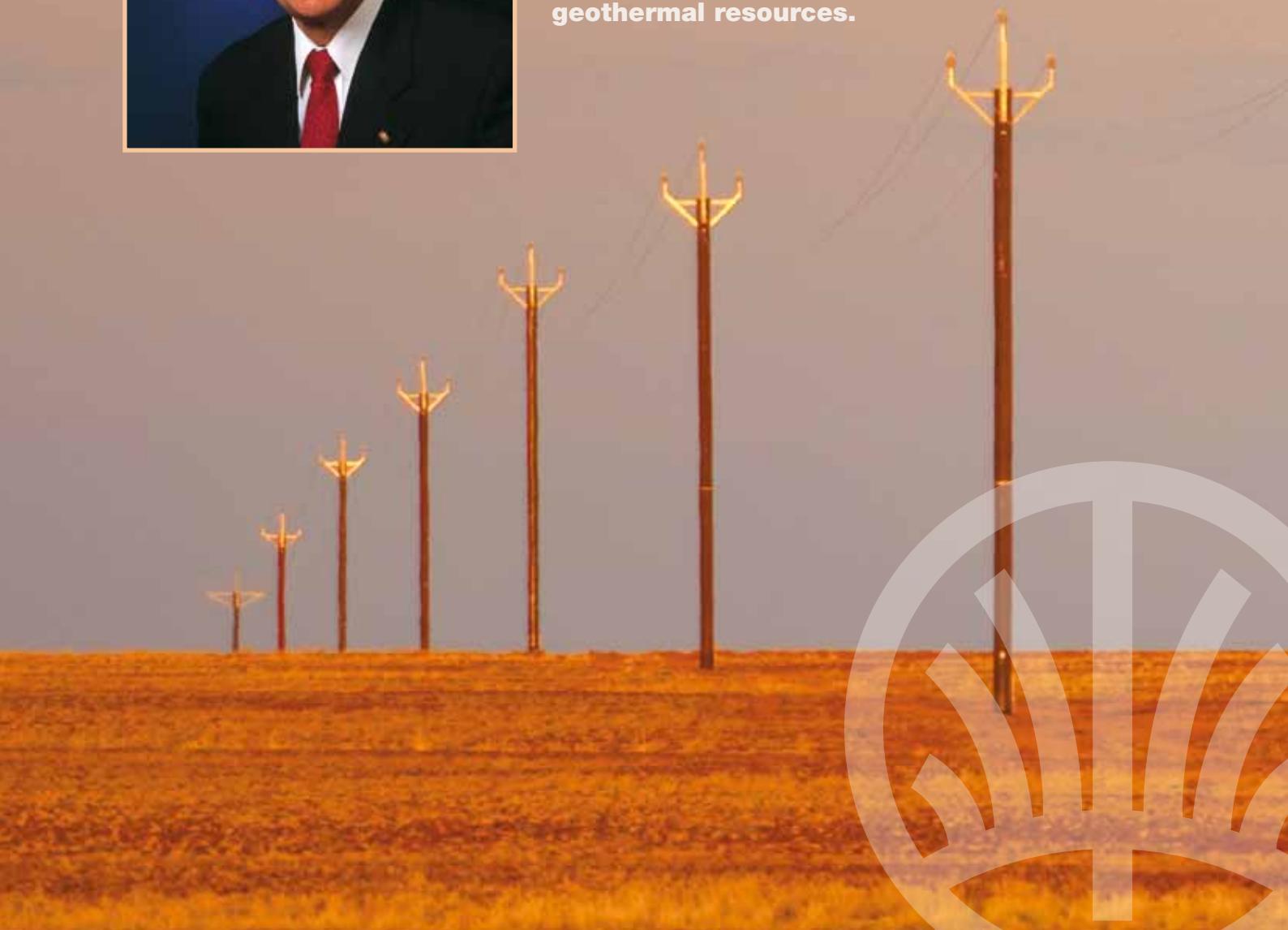
### The framework of the Australian Geothermal Reporting Code (extracted from the Geothermal Code, 2008)



## CHAIRMAN'S REVIEW



**The last financial year has been a year of many achievements for Geodynamics but also one of reflection and review of our forward program to develop the Company's significant EGS geothermal resources.**



At Company level, achieving Proof of Concept in March 2009 and completing construction of the 1 MW Power Plant were significant steps forward. These successes were tempered by the temporary setback of the Habanero 3 well incident which was most unfortunate, at a time when commencement of the commissioning of the 1 MW Power Plant was imminent.

Fortunately, the well incident resulted in no loss of life or injury and the investigation is now complete. The issues identified by the investigation are complex, but are within the bounds of general operational experience in the geothermal industry. We are well positioned to learn from and build on valuable lessons from this experience and we are confident the incident will not have a material impact on the Company's long term strategy for large scale geothermal power generation in the Cooper Basin. Geodynamics is taking prudent and timely stock of our learnings to date and reviewing our forward work program and appropriate adjustments will be made.

The Global Financial Crisis has caused markets to contract and shareholder's investments to diminish in value. However, Geodynamics maintained strong support from shareholders despite the drop in the share price. Shareholder sentiment has been characterised by disappointment and frustration over delays. Despite this, many shareholders remain committed to the long term vision of zero emission base-load power. Our major shareholders Tata Power, Origin Energy, The Sentient Group and Sunsuper remain committed to Geodynamics' vision for the long term.

At Government level we have seen some significant policy focus on emerging technologies and infrastructure as well as progress and increased debate on the Renewable Energy Target (RET) and the Carbon Policy Reduction Scheme (CPRS).

## The Evolving Policy Environment

The Company's long term vision to profitably deliver geothermal power from the Cooper Basin is supported by continued projections for energy demand, growth in interest in both the Australian and International geothermal scene as well as increased, albeit variable, policy focus on climate change issues by Federal and State Governments.

However, there are risks from continued debate about climate change and delays in policy response. Geodynamics continues to strongly support the introduction of the CPRS, while being concerned about the ongoing debate and the impact the delay of introduction may have on the achievement of the Government's 2050 target of a 60% reduction in carbon emissions on 1990 emission levels.

It is pleasing to note, the Federal Government has now introduced the Renewable Energy Target of 20% by 2020; a big jump from the previous 2%. It is also positive to see the Federal and State governments and regulatory bodies focusing on emerging technologies and infrastructure.

The Company is supportive of government efforts to develop their long term energy visions and the prospect of extensions of the transmission infrastructure into remote areas. Going forward, Geodynamics hopes governments build on their early policy initiatives more robustly. Indeed, Government has a significant role to play to support efforts in unlocking the energy from our vast resources.

To that end, the Company will continue to support policy initiatives such as the Carbon Reduction Pollution Scheme (CPRS) to come into play sooner, rather than later. The Company is also supporting a drive for equity in the federal tax arena so that geothermal exploration becomes tax deductible as it is for the hydrocarbon and mineral exploration industries. In addition, customs tariff concessions for imported drilling supplies and diesel fuel excise rebates are not currently available for geothermal drilling as they are for hydrocarbon drilling and it is seeking to redress this inequity as well.

It is pleasing to note the Company was successful in its application for a \$10 million grant from the New South Wales Government's Renewable Energy Fund.

This grant will assist in the development of a small geothermal plant in the Hunter Valley if the results of testing, to be undertaken shortly, are successful. The Company was also successful in its application for a \$560,000 grant from the South Australian Government's Regional Development Infrastructure Fund (RDIF). The grant funded 50% of the cost of transmission line between the 1 MW Power Plant and the Innamincka township. The Company welcomes the continuing support provided by governments in the journey to commercialization of EGS.

Internationally, the geothermal industry also continues to grow with many foreign governments investigating their geothermal resources. The Obama administration is supportive of Enhanced Geothermal Systems (EGS) research and has allocated many tens of millions of dollars to commercialise EGS in the USA.

## Corporate Governance and Capacity to Deliver

As part of the planned succession, there have been a number of changes to the Board of Directors. In November 2008, two of the Company's longest serving directors retired from the Board. Dr Doone Wyborn had served since November 2000 and Mr Neil Galwey OAM since June 2001. In May 2009, Mr Robert Flew retired as a director, having served on the Board since August 2001. Dr Wyborn remains with the Company as its Chief Scientist.

On behalf of the Directors, I wish to acknowledge the invaluable contribution of all three in shaping the strategic direction of the Company. We valued their wise counsel and wealth of experience and wish them all the best for the future.

At the Annual General Meeting in November 2008, Shareholders elected Mr Banmali Agrawala as a Non-Executive Director. Mr Agrawala's appointment was pursuant to the September 2008 placement made to Tata Power, wherein Tata Power has a right to appoint a Director to the Board of Geodynamics. An Engineer, Mr Agrawala brings a wealth of experience to the Company. He is currently Executive Director – Strategy and Business Development at Tata Power and is presently Chairman of CII Western Regional Council.

Mr Robert Davies was also appointed a Non-Executive Director shortly after the Annual General Meeting in 2008. Mr Davies is a Certified Management Accountant (Canada) and has extensive senior finance experience with global mining and resource companies including Inco, WMC, BHP and Alcoa. Mr Davies has succeeded Mr Flew as Chair of the Audit and Risk Committee.

Geodynamics believes that the new Directors' mix of skills complements and strengthens your Board's capability to guide the Company through the next stages of commercial development.

Along with the Board changes, our investment in skilled and experienced staff continues with numbers growing from 40 to over 75 in 12 months, reflecting further maturing of the Company's capacity to deliver.

## Long Term Vision

The Geothermal industry continues to grow nationally. Other players are starting to drill, albeit focusing on shallower, lower temperature geothermal prospects. Geodynamics wishes them well in their ventures and maintains the view that the Company will benefit from a robust successful geothermal industry in Australia.

Geodynamics remains the market leader in the development of EGS power generation focused on the largest resource in Australia. Notwithstanding the timely and prudent opportunity to review lessons from 2009 and take stock, we remain firmly committed to our vision of zero emission base-load power and our first 500 MW geothermal power station.

The Company is firmly of the opinion that it has the opportunity to develop a nation building resource for this century to rival the Snowy Mountains Hydro Scheme of the last century.

In time, the realisation of our ambitious program will require further equity raising. Governments, both state and federal, our cornerstone partners as well as our existing loyal shareholders, will all continue to have a role to play and will have the opportunity to participate in unlocking the energy from our vast resources.

## Conclusion

2009 has been a year of many challenges as well as achievements. It has once again been my privilege to be part of the Geodynamics team. I would like to thank my fellow Directors for their dedicated support, our partners for sharing our vision and our shareholders for their continued faith in the environmental and commercial merits of Geodynamics commitment to zero emission energy generation.

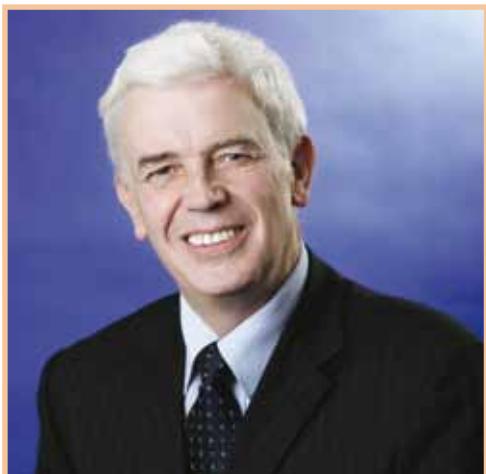


Martin Albrecht AC, **Chairman**



Habanero 3 well control incident during May 2009

## MANAGING DIRECTOR'S REVIEW



### A Watershed Year

**The 2008/09 financial year has been a significant one for Geodynamics, characterised by achievement, consolidation, and being forced by circumstances to rethink our immediate work program with a view to bringing our considerable energy resource to market.**

The mixed picture is demonstrated by the achievement of 'Proof of Concept' on the one hand, while having to pause to digest the lessons of the Habanero 3 well incident on the other. The Company has learned a lot about itself and the balance between haste and risk. As a result, the Company is recalibrating its approach to developing the resource.

We have seen a significant year in the evolution of Geodynamics and the geothermal operating environment. Geodynamics has worked through a number of difficult situations with all stakeholders and believe we are a stronger company for having done so. We also retain the strong support of our partners and shareholders.

As 2009 ends we are waiting for an announcement from the Federal Government that Geodynamics will be awarded \$90 million from the Renewable Energy Demonstration Program. This will be an important recognition of the work we are doing, building on 'Proof of Concept' and leading to the development of a commercial demonstration plant (CDP). It will also reflect an important Government commitment to our vision for developing large scale zero-emission energy generation.

### A Maturing Company

The Company has developed considerable learning throughout the year in all aspects of the business including drilling, reservoir testing, remote power plant construction and well control that are of significant value and will be much sought after by the industry worldwide. The intellectual property of the Company lies predominantly in its people and is of enormous long-term value to Geodynamics.

The Habanero 3 well incident in April caused an unforeseen delay to operations as the Company took time to bring the well under control and identify the cause of the incident. However, out of adversity comes the shoots of the future. The Company has used the hiatus in operations towards the end of the year to catch its breath, embed the learning from the incident and ensuing review, and strengthen the internal control environment and systems and procedures by which the Company operates. This has been leveraged by increasing the skills and experience base of our workforce which has grown from 40 to over 75 in the last 12 months.

In some ways the timing of the Habanero incident was both good and bad. Whilst it is regrettable that it occurred at all, and so close to the commissioning of the 1 MW power plant, it is fortunate that it didn't occur later in our drilling program with all wells designed to the same specifications. The incident also proved the robust and productive relationship we have with Primary Industries and Resources of South Australia (PIRSA).

The Company has learned a lot from Habanero 3. Information gained around its production history, flow potential, geo-seismic monitoring data, the incident itself and the well-dynamics during the control and cementing operations will all be useful to the Company going forward. Areas where the information gained will have a direct impact include the material selection, well design, operability of production wells (and injection wells), production enhancement, rig specifications, well-cost reduction, temperature optimization, thermal efficiency and hydraulic optimisation of the Enhanced Geothermal System.

The Company faces a continual challenge to balance competing objectives around appropriately managed risk and the pace of development. The Company and all of its stakeholders have a desire to see the resource developed in the shortest possible time. However this needs to be balanced against the risk of undue haste and running parallel work streams to resolve multiple technical issues.

Geodynamics in 2009 is a very different company to the junior explorer it was in 2006 when Habanero 3 was designed. With the assistance of our Joint Venture partner Origin Energy, Geodynamics is developing methodologies and systems to further develop the resource and grow the company into a project developer with a focus on improving execution. A focus of the Joint Venture is on addressing risks and technical issues in a systematic way.

## Health and Safety

I am pleased to report that Geodynamics has also shown a marked improvement in the health and safety arena. Significant progress has been made with a number of health and safety initiatives including the design and implementation of a safety management system and the establishment of a health and safety committee. This improvement was demonstrated during the Habanero 3 well incident and subsequent investigation where there were no safety incidents. These developments were achieved due to the recruitment of number of experienced personnel in the field of health and safety management.

## Capacity to Deliver

Over the past 12 months, the Company has continued to grow its workforce and has been fortunate to attract some of the leading experts in their field to join the Geodynamics team. In the sub-surface area in particular, significant expertise has been brought on board to help address the technical challenges faced by the Company.

This is epitomised by the recruitment of Andre Mol, Wells Delivery Manager and Robert Hogarth, Reservoir Development Manager. Both are experts in their field with Andre joining Geodynamics from overseas with a wealth of drilling experience having previously been the mastermind behind rolling out 'Drill the Limit', a world renowned drilling cost improvement program, for Shell around the world. Robert was previously responsible for managing the reservoirs of BHP's oil business. The level of skill and experience that these individuals, and others, bring to the organisation is invaluable.

Experienced and senior staff have also been recruited into the procurement, project management and health and safety areas.

As a result of this increase in skills and experience base, the Company has increased its capacity to deliver the work program objectives and deliver this vast resource to market.

## Behind the Scenes

As well as the obvious focus on drilling activities and the construction of the 1 MW power plant, the Company has been extremely busy behind the scenes with activities to support the ultimate commercialisation of the Company's geothermal resources.

In relation to the Cooper Basin resource, a significant amount of activity has gone into the basis of design of the commercial sized generation units and associated plant including heat exchangers and re-injection pumps. Work has also been progressing on the approvals process for the ultimate power station development and services base that will be required.

A number of transmission studies were completed during the year to determine, among other things, the optimum connection point into the existing transmission network. This work will enable the Company to start the transmission planning process. In addition to planning long term large scale transmission links, the Company has also been investigating the potential uses of power from the commercial demonstration plant in the short term, including the feasibility of co-locating a Data Centre with the plant.

Work has also been undertaken to determine the requirements of the lending community to enable Geodynamics to access debt financing for commercial expansion of generation plant to exploit the resource. This work has confirmed that the Company will be in a position to obtain debt financing for a significant proportion of the commercial expansion, following the successful operation of a commercial sized demonstration plant.

In addition to the above initiatives, Geodynamics committed \$5 million over a five year period to accelerate the development of geothermal technology as part of the international Geothermal Technology Plan (GTP). The GTP is designed to leverage private and public sector funding and the Company believes it is important to strengthen its longer-term technology relationships and to work with institutions to help build the capability the Company needs to meet the technology challenges it faces.

## Forward Program

Whilst Geodynamics and its joint venture partner Origin Energy remain committed to bringing the vast Cooper Basin geothermal resource to market, the Habanero 3 incident and the global financial environment has brought into sharp focus the need to re-evaluate the forward work program. Both parties have been working hard together to determine the next steps in the forward work program on this journey to commercialisation.

Geodynamics is acutely aware of the need to reach a position where access to the debt markets is possible. As discussed above, this means successfully operating a commercial demonstration plant. Both joint venture parties are working toward this goal in the medium term. The key driver of the work program over the next 18 to 24 months is to get the joint venture to a position where it can take the investment decision to procure and construct a commercial sized demonstration power plant.

There are four key points that still need to be addressed in relation to getting to that decision point and they are summarised as follows:

- *Proving up resources/reserves in the Cooper Basin*** – demonstrating the granite formation conditions are consistent across the tenement area;
- *Demonstrating heat extraction at commercial volumes*** – producing the required flow rates from wells;
- *Demonstrating a pathway to long term economics*** – reducing costs;
- *Proving execution capability* –** delivering on key milestones.

The work program over the next 18 to 24 months is designed to specifically address these points and can be summarized as follows:

- Complete Jolokia 1, undertake fracture stimulation, demonstrate injectivity rates;
- Drill Jolokia 2, undertake stimulation, establish connection with Jolokia 1, commence long term doublet flow testing;
- Drill the first well of a second doublet (location yet to be determined), undertake fracturing at multiple levels, flow test;
- Drill the second well of the second doublet, demonstrate multi-fracture drilling, establish connection, undertake flow testing.

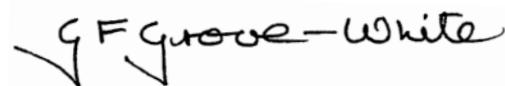
Each of these steps will be subject to decision gates and satisfactorily meeting objectives of the steps.

The Company is firmly of the opinion that this gated approach and the robust objectives being set for each of the gates will enable the joint venture parties to take the correct decisions at the right time about the development and commercialisation of the resource.

There is some immediate work to be done on well designs to complete both Jolokia 1 and Savina 1 that were designed to the same specification as Habanero 3. This work is in hand and is being undertaken with the assistance of well design specialists from around the world.

The design of the future wells in the forward program in light of the Habanero 3 incident findings is also in hand.

Geodynamics is grateful for the continued support of all of its stakeholders, including the people of Innamincka, Government, Joint Venture parties and shareholders for their continued support.



Gerry Grove-White, **Managing Director and CEO**



**Reef of coiled tubing inserted into Habanero 3 -  
mud was pumped down the tube to the bottom of  
the well to stop the flow of steam and water.**



# OPERATIONS

**Geodynamics has achieved a significant amount in the past 12 months. The lessons learned from the field operations are enabling the Company to establish a unique knowledge base giving deep and broad insight and understanding into the vast geothermal resource. This insight is being leveraged with information from other geothermal developments around the world to enable the company to progress on its journey to commercialising Enhanced Geothermal Systems (EGS) in the Cooper Basin.**

This expanded knowledge base, a wider geothermal network, greater understanding about static and dynamic behaviour of the reservoir, a more robust and mature operations team with enhanced focus on design as well as operational execution all help cement Geodynamics position as the leading geothermal company in the industry.

## First wells provide invaluable lessons for future development

Geodynamics has learned a great deal through the process of drilling five deep wells (Habanero 1, 2, 3, Jolokia 1 and Savina 1), creating the reservoir at Habanero and flow testing between Habanero 1 and Habanero 3.

Building on the lessons learned from the drilling of the Habanero wells with its LeTourneau Lightning Rig (Rig 100), Geodynamics completed Jolokia 1 in September 2008, drilling to a depth of 4,911 m. Jolokia 1 is the hottest well on mainland Australia, known to be 10 degrees hotter than the Habanero wells located nine kilometres away. Successful stimulation of Jolokia 1 during the next year will confirm the capacity to create heat exchange reservoirs at locations spread across the

resource and satisfy one of the key milestones toward making the decision to proceed with the commercial demonstration plant.

Savina 1 was drilled a further 9 km west of Jolokia and was secured with a cement plug at 2,640 m after a program of actions to recover stuck drill pipe was unsuccessful. Before the stuck pipe event, the well had intersected overpressured fractures similar to those at Habanero and Jolokia. A decision was taken on 5 March to redeploy Rig 100 at Jolokia 1 where stimulation activities are planned.

The Habanero 3 incident has been a very important event as it brought sharply into focus how much EGS in the Cooper basin is pushing the envelope of existing technologies. However, the incident and resulting investigation have made the path forward much clearer, with the appropriate balance of measured risk taking and application of robust technology will lay the foundation of a program to progress EGS on the path towards commercialisation.

The lessons of the past year have driven a shift in the way Geodynamics addresses the technical challenges it faces in bringing this resource to market. This shift has identified a series of activities that need to be incorporated into the 'way we do things here' to deliver on the company vision. Some of these activities are outlined below:

- Partnering with engineering and modeling specialists to deepen the global expertise on well design for EGS, its operation and maintenance;
- Using the newly gained insight to determine best material solutions for production and injection wells;
- Enhancing critical design and operational features such as cementing and tubular handling;
- Widening the knowledge of multi-component but single phase brine behaviour under extreme pressures and temperatures regimes;
- Enhancing the current well delivery process with a more robust Quality Assurance and Quality Control component geared for unchartered technical territory; and

- Upgrading contracting strategy and contracting management processes to ensure systematic quality thinking for well design and construction is a main value-driver.

The Company is currently incorporating these activities into the standard operating procedures of the company.

## Drilling and Rig strategy

Operating Rig 100 has also been a source of learning; it has proven to be a capable drilling rig with ample opportunity for optimisation, notably during operations such as running casing, working on the well head of the geothermal wells, or during cementation operations. There is also room to improve the Company's ability to expedite the movement of the rig between well locations.

Geodynamics announced 24 September 2008 that a contract for the construction and supply of a second heavy duty drilling rig had been signed with National Oilwell Varco (NOV); a worldwide leader in the design, manufacture and sale of oil and gas drilling systems and components. The additional geothermal drilling rig will cater for deep EGS wells and will be a capable addition to the Australian rig fleet. The lessons learned from operating Rig 100 have resulted in design improvements on Rig 200. These include improved handling of various drill pipe and casing sizes, enhanced circulation system for the drilling fluid, better rig move capabilities, higher pumping capacity and enhanced diesel electric system.

All these modifications to Rig 200 will enhance the ability of the rig to assist the Company in delivering:

- Cheaper wells by drilling faster and better;
- Better wells by enhancing commercial flow potential;
- More commercial wells by drilling deeper to access hotter granite; and
- Smarter wells as we develop greater understanding and gather better data.

To support this revitalised operations effort, Geodynamics will adopt a proven and well known methodology of performance management named 'Perfection Based Performance'. This methodology is not merely doing what we already do safer, better and cheaper but doing it smarter from the start. The foundation of this methodology was laid in April 2009 and has been further developed in the intervening period, continuing during the Habanero 3 incident. It has been designed so that the performance methodology will support the rapid adoption of all

lessons learned from Habanero 3. At the highest level, it consists of only a few remarkably simple elements:

- A desire to be the best and help others to be the best - hunger to learn and keen to share;
- Pervasive leadership at all elements and aspects of operations and across the disciplines;
- Clear performance logic, unravelling business complexity and linking technical tasks to goals;
- Candid measurement of leading performance indicators and honest feedback with swift action;
- Closing the learning-planning-doing cycle because a lesson is truly learned when behavior is changed.

The desire to adopt this methodology is a matter of priority for the Company as it will also result in safer design, higher quality, better informed staff, better equipment and enhanced procedures.



**A NOV rig similar to Geodynamics' Rig 200 contracted to be built**

## Practical Completion of 1 MW Power Plant and Visitor Centre

Following the Habanero 3 well control incident the construction crew for the 1 MW plant was demobilised until the well was brought under control and the control measures which were identified by the risk assessment of the Habanero 1 well were implemented. The construction crew was then remobilised in the last week of June to finish the work that remained outstanding at the time of the incident. The construction activities were completed and cold commissioning activities commenced in early July. Cold commissioning was successfully completed and the construction crew demobilised in mid July. The 1 MW Power Plant was officially handed over to the Power Engineering and Operations Group as of 31 July 2009. Hot commissioning is yet to be completed on the 1 MW Power Plant and the timeframe for this is yet to be determined and is dependent on re-establishing a fuel source following the Habanero 3 incident. The Joint Venture will determine the future location and commissioning timeline for the 1 MW plant as the work program unfolds and well locations are determined.

## Construction of Power Line from 1 MW Plant to Innamincka

At the time of the Habanero 3 incident all construction work on the overhead power line to Innamincka had been completed. Work to be completed in order to energise the line consisted of a small amount of Electrical Code of Compliance (ECC) work (ensuring property wiring in the township was up to code) and connecting the properties to the consumer mains. Commissioning of the power line remains under a suspension notice and any activities related to the power line will not be carried out until the commencement of the 1 MW hot commissioning.

## Challenges in delivering the 1 MW Power Plant

The 1 MW power plant is unique, in that there is no other power generation plant that uses water at the high pressure encountered at Habanero. The geofluid production pressure of 350 bar is greater than the main steam pressure of a coal fired supercritical power station. Although this may sound like a positive feature it has caused significant difficulties with the reinjection pump. The reinjection pump is used to add another 100 bar of pressure to the geofluid in order to pump it back underground. The conditions have proved challenging for all pump and seal suppliers and although they were willing to rate their seals for our conditions, the margins are slim resulting in the pump being unreliable. The suction end of the reinjection

Power plant components behind the turbine hall and Visitors Centre



Powell Electric constructing the transmission lines to Innamincka

pump needs to be sealed to prevent the geofluid leaking back out along the motor shaft and there is no known seal manufacturer who has successfully managed a fluid at this pressure. A global search for an alternative pump has identified two possible solutions; one a down hole pump which does not require a seal and the other an above ground centrifugal pump with a triple seal. Further investigations are being carried out to evaluate their suitability for both the 1 MW power plant and future larger plants.

The brine chemistry is also unique with the unexpected deposition of stibnite from the brine to the brine cooler tubing (which would also occur in heat exchangers). Methods to eliminate or manage this problem are currently being investigated. The results of the investigation into the Habanero 3 well failure has prompted a review of materials used in the surface works of the 1 MW plant in addition to those materials under consideration for the Commercial Demonstration Plant (CDP). Geodynamics will construct a test rig, to be incorporated into the 1 MW plant, to validate the findings of the investigations into both the stibnite deposition and the material selection.

Although the 1 MW plant hot commissioning was not completed (due to the Habanero 3 incident) the cold commissioning was completed. This provided valuable information regarding the control system of the plant and improvements have already been considered for the CDP.

## Environmental and Regulatory Review

### Habanero 3 incident

The key environmental issue encountered during 2009 was without doubt the incident at Habanero 3 and the resultant environmental impacts. The Company engaged a hydrogeologist and an environmental consultant to carry out a detailed hydrogeological and environmental assessment. Based on that assessment, a remediation/rehabilitation strategy for any potential surface and subsurface impacts resulting from the well incident has been prepared and is currently with the regulatory authorities in South Australia for review. The strategy demonstrates how the Company will proactively manage the incident including monitoring through the installation of at least two wells and chemical analysis of water and soil to ensure that any potential effects on the environment are effectively managed. The Company is confident that there will be no observed material, long term, environmental impacts from the incident.

During 2009 the Company has taken a number of key steps in terms of environmental management. The most significant of these is the development and implementation of an Environmental

Management System (EMS). The EMS establishes a set of processes and practices which ensure that Geodynamics minimises its adverse environmental impacts, meets the commitments of its environmental policy and achieves its objectives and targets. The EMS applies to all of Geodynamics operations, sites and offices. Staff and contractors working for Geodynamics are expected to comply with the spirit of the EMS in relation to all day to day activities undertaken for and on behalf of Geodynamics.

### Regulatory approvals

Geodynamics is required to obtain various regulatory approvals before undertaking any regulated activities. In South Australia these include:

- Holding a licence under the Petroleum Act 2000, with conditions attached. Currently we have Geothermal Exploration Licences (GELs) and Geothermal Retention Licences (GRLs) for our activities in the Cooper Basin;
- Submitting a Statement of Environmental Objectives (SEO) approved by PIRSA;
- Submitting an Environmental Impact Report (EIR) approved by PIRSA that forms the basis for the SEO;
- Submitting an Activity Notification to PIRSA for approval 35 days before undertaking a regulated activity and issuing a Notice of Entry to all occupiers of the land;
- Receiving an approval for the Activity Notification before commencing the activity. Occupiers can object to the notice of entry;
- PIRSA consulting with a number of other agencies prior to approving an EIR/SEO including the Environment Protection Authority and Department of Water Land and Biodiversity Conservation and the Department of Environment and Heritage.

## Project Management Capability

Geodynamics now has a fully staffed project management group. A significant amount of effort has been expended on developing and implementing the Geodynamics Project Management Process (PMP) which describes the methodology by which Geodynamics plans and delivers projects. It consists of process maps, guidelines, and a set of standard document templates that are to be used on projects to ensure consistency in the approach and appropriate governance is applied by the newly established Program Control Group (PCG). Improvement of the PMP is an ongoing process and many incremental improvements have been implemented during the year.

The implementation of the Geodynamics Enterprise Resource Planning (ERP) system will further improve the way projects are managed by integrating the PMP with other processes across the organisation.

Following completion of the 1 MW Project, Geodynamics conducted a detailed Post Implementation Review (PIR). The PIR resulted in a number of improvement recommendations, a large number of which have already been implemented. The key lessons pertain to:

- The need to conduct detailed integrated planning for projects prior to attempting execution;
- Initiating the project properly to ensure key project elements such as scope definition, estimating, approvals and scheduling are addressed when the project is commenced;
- Scope Management and Estimating prior to embarking on the execution phase of a project, to ensure it is scoped in detail and that cost estimates are rigorous, independently reviewed and based on a robust scoping effort.

## Advances in procurement

During 2009, Geodynamics has focused on streamlining the procurement, contract management and logistics operations of the organisation. The Company has appointed two procurement Specialists; one focused on subsurface and drilling activities and one focused on the surface and power plant construction activities to enable closer integration with the operational teams and tailored procurement strategies.

Geodynamics has designed a warehouse facility to support the Cooper Basin operations and developed an operational plan. The warehouse facility will comprise a number of 40 ft containers connected by canvas domes to provide covered and air-conditioned storage for vital and sensitive equipment and materials.

**Road train passing through Innamincka**



## Transmission Lines

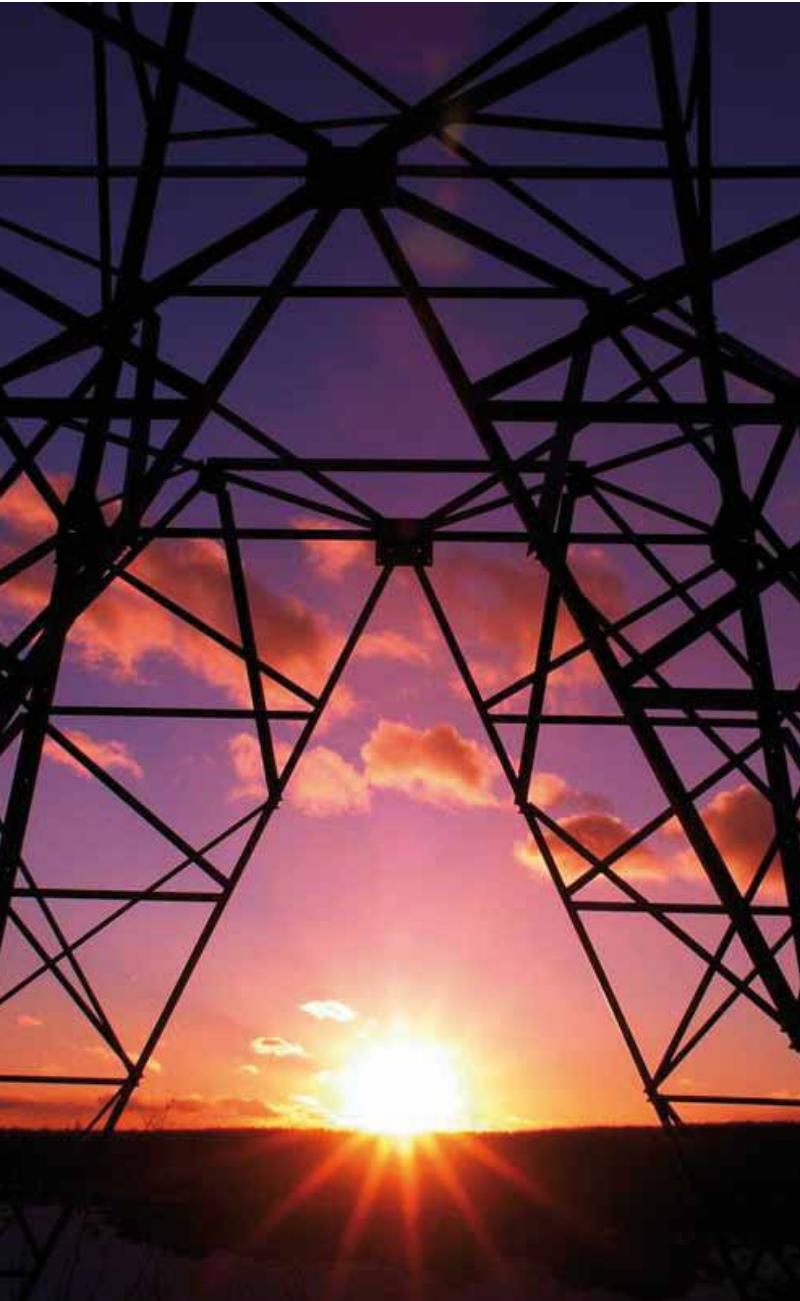
Significant traction has been gained during the year on raising the awareness of the need for extensions to the existing transmission network to cater for the expected growth in renewable energy development driven by the federal government's Renewable Energy Target legislation.

The Australian Energy Markets Commission (AEMC) has been charged by the Ministerial Council on Energy (MCE) to review the impacts of the introduction of renewable target legislation and the proposed Carbon Pollution Reduction Scheme (CPRS) on the existing energy market frameworks and where problems exist develop workable solutions to the problems. The AEMC have prepared a number of reports to date and have identified the connection of remote renewable projects as being a major issue that requires attention. To that end the AEMC have suggested the introduction of Network Extensions for Remote Generation (NERGs) where the market funds large connection assets from renewable hubs into the existing transmission system with end users ultimately bearing the risk of under-utilisation of the assets. The AEMC are due to report to the MCE with its recommendations this year.

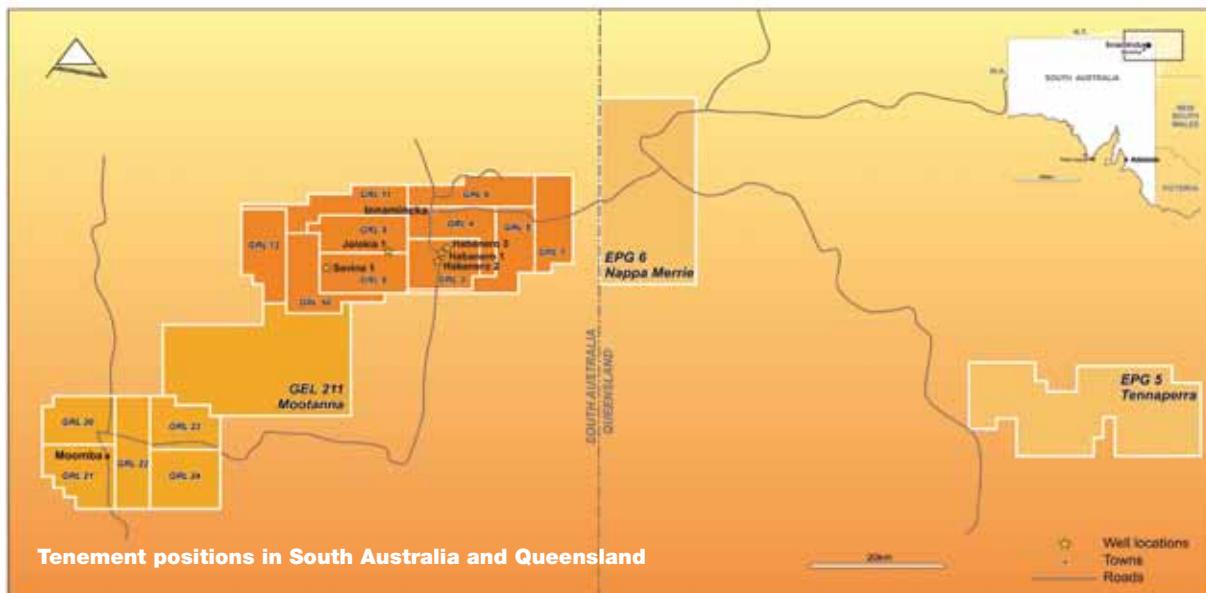
Geodynamics see the NERG solution as a significant development and a positive step in ultimately connecting the Cooper Basin geothermal resource into the existing market.

In addition to the AEMC review, Infrastructure Australia have also identified the acute need to extend and augment the existing transmission system to facilitate the connection of remote renewable power generation sources and are investigating potential nation building infrastructure projects to satisfy this need.

Despite this increased awareness and the positive noises coming from regulators and government agencies, Geodynamics has been progressing the preliminary planning for transmission assets connecting the Cooper Basin resource into the existing system. During the year, Geodynamics commissioned a study by Worley Parsons to identify the optimum connection solution for Geodynamics to connect its first significant power capacity (~500 MW). The Company is confident that this planning and pre-feasibility work will ultimately be utilised by Transmission Network Service Providers (TNSPs) to design and construct the required transmission infrastructure.



# EXPLORATION AND APPRAISAL



## Hunter Valley exploration licences

Geodynamics holds a 100% interest in two exploration licences in the Hunter Valley, NSW as shown in the figure below. These licences were renewed in February 2008 for a period of 3 years. The company has an agreed work program with the NSW Department of Primary Industries involving the drilling of an intermediate depth well (2 km) and subsequent planning of a deep well within the 3 year renewal timeframe.

During the year the Company was successfully awarded \$10 million in funding assistance under the NSW Renewable Energy Fund program to develop a small geothermal power generation plant.

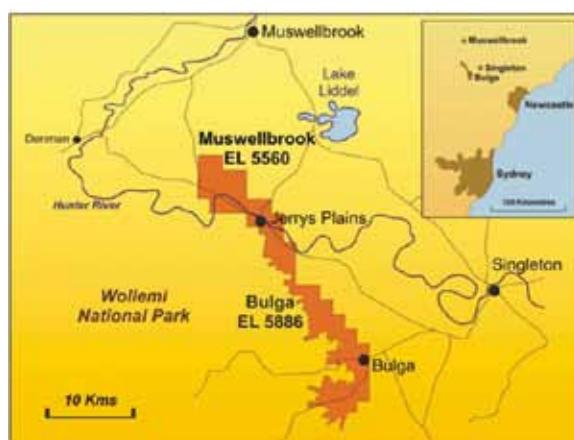
In addition to the NSW government funding the Company has also applied for funding assistance under round 2 of the federal government's Geothermal Drilling Program to assist with the drilling of the first deep wells to prove proof of concept in the Hunter Valley.

The Company has successfully completed a Review of Environmental Factors and is currently in the process of negotiating the appropriate access and regulatory approvals to commence the drilling of an intermediate depth well to 2 km (into the basalt, below the coal measures) to firm up temperature estimates in the granite basement.

# Queensland geothermal exploration permits

The company has negotiated and finalised terms with the Queensland Department of Mines and Energy, but is still awaiting formal grant of the geothermal exploration permits (GEPs) which is expected shortly.

When the GEPs are finally issued the Company expects to commence a program of surface analysis and then shallow heat flow drilling. The Company also expects to receive a \$150,000 Smart Mining Collaborative Drilling grant from the Queensland government to assist in the shallow drilling.



## **Location of the New South Wales tenements**



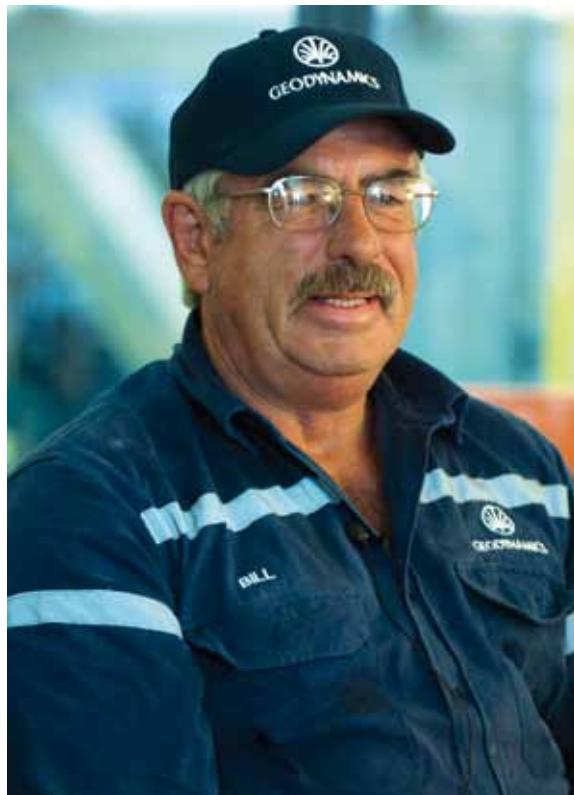
# PEOPLE

## An employer of choice

**Geodynamics is striving to become an employer of choice. The company employs people on terms that provide competitive and attractive benefits and conditions according to accepted principles of equal opportunity and open market forces.**

Geodynamics seeks to provide its people with a package of remuneration and benefits that are market competitive and performance focused and which encourage people to use their full range of capabilities in their work for the Company.

**Site Manager, Bill Austin**



Geodynamics seeks to provide a total employment experience that uses a range of tangible and intangible employment based elements, but also endeavors to capture the challenge and experience of working for the Company as a positive element in attracting and retaining high quality people.

The company has grown to seventy-five full time equivalent employees at the time of writing. Vital skills in sub-surface engineering and technology disciplines have been recruited into the company.

The culture within Geodynamics is driven by the company's values. The poster overleaf helps to explain our values and how they are working within the company.

## Training and Development

Geodynamics has developed a proactive approach to training and development of our people to prepare for the challenges ahead to grow and develop the organisation. Processes such as regular performance reviews and communications with staff assist Line Managers in developing an understanding of particular knowledge, experience and skills of employees and those that will further enhance the performance of individual employees and the business as a whole.

**Project Engineer, Louis Hirsinger**





**Fitting insulation cladding**



## GEODYNAMICS LIMITED Values in action

At Geodynamics we: GEODYNAMICS' CULTURE

### Passionately pursue our purpose

Includes behaviours such as:

- Proactively work to achieve goals
- Take on challenging tasks
- Pursue a standard of excellence
- Think ahead and plan/explore alternatives
- Take measured risks
- Understand the broader business

### Maintain personal integrity

Includes behaviours such as:

- Proactive self development
- Challenge conformity
- Communicate ideas
- Deliver what I promise
- Take responsibility and accountability
- Contribute in unique ways

### Support others

Includes behaviours such as:

- Show concern for the needs of others
- Involve others in decision making that affects them
- Value and manage individual differences
- Support and encourage others
- Help others to grow and develop
- Recognise others contributions

### Collaborate

Includes behaviours such as:

- Respect and value others
- Co-operate with others
- Think/Act in terms of the team/group
- Constructively share feelings as well as thoughts
- Communicate effectively with others
- Manage stakeholders well
- Good cross-functional communication

**Geodynamics values are demonstrated through constructive behaviours**

Employees are encouraged to develop additional skills and experience to better equip them to more effectively perform their roles within the company. This year has seen a range of employees undertaking training and development opportunities across a broad range of skill areas. Training and development has been undertaken in four wheel drive training, first aid, auditing in Health and Safety, rig management and specialist drilling courses to name a few.

Development of people will keep them challenged, engaged and productive, and will assist with growth of the organisation through the development of a strong internal talent pool.

### Occupational Health and Safety

The health and safety lessons learned from the Habanero 3 incident have added to the valuable knowledge base within the Company. Geodynamics is now recalibrating towards minimising risk and implementing robust corporate risk management processes. In 2009, Geodynamics has shown a marked improvement in the Company's health and safety process; demonstrated by zero injuries during the Habanero 3 well incident and during drilling activities. These are important achievements due to the dedication of all employees embracing the safety message; 'Nothing is so important it can't be done safely'. The recruitment of key personnel in the field of Health and Safety has ensured that the Company implement a robust Health and Safety Management System, supported by procedures and industry best practice Standards.

Other activities during the year involved implementing actions from the 2008 external Health and Safety Audit and finalising twenty core procedures that support relevant Standards while the remaining procedures have been drafted ready for internal review.

# CORPORATE AND SOCIAL RESPONSIBILITY

## Working with stakeholders

**Geodynamics business activities affect a broad range of stakeholders. Each day, we strive to ensure that our operations are carried out in line with the Geodynamics values and that each initiative is designed to achieve positive outcomes for our stakeholders.**

## Our stakeholders and activities in 2008/2009

### Employees

The 2008/2009 year has seen the Company grow from 40 people to 75.

In recognition that people are the Company's best asset, Geodynamics has put in place a number of initiatives designed to attract and retain good people, and to keep them safe and engaged whilst at work.

These initiatives include:

- Employee culture surveys;
- The Cultural Improvement Agency (an internal group) to foster great culture from the grass roots level;
- Competitive short and long term incentive programs;
- Master Classes to share information and cross train interested team members;
- A focus on health and safety both at work and outside of it; and
- Team building events during and outside of business hours.

### Business Partners

Business partners include contractors, suppliers, advisors, advocates and associations. We work with them to develop long term industry relationships and to mutually drive growth and business efficiency improvement. Engagement activities include:

- Contributing to initiatives of AGEG and AGEA (Australia's geothermal industry bodies) to raise awareness of geothermal energy and its benefits;
- Employing a skilled Procurement team with specialist members to drive best value relationships with suppliers; and
- Requiring a cultural fit with suppliers to ensure they support our values, especially safety.

### Government

Geodynamics' government relations strategy involves educating government at all levels with respect to geothermal energy.

Our long term aims are to develop awareness of the industry and its potential to provide Australia with a new base-load energy source; and to encourage the establishment of better infrastructure to remote Australian locations. Activities include:

- Briefing government at all levels;
- Conducting visits to our Cooper Basin site operations;
- Working with AGEA and other industry groups to encourage industry awareness and growth; and
- Submitting funding applications – such as for the Federal Government's Renewable Energy Demonstration Program to contribute to Geodynamics' Commercial Demonstration Plant.

## Community

This relates to communities local to our offices, as well as those affected by our operations in remote locations.

We strive to make a minimal environmental impact in all areas of business operation, and attempt to support our community partners where possible through:

- Community sponsorships;
- Regular communications with important community stakeholders – such as the people of Innamincka; and
- Regular contributions to Earth Science education programs and other educational initiatives.

## Investors

Investors form our largest stakeholder group and are one that we focus the largest amount of effort on.

We are extremely proud of our relationships with shareholders and grateful for the passion that many shareholders display when talking about geothermal energy and its potential to change Australia's energy landscape.

We are regularly complimented on our efforts to keep the market updated and continually strive to earn that praise. Communication activities include:

- Producing quarterly reports to provide a regular overview;
- Implementing initiatives to reduce the cost of printing – saving money and providing environmental benefits;
- Organising AGM and shareholder roadshows so shareholders can meet with the Board and management in most capital cities – run yearly;
- Organising regular meetings with the institutional investment community; and
- Fostering of relationships with cornerstone investors and Origin Energy, our partner in the Innamincka Joint Venture.

## Environment

Fundamental to Geodynamics' future growth is protection of the environment in which we conduct our activities.

One of Geodynamics Values is that we respect The Living Earth and it is our overarching objective to act with integrity and respect for the community and the environment. Institution of sound environmental practices in our daily activities is of paramount importance. Activities include:

- Adhering to our Environmental Management System;
- Considering the environment before undertaking activities – such as determining well locations;
- Consulting with landholders prior to starting activities in new locations to ensure minimal impact on culturally significant environments and artefacts; and
- Appraising our team based on whether they demonstrate Geodynamics Values – one of which is The Living Earth.

## Corporate regulators

With a growing team, your Company has focussed on implementing systems and procedures to ensure that corporate ethics underpin all our operations.

We continue to pay strict attention to the ASX listing rules and our continuous disclosure obligations. In other areas of our business, we have further developed relationships with relevant regulators - such as Primary Industries and Resources, South Australia (PIRSA) to ensure we go above and beyond observing laws and regulations. Activities include:

- Releasing material as early as practical during management of the Habanero 3 incident (on a Saturday);
- Inviting PIRSA people to join our team during incident management and accepting critical recommendations for safe environmental management;
- Educating the whole team as to Environmental laws and legislation relating to health and safety; and
- Engaging with the Australian Securities Exchange and legal counsel to ensure we comply with continuous disclosure obligations.

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**GEODYNAMICS**  
LIMITED

# DIRECTORS' REPORT

## DIRECTOR PROFILES

Your Directors submit their report for the period ended 30 June 2009. The names and details of the Directors of Geodynamics Limited in office during the financial year and until the date of this report are as follows. Directors were in office for this entire period unless otherwise stated.



### **Martin Albrecht AC | Non-executive Chairman**

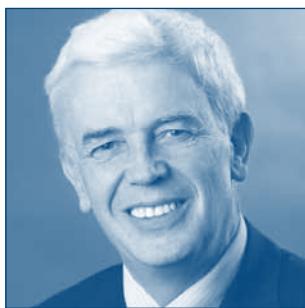
B.Tech (Civil), FTSE, FIE Aust, FAICD, FAIM, DUniv (QUT)

Age 70

Mr Martin Albrecht AC was Managing Director of Thiess Pty. Ltd. (one of Australia's largest engineering and construction companies) a position he held for more than 15 years (1985 – 2000). He was also Chairman of Thiess from 2001 to 2008.

During the past three years, Mr Albrecht has also served as a director of the listed company Leighton Holdings Limited (2001 – 2008).

He received a Companion of the Order of Australia (AC) in 2002 for service to the construction industry, to the engineering profession, and to the community in the areas of education, corporate social responsibility and industrial safety. A Centenary Medal was also awarded to him in 2003. Mr Albrecht maintains an active interest in a wide range of government, community, education and cultural activities.



### **Gerry Grove-White | Managing Director and CEO**

B.Sc (Hons), M I Mech E, C.Eng, C Dip A F

Age 59

Mr Gerry Grove-White has a Mechanical Engineering background, and was, up to joining Geodynamics as Managing Director, Chief Operations Officer for Tata Power, India's largest private power company. Prior to that, he was Eraring Energy's Managing Director for 5 years.

He gained a B.Sc. (Hons) in Mechanical Engineering from City University, London. He is a Member of the Institution of Mechanical Engineers and a Chartered Engineer. He also gained a Certified Diploma in Accountancy and Finance.

He has over 38 years experience in the power industry, having worked on both conventional and nuclear power stations, in the UK and internationally. He has experience in the development and financing of power station projects on a limited recourse basis, and the project management of their subsequent construction and operation.



### **Banmali Agrawala | Non-executive Director**

B.Eng (Mech) | Appointed 20/11/2008

Age 46

Mr Agrawala graduated with a BE Mechanical Engineering with distinction from Mangalore University in 1984. His professional experience includes working from 1984 – 1987 with Bajaj Auto in the R&D department and from 1987-2008 in Wartsila where he was finally the Managing Director of Wartsila India and a Member of the Global Power Plant Management Board.

He is currently the Executive Director (Strategy & Business Development) of Tata Power and also a member of the Board.

He has held various positions in Confederation of Indian Industry a Premier Industry body including Chairman of the Western Region and member of the National Council.

He is currently a member of the National Infrastructure council as well as the National Power Committee of CII.

**Pieter Britz | Non-executive Director**

B Eng (Industrial), Pr Eng, MBA

Age 42

Mr Pieter Britz is a registered professional engineer with a wealth of experience in the resources industry since the early 1990s. He began his career at Iscor Mining in South Africa where he worked on capital expenditure programs and investments at the Sishen iron ore mine managing throughput, capacity and expansion projects. He joined the Sishen Executive Team in 1997 to oversee investment decisions and later that year set up Iscor's corporate strategy and business consulting unit where he managed various strategic initiatives. His experience also includes coal, base metals, heavy minerals, and industrial minerals. Pieter co-managed the de-merger and separate listing of Kumba Resources Limited in 2001 where he continued with strategy and corporate development. In early 2004 Pieter moved to Australia to set up Royal Bank of Canada's investment banking division, initially focusing on equity capital markets before expanding into corporate advisory work. Pieter joined The Sentient Group in early 2007 as investment professional.

**Prame Chopra | Non-executive Director**

B.Sc. (Hons), Ph.D, FAICD, MAGU, MASEG, MIGA, MASC

Age 56

Dr Prame Chopra was a Reader in Geophysics at The Australian National University in Canberra from 1996 - 2006. He obtained his Ph.D in rock physics at the ANU in 1980 and has held research appointments at ANU, Cornell University in New York and at the Bureau of Mineral Resources, Geology & Geophysics and the Australian Geological Survey Organisation. He is an internationally recognised researcher of more than 21 years standing with strong collaborative links with key overseas HFR geothermal energy research groups.

He was a Principal Investigator of the Energy Research & Development Corporation funded project into HFR and Tight Gas in the Cooper Basin, SA and the ANU - Pacific Power geothermal research project in the Hunter Valley, NSW. In 2000, he was an invited guest of the Japanese New Energy Development Organisation and lectured on HFR geothermal resources in a number of Japanese cities. He is a member of the Australian Science Communicators and was an ABC Science Media Fellow in 2000.

**Robert Davies | Non-executive Director**

CMA (Canada) | Appointed 28/11/2008

Age 59

Mr Robert Davies is a Certified Management Accountant (Canada) and has extensive senior finance experience with global mining and resource companies. He was formerly the Chief Executive Officer and a Director of Australian Energy Company Limited, an unlisted public company. Prior to that he was Executive Vice President and Chief Financial Officer for Inco Ltd, the western world's largest nickel producer. Prior to that, he was Chief Financial Officer for Alumina Ltd., and General Manager Treasury Tax and Investor Relations for WMC Ltd. He has previously held senior finance positions with BHP in Canada, the US, Chile and Australia, acquiring significant operational and corporate finance experience. He was also previously a director of PT Inco and Alcoa of Australia.

**Robert Flew | Non-executive Director**

B.Ec (Hons), FAusIMM, FAICD | Retired 7/5/2009

Age 67

Mr Robert Flew has extensive Board, corporate, financial and general management experience in the national and international resource sector. For fifteen years he held senior management responsibilities at BHP, including business division accountability and financial and other responsibilities. Before his retirement at the end of 1999, he was Company Secretary and Vice President Investor Relations. In the years prior to that he was Group General Manager International and Group General Manager BHP Australia Coal. He is widely experienced in project development and in negotiations with Governments, financial institutions and unions.

Mr Flew is also a Director of the listed company Astron Ltd. He was formerly a Director of Thiess Pty Ltd and Tubemakers Australia Ltd and in the past three years the listed companies, Leviathan Resources Limited (2005 – 2007), Bass Strait Oil Company Ltd (2002 - 2006) and Perserverance Resources Limited (2007 - 2008). He was the inaugural President of the Queensland Mining Council and past Chairman of CQCA and Gregory Joint Ventures, BHP Mitsui Pty Ltd and The World Coal Institute.

## DIRECTORS' REPORT continued

**Jack Hamilton | Non-executive Director**

B.Eng. (Chem), Ph.D, FAICD

Age 53

Dr. Jack Hamilton is currently CEO of Exergen Pty Ltd, a low emission coal resource development Company and formerly, Director of NWS Ventures with Woodside Energy. Dr. Hamilton graduated from Melbourne University with a Bachelor of Chemical Engineering and Doctorate of Philosophy in 1981. He has over 26 years experience both locally and internationally in Operations management, in refining, petrochemicals and gas production, Marketing, Strategy and LNG Project Management. During his time at Woodside, he held the role of Managing Director, Metasource Pty. Ltd. a company focused on investing in sustainable and renewable energy businesses.

**Neil Galwey OAM | Non-executive Director**

BE, FIE Aust | Retired 20/11/2008

Age 78

Mr Neil Galwey has an electrical engineering background. He has been Queensland Electricity Commissioner, Chairman of the Snowy Mountain Engineering Corporation, and Director of the Energy Research and Development Corporation and Stanwell Corporation. He is currently Chairman of CVC REEF Ltd, a venture capital fund established to increase investment in renewable energy technologies. In 1997 he was awarded an OAM for services to Australia's electricity industry, particularly with respect to research and development.

**Keith Spence | Non-executive Director**

B.Sc (Hons), FAIM | Appointed 10 July 2008

Age 55

Mr Keith Spence was most recently Executive Vice President Enterprise Capability for Woodside and was responsible for ensuring the business operated with the best people, technology and processes. He was also responsible for building a skilled and technologically advanced workforce through targeted recruiting and enhanced training and played a key role in representing Woodside's interests to the government and the public. In addition, he was responsible for Woodside's Western Australian gas supply interests.

Mr Spence has held many roles during his time with Woodside, including Chief Operating Officer, Acting Chief Executive Officer, Director – Oil Business Unit, Director – Northern Business Unit and Exploration Manager – North West Shelf. Mr Spence has gained a broad knowledge across the industry having over 30 years of experience in the oil and gas industry including 18 years with Shell.

Mr Spence is a Non-Executive Director of Clough, Chairman of the State Training Board of Western Australia and the Industry Advisory Board of the Australian Centre for Energy and Process Training. He is a member of the board of Skills Australia, the Australian Institute of Management (WA) and the Curtin University of Technology Council.

**Andrew Stock | Non-executive Director**

B.Eng. (Chem) (Hons), FIE Aust

Age 57

Mr Andrew Stock is the Executive General Manager, Major Development Projects for Origin Energy, where he is responsible for Origin's major capital investments in upstream petroleum, power generation, and low emissions technology businesses.

With over 30 years of experience, he previously held senior management positions in energy marketing, oil and gas and petrochemical industries in Australia and overseas. He is a director of Australia Pacific LNG Limited and The Climate Group, and a member of the Advisory Board of the Faculty of Engineering, Computer and Mathematical Sciences at the University of Adelaide. He has a Chemical Engineering degree (Honours) from the University of Adelaide, is a Fellow of the Institution of Engineers Australia, and a member of the Australian Institute of Company Directors.

**Doone Wyborn** | Executive Director

B.Sc. (Hons), Ph.D, FAusIMM, MGSA | Retired 20/11/2008

Age 59

Dr Doone Wyborn is an internationally known geoscientist specialising in granitic rocks. He obtained his Ph.D on granite research in 1983, and served more than 25 years with the Bureau of Mineral Resources, Geology & Geophysics and the Australian Geological Survey Organisation, including research in Antarctica and other overseas locations.

He has been championing the potential of HFR geothermal energy for the last 13 years and is recognised as a leading Australian expert authority on this subject. He is a member of the Executive Committee of the International Energy Agency Geothermal Implementing Agreement and has studied HFR geothermal projects in Japan, Europe and the USA. He was Project Manager of a joint Pacific Power and ANU deep drilling geothermal research project in the Hunter Valley, NSW, with partial funding from the Australian Greenhouse Office.

With the exception of Banmali Agrawala, Robert Davies, Robert Flew, Neil Galwey, Keith Spence and Doone Wyborn, all of the above named Directors acted as Directors of the Company for the whole of the year under review and up to the date of this report.

## COMPANY SECRETARY

**Paul Frederiks**

B.Bus. (Acc), FCPA, FCIS, FAICD

Mr Paul Frederiks has extensive experience in public company financial and secretarial management with more than 27 years experience in the Australian resources sector. He has an extensive knowledge base in listed public company reporting and compliance, financial modelling and forecasting, treasury management, project financing and corporate governance.

He was previously Company Secretary and CFO of Ross Mining NL for over eight years until 2000 and Company Secretary for Billabong International Limited from 2000 until 2004. He is a Non-executive Director of the listed companies Auzex Resources Limited and China Steel Australia Limited.

## CORPORATE STRUCTURE

Geodynamics Limited is a company limited by shares, incorporated and domiciled in Australia. It listed on the Australian Securities Exchange on September 2002 under code GDY. Its registered office and principal place of business is Level 2, 23A Graham Street, Milton QLD 4064.

## PRINCIPAL ACTIVITIES

Geodynamics Limited was formed in November 2000 to focus on the development of zero emissions, renewable energy generation from Hot Fractured Rocks (HFR) (also known as Enhanced Geothermal Systems (EGS)) in Australia. The Company has HFR geothermal tenements in NSW, QLD and in the north-eastern part of South Australia. This latter area can be classified as the hottest accessible non-volcanic region in the world.

Geodynamics Limited is the largest public company in Australia with a focus on HFR energy. It aims to become the largest renewable energy producer in Australia by developing emission-free, baseload electricity generation from known HFR geothermal resources. In March 2009, it completed Stage One of its three stage business plan based on the development of the known HFR geothermal resource in the Cooper Basin. Stage One was the demonstration of economic heat extraction from a two well circulation test via a developed underground heat exchanger. The Company completed this stage by drilling two deep geothermal wells (Habanero 1 and Habanero 3), successfully developing an underground heat exchanger and then successfully completing an open flow circulation test in March 2008 and a six week closed loop circulation test followed by independent data validation in March 2009.

## REVIEW AND RESULTS OF OPERATIONS

The Company realised an operating loss before tax for the financial period as set out below:

	2009 \$	2008 \$
Operating loss before income tax expense	(15,307,432)	(7,380,740)
Net loss attributable to members of Geodynamics Limited	(15,307,432)	(7,380,740)
<b>Earnings per Share</b>	<b>(cents)</b>	<b>(cents)</b>
Basic and diluted loss per share	(5.42)	(3.63)

In the 12 months to June 2009, Geodynamics has made further progress in its quest for the development of zero-emissions, renewable energy generation. The key achievements and progress made during the period were:

### Operations

- Completion of Jolokia 1 (fourth well) to a depth of 4,911 m;
- Completion of the closed loop circulation test between Habanero 1 and 3 wells in March 2009;
- Drilling of Savina 1, the Company's 5th well to a depth of 3,700 m. The well was secured with a cement plug at 2,640 m after an unsuccessful program of actions to recover stuck drill pipe during February 2009;
- Redeployment of Rig 100 at Jolokia 1 in preparation for deep stimulation activities;
- Practical completion of the 1 MW Power Plant and Visitor Centre;
- Construction of a powerline from the 1 MW Power Plant to the township of Innamincka;
- Reporting of Habanero 3 well control incident on 24 April. The well was controlled and secured 22 May (day 28) and independent investigation commenced.

### People

- Mr Banmali Agrawala and Mr Robert Davies joined the Board of Geodynamics as Non-executive Directors on 20 November 2008 and 28 November 2008 respectively;
- Relocation of Company's Head Office to a new energy efficient building to accommodate the growth in personnel to complete core capabilities including engineering, project management, procurement and logistics, finance, health and safety, information technology and commercial;
- Retirement in November 2008 of Mr Neil Galwey and in May 2009 of Mr Robert Flew, two of the Company's longest serving Directors.

### Capital

- A cornerstone investment by Tata Power who subscribed for 11.4% of the Company's then current issued share capital @ \$1.50 per share for an investment of \$44.1m;
- Origin Energy confirming the achievement of the first key milestone in the Joint Venture; completion of the Habanero 3 well and the open circulation test between Habanero 1 and 3 on time and within budget; and consequently committing a further \$9.6 million to the project expenditure;
- A bonus Options rights issue announced 25 February 2009, entitling shareholders to one option for every four shares held;

### Business Development

- A contract for a second heavy drilling rig signed with National Oilwell Varco (NOV);
- AGM and shareholder briefings in capital cities during November 2008;
- Commitment of \$5 million over a five-year period to accelerate the development of geothermal technology through the Geothermal Technology Plant (GTP) to support the work of a number of Australian and International institutions;
- Lodged a submission to the Federal Government's Renewable Energy Demonstration Program (REDP);
- Award by the NSW Government of \$10 million in funding for the development of the Hunter Valley Project with funding staged over the life of the project;
- Award and payment by the South Australian Government (Regional Development Infrastructure Fund) of a \$560,000 grant which funded 50% of the cost of the transmission line between the 1 MW Power Plant and the Innamincka township;
- Submission of a funding application to the Geothermal Drilling Program for up to \$7 million for the Hunter Valley project;
- Issuance of Queensland Geothermal Exploration Permits over Nappa Merrie and Tennaperra areas.

**Geothermal Sector**

- Statement of estimated geothermal resources released on 21 October 2008;
- Participation as an active member of the Australian Geothermal Energy Association (AGEA) and Australian Geothermal Energy Group (AGEG);
- Provided input into the development of WWF-Australia's briefing paper 'Power to Change' Australia's geothermal future that was widely reported on in the media;
- Major sponsor of the 2009 Australian Geothermal Energy Conference in Brisbane in November;
- Speaker roles at more than a dozen energy and climate change conferences in Australia and Internationally.

**EMPLOYEES**

The Company had 61 equivalent full time employees as at 30 June 2009 (2008: 20 employees).

**DIVIDEND**

The Directors do not propose to recommend the payment of a dividend in respect of the period ended 30 June 2009.

**DIRECTORS' INTERESTS IN THE SHARES AND OPTIONS OF THE COMPANY**

As at the date of this report, the interests of the Directors in the shares of Geodynamics Limited were:

Director	Fully paid Ordinary Shares	Listed Options exercisable at \$1.50 and expiring 8/12/09	Employee Share Plan Options over Ordinary Shares
M. Albrecht	1,950,635	487,660	-
G. Grove-White	42,296	10,575	300,000
B. Agrawala	-	-	-
P. Britz	-	-	-
P. Chopra	798,414	199,604	-
R. Davies	-	-	-
J. Hamilton	79,116	19,780	-
K. Spence	-	-	-
A. Stock	13,333	3,334	-

**SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS**

Significant changes in the state of affairs of the Company during the financial period were as follows:

- Shareholders' contributed equity increased from \$275.4 million to \$319.9 million, an increase of \$44.5 million. The movement was predominantly as a result of the 10% cornerstone share placement in September 2008 to Tata Power raising \$44.1 million.
- Property, Plant and Equipment increased from \$27.5 million to \$69.9 million as a result of the part payment of Rig 200, the Company's second large drilling rig (due for delivery in September 2010) as well as construction of the 1MW Power Power station near Innamincka, South Australia.

**SIGNIFICANT EVENTS AFTER THE BALANCE DATE**

On 21 August 2009, the Company announced that it had now obtained technical data relevant to its investigation into the well incident at Habanero 3 on 24 April 2009. This data showed that cracking of the casing material was caused by hydrogen embrittlement which itself was caused by dissolved gases in the reservoir fluid. The Company further advised that in light of these findings, the Joint Venture has taken various steps to ensure the security of existing wells that have come into contact with the reservoir fluid including installing cement plugs in Habanero 2 and Habanero 3. Steps to secure Habanero 1 were also underway.

Following the investigation, the Joint Venture parties were now deliberating on the most appropriate way forward for the project. The implications of the findings for future well design, material selection and any revision of operational procedures were complex, but are within the bounds of general operational experience in the geothermal industry. Available options will be critically examined and assessed resulting in a revised work program for the project.

The Company advised the market that these activities will take at least eight weeks, and may lead to a revision of the previously indicated delay of six to nine months in the commissioning of the 1MW Power Plant. It stated that the revised work program and project delivery timelines will be communicated as they are finalised.

## DIRECTORS' REPORT continued

### SIGNIFICANT EVENTS AFTER THE BALANCE DATE (Continued)

The Company stated that it believes that the incident will not have a material impact on its long term strategy for large scale geothermal power generation in the Cooper Basin. It reported that it has continued to strengthen its resources with key appointments being made in the well design and engineering, drilling operations, reservoir engineering and geosciences disciplines.

Other than the above, there has not arisen between 30 June 2009 and the date of this report any item, transaction or event of a relevant and unusual nature likely, in the opinion of the Directors of the Company, to affect significantly the operations of the Company, the results of those operations, or the state of affairs of the Company, in subsequent financial years.

### LIKELY DEVELOPMENTS AND EXPECTED RESULTS

The Directors foresee that the 2009/10 financial year will see the advancement of Stage 2 of the Company's business plan as well as the expansion of geothermal reserves by drilling additional deep geothermal wells.

### ENVIRONMENTAL REGULATIONS AND PERFORMANCE

Geodynamics Limited is committed to the effective environmental management of all its exploration, development and operating activities, while at the same time minimising the social impact for the benefit of present and future generations.

The Company recognises that while exploration and resource development is a temporary land use, there are a range of potential environmental impacts. Prior to commencement of operations, planning must identify these potential impacts and lead the development of effective strategies for their management. During operations, the successful implementation of these strategies must be a principal objective of site management. Following decommissioning, the sites must be left in a safe and stable state, with all disturbed land successfully rehabilitated to an agreed standard.

The Company has an Environmental Policy in place that explains the site requirements to achieve these objectives including operating in accordance with a site environmental management plan and identification and management of environmental risk and liability.

In addition, in the last 12 months the Company has been developing and implementing an Environmental Management System (EMS). The EMS is a set of procedures and practices designed to ensure that Geodynamics minimises its environmental impact, meets the commitments of the Environmental Policy, while at the same time ensuring compliance with all regulatory requirements. The aim is to achieve certification of the EMS to ISO 14001:2004 by late 2009.

The key environmental issue that the Company has had to deal with this year has been the impacts caused by the Habanero 3 well incident, following which a considerable amount of formation water was released. The majority of the water drained into a borrow pit adjacent to the well and has since infiltrated into the surrounding soil. Immediately following the incident, Geodynamics prepared a Water Management Plan for submission and approval of the relevant government agencies. This plan detailed the strategy proposed by the Company to deal with the potential impact of the water on the surrounding environment. The key components of the strategy involved a detailed hydrogeological assessment combined with a comprehensive monitoring programme to determine the potential environmental impacts.

The hydrogeological report concluded that "other than via slow horizontal movement in the shallow aquifer there are no possible paths by which contaminated water can reach any other water body either underground or at the surface". However it was recommended that regular monitoring be undertaken and that the Company consider installation of two additional monitoring wells to monitor the extent of the flow. At the time of writing the Company is preparing to undertake installation of these wells.

Both of these reports are currently with the relevant agencies and we are awaiting their comments and agreement on the approach being taken by the Company to deal with this issue.

At the time of writing, the Company was not in breach of any environmental regulations regarding any field work undertaken on its tenements.

### REMUNERATION REPORT (Audited)

This remuneration report outlines the remuneration arrangements in place for Directors and Executives of Geodynamics Limited in accordance with the requirements of the *Corporations Act 2001* and its Regulations. For the purposes of this report, key management personnel (KMP) of the Company are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the Company directly or indirectly including any director and includes the five executives in the Company receiving the highest remuneration.

For the purposes of this report, the term 'executive' encompasses the Managing Director and the executive management team of the Company.

**REMUNERATION REPORT (Audited) Continued****Remuneration Philosophy**

The performance of the Company depends upon the quality of its Directors and Executives. To prosper, the Company must attract, motivate and retain highly skilled Directors and Executives.

To this end, the company embodies the following principles in its remuneration framework:

- Provide competitive salaries to attract high calibre executives;
- Link executive rewards to shareholder value creation through the issue of shares and share options;
- Establish appropriate share price performance hurdles under its long term incentive plan to align executive reward with shareholder value creation, the achievement of which will depend on the Company achieving key corporate milestones that are integral to the Company's successful completion of its business plan.

**Remuneration Committee**

The Remuneration and Nominations Committee has the primary objective of assisting the board in developing and assessing the remuneration policy and practices of the Directors, Chief Executive Officer (CEO) and Senior Executives who report directly to the CEO.

Such assessment will incorporate the development of remuneration policies and practices which will enable the Company to attract and retain executives who will create value for shareholders. Executives will be fairly and responsibly rewarded having regard to the performance of the Company, the performance of the executive and the general market environment. The Committee also assists the board in its own self evaluation by annually reviewing the process for self evaluation. This considers attributes such as the qualitative and quantitative nature of the review, and the mix between total board review and individual Director review.

**Remuneration Structure**

In accordance with best practice corporate governance, the structure of Non-executive Director and senior executive remuneration is separate and distinct.

**Non-executive Director Remuneration**

**Objective** - The Board seeks to set aggregate remuneration at a level which provides the Company with the ability to attract and retain directors of the highest calibre, whilst incurring a cost which is acceptable to shareholders.

**Structure** - The Constitution of Geodynamics and the ASX Listing Rules specify that the aggregate remuneration of Non-executive Directors shall be determined from time to time by a general meeting. An amount not exceeding the amount determined is then divided between the directors as agreed. The latest determination was at the Annual General Meeting held on 28 November 2007 when shareholders approved an aggregate remuneration of \$700,000 per year.

The amount of aggregate remuneration sought to be approved by shareholders and the manner in which it is apportioned amongst Directors is reviewed annually. The board considers advice from external consultants as well as the fees paid to non-executive directors of comparable companies when undertaking the annual review process. The amounts are set at a level that compensates the Directors for their significant time commitment in overseeing the progression of the Company's business plan.

Each Non-executive Director receives a fee for being a Director of the company. The current fee structure is to pay Non-executive Directors a base annual remuneration of \$64,500 p.a. with the Chairman paid \$118,250 p.a. The Chairman of each committee receives an additional fee of \$16,125 p.a. There are no retirement benefits offered to Non-executive Directors other than statutory superannuation which is in addition to these amounts. In accordance with good corporate governance practice, the Non-executive Directors do not participate in share and share option based remuneration plans of the Company.

The Company notes that Origin Energy Limited, The Tata Power Company Ltd and collectively Sunsuper Pty Ltd & The Sentient Group, as major investors, each have a right to appoint a Non-executive Director to the Company and as such those Directors (where appointed) are not considered by the ASX Corporate Governance Principles to be independent.

The remuneration of Non-executive Directors for the period ending 30 June 2009 is detailed in Table 1 of this report.

**Managing Director and Senior Management remuneration**

**Objective** - The Company aims to reward executives with a level and mix of remuneration commensurate with their position and responsibilities within the company and so as to:

- Reward executives for company, business division and individual performance against targets set by reference to appropriate benchmarks;
- Align the interests of executives with those of shareholders;
- Link reward with the strategic goals and performance of the company; and
- Ensure total remuneration is competitive by market standards.

## DIRECTORS' REPORT continued

### REMUNERATION REPORT (Audited) Continued

**Structure** - The Managing Director's and key executives' emoluments are structured to retain and motivate executives by offering a competitive base salary, a short term annual cash based performance related component together with longer term performance incentives through shares and share options which allow executives to align with the success of Geodynamics Limited. The share price based performance incentives are outlined in Note 15 of these accounts.

The Company's Managing Director and Senior Executive remuneration packages are formalised in service agreements, and policies and procedures are documented and approved by the Board covering all employees who participate in the incentive plans of the Company.

Remuneration consists of the following key elements:

- Fixed Remuneration – Base salary and superannuation;
- Variable Remuneration under the Geodynamics Short Term Incentive Plan (STIP) – payable in cash at the end of the financial year;
- Variable Remuneration under the Geodynamics Long Term Incentive Plan (LTIP) – payable in Shares and Share Options.

#### Fixed Remuneration

The level of fixed remuneration is set so as to provide a base level of remuneration which is both appropriate to the position and is competitive in the market. Fixed remuneration of the Managing Director is reviewed annually by the Remuneration and Nominations Committee. Factors considered include Company and individual performance, relevant comparative remuneration in the market and internal and, where appropriate, external advice. The Remuneration and Nominations Committee has access to external advice independent of management.

Senior executives receive their fixed (primary) remuneration in cash. The fixed remuneration component of the most highly remunerated senior managers is detailed in Table 2 of this report.

#### Variable Remuneration under the Short Term Incentive Plan (STIP)

**Objective** - The objectives of the Geodynamics STIP are to:

- Reward employees for their contribution in ensuring that Geodynamics achieves the corporate key deliverables;
- Encourage cross divisional and team working;
- Enhance Geodynamics attracting and retaining high calibre and high performing employees; and
- Link remuneration directly to the achievement of key annual organizational objectives.

**Structure** - In 2008, following a comprehensive review of market practices by the Remuneration and Nominations Committee, the Board resolved to approve the Short Term Incentive Plan to commence operation on 1 July 2008 with first payments under the scheme to be made in July 2009. The Plan establishes a pool of funds up to a maximum of 30% of annualised fixed remuneration, adjusted in size according to the achievement of key Company Business Plan milestones in a year. The distribution of the pool is to be determined by team achievement in delivering the team business plan milestones.

To participate in the Plan, eligible staff must be employed for at least six months for the financial year in question meaning that for the FY08/09 year, eligible staff must have started by 1 January 2009.

The key business plan milestones for FY08/09 were the completion of proof of concept, commencement of operation of the 1 MW power station, successful completion of the Savina 1 well, submission of the Renewable Energy Fund grant application and drilling a well in NSW.

For FY08/09, the Company's performance against the five key Business Plan milestones resulted in a payment under the STI Plan of 15% of annualised fixed remuneration that is half of the maximum bonus pool. The aggregate of annual STI payments available for staff is subject to the approval of the Remuneration and Nominations Committee. This determination usually occurs within one month after the reporting date. The payments made are recognised as remuneration in the year in which payments are made.

#### Variable Remuneration under the Long Term Incentive Plan (LTIP)

**Objective** - The objective of the Geodynamics LTIP is to retain, motivate and reward senior executives and staff in a manner which aligns this element of remuneration with the creation of long term shareholder value.

**Structure** – The LTIP was established by the Board in 2008 as part of its remuneration review. The LTIP comprises two components: Geodynamics Limited shares, and options to purchase Geodynamics Limited shares at the current price, at a time in the future. The LTIP is designed to provide rewards over a three year term.

The Geodynamics LTIP offers eligible employees and the Managing Director of Geodynamics the opportunity to participate in the growth of Geodynamics through participation in the:

- Geodynamics Limited Deferred Employee Share Plan (DESP); and
- Geodynamics Limited Employee Option Plan (EOP).

**REMUNERATION REPORT (Audited) Continued**

Shares and Options issued under the DESP and EOP respectively are allocated and issued to participants for no consideration. The issue of options and allocations of shares within the LTIP is also subject to the participants satisfactory performance as judged by their line manager.

To become entitled to the shares and options, participants are required to satisfy certain performance requirements. On satisfying the performance requirements for options, the options can be converted into shares by payment of the exercise price.

The performance requirements for shares issued under the DESP require that for each annual allocation of shares made to participants under the DESP, the participant will be required to remain employed by Geodynamics or a Related Body Corporate for 36 months from the date of allocation of the shares for the shares to vest.

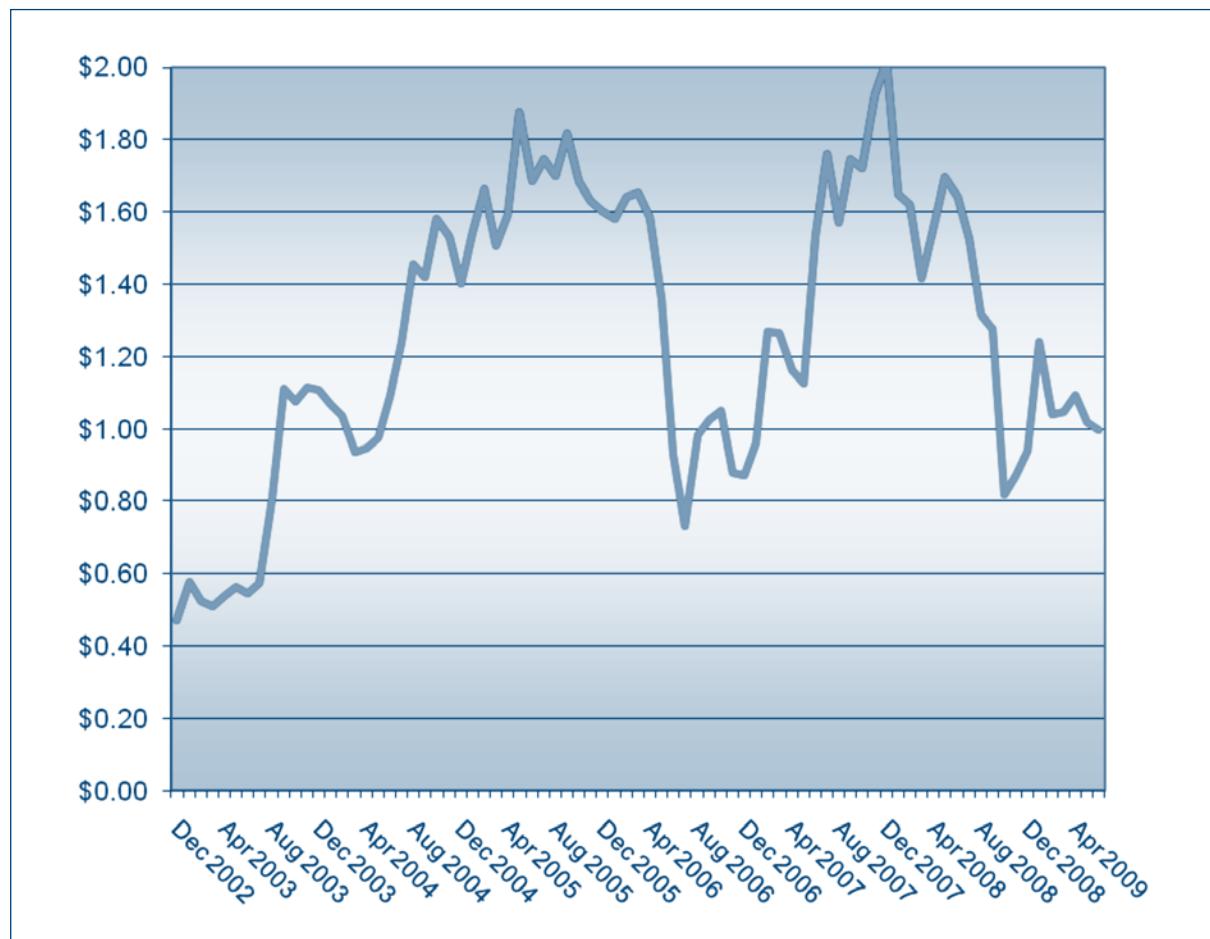
The performance requirements for options issued under the EOP requires that options will only vest should the compound growth in the Geodynamics share price increase by 15% per annum and the participant remains employed by Geodynamics or a Related Body Corporate for:

- 12 months from the date of allocation for 30% vesting of the total option grant; and
- 24 months from the date of allocation for 30% vesting of the total option grant; and
- 35 months from the date of allocation for 40% vesting of the total option grant.

The Company uses a Total Shareholder Return (TSR) measure as the performance hurdle for the Geodynamics EOP as outlined below. A TSR based hurdle ensures an alignment between medium term shareholder return and reward for executives. The Board considers at this development stage of the Company's growth, share price increase itself is an adequate measure of TSR.

**Relationship of rewards to performance**

The graph below shows the performance of the Company as measured by its share price and therefore by definition its TSR.

**GEODYNAMICS LIMITED SHARE PRICE 2002 -2009**

## DIRECTORS' REPORT continued

### REMUNERATION REPORT (Audited) Continued

#### Employment Contracts

##### Managing Director and Chief Executive Officer

The Managing Director's remuneration package is formalised in a service agreement for a period of three years commencing 27 August 2007. The key terms of Mr Grove-White's contract are as follows:

- He receives a base remuneration including superannuation of \$525,000 per annum;
- He receives an annual short term incentive payment of up to 50% of base remuneration which is only payable on the achievement of certain performance milestones. There were five key milestones for FY08/09 comprising health safety and environment performance, human resource organisational capacity building, share price performance, successful commissioning of the 1 MW power station, and field execution delivery. Based on the Board's assessment of performance against these milestones, the Managing Director was awarded a bonus of 50% of the maximum award. This payment will be recognised as remuneration in the year in which payment is made being FY09/10;
- The Company may terminate the agreement at any time by giving six months notice or by providing payment in lieu of the notice period;
- The Company may terminate the contract at any time without notice if serious misconduct has occurred.

The Directors resolved at a Board meeting held on 25 August 2009 to enable Mr Grove-White to participate in the Company's Long Term Incentive Plan (LTIP) on the same basis as all other employees. As such, it is proposed that he will be issued shares and options under the LTIP to be considered for approval by shareholders at the November 2009 Annual General Meeting. As the review of his long term incentive was effective from 1 July 2009, the Directors have resolved that the calculation for the number of shares to be issued and the exercise price for number of options to be issued should be based on the weighted average share price for the 5 trading days prior to 1 July 2009.

#### Other Executives

All Executives have rolling contracts that are formalised in service agreements as follows:

The Chief Scientific Officer may terminate his agreement with one month's notice if, amongst other things, the Company becomes subject to a takeover where effective control changes. He may also terminate the agreement if the Managing Director has given notice that the Managing Director reasonably believes that the policies, strategies or future plans of the Board are such that the Managing Director will be unable to implement his strategy or plans for the development of the Company. If that occurs, the Company must pay the Chief Scientific Officer in addition to any payment in lieu of notice, his then current remuneration package for an additional period of 3 months after termination. The Company may terminate the agreement if, amongst other things, 14 days written notice is provided and subject to the Company paying the Chief Scientific Officer the equivalent of one year's base annual remuneration plus other statutory entitlements accrued to that date.

For each of the Sub-Surface Manager, the Information and Communications Technology Manager, the Power Engineering Manager, The Project Manager South Australia and the Commercial Manager, the Executive may terminate their agreement with one month's notice if, amongst other things, the Company becomes subject to a takeover where effective control changes. The Executive may also terminate the agreement by providing three months written notice. The Company may terminate the agreement if, amongst other things, 14 days written notice is provided and subject to the Company paying the Executive the equivalent of 25% of base annual remuneration plus other statutory entitlements accrued to that date. In addition to the above, the Project Manager South Australia is also entitled to four weeks base remuneration for each completed year of service or pro-rata thereof.

For the Human Resources Manager, the Executive may terminate the agreement by providing one month's written notice. The Company may also terminate the agreement by providing one month's written notice or at its election pay the Executive the equivalent of one month's base annual remuneration plus other statutory entitlements accrued to that date in lieu of the notice period.

The Company Secretary and Chief Financial Officer operates a consultancy business providing Company Secretarial and Accounting services (see profile in Director's Report). His consultancy is paid for services on normal commercial terms.

## REMUNERATION REPORT (Audited) Continued

**Table 1 – Directors' Remuneration for the year ended 30 June 2009 (Audited)**

		Short-Term		Post Employ- ment	Share-based payment		Total		
		Salary & Consulting Fees	Directors fees		Cash Bonus	Super- annuation			
M. Albrecht	2009	-	118,250	-	10,643	-	-	128,893	
Chairman	2008	-	110,000	-	9,900	-	-	119,900	
G. Grove-White	2009	460,078	-	25,000	41,284	-	149,450	675,812	
Managing Director	2008	306,858	-	95,000	51,154	-	79,843	532,855	
B. Agrawala <sup>1</sup>	2009	-	39,361	-	-	-	-	39,361	
Non-executive	2008	-	-	-	-	-	-	-	
P. Britz <sup>2</sup>	2009	-	64,500	-	2,902	-	-	67,402	
Non-executive	2008	-	923	-	83	-	-	1,006	
P. Chopra	2009	119,000	-	-	70,305	-	-	189,305	
Non-executive	2008	7,500	-	-	65,400	-	-	72,900	
R. Davies <sup>3</sup>	2009	-	41,484	-	3,733	-	-	45,217	
Non-executive	2008	-	-	-	-	-	-	-	
R. Flew <sup>4</sup>	2009	-	68,644	-	6,177	-	-	74,821	
Non-executive	2008	-	75,000	-	6,750	-	-	81,750	
N. Galwey <sup>5</sup>	2009	-	26,969	-	2,427	-	-	29,396	
Non-executive	2008	-	75,000	-	6,750	-	-	81,750	
J. Hamilton	2009	-	80,625	-	7,256	-	-	87,881	
Non-executive	2008	-	75,000	-	6,750	-	-	81,750	
K. Spence	2009	-	63,077	-	5,677	-	-	68,754	
Non-executive	2008	-	-	-	-	-	-	-	
A. Stock <sup>6</sup>	2009	-	80,625	-	-	-	-	80,625	
Non-executive	2008	-	75,000	-	-	-	-	75,000	
D. Wyborn <sup>7</sup>	2009	208,090	-	-	20,809	6,933	24,625	260,457	
Executive Director and Chief Scientific Officer	2008	190,910	-	-	19,091	-	21,051	231,052	
Totals		<b>2009</b>	<b>787,168</b>	<b>583,535</b>	<b>25,000</b>	<b>171,213</b>	<b>6,933</b>	<b>174,075</b>	<b>1,747,924</b>
		<b>2008</b>	<b>505,268</b>	<b>410,923</b>	<b>95,000</b>	<b>165,878</b>	<b>-</b>	<b>100,894</b>	<b>1,277,963</b>

<sup>1</sup> Appointed 20 November 2008, fees paid to the Director's employer (Tata Power), being the largest shareholder of the Company.<sup>2</sup> Fees paid to the Director's employer (The Sentient Group), being a cornerstone shareholder of the Company.<sup>3</sup> Appointed 28 November 2008.<sup>4</sup> Retired 7 May 2009.<sup>5</sup> Retired 20 November 2008.<sup>6</sup> Fees paid to the Director's employer (Origin Energy), being a cornerstone shareholder of the Company.<sup>7</sup> Retired as a Director 20 November 2008, remains as a full time employee of the Company. Remuneration disclosed is for the full 12 months.

## DIRECTORS' REPORT continued

### REMUNERATION REPORT (Audited) Continued

**Table 2 - Remuneration of key management personnel for the year ended 30 June 2009 (Audited)**

		Short-Term		Post Employ -ment	Share-based payment		Total <sup>4</sup>
		Salary & Consulting Fees	Non Monetary Benefits		Super- annuation	Shares (amortised cost)	
D. Anthony <sup>1</sup>	2009	224,359	-	20,192	11,667	31,907	288,125
Sub-Surface Manager	2008	-	-	-	-	-	-
P. Frederiks	2009	338,714	-	-	11,233	31,383	381,330
Company Secretary and CFO	2008	321,043	-	-	-	16,932	337,975
M. Manton <sup>2</sup>	2009	214,450	-	19,300	8,400	22,973	265,123
Information Technology Manager	2008	-	-	-	-	-	-
P. Schmidt <sup>3</sup>	2009	186,011	-	16,741	7,633	20,876	231,261
Power Engineering Manager	2008	-	-	-	-	-	-
R. Smith	2009	294,495	-	26,504	9,833	26,893	357,725
SA Project Manager	2008	74,100	-	6,669	-	17,196	97,965
A. Webb	2009	254,162	-	22,860	8,100	22,153	307,275
Commercial Manager	2008	158,438	-	13,153	-	44,276	215,867
B. Richardson	2009	-	-	-	-	-	-
Drilling Operations Manager	2008	237,355	16,114	22,812	-	58,447	334,728
M. Donaghue	2009	-	-	-	-	-	-
Manager People, Process and Place	2008	158,368	-	-	-	-	158,368
<b>Totals</b>	<b>2009</b>	<b>1,512,191</b>	<b>-</b>	<b>105,597</b>	<b>56,866</b>	<b>156,185</b>	<b>1,830,839</b>
	<b>2008</b>	<b>949,304</b>	<b>16,114</b>	<b>42,634</b>	<b>-</b>	<b>136,851</b>	<b>1,144,903</b>

<sup>1</sup> Appointed 10 November 2008.

<sup>2</sup> Appointed 1 July 2008.

<sup>3</sup> Appointed 12 December 2008.

<sup>4</sup> In addition to Executive Director Remuneration in Table 1.

**Table 3 - Options granted to executives as part of remuneration for the year ended 30 June 2009 (Audited)**

During the financial year, options were granted under the Long Term Incentive Plan to certain executives as disclosed below. The options, issued for nil consideration, are issued in accordance with performance hurdles established by the Directors of the Company under the Employee Option Plan (EOP). The options are issued for a term of 36 months and are exercisable and vest in the holder of the Options in three lots as detailed in Note 15.

	Grant Date	Granted Number	Value of options granted during the year	% of Remun- eration <sup>#</sup>	Value of options exercised during the year	Value of options lapsed during the year	Value per option at grant date	Weighted average exercise price
D. Anthony	5/11/08	405,356	\$128,902	15%	-	-	\$0.32	\$0.75
P. Frederiks	5/11/08	390,297	\$124,113	15%	-	-	\$0.32	\$0.75
M. Manton	5/11/08	291,856	\$92,809	15%	-	-	\$0.32	\$0.75
P. Schmidt	5/11/08	265,218	\$84,338	15%	-	-	\$0.32	\$0.75
R. Smith	5/11/08	341,657	\$108,646	15%	-	-	\$0.32	\$0.75
A. Webb	5/11/08	281,433	\$89,495	15%	-	-	\$0.32	\$0.75
D. Wyborn	5/11/08	240,896	\$76,604	15%	-	-	\$0.32	\$0.75

The options fair value was determined at the date of grant. Value per option at grant date is fair value.

# Options vest over three years and are considered remuneration for a three year period, this calculation takes 30% of the full valuation for the purposes of calculating the options as a percentage of remuneration. The first exercise date is 12 months after the date of issue and the last exercise date is 35 months after the date of issue. Options expire 36 months after the date of issue.

## REMUNERATION REPORT (Audited) Continued

**Table 4 – Shares granted to executives as part of remuneration for the year ended 30 June 2009 (Audited)**

During the financial year, shares were granted under the Long Term Incentive Plan to certain executives as disclosed below. The shares issued for nil consideration, are issued in accordance with performance hurdles established by the Directors of the Company under the Deferred Employee Share Plan (DESP). The shares vest with the employee after a term of 36 months.

	Grant Date	Granted Number	Value of shares granted during the year	% of Remuneration #	Value of shares exercised during the year	Value of shares forfeited during the year	Value per share at grant date
D. Anthony	5/11/08	71,918	\$52,500	15%	-	-	\$0.74
P. Frederiks	5/11/08	69,247	\$50,550	15%	-	-	\$0.74
M. Manton	5/11/08	51,781	\$37,800	15%	-	-	\$0.74
P. Schmidt	5/11/08	47,055	\$34,350	15%	-	-	\$0.74
R. Smith	5/11/08	60,616	\$44,250	15%	-	-	\$0.74
A. Webb	5/11/08	49,932	\$36,450	15%	-	-	\$0.74
D. Wyborn	5/11/08	42,740	\$31,200	15%	-	-	\$0.74

The shares fair value was determined at the date of grant. Value per share at grant date is fair value.

# Shares are considered remuneration for a one year period, this calculation takes the full valuation for the purposes of calculating the shares as a percentage of remuneration. Shares vest with the employee 36 months after the date of issue providing the employee is still employed by the Company at that time.

## SHARE OPTIONS

### Unissued shares – employee options

As at the date of this report, there were 9,614,392 unissued ordinary shares under employee options (2008 – 4,251,501). Option holders do not have any right, by virtue of the option, to participate in any share issue of the Company or any related body corporate. The options are unlisted, issued for nil consideration and have a term of three years. There were 8,493,390 employee options granted during the financial year ended 30 June 2009 (2008 – 2,077,000). The average exercise price of the options granted during the financial year ended 30 June 2009 is \$0.82 cents per share. Refer to Note 15 of the financial statements for further details of the options outstanding.

### Shares issued as a result of the exercise of employee options

There were no employee options exercised during the financial year (2008 – 590,500) or since the end of the financial year.

### Unissued shares – shareholder options

As at the date of this report, there were 72,273,791 unissued ordinary shares under shareholder options (2008 – 22,638,856). Option holders do not have any right, by virtue of the option, to participate in any share issue of the Company or any related body corporate. The options comprise 72,273,791 listed options exercisable at \$1.50 and expiring 8 December 2009. There were 72,342,080 shareholder options granted during the financial year ended 30 June 2009 (2008 – 23,638,56). The average exercise price of the shareholder options granted during the financial year ended 30 June 2009 is \$1.50 per share.

### Shares issued as a result of the exercise of shareholder options

There were 130,183 shareholder options exercised during the financial year (2008 – 37,182,493) or since the end of the financial year.

## DIRECTORS' REPORT continued

### DIRECTORS' MEETINGS

During the period there were twelve directors' meetings held of which five were by telephone conference. The number of Directors' meetings and the number of meetings attended by each of the Directors of the Company during the financial period are as follows:

	Directors' Meetings		Audit and Risk Management Committee Meetings		Remuneration and Nominations Committee Meetings		Technical Committee Meetings		Health Safety and Environment Committee Meetings	
	Number held whilst in office	Number attended	Number held whilst in office	Number attended	Number held whilst in office	Number attended	Number held whilst in office	Number attended	Number held whilst in office	Number attended
M. Albrecht	12	11	-	-	3	3	-	-	-	-
G. Grove-White	12	12	-	-	-	-	-	-	-	-
B. Agrawala	6	1	-	-	-	-	-	-	-	-
P. Britz	12	11	-	-	-	-	-	-	2	2
P. Chopra	12	12	3	3	-	-	-	-	2	2
B. Davies	6	6	1	1	1	1	-	-	-	-
R. Flew	9	9	3	3	2	2	-	-	-	-
N. Galwey	6	6	2	2	-	-	-	-	-	-
J. Hamilton	12	12	-	-	-	-	5	5	-	-
K. Spence	11	10	-	-	-	-	5	5	2	2
A. Stock	12	12	-	-	3	3	-	-	2	2
D. Wyborn	6	4	-	-	-	-	2	2	-	-

The Company has four committees with the following membership:

**Audit & Risk Management Committee** – Membership comprises three Non-executive Directors being Messrs Davies (Chair), Britz, and Chopra. During the year Messrs Flew and Galwey (since retired) were also members of this Committee.

**Remuneration & Nominations Committee** – Membership comprises three Non-executive Directors being Messrs Stock (Chair), Albrecht and Davies. During the year B. Flew (since retired) was also a member of this Committee.

**Technical Committee** – Membership comprises two Non-executive Directors being Messrs Hamilton (Chair) and Spence and three external members comprising a recognized expert covering the technical domain areas of well engineering and drilling execution, reservoir development and behaviour, and HFR external developments. Dr Doone Wyborn, the Company's Chief Scientific Officer is also a member of this Committee.

**Health, Safety & Environment (HSE) Committee** – Membership comprises four Non-executive Directors being Messrs Spence (Chair), Britz, Chopra and Stock with G. Grove-White as an ex-officio member. The Company's Health and Safety Manager (D. Murphy) and Environment & Compliance Manager (H. Coombes) are also ex-officio members of this Committee.

### INDEMNIFICATION AND INSURANCE OF DIRECTORS AND OFFICERS

During the financial year, the entity paid premiums in respect of contracts insuring directors, secretaries, and executive officers of the Group and related entities against liabilities incurred as director, secretary or executive officer to the extent permitted by the Corporations Act, 2001, subject to the terms, conditions, limitations and exclusions of the policy.

## AUDITOR INDEPENDENCE AND NON-AUDIT SERVICES

The Directors received a declaration from the auditor of Geodynamics Limited which is listed immediately after this report and forms part of this Directors' report.

The following non-audit services were provided by the entity's auditor, Ernst & Young. The Directors are satisfied that the provisions of non-audit services is compatible with the general standard of independence for auditors imposed by the Corporations Act. The nature and scope of each type of non-audit service provided means that auditor independence was not compromised.

Ernst & Young received or are due to receive the following amounts for the provisions of non-audit services:

Tax compliance services	\$6,300
Assurance	\$11,000

## CORPORATE GOVERNANCE

The Directors recognise the need for the highest standards of corporate behaviour and accountability and therefore support and have adhered to the principles of Corporate Governance. The Company's Corporate Governance Statement is printed immediately following this Directors Report.

Signed in accordance with a resolution of the Directors.



**M. Albrecht**  
Chairman

Brisbane, 26 August 2009



1 Eagle Street  
Brisbane QLD 4000 Australia  
GPO Box 7878 Brisbane QLD 4001

Tel: +61 7 3011 3333  
Fax: +61 7 3011 3100  
[www.ey.com/au](http://www.ey.com/au)

Liability limited by the Accountants Scheme, approved under the Professional Standards Act 1994 (NSW)

### **Auditor's Independence Declaration to the Directors of Geodynamics Limited**

In relation to our audit of the financial report of Geodynamics Limited for the financial year ended 30 June 2009, to the best of my knowledge and belief, there have been no contraventions of the auditor independence requirements of the *Corporations Act 2001* or any applicable code of professional conduct.

A handwritten signature in blue ink that reads 'Ernst &amp; Young'.

Ernst & Young

Mike Reid  
Partner  
Brisbane

26 August 2009

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# CORPORATE GOVERNANCE STATEMENT

The Board of Directors of Geodynamics Limited is responsible for the corporate governance of the Company and is committed to achieving and demonstrating the highest standards of corporate governance.

The Geodynamics Limited Corporate Governance Statement is structured with reference to the Australian Securities Exchange Corporate Governance Council's 'Corporate Governance Principles and Recommendations' as revised in August 2007 the Principles of which are as follows:

- Principle 1. Lay solid foundations for management and oversight
- Principle 2. Structure the board to add value
- Principle 3. Promote ethical and responsible decision making
- Principle 4. Safeguard integrity in financial reporting
- Principle 5. Make timely and balanced disclosure
- Principle 6. Respect the rights of shareholders
- Principle 7. Recognise and manage risk
- Principle 8. Remunerate fairly and responsibly

This Corporate Governance Statement contains certain specific information and discloses the extent to which the Company has followed the guidelines during the period. Where a recommendation has not been followed, that fact is disclosed, together with the reasons for the departure.

Geodynamics Limited's corporate governance practices were in place throughout the year ended 30 June 2009 and were fully compliant with the Council's recommendations except for principle 2.1 – a majority of the Board should be independent directors. The Company has four independent Directors out of nine Directors. The Company believes that the four Non-executive Directors who are not deemed independent provide an invaluable contribution to the Board due to their expertise. For further information on corporate policies adopted by Geodynamics Limited, please refer to the Corporate Governance Tab under 'About Geodynamics' on our website located at [www.geodynamics.com.au](http://www.geodynamics.com.au).

For 2009, the Company's reporting against the Principles is as follows:

## 1. LAY SOLID FOUNDATIONS FOR MANAGEMENT AND OVERSIGHT

*Companies should establish and disclose the respective roles and responsibilities of Board and management.*

The Board operates in accordance with the following principles and guidelines:

- The Board does comprise a majority of Non-executive Directors.
- The Chairperson is an Independent Director.
- The Board does comprise Directors with an appropriate range of qualifications and expertise.
- The terms and conditions of the appointment of Non-executive Directors are set out in a letter of appointment. The appointment letter covers the following matters:
  - the level of remuneration;
  - the tenure of appointment;
  - the expectation of the Board in relation to attendance and preparation for all Board meetings;
  - the Directors code of conduct;
  - the procedures dealing with conflicts of interest; and
  - the availability of independent advice - The board has agreed a procedure for Directors to take independent professional advice at the expense of the Company. Prior approval of the Chairman is required, but this will not be unreasonably withheld.
- The Board meets as often as required to attend to the affairs of the Company and follow meeting guidelines set down to ensure all Directors are made aware of, and have available to them all necessary information enabling them to participate in an informed discussion of all agenda items.
- The Chairman of the Board meets regularly with the Managing Director.

# CORPORATE GOVERNANCE STATEMENT (Continued)

## 1. LAY SOLID FOUNDATIONS FOR MANAGEMENT AND OVERSIGHT (Continued)

The Board is responsible for the direction and supervision of the Company's business on behalf of the shareholders, by whom they are elected and to whom they are accountable. This includes ensuring that internal controls and reporting procedures are adequate and effective. The Directors recognise the need to maintain the highest standards of behaviour, ethics and accountability. The primary functions of the Board include responsibility for:

- Approving objectives, goals and strategic direction for management;
- Monitoring financial performance including adopting annual budgets and approving the Company's financial statements;
- Ensuring that adequate systems of internal control exist and are appropriately monitored for compliance;
- Selecting, appointing and reviewing the performance of the chief executive officer and reviewing the performance of senior operational management;
- Ensuring significant business risks are identified and appropriately managed; and
- Reporting to shareholders on performance.

The Company's Managing Director's performance and remuneration is reviewed annually by the Non-executive Directors.

The performance criteria against which Executives are assessed is aligned with the financial and non-financial objectives of Geodynamics Limited. Further details of the process for evaluating performance is set out in the Remuneration Report.

The Board may determine from time to time to establish specific purpose sub-committees to deal with specific issues. All matters determined by committees are submitted to the full Board as recommendations for Board decision. Minutes of committee meetings are tabled at the immediate subsequent Board meeting.

## 2. STRUCTURE THE BOARD TO ADD VALUE

*Companies should have a board of an effective composition, size and commitment to adequately discharge its responsibilities and duties.*

### SKILLS, EXPERIENCE AND EXPERTISE OF DIRECTORS

The Directors in office at the date of this statement are:

Name	Position	Independent	Term in Office	Expertise
Martin Albrecht AC	Non-executive Chairman	Yes	8.5 years	Management, Major Infrastructure and Resource Development
Gerry Grove-White	Managing Director and CEO	No	2.0 years	Management, Power Station Development and Operation Energy Trading
Banmali Agrawala	Non-executive Director	No	0.7 years	Energy, Engineering and Management
Pieter Britz	Non-executive Director	No	1.2 years	Engineering, Financial Management, Resource Development
Prame Chopra	Non-executive Director	No	8.8 years	Geothermal Energy, Rock Mechanics and Geophysics
Robert Davies	Non-executive Director	Yes	0.7 years	Finance, Governance and Management
Jack Hamilton	Non-executive Director	Yes	2.9 years	Energy, Engineering and Management
Keith Spence	Non-executive Director	Yes	1.1 years	Energy, Engineering and Management
Andrew Stock	Non-executive Director	No	5.8 years	Energy, Engineering and Management

### INDEPENDENT DIRECTORS

Directors of Geodynamics Limited are considered to be independent when they are independent of management and free from any business or other relationship that could materially interfere with, or could reasonably be perceived to materially interfere with the exercise of their unfettered and independent judgement.

In the context of director independence, 'materiality' is considered from both the Company and individual director perspective. The determination of materiality requires consideration of both quantitative and qualitative elements. An item is presumed to be quantitatively immaterial if it is equal or less than 5% of the appropriate base amount. It is presumed to be material (unless there is qualitative evidence to the contrary) if it is equal to or greater than 10% of the appropriate base amount. Qualitative factors considered include whether a relationship is strategically important, the competitive landscape, the nature of the relationship and the contractual or other arrangements governing it and other factors which point to the actual ability of the Director in question to shape the direction of the Company's loyalty.

In accordance with the definition of independence above, and the materiality thresholds set, the Directors as marked in the previous table are considered to be independent. Therefore there are eight Non-executive Directors, four of whom are deemed independent, and one Executive Director. Three Non-executive Directors who are not deemed independent are Officers of the Company's three

## **2. STRUCTURE THE BOARD TO ADD VALUE (Continued)**

largest shareholders which each has a right to appoint a Director to the Board under their respective Investment Deeds. (The Sentient Group and Sunsuper Pty Ltd are jointly treated as a cornerstone investor in so far as they have a collective right to appoint a director).

Further details of the members of the Board including their experience and expertise is set out in the Directors' Report.

### **NON-EXECUTIVE DIRECTORS**

The eight Non-executive Directors periodically meet for a period of time, without the presence of management, to discuss the operation of the Board and a range of other matters including those relating to Remuneration and Directors Nominations. Relevant matters arising from these meetings are shared with the full Board.

### **TERM OF OFFICE**

The Company's constitution specifies that all Directors (with the exception of the Managing Director) must retire from office no later than the third annual general meeting (AGM) following their last election. Where eligible, a Director may stand for re-election.

### **PERFORMANCE**

In order to ensure that the Board continues to discharge its responsibilities in an appropriate manner, the performance of all Non-executive Directors is reviewed annually by the Chairman. In addition during the year, all Directors completed a structured self evaluation questionnaire that aimed to evaluate the performance of the Board as a whole. These responses are collated and subsequently discussed by the Board to improve the functional operations of the Board. The Chairman meets privately with each Director as appropriate to discuss their individual performance. The Chairman's performance is reviewed by the Board.

## **3. PROMOTE ETHICAL AND RESPONSIBLE DECISION-MAKING**

*Companies should actively promote ethical and responsible decision-making*

The Company supports and has adopted the Code of Conduct published by The Australian Institute of Company Directors in 2005. This code recognises the need for Directors and employees to observe the highest standards of behaviour and business ethics and its commitment to ensuring compliance with the insider trading laws.

The insider trading provisions of the Corporations Act have been drawn to the attention of all Directors and executives and it has been agreed that this will be a continuing policy on a regular basis. Directors have all entered into agreements to notify the Company within three days of any dealing in the Company's securities and it is an employment condition that all executives notify the Company within three days of any dealing in the Company's securities.

The Code of Conduct and Securities Trading policy are available on the Company's website.

## **4. SAFEGUARD INTEGRITY OF FINANCIAL REPORTING**

*Companies should have a structure to independently verify and safeguard the integrity of their financial reporting.*

The Board has adopted an Audit & Risk Committee Charter to ensure the truthful and factual presentation of the Company's financial position. Audit & Risk Committee meetings will be held periodically throughout the year. It is the policy of the Board that the members of the committee shall be a minimum of three Non-executive Directors. The Audit & Risk Committee will be chaired by a Non-executive Director other than the Chairman of the Board.

The Chief Executive Officer and Chief Financial Officer may attend the committee meetings by invitation.

The main functions of the committee will be to:

- Assess the appropriateness of accounting policies, practices and disclosures and whether the quality of financial reporting is adequate;
- Review the scope and results of internal, external and compliance audits;
- Maintain open lines of communication between the Board and external auditors and the Company's compliance officers;
- Review and report to the Board on the annual report, the half-year financial report and all other financial information published by the Company or released to the market;
- Assess the adequacy of the Company's internal controls and make informed decisions regarding compliance policies, practices and disclosures;
- Ensure effective deployment of risk management processes;
- Nominate the external auditors and review the terms of their engagement, the scope and quality of the audit and the auditor's independence;
- Review the level of non-audit services provided by the external auditors and ensure that it does not adversely impact on auditor independence.

The Chairman of the Audit & Risk Management Committee reviews the performance of the committee with members and reports annually to the Board. The members of the Audit & Risk Committee during the year were:

Robert Davies (Chairman), Robert Flew (Former Chairman – now retired), Neil Galwey (now retired), Pieter Britz, Prame Chopra.

## CORPORATE GOVERNANCE STATEMENT (Continued)

### 4. SAFEGUARD INTEGRITY OF FINANCIAL REPORTING (Continued)

#### *Qualifications of audit committee members*

Robert Davies CMA has extensive senior finance experience with global mining and resource companies. He has held a number of senior management responsibilities including Executive Vice President and Chief Financial Officer for Inco Ltd, Chief Financial Officer for Alumina Ltd and General Manager Treasury Tax and Investor Relations for WMC Ltd. He has previously held senior finance positions with BHP in Canada, the US, Chile and Australia, acquiring significant operational and corporate finance experience.

Pieter Britz B.Eng (Industrial), Pr Eng, MBA is a registered professional engineer with a wealth of experience in the resources industry since the early 1990s. His experience includes coal, base metals, heavy minerals, and industrial minerals. In early 2004 Pieter moved to Australia to set up Royal Bank of Canada's investment banking division, initially focusing on equity capital markets before expanding into corporate advisory work. Pieter joined The Sentient Group in early 2007 as investment professional.

Prame Chopra B.Sc. (Hons), Ph.D, FAICD, MAGU, MASEG, MIGA, MASC was a Reader in Geophysics at The Australian National University in Canberra from 1996 - 2006. He obtained his Ph.D in rock physics at the ANU in 1980 and has held research appointments at ANU, Cornell University in New York and at the Bureau of Mineral Resources, Geology & Geophysics and the Australian Geological Survey Organisation.

Robert Flew B.Ec (Hons), FAusIMM, FAICD has extensive Board, corporate, financial and general management experience in the national and international resource sector. For fifteen years he held senior management responsibilities at BHP, including being Company Secretary and Vice President Investor Relations.

Neil Galwey OAM BE, FIE Aust. has an electrical engineering background with 35 years experience in the electricity industry. He has held the positions of Queensland Electricity Commissioner, Chairman of the Snowy Mountain Engineering Corporation, and Director of the Energy Research and Development Corporation and Stanwell Corporation.

For details on the number of meetings of the audit committee held during the year and the attendees at those meetings, refer to the Directors' Report.

### 5. MAKE TIMELY AND BALANCED DISCLOSURE

#### *Companies should promote timely and balanced disclosure of all material matters concerning the company.*

The Board has adopted a Listing Rule 3.1 Compliance Policy, which has been designed to ensure compliance with the ASX Listing Rule disclosure requirements and to ensure accountability at a senior management level for that compliance.

The Company Secretary has been nominated as the person responsible for communications with the Australian Securities Exchange (ASX). This role includes responsibility for ensuring compliance with the continuous disclosure requirements in the ASX listing rules and overseeing and co-ordinating information disclosure to the ASX, analysts, brokers, shareholders, the media and the public.

The Company rigorously polices its continuous disclosure responsibilities to ensure a fully informed market at all times.

### 6. RESPECT THE RIGHTS OF SHAREHOLDERS

#### *Companies should respect the rights of shareholders and facilitate the effective exercise of those rights.*

The Board of Directors aims to ensure that the shareholders, on behalf of whom they act, are provided with all information necessary to assess the performance of the Company. Information is communicated to the shareholders through:

- The Annual Report, which will be distributed to all shareholders (unless shareholders specifically indicate otherwise);
- Quarterly Reports to all shareholders (to be issued within four weeks of the end of the quarter);
- The Annual General Meeting, and other meetings called to obtain approval for Board action as appropriate;
- Investor presentation evenings held in at least four capital cities each year; and
- The Company's Corporate Internet site at [www.geodynamics.com.au](http://www.geodynamics.com.au). This web site is actively maintained and includes all market announcements, research reports from analysts, briefings to shareholders, full texts of notices of meeting and explanatory material and compliance reports such as the quarterly cash flow report and annual report.

Shareholders are actively encouraged to become 'online shareholders' by registering electronically with the Company to receive an email notification of announcements as they are made. The Company endeavours to respond to all shareholder queries on a prompt and courteous basis.

All information disclosed to the ASX is automatically posted on the Company's website as soon as it is disclosed to the ASX. This is achieved through a sophisticated web interface with the ASX online lodgement system.

## 7. RECOGNISE AND MANAGE RISK

*Companies should establish a sound system of risk oversight, management and internal control.*

The Company is committed to having a culture of risk management and has established a risk management system that supports a pro-active approach to managing risk and to exploiting opportunity at all levels.

A series of extensive workshop reviews have been held for each component phase of Stage One of the Company's business plan and these will continue to be held for subsequent stages to highlight major risk areas and plan the treatment to manage those risks. In addition, a formal risk management plan is included as part of every major capital acquisition or procurement decision and key risk/opportunity areas and their drivers are included in the Management/Board reporting system. The Board has also established a Technical Committee and a Health Safety and Environment Committee which both operate under charters approved by the Board. A key function of the Technical Committee is to advise the Board on issues related to technical risk.

Management, through the Managing Director, is responsible for designing, implementing and reporting on the adequacy of the Company's risk management and internal control system. Management reports to the Audit and Risk Committee on the Company's key risks and the extent to which it believes these risks are being managed. This is performed on a six monthly basis or more frequently as required by the Board or Committee.

The Board is responsible for satisfying itself annually, or more frequently as required, that management has developed and implemented a sound system of risk management and internal control. It reviews strategic, operational and technical risks in conjunction with, and as a key input to an annual corporate strategy workshop attended by the Board and senior management. This workshop reviews the Company's strategic direction in detail and includes specific focus on the identification of business risks which could prevent the Company from achieving its objectives. Management are required to ensure that appropriate controls and mitigation strategies are in place to effectively manage those risks. Compliance and reporting risks and reviewed on an ongoing basis and independently audited from time to time – the most recent audit was undertaken in the past three months. The Audit and Risk Committee oversees the adequacy and comprehensiveness of risk reporting from management.

The Board receives a written assurance from the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO) that to the best of their knowledge and belief, the declaration provided by them in accordance with section 295A of the Corporations Act is founded on a sound system of risk management and internal control and that the system is operating effectively in relation to financial reporting risks. The Board notes that due to its nature, internal control assurance from the CEO and CFO can only be reasonable rather than absolute. This is due to such factors as the need for judgement, the use of testing on a sample basis, the inherent limitations in internal control and because much of the evidence available is persuasive rather than conclusive and therefore is not and cannot be designed to detect all weaknesses in control procedures.

### TECHNICAL COMMITTEE

Technical Committee meetings are held on an as required basis but generally there will be at least two meetings throughout the year. The Committee is comprised of a Chair drawn from the Non-executives of the Geodynamics Board, the Chief Scientific Officer, the CEO and approximately three members comprising of a recognized expert covering one or more of the technical domain areas identified below. These experts may be from the Board, but more likely will be drawn externally from the Company and be independent of management. The Technical Committee has been given the following Terms of Reference:

- Advise the Board on issues related to the technical risks, mitigations and opportunities associated with the five key technical domain areas the Company is currently involved in, namely exploration, well engineering and drilling execution, reservoir development and behaviour, power station development and execution and HFR external developments;
- Provide guidance and challenge to management on technical issues;
- Review and advise the Audit and Risk Committee of the Board on the Technical Risks and their potential impact on the broader Company objectives;
- Review technology and/or product development opportunities that arise and advise the Board on their appropriateness; and
- Each member shall have the responsibility to initiate issues that should be brought to the attention of the committee or Board.

The members of the Technical Committee during the year were:

**Jack Hamilton (Chairman), Keith Spence, Doone Wyborn, Gerry Grove-White.**

There are three external independent experts with expertise across the technical domain areas identified above.

### HEALTH SAFETY & ENVIRONMENT COMMITTEE

A Health, Safety and Environment (HSE) Committee was established on 20 November 2008. HSE meetings are held on an as required basis but generally there will be at least four meetings throughout the year. The Committee is comprised of a Chair drawn from the Non-executives of the Geodynamics Board. It is the policy of the Board that the members of the committee shall be a minimum of three Non-executive Directors. The HSE Committee has been given the following Terms of Reference:

## CORPORATE GOVERNANCE STATEMENT (Continued)

### 7. RECOGNISE AND MANAGE RISK (continued)

- Its primary objective is to assist the Board of Directors in its responsibilities relating to establishing and maintaining the highest standards of Health and Safety and Environmental performance by Geodynamics, and compliance with all relevant legislation. In addition the Committee will ensure that Management reports to the Board on:-
  - Compliance with statutory requirements, codes, standards, and guidelines;
  - Establishment of measurable objectives and targets aimed at elimination of work related incidents or environmental impacts from Geodynamics' activities;
  - The defining of roles, responsibilities and levels of accountability for HSE within Geodynamics.
- Act as an independent and objective party to review the safety and environmental performance reports presented by management for the use of all stakeholders.
- Review HSE risk assessment processes and monitor their effectiveness.
- Review all significant Geodynamics incident reports along with the results of the subsequent investigations and the implementation of the identified corrective actions.
- Oversee and appraise the quality of the health & safety and the environmental audits conducted by the HSE auditors.
- Ensure through regular meetings that open lines of communication exist among the Board, Management and HSE Auditors.

The members of the HSE Committee during the year were:

**Keith Spence (Chairman), Pieter Britz, Prame Chopra, Andrew Stock, Gerry Grove-White (ex-officio member).**

### 8. REMUNERATE FAIRLY AND RESPONSIBLY

*Companies should ensure that the level and composition of remuneration is sufficient and reasonable and that its relationship to performance is clear.*

#### REMUNERATION

It is the Company's objective to provide maximum stakeholder benefit from the retention of a high quality Board and executive team by remunerating Directors and key executives fairly and appropriately with reference to relevant employment market conditions. The Managing Director's and key executives' emoluments are structured to retain and motivate executives by offering a competitive base salary together with short and long term performance incentives through cash, shares and options which allow executives to share in the success of Geodynamics Limited. The Board will assess the appropriateness of the nature and amount of emoluments of such officers on a periodic basis by reference to relevant employment market conditions with the overall objective of ensuring maximum stakeholder benefit.

The Company currently has eight Non-executive Directors and a Managing Director. The Company's Managing Director does not receive Directors' fees and his remuneration package is formalised in a service agreement. The Non-executive Directors' maximum aggregate remuneration as approved by shareholders is currently \$700,000 and is set at a level that compensates the directors for their significant time commitment in overseeing the progression of the Company's business plan.

There are no retirement benefits offered to Non-executive Directors other than statutory superannuation. For a full discussion of the Company's remuneration philosophy and framework and the remuneration received by Directors and Executives in the current period, please refer to the Remuneration Report which is contained within the Directors' Report.

#### REMUNERATION AND NOMINATIONS COMMITTEE

The Remuneration and Nominations committee operates under a charter approved by the Board. Remuneration and Nomination Committee meetings are held at least semi-annually and otherwise as required throughout the year. It is the policy of the Board that the members of the committee shall be a minimum of three Non-executive Directors. The Remuneration and Nominations Committee will be chaired by a Non-executive Director other than the Chairman of the Board.

The Board is responsible for determining and reviewing compensation arrangements for the Directors themselves and the Chief Executive Officer.

The members of the Remuneration and Nominations Committee during the year were:

**Andrew Stock (Chairman), Martin Albrecht, Robert Davies, Robert Flew (now retired).**

For details on the number of meetings of the Remuneration and Nominations committee held during the year and the attendees at those meetings, refer to the Directors' Report.

# INCOME STATEMENT

## FINANCIAL YEAR ENDED 30 JUNE 2009

	Note	2009 \$	2008 \$
Interest Revenue		6,491,889	1,471,473
Realised Gain on Sale of Investment		-	1,182,012
Impairment of Available for Sale Financial Asset	3	(5,603,760)	-
Share of associate's loss accounted for using the equity method	3	-	(2,565,082)
Administrative Expenses	3	(16,195,561)	(7,469,143)
<b>Loss before Income Tax Expense</b>	3	<b>(15,307,432)</b>	<b>(7,380,740)</b>
Income Tax Benefit	4	-	-
<b>Loss after Income Tax Expense</b>		<b>(15,307,432)</b>	<b>(7,380,740)</b>
<b>Net Loss for the Year</b>		<b>(15,307,432)</b>	<b>(7,380,740)</b>
Basic and Diluted Earnings/(Loss) per share (cents per share)	16	(5.42)	(3.63)
Basic and Diluted Earnings/(Loss) per share attributable to the equity holders of the entity(cents per share)	16	(5.42)	(3.63)

The above Income Statement should be read in conjunction with the accompanying notes.

# BALANCE SHEET

AS AT 30 JUNE 2009

	Note	2009 \$	2008 \$
<b>Current Assets</b>			
Cash Assets	21(A)	114,966,887	99,901,378
Inventories – Rig Parts and Well Materials		1,522,222	1,019,198
Receivables	5	22,708,178	31,269,614
<b>Total Current Assets</b>		<b>139,197,287</b>	<b>132,190,190</b>
<b>Non Current Assets</b>			
Available for Sale Financial Asset	22	2,936,204	8,539,964
Property, Plant and Equipment	6	69,928,790	27,513,655
Deferred Exploration, Evaluation and Development phase costs	7	90,349,186	100,977,144
<b>Total Non Current Assets</b>		<b>163,214,180</b>	<b>137,030,763</b>
<b>Total Assets</b>		<b>302,411,467</b>	<b>269,220,953</b>
<b>Current Liabilities</b>			
Payables	8	11,310,793	12,566,915
Provisions	9	467,105	139,608
Deferred Income	10	4,823,818	1,164,365
Derivative Liability	11	562,724	-
<b>Total Current Liabilities</b>		<b>17,164,440</b>	<b>13,870,888</b>
<b>Non Current Liabilities</b>			
Provisions	9	2,426,828	1,962,851
<b>Total Non Current Liabilities</b>		<b>2,426,828</b>	<b>1,962,851</b>
<b>Total Liabilities</b>		<b>19,591,268</b>	<b>15,833,739</b>
<b>Net Assets</b>		<b>282,820,199</b>	<b>253,387,214</b>
<b>Equity</b>			
Contributed Equity	12	319,692,861	275,322,345
Other Reserves	13	1,998,990	1,629,089
Accumulated Losses		(38,871,652)	(23,564,220)
<b>Total Equity</b>		<b>282,820,199</b>	<b>253,387,214</b>

The above Balance Sheet should be read in conjunction with the accompanying notes.

# CASH FLOW STATEMENT

## FINANCIAL YEAR ENDED 30 JUNE 2009

	Note	2009 \$	2008 \$
<b>Cash Flows from/(used in) Operating Activities</b>			
Net Goods and Services Tax received		10,786,526	5,484,835
Payments to suppliers and employees		(29,790,184)	(12,805,622)
Net Interest Received		6,344,340	1,115,381
Net cash flows from/(used in) Operating Activities	21(B)	<b>(12,659,318)</b>	<b>(6,205,406)</b>
<b>Cash Flows from/(used in) Investing Activities</b>			
Proceeds from Government Grants		3,659,453	1,164,365
Purchase of Property, Plant & Equipment		(45,558,888)	(4,504,614)
Payments for Exploration and Evaluation expenditure		(92,963,016)	(58,105,864)
Proceeds from Farmin Cash Calls		118,228,432	27,423,641
Purchase of shares in Exorka International Ltd		-	(4,717,542)
Proceeds from sale of property, plant & equipment		17,129	-
Net cash flow used in investing activities		<b>(16,616,890)</b>	<b>(38,740,014)</b>
<b>Cash Flows from Financing Activities</b>			
Proceeds from issue of shares		44,341,717	121,836,243
Costs of issue		-	(730,742)
Net cash flow provided by financing activities		<b>44,341,717</b>	<b>121,105,501</b>
Net increase / (decrease) in cash held		<b>15,065,509</b>	<b>76,160,081</b>
Add: Opening cash carried forward		99,901,378	23,741,297
<b>Closing cash carried forward</b>	21(A)	<b>114,966,887</b>	<b>99,901,378</b>

The above Cash Flow Statement should be read in conjunction with the accompanying notes.

# STATEMENT OF **CHANGES IN EQUITY**

## **FINANCIAL YEAR ENDED 30 JUNE 2008**

	<b>Issued Capital</b> \$	<b>Employee Equity Benefits Reserve</b> \$	<b>Foreign Exchange Hedge Reserve</b> \$	<b>Accumulated Losses</b> \$	<b>Total Equity</b>
<b>At 1 July 2007</b>	<b>154,100,293</b>	<b>1,164,326</b>		<b>(16,183,480)</b>	<b>139,081,139</b>
Nil	-	-	-	-	-
Total expense for period recognised directly in equity	-	-	-	-	-
Loss for the period	-	-	-	(7,380,740)	(7,380,740)
Total loss for the period	-	-	-	(7,380,740)	(7,380,740)
<b>Equity Transactions:</b>					
Exercise of options - unlisted	12,850,000	-	-	-	12,850,000
Exercise of options - listed	37,373,953	-	-	-	37,373,953
Exercise of options - employee	628,174	-	-	-	628,174
Issue of Share Capital in consideration of services	116,550	-	-	-	116,550
Issue of Share Capital via placement	37,500,000	-	-	-	37,500,000
Issue of Share Capital via Share Purchase Plan	33,484,117	-	-	-	33,484,117
Transaction costs of share purchase plan and exercise of listed options	(730,742)	-	-	-	(730,742)
Cost of share-based payment - recognition of share option expense	-	464,763	-	-	464,763
<b>At 30 June 2008</b>	<b>275,322,345</b>	<b>1,629,089</b>		<b>(23,564,220)</b>	<b>253,387,214</b>

# STATEMENT OF **CHANGES IN EQUITY**

## FINANCIAL YEAR ENDED 30 JUNE 2009

	<b>Issued Capital</b> \$	<b>Employee Equity Benefits Reserve</b> \$	<b>Foreign Exchange Hedge Reserve</b> \$	<b>Accumulated Losses</b> \$	<b>Total Equity</b>
<b>At 1 July 2008</b>	<b>275,322,345</b>	<b>1,629,089</b>	<b>-</b>	<b>(23,564,220)</b>	<b>253,387,214</b>
Recognition of foreign exchange hedge reserve	-	-	(562,724)	-	(562,724)
Total expense for period recognised directly in equity	-	-	(562,724)	-	(562,724)
Loss for the period	-	-		(15,307,432)	(15,307,432)
Total loss for the period	-	-	-	(15,307,432)	(15,870,156)
<b>Equity Transactions:</b>					
Exercise of options - listed	224,452	-	-	-	224,452
Issue of Share Capital in consideration of services	28,800	-	-	-	28,800
Issue of Share Capital via placement	44,100,000	-	-	-	44,100,000
Ordinary shares issued for the deferred employee share plan	-	206,344	-	-	206,344
Transaction cost adjustment	17,264	-	-	-	17,264
Cost of share-based payment - recognition of share option expense	-	726,281	-	-	726,281
<b>At 30 June 2009</b>	<b>319,692,861</b>	<b>2,561,714</b>	<b>(562,724)</b>	<b>(38,871,652)</b>	<b>282,820,199</b>

# NOTES TO THE FINANCIAL STATEMENTS

## NOTE 1 – CORPORATE INFORMATION

The financial report of Geodynamics Limited (the Company) for the year ended 30 June 2009 was authorised in accordance with a resolution of the directors on 26 August 2009.

Geodynamics Limited is a company limited by shares, incorporated and domiciled in Australia whose shares are publicly traded on the Australian Securities Exchange. The nature of the operations and principal activities of the Company are described in the Directors' Report.

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (A) Basis of Preparation

The financial report is a general purpose financial report which has been prepared in accordance with the requirements of the *Corporations Act 2001* and Australian Accounting Standards. The financial report has also been prepared on a historical cost basis except for the valuation of available for sale financial assets which are carried at fair value. The financial report is presented in Australian dollars. The Directors have adopted the going concern assumption in preparing the financial report.

### (B) Statement of Compliance

The financial report complies with Australian Accounting Standards, which include Australian equivalents to International Financial Reporting Standards (AIFRS). Compliance with AIFRS ensures that the financial report, comprising the financial statements and notes thereto, complies with International Financial Reporting Standards (IFRS).

Certain Australian Accounting Standards and interpretations have recently been issued or amended but are not yet effective and have not been adopted by the Company for the annual reporting period ended 30 June 2009. The Directors' have assessed the impact of these new or amended standards (to the extent relevant to the Company) and have concluded that these Standards and interpretations will not impact the amounts recognised in the financial statements.

### (C) Basis of Consolidation

The financial statements comprise the financial statements of Geodynamics Limited.

A wholly owned subsidiary was incorporated during the year named Geodynamics Share Plans Pty Ltd. Its issued capital is \$1.00 and its purpose is to act as trustee for the Geodynamics Deferred Employee Share Plan which holds shares on trust for employees. Consolidation was not considered material for the purposes of this subsidiary.

Subsidiaries are all those entities (including special purpose entities) over which the Group has the power to govern the financial and operating policies so as to obtain benefits from their activities. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether a group controls another entity. Subsidiaries are fully consolidated from the date on which control is obtained by the Group and cease to be consolidated from the date on which control is transferred out of the Group.

### (D) Significant Accounting Judgements, Estimates and Assumptions

The carrying amounts of certain assets and liabilities are often determined based on judgement, estimates and assumptions of future events. The key estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of certain assets and liabilities within the next annual reporting period are:

#### *Share-based payment transactions*

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined using a Black Scholes model.

#### *Provision for site rehabilitation*

The Company reviews rehabilitation requirements for its geothermal exploration tenements on a six-monthly basis by undertaking an in-house analysis of the costs to rehabilitate the sites including the plugging and abandoning of wells as appropriate.

#### *Capitalisation of Deferred Exploration and Evaluation Expenditure and Impairment*

The Company determines whether Deferred Exploration and Evaluation Costs are impaired at least on an annual basis. This requires an estimation of the recoverable amount of the cash generating units to which these asset groups belong.

#### *Classification and valuation of investments*

The Company classifies investments in listed and unlisted securities as 'available for sale' investments and movements in fair value are recognised directly in equity unless impairment has occurred in which case impairment is expensed. The fair value of unlisted securities not traded in an active market is determined by the pricing of those securities when share allotments of those securities are made on or around balance date to independent third parties.

**NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

**(E) Foreign Currency Translation**

Both the functional and presentation currency of Geodynamics is Australian dollars (\$A). Transactions in foreign currencies are initially recorded in the functional currency at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date.

All exchange differences in the financial report are taken to the income statement. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate as at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

**(F) Property, Plant & Equipment**

Property, plant and equipment is stated at cost less accumulated depreciation and any impairment in value. Depreciation is provided on a straight line basis on all property, plant and equipment. All classes are depreciated over periods ranging from 3 to 10 years (comparable to prior year). The assets' residual values, useful lives and amortisation methods are reviewed, and adjusted if appropriate, at each financial year end.

*Impairment*

The carrying values of property, plant and equipment are reviewed for impairment at each reporting date, with recoverable amount being estimated when events or changes in circumstances indicate the carrying value may be impaired.

For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs. An impairment exists when the carrying value exceeds its estimated recoverable amount. The asset or cash-generating unit is then written down to its recoverable amount.

The recoverable amount of plant and equipment is the greater of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses are recognised in the income statement in the year the loss is recognised.

*Derecognition and disposal*

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the year the asset is derecognised.

**(G) Exploration, Evaluation, Development and Restoration costs**

*Costs carried forward*

Costs arising from exploration and evaluation activities are carried forward provided such costs are expected to be recouped through successful development, or by sale, or where exploration and evaluation activities have not, at balance date, reached a stage to allow a reasonable assessment regarding the existence of economically recoverable reserves.

Grants and subsidies are treated as revenue and an equivalent amount of eligible exploration and evaluation expenditure is written off to offset this revenue. Costs carried forward in respect of an area of interest that is abandoned are written off in the year in which the decision to abandon is made.

*Impairment*

The carrying values of exploration, evaluation, development and restoration costs are reviewed for impairment in accordance with AASB 6 *Exploration and Evaluation of Mineral Resources* when facts and circumstances suggest that the carrying amount of such an asset may exceed its recoverable amount. Any impairment loss identified is recognised as an expense in accordance with AASB 136 *Impairment of Assets*.

*Amortisation*

Costs on productive areas will be amortised over the life of the area of interest to which such costs relate on the production output basis.

*Restoration costs*

Restoration costs that are expected to be incurred are provided for as part of the cost of the exploration, evaluation, development, construction or production phases that give rise to the need for restoration. Accordingly, these costs will be recognised gradually over the life of the facility as these phases occur. The costs include obligations relating to reclamation, plant closure and other costs associated with the restoration of the site.

**(H) Intangibles**

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful life and assessed for impairment whenever there is an indication that the intangible asset may be impaired.

The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, which is a change in accounting estimate. The amortisation expense on intangible assets with finite lives is recognised in profit or loss in the expense category consistent with the function of the intangible asset.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### (I) Impairment of Assets

At each reporting date, the Company assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Company makes a formal estimate of recoverable amount. Where the carrying amount of an asset exceeds its recoverable amount the asset is considered impaired and is written down to its recoverable amount.

Recoverable amount is the greater of fair value less costs to sell and value in use. It is determined for an individual asset. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

#### (J) Cash and Cash Equivalents

Cash assets on the balance sheet comprise cash at bank and on hand and short-term deposits with an original maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

For the purposes of the Cash Flow Statement, cash includes cash on hand and in banks and short term deposits with an original maturity of three months or less, net of outstanding bank overdrafts.

#### (K) Trade and Other Receivables

Trade receivables, which generally have 30 day terms, are recognised and carried at original invoice amount. An allowance for doubtful debts is made when there is objective evidence that the Company will not be able to collect the debts. Bad debts are written off when identified.

#### (L) Inventories

Inventories include spare parts and consumable items used in drilling operations and are valued at the lower of cost and net realisable value.

#### (M) Contributed Equity

Ordinary shares are classified as equity. Any transaction costs arising on the issue of ordinary shares are recognised directly in equity as a reduction of the share proceeds received.

#### (N) Trade and Other Payables

Trade payables and other payables are carried at cost and represent liabilities for goods and services provided to the Company prior to the end of the financial year that are unpaid and arise when the Company becomes obliged to make future payments in respect of the purchase of these goods and services.

#### (O) Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

#### (P) Employee Benefits

##### (i) Wages, salaries, annual leave and sick leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled within 12 months of the reporting date are recognised in other payables in respect of employees' services up to the reporting date. They are measured at the amounts expected to be paid when the liabilities are settled. Liabilities for sick leave are recognised when the leave is taken and are measured at the rates paid or payable.

##### (ii) Long service leave

The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures, and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currencies that match, as closely as possible, the estimated future cash outflows.

#### (Q) Share-based Payment Transactions

The Company provides benefits to employees (including directors) in the form of share-based payment transactions, whereby employees render services in exchange for rights over shares ('equity-settled transactions'). The current plans in place to provide these benefits are the Geodynamics Employee Option Plan and the Geodynamics Deferred Employee Share Plan, which both provide benefits to executive directors and employees. The cost of these equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined by the use of a Black-Scholes model which is prepared by the Company and independently reviewed.

**NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

In valuing equity-settled transactions, no account is taken of any performance conditions, other than conditions linked to the price of the shares of Geodynamics Limited ('market conditions'). The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award ('vesting date').

The cumulative expense recognised for equity-settled transactions at each reporting date until vesting date reflects (i) the extent to which the vesting period has expired and (ii) the number of awards that, in the opinion of the directors of the Company, will ultimately vest and (iii) the expired portion of the vesting period. This opinion is formed based on the best available information at balance date. No adjustment is made for the likelihood of market performance conditions being met as the effect of these conditions is included in the determination of fair value at grant date. No expense is recognised for awards that do not ultimately vest, except for awards where vesting is conditional upon a market condition. The dilutive effect, if any, of outstanding options is reflected as additional share dilution in the computation of earnings per share.

**(R) Revenue Recognition**

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the entity and the revenue can be reliably measured. In the case of interest, revenue is recognised as the interest accrues (using the effective interest method, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument) to the net carrying amount of the financial asset.

**(S) Government Grants**

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income over the periods necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to the income statement over the expected useful life of the relevant asset by equal annual instalments.

**(T) Earnings per Share**

Basic earnings per share is determined by dividing the operating profit after tax by the weighted average number of ordinary shares outstanding during the financial period. Diluted earnings per share is determined by dividing the operating profit after tax adjusted for the effect of earnings on potential ordinary shares, by the weighted average number of ordinary shares (both issued and potentially dilutive) outstanding during the financial period.

**(U) Income Tax**

Deferred income tax is provided on all temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognised for all taxable temporary differences:

- except where the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised. The carrying amount of deferred income tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

For Geodynamics Limited, no deferred income tax asset is being recognised in the accounts as the benefit is not considered to be probable of being realised at this stage of the Company's development. Unrecognised deferred income tax assets are reassessed at each balance sheet date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date. Income taxes relating to items recognised directly in equity are recognised in equity and not in the income statement.

Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to the same taxable entity and the same taxation authority.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

#### **(V) Other Taxes**

Revenues, expenses and assets are recognised net of the amount of GST except:

- where the GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the balance sheet. Cash flows are included in the Cash Flow Statement on a net basis and the GST component arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority are classified as operating cash flows. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the taxation authority.

#### **(W) Segment reporting**

A business segment is a distinguishable component of the entity that is engaged in providing products or services that are subject to risks and returns that are different to those of other business segments. A geographical segment is a distinguishable component of that entity that is engaged in providing products or services within a particular economic environment and is subject to risks and returns that are different than those of segments operating in other economic environments.

#### **(X) Available for sale securities**

Available-for-sale investments are those non-derivative financial assets, principally equity securities that are designated as available-for-sale. After initial recognition available-for sale securities are measured at fair value with gains or losses being recognised as a separate component of equity until the investment is derecognised or until the investment is determined to be impaired, at which time the cumulative gain or loss previously reported in equity is recognised in profit or loss.

The fair values of investments that are actively traded in organised financial markets are determined by reference to quoted market bid prices at the close of business on the balance sheet date. For investments with no active market, fair values are determined using valuation techniques. Such techniques include: using recent arm's length market transactions; reference to the current market value of another instrument that is substantially the same; discounted cash flow analysis and option pricing models making as much use of available and supportable market data as possible and keeping judgemental inputs to a minimum.

#### **(Y) Farmin Arrangement**

The Company is a party to a farmin arrangement (called the Innamincka Joint Venture) with Origin Energy Geothermal Pty Ltd (Origin). In the arrangement the Company (the 'transferor') has transferred 30% of its interest in its South Australian geothermal tenements and 30% of its Cooper Basin assets including the drilling rig for an agreement by Origin (the 'transferee') to meet project costs which would otherwise have to be undertaken by the Company. Participants in the Innamincka Joint Venture are:

Geodynamics (Operator) – 70%

Origin Energy Geothermal Pty Ltd\* – 30%

\*A wholly owned subsidiary of Origin Energy Limited (ASX:ORG)

Refer to Note 20 for a status of the payments made to date under this farmin arrangement.

	2009 \$	2008 \$
<b>NOTE 3 – EXPENSES AND LOSSES/(GAINS)</b>		
Operating loss before income tax has been determined after charging/(crediting) the following specific items:		
Depreciation of plant and equipment	827,440	212,244
Amortisation of leasehold improvements	123,051	60,193
Share Option Expense	726,281	313,564
Personnel costs	7,365,909	2,412,026
Interest expense	5,031	2,428
Operating lease rentals paid	551,312	152,201
Foreign exchange loss/(gain)	412,250	(155,077)
(Profit)/loss on disposal of subsidiary	-	23,345
(Profit)/loss on disposal of property, plant & equipment	9,827	10,372
Impairment of Available for sale asset.	5,603,760	-
Share of associate's loss accounted for using equity method	-	2,565,082
<b>NOTE 4 - INCOME TAX</b>		
<b>Income tax expense</b>		
The prima facie tax benefit on loss of 30% (2008 - 30%) differs from the income tax provided in the financial statements as follows:		
Prima facie tax on loss	(4,592,268)	(2,214,222)
Tax effect of amounts which are not deductible (taxable) in calculating taxable income:		
Grant Income	1,097,836	349,309
Impairment of Available for Sale / Loss on Investment in Associate	1,681,128	414,920
Other income/(expenses)	(10,970)	(1,149,401)
Additional deduction for research & development expenditure	(1,966,305)	(7,517,418)
Income tax benefit attributable to current year losses	(3,790,579)	(10,116,812)
Deferred tax asset not brought to account as realisation of the asset is not regarded as probable	3,790,579	10,116,812
Income tax expense attributable to operating loss	-	-

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 4 - INCOME TAX (Continued)

#### Deferred income tax

Deferred income tax at 30 June relates to the following:

	Balance Sheet		Income Statement	
	2009 \$	2008 \$	2009 \$	2008 \$
<b>Deferred tax liabilities</b>				
Deferred Exploration Phase Expenditure	(311,661)	(290,237)	-	-
Deferred Evaluation Phase Expenditure	(26,793,094)	(30,002,906)		
Other Deferred tax liability	(1,137,231)	(136,881)		
<b>Deferred tax assets</b>				
Losses available for offset against future taxable income	44,545,562	41,638,787	-	-
Other Deferred tax asset	380,140	104,480	-	-
Net deferred tax assets	16,683,716	11,313,243		
Deferred tax asset not recognised	(16,683,716)	(11,313,243)		
Gross deferred income tax assets	-	-		
Deferred tax income/(expense)	-	-	-	-

The deferred tax asset arising from estimated tax losses is not brought to account at balance date as realisation of the benefit is not yet regarded as probable.

The deferred tax asset will only be obtained if:

- (a) future assessable income is derived of a nature and of an amount sufficient to enable the benefit to be realised;
- (b) the conditions for deductibility imposed by tax legislation continue to be complied with; and
- (c) no changes in tax legislation adversely affect the Company in realising the benefit.

	2009 \$	2008 \$
Accounts Receivable	19,661,598	28,338,588
GST Receivable	2,038,481	2,344,237
Interest Receivable	536,134	393,616
Sundry Receivables and Prepayments	471,965	193,173
	<b>22,708,178</b>	<b>31,269,614</b>

Accounts receivable, GST receivable, interest receivable and sundry receivables are non-interest bearing.

The accounts receivable balance represents the amount owing from Origin Energy at balance date under the farm in arrangement (refer to Note 2(Y) and Note 20 for further particulars) and an amount owing from insurance for the Habanero 3 incident. Due to the short term nature of these receivables, their carrying value is assumed to approximate their fair value.

#### Allowance for Impairment loss.

No allowance has been made for impairment loss. A provision for impairment loss is only recognised when there is objective evidence that an individual receivable is impaired. None of the balances within receivables and prepayments contain impaired assets.

	2009 \$	2008 \$
<b>NOTE 6 - PROPERTY, PLANT &amp; EQUIPMENT</b>		
Plant and Equipment at cost	75,367,743	30,214,467
Less: accumulated depreciation	(5,438,953)	(2,700,812)
<b>Total Property, Plant and Equipment</b>	<b>69,928,790</b>	<b>27,513,655</b>
<b><i>Reconciliation of Plant &amp; Equipment</i></b>		
Carrying amount at beginning	27,513,655	36,815,866
Additions	45,584,810	4,504,614
Disposals	(9,827)	(10,373)
Disposals – Origin Energy South Australia Farmin	-	(11,222,300)
Depreciation/Amortisation Expense	(3,159,848)	(2,574,152)
<b>Carrying amount at the end</b>	<b>69,928,790</b>	<b>27,513,655</b>

Assets increased during the financial year due to the construction of a 1 MW power station and the progress payments for the second drilling rig and associated equipment.

	2009 \$	2008 \$
<b>NOTE 7 – DEFERRED EXPLORATION AND EVALUATION COSTS</b>		
Exploration Phase	1,038,870	967,456
Evaluation Phase	89,310,316	100,009,688
<b>Total</b>	<b>90,349,186</b>	<b>100,977,144</b>
<b><i>Reconciliation of Deferred Exploration &amp; Evaluation costs</i></b>		
Carrying amount at beginning	100,977,144	78,086,814
Add: Exploration Expenditure for period	149,255	66,981
Add: Evaluation & Development expenditure for period	72,123,548	23,823,349
Less: Farmin contribution from Origin Energy	(82,903,761)	-
Disposals –Origin Energy South Australia Farmin	-	(1,000,000)
<b>Carrying amount at the end</b>	<b>90,346,186</b>	<b>100,977,144</b>

The ultimate recoupment of costs carried forward for exploration and evaluation phases is dependent on the successful development and commercial exploitation or sale of the respective geothermal exploration tenements. The Company completed Stage One of its business plan in March 2009 being 'Proof of Concept'. The Proof of Concept Phase is the demonstration of economic heat extraction from a two well circulation test via a developed underground heat exchanger.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

	2009 \$	2008 \$
<b>NOTE 8 - ACCOUNTS PAYABLE</b>		
<b>Current</b>		
Trade Creditors	10,079,498	9,281,155
Accrued Liabilities	1,231,295	3,285,760
Trade creditors and accruals	<b>11,310,793</b>	<b>12,566,915</b>

### Terms and conditions

Accounts payable and accrued liabilities are non-interest bearing. Liabilities are recognised for amounts to be paid in the future for goods and services received, whether or not billed to the Company. All amounts are normally settled within 30 days, and discounts for early payment are normally taken where it is considered advantageous for the Company to do so. Due to the short term nature of these payables, their carrying value is assumed to approximate their fair value.

## NOTE 9 - PROVISIONS

	Employee Entitlements \$	Restoration Provision \$	Make Good Provision \$	Total Provisions \$
<b>At 1 July 2008</b>	<b>178,871</b>	<b>1,881,001</b>	<b>42,587</b>	<b>2,102,459</b>
Arising during the year	615,584	352,278	18,072	985,934
Utilised	(194,460)	-	-	(194,460)
<b>At 30 June 2009</b>	<b>599,995</b>	<b>2,233,279</b>	<b>60,659</b>	<b>2,893,933</b>
Current 2009	457,105	10,000	-	467,105
Non current 2009	142,890	2,223,279	60,659	2,426,828
	<b>599,995</b>	<b>2,233,279</b>	<b>60,659</b>	<b>2,893,933</b>
Current 2008	129,608	10,000	-	139,608
Non current 2008	49,263	1,871,001	42,587	1,962,851
At 30 June 2008	<b>178,871</b>	<b>1,881,001</b>	<b>42,587</b>	<b>2,102,459</b>

The restoration provision relates to the ultimate restoration of the Habanero 1, Habanero 2, Habanero 3, Jolokia 1 and Savina 1 sites including the wells themselves (permanent plugs), the monitoring wells and water supply pipeline routes. The provision has increased on account of increased exploration and evaluation activity in the Cooper Basin.

Bank guarantees totalling \$150,000 and \$80,000 are held respectively by the South Australian and NSW governments to secure tenement rehabilitation obligations.

The make good provision relates to the lease agreements on the Company's corporate office premises in Brisbane and Perth. Under these agreements, Geodynamics is required to restore the leased premises to their original condition at the end of the respective lease. Bank guarantees totalling \$203,099 for Brisbane and \$8,500 for Perth are held by the respective landlords of these leased premises.

	2009 \$	2008 \$
<b>NOTE 10 - DEFERRED INCOME</b>		
<b>Current</b>		
Government Grant - REDI	4,261,568	1,164,365
Government Grant – RDIF	562,250	-
	<b>4,823,818</b>	<b>1,164,365</b>

**NOTE 10 – DEFERRED INCOME (Continued)**

**Terms and conditions – Renewable Energy Development Initiative**

The Company announced on 5 December 2005, that it had been awarded a \$5 million grant under the then Federal Government's Renewable Energy Development Initiative (REDI) Program. The grant was for the demonstration 1 MW HFR power plant to be constructed near Innamincka in the Cooper Basin, South Australia (Stage Two of Geodynamics Cooper Basin project).

The REDI grant was formally executed in late 2007 and at 30 June 2009 an amount of \$4,261,568 + GST had been paid by AusIndustry against this total grant of \$5 million. It has been classified as deferred income on the basis that the grant relates to an asset, and therefore the fair value is credited to a deferred income account and is released to the income statement over the expected useful life of the relevant asset by equal annual instalments.

**Terms and Conditions - Regional Development Infrastructure Fund**

The Company announced on 16 April 2009 that it had been successful in its application for a \$560,000 grant in relation to the construction of the power line, from the Regional Development Infrastructure Fund (RDIF), an initiative of the South Australian government. The grant funded 50% of the cost of the transmission line between the 1 MW Power Plant and the Innamincka township. At 30 June 2009 this grant had been paid in full and it has been classified as deferred income on the basis that the grant relates to an asset, and therefore the fair value is credited to a deferred income account and is released to the income statement over the expected useful life of the relevant asset by equal annual instalments.

	<b>2009</b>	<b>2008</b>
	\$	\$
Forward currency contracts – cash flow hedges	<b>562,724</b>	-
<b>Forward currency contracts – cash flow hedges</b>		

**NOTE 11 – DERIVATIVE FINANCIAL INSTRUMENTS**

Current Liabilities

Forward currency contracts – cash flow hedges

**562,724**

**Forward currency contracts – cash flow hedges**

In order to protect against exchange rate movements, the Company has entered into forward exchange contracts to hedge certain US\$ purchase commitments. These contracts are timed to mature when payments are scheduled to be made. The cash flows are expected to occur between 1 and 7 months from 1 July 2009. At balance date, the details of outstanding contracts are:

	<b>2009</b>	<b>2008</b>	<b>2009</b>	<b>2008</b>
	\$	\$		
<b>Buy US\$ / sell Australian \$</b>	<b>14,898,979</b>	-	<b>0.7744</b>	-

The forward currency contracts are considered to be highly effective hedges as they are matched against committed fixed asset payment schedules and any gain or loss on the contracts attributable to the hedged risk is taken directly to equity. When the fixed asset is delivered the amount recognised in equity is adjusted to the fixed asset account in the balance sheet.

	<b>2009</b>	<b>2008</b>
	\$	\$
Issued and Fully Paid Capital		
290,288,801 (2008 – 259,226,348) fully paid ordinary shares	<b>319,692,861</b>	<b>275,322,345</b>

**NOTE 12 – CONTRIBUTED EQUITY**

Issued and Fully Paid Capital

290,288,801 (2008 – 259,226,348) fully paid ordinary shares

**319,692,861**

**275,322,345**

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 12 – CONTRIBUTED EQUITY (Continued)

	<b>Movement in ordinary share capital</b>	<b>Number of Shares</b>	<b>Issue price \$ per share</b>	<b>\$</b>
<b>30/06/07</b>	<b>Balance end of financial year</b>	<b>174,066,766</b>		<b>154,100,293</b>
Jul 07	Ordinary shares issued as a result of the exercise of listed options with an expiry date of 31 Jan 2008 (monies received June 2007)	16,121	-	-
Aug 07	Ordinary shares issued as a result of the exercise of unlisted placement options with an expiry date of 31 Aug 2007	11,250,000	1.00	11,250,000
Dec 07	Ordinary shares issued as a result of the exercise of unlisted options	1,000,000	1.60	1,600,000
Jan 08	Ordinary shares issued as a result of the exercise of listed options with an expiry date of 31 Jan 2008	24,916,372	1.50	37,373,953
	Ordinary shares issued as a result of the exercise of employee options	8,334	0.54	4,500
	Ordinary shares issued as a result of the exercise of employee options	182,500	0.98	178,850
	Ordinary shares issued as a result of the exercise of employee options	133,333	1.05	140,000
	Ordinary shares issued as a result of the exercise of employee options	115,000	1.09	125,350
	Ordinary shares issued as a result of the exercise of employee options	133,333	1.18	157,333
	Ordinary shares issued as a result of the exercise of employee options	18,000	1.23	22,140
	Ordinary shares issued in consideration of services rendered	63,844	1.60	102,150
May 08	Ordinary shares issued pursuant to Placement	25,000,000	1.50	37,500,000
Jun 08	Ordinary Shares issued pursuant to a Share Purchase Plan	22,322,745	1.50	33,484,117
	Transaction costs of Share Purchase Plan and exercise of listed options	-	-	(730,742)
	Ordinary shares issued in consideration of services rendered – Shares issued in Aug 2008	-	-	14,400
<b>30/06/08</b>	<b>Balance end of financial year</b>	<b>259,226,348</b>		<b>275,322,345</b>
Aug 2008	Ordinary shares issued in consideration of services rendered – Shares issued in Aug 08	9,600	-	-
Sep 2008	Ordinary shares issued to pursuant to placement (Tata Power)	29,400,000	1.50	44,100,000
Sep 2008	Transaction cost adjustment			16,932
Nov 2008	Ordinary shares issued for the deferred employee share plan	1,126,644	0.73	182,769
	Less: above issue transferred to reserves	-	-	(182,769)
Feb 2009	Exercise of Listed \$2.00 Options expiring 28 February 2009	61,008	2.00	122,349
Mar 2009	Ordinary shares issued in consideration of services rendered	24,800	1.16	28,800
Mar-May 2009	Ordinary shares issued for the deferred employee share plan	372,115	1.04	23,575
	Less: above issue transferred to reserves	-	-	(23,575)
Apr-Jun 2009	Exercise of Listed \$1.50 Options expiring 8 December 2009	68,289	1.50	102,436
<b>30/06/09</b>	<b>Balance end of financial year</b>	<b>290,288,804</b>		<b>319,692,861</b>

**NOTE 12 – CONTRIBUTED EQUITY (Continued)**

**Terms and Conditions of contributed equity**

Ordinary Shares entitle their holder to one vote, either in person or by proxy, at a meeting of the company. Effective 1 July 1998, the Corporations legislation abolished the concepts of authorised capital and par value shares. Accordingly the Company does not have authorised capital nor par value in respect of its issued capital.

**Capital Management**

When managing capital, management's objective is to ensure the entity continues as a going concern and to maintain a structure that ensures the lowest cost of capital available to the entity. As the entity is not in position to be debt funded until it advances its Cooper Basin project to a completed feasibility phase which has the support of financiers, it must rely totally on shareholders and government grants for its funding requirements.

**Unissued Shares – Shareholder Options**

At 30 June 2009, there were 72,273,791 unissued ordinary shares under shareholder options (2008- 22,638,856). Option holders do not have any right, by virtue of the option, to participate in any share issue of the Company or any related body corporate. The options comprise 72,273,791 listed options exercisable at \$1.50 and expiring 8 December 2009. There were 72,342,080 shareholder options granted during the financial year ended 30 June 2009 (2008 – 22,638,856). The average exercise price of the shareholder options granted during the financial year ended 30 June 2009 is \$1.50 per share.

	<b>2009</b> \$	<b>2008</b> \$
Deferred Employee Share Plan Reserve	206,344	-
Employee Share Option Reserve	2,355,370	1,629,089
Cash Flow Hedge Reserve	(562,724)	-
	<b>1,998,990</b>	<b>1,629,089</b>
<b>Reconciliation of Reserves</b>		
Carrying amount at beginning	1,629,089	1,164,326
Recognition of Share Plan Expense	206,344	-
Recognition of Share Option Expense	726,281	464,763
Recognition of Foreign Exchange Hedge Reserve	(562,724)	-
	<b>1,998,990</b>	<b>1,629,089</b>

**Nature and purpose of reserves**

**Employee share plan reserve**

The employee share plan reserve is used to record the value of fully paid ordinary shares granted to employees, including key management personnel, as part of their remuneration. Refer to note 15 for further details.

**Employee share option reserve**

The employee share option reserve is used to record the value of share options granted to employees, including key management personnel, as part of their remuneration. Refer to note 15 for further details.

**Cash flow hedge reserve**

This reserve records the portion of the gain or loss on a hedging instrument in a cash flow hedge that is determined to be an effective hedge.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 14 – EXPENDITURE COMMITMENTS

#### Hot Fractured Rock (HFR) Tenement Commitments

In order to maintain current rights of its HFR tenements, the Company is required to outlay annual rentals and to meet certain expenditure requirements of the New South Wales, South Australian and Queensland Mines Departments. These obligations are subject to renegotiation upon expiry of the HFR tenements. The obligations are not provided for in the financial report and are payable as follows:

	2009 \$	2008 \$
Payable not later than one year	370,000	130,000
	<b>370,000</b>	<b>130,000</b>
<b>Operating Leases (non-cancellable)</b>		
Payable not later than one year	521,652	431,291
Later than one year but not later than five years	1,181,544	1,447,867
	<b>1,703,196</b>	<b>1,879,158</b>
<b>Capital Expenditure Commitments</b>		
	<b>14,899,495</b>	-
<b>Other Commitments</b>		
Payable not later than one year	-	5,500
	<b>-</b>	<b>5,500</b>

### NOTE 15 - EMPLOYEE BENEFITS AND SUPERANNUATION COMMITMENTS

	2009 \$	2008 \$
<b>Employee Benefits</b>		
The aggregate employee benefit liability is comprised of:		
Provision for Annual Leave (current)	457,105	129,608
Provision for Long Service Leave (non-current)	142,890	49,263
	<b>599,995</b>	<b>178,871</b>
<b>Superannuation Commitments</b>		

The Company contributes to external accumulation funds for its employees which provide benefits for employees and their dependants on retirement, disability or death. These funds provide benefits on a defined contribution basis. Contributions are enforceable to the extent of the contribution required by the Superannuation Guarantee Levy.

Employer contributions paid or payable to the plans	<b>671,791</b>	<b>230,116</b>
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## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### **NOTE 15 - EMPLOYEE BENEFITS AND SUPERANNUATION COMMITMENTS (Continued)**

#### **Expired Directors & Employees Incentive Option Plans**

Geodynamics issued options to employees and executive officers of the Company under various conditions from its listing in 2002 through to 2006. The options, issued for nil consideration, were issued in accordance with performance hurdles established by the Directors of Geodynamics Limited at that time. The options were issued for a term of five years and lapsed in the past year as follows:

	<b>2009</b>		<b>2008</b>	
	<b>Number of Options</b>	<b>Weighted average exercise price</b>	<b>Number of Options</b>	<b>Weighted average exercise price</b>
Balance at beginning of year	354,001	\$1.21	1,138,001	\$1.07
- exercised	-	-	(275,000)	\$1.10
- lapsed or forfeited	(354,001)	\$1.21	(509,000)	\$0.95
Balance at end of year	-	-	<b>354,001</b>	<b>\$1.21</b>
Vested & Exercisable at end of year	-	-	<b>187,334</b>	<b>\$1.29</b>

#### **Employee Incentive Option Plan (2004 Plan)**

On 24 November 2004, shareholders resolved to approve an employee incentive option plan. It was considered that the previous plan had been superseded by developments since the Company's listing and for FY06/07 and FY07/08, the vesting criteria for the issue of options was as follows:

- As to one half, on the first day after the first anniversary of the date of grant that the Company's closing share price on ASX is at least 25% greater than the exercise price. The employee will have 24 months after the first anniversary in which to exercise the options.
- As to one half, on the first day after the second anniversary of the date of grant that the Company's closing share price on ASX is at least 50% greater than the exercise price. The employee will have 24 months after the second anniversary in which to exercise the options.

The options cannot be transferred and are not be quoted on the ASX. Information with respect to the number of options granted under this Plan is as follows:

	<b>2009</b>		<b>2008</b>	
	<b>Number of Options</b>	<b>Weighted average exercise price</b>	<b>Number of Options</b>	<b>Weighted average exercise price</b>
Balance at beginning of year	<b>3,897,500</b>	<b>\$1.46</b>	<b>2,639,000</b>	<b>\$1.40</b>
- granted	1,144,400	\$1.47	2,077,000	\$1.50
- exercised	-	-	(315,500)	\$1.03
- lapsed or forfeited	(3,920,898)	\$1.52	(503,000)	\$1.58
Balance at end of year	<b>1,121,002</b>	<b>\$1.25</b>	<b>3,897,500</b>	<b>\$1.46</b>
Vested & Exercisable at end of year	-	-	<b>1,136,164</b>	<b>\$1.48</b>

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 15 - EMPLOYEE BENEFITS AND SUPERANNUATION COMMITMENTS (Continued)

#### Long Term Incentive Plan (LTIP)

In October 2008, the Board after taking extensive external advice, resolved to approve a new Long Term Incentive Plan (LTIP) with the key objective being to retain, motivate and reward senior executives and staff in a manner which aligns this element of remuneration with the creation of long term shareholder value.

The LTIP is provided in two components being Geodynamics Limited shares as traded on the ASX and options to purchase Geodynamics Limited shares at the current price, sometime in the future. The LTIP is designed to provide rewards over a three year term.

The Geodynamics LTIP offers eligible employees and executive directors of Geodynamics the opportunity to participate in the growth of Geodynamics through participation in:

- the Geodynamics Limited Deferred Employee Share Plan (DESP); and
- the Geodynamics Limited Employee Option Plan (EOP).

Shares and Options issued under the DESP and EOP respectively are allocated and issued to participants for no consideration. The issue of options and allocations of shares within the LTIP is also subject to the participants satisfactory performance as judged by their line manager.

To become entitled to the shares and options, participants are required to satisfy certain performance requirements. On satisfying the performance requirements for options, the options can be converted into shares by payment of the exercise price.

The performance requirements for shares issued under the DESP require that for each annual allocation of shares made to participants under the DESP, the participant will be required to remain employed by Geodynamics or a Related Body Corporate for 36 months from the date of allocation of the shares for the shares to vest.

The performance requirements for options issued under the EOP requires that options will only vest should the compound growth in the Geodynamics share price increase by 15% per annum and the participant remains employed by Geodynamics or a Related Body Corporate for :

- 12 months from the date of allocation for 30% vesting of the total option number; and
- 24 months from the date of allocation for 30% vesting of the total option number; and
- 35 months from the date of allocation for 40% vesting of the total option number.

#### Employee Option Plan (EOP) (2008 Plan)

The options are issued for a term of three years. The options are valued using the Black-Scholes formula which is a function of the relationship between a number of variables that principally comprise the share price, option exercise price, risk free interest rate and the volatility of the Company's underlying share price. Accordingly, the formula requires a number of inputs, some of which must be assumed. For the purposes of these options granted in 2009, the material assumptions used were:

- Share price of \$0.73 to \$1.04
- Risk free interest rate of 5.52%
- A volatility factor of 65%
- An expected dividend yield of 0%

The financial impact of the grant of options above was estimated at \$575k for the financial year ended 30 June 2009 and \$2,990k in aggregate over the exercise period of the options.

Information with respect to the number of options granted under the EOP is as follows:

	2009		2008	
	Number of Options	Weighted average exercise price	Number of Options	Weighted average exercise price
Balance at beginning of year	-	-	-	-
- granted	8,493,390	\$0.82	-	-
Balance at end of year	<b>8,493,390</b>	<b>\$0.82</b>	-	-
Vested & Exercisable at end of year	-	-	-	-

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### **NOTE 15 - EMPLOYEE BENEFITS AND SUPERANNUATION COMMITMENTS (Continued)**

#### **Total Option Movements**

The following table summarises all options issued under the aforementioned Option Plans and Subscription Deeds:

	<b>2009</b>	<b>2008</b>		
	<b>Number of Options</b>	<b>Weighted average exercise price</b>	<b>Number of Options</b>	<b>Weighted average exercise price</b>
Balance at beginning of year	4,251,501	\$1.44	3,777,001	\$1.30
Granted during the year	9,637,790	\$0.82	2,077,000	\$1.50
- exercised	-	-	(590,500)	\$1.06
- lapsed or forfeited	(4,274,899)	\$1.32	(1,012,000)	\$1.27
Balance at end of year	<b>9,614,392</b>	<b>\$0.87</b>	<b>4,251,501</b>	<b>\$1.44</b>
Options that vested during the period	-	-	<b>1,071,336</b>	<b>\$1.30</b>
Vested & Exercisable at end of year	-	-	<b>1,323,498</b>	<b>\$1.46</b>

#### **Options exercised**

There were no options exercised by employees during the year ended 30 June 2009.

#### **Total Options held at the end of the reporting period**

The following table summarises information about options held by employees as at 30 June 2009:

<b>Grant Date</b>	<b>Number Options</b>	<b>Type</b>	<b>Expiry Date</b>	<b>Exercise Price</b>
15/07/05	96,668	Employee Option Plan 2004	14/07/10	\$1.60
04/11/05	11,000	Employee Option Plan 2004	03/11/10	\$1.68
23/11/05	123,334	Employee Option Plan 2004	22/11/10	\$1.60
22/08/06	182,500	Employee Option Plan 2004	23/08/10	\$0.98
18/09/06	42,500	Employee Option Plan 2004	18/09/10	\$1.05
23/03/07	40,000	Employee Option Plan 2004	23/03/11	\$1.19
10/04/07	115,000	Employee Option Plan 2004	10/04/11	\$1.09
18/12/07	300,000	Employee Option Plan 2004	01/08/11	\$1.09
27/08/07	210,000	Employee Option Plan 2004	27/08/11	\$1.48
05/11/08	2,973,356	Employee Option Plan 2008	05/11/11	\$0.73
26/11/08	3,376,820	Employee Option Plan 2008	26/11/11	\$0.76
31/03/09	1,278,452	Employee Option Plan 2008	30/03/12	\$1.04
11/05/09	864,762	Employee Option Plan 2008	10/05/12	\$1.04
<b>TOTAL</b>	<b>9,614,392</b>			<b>\$0.87</b>

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 15 - EMPLOYEE BENEFITS AND SUPERANNUATION COMMITMENTS (Continued)

#### Deferred Employee Share Plan (DESP) (2008 Plan)

The shares are issued for a term of three years. The shares are valued using fair value at the date of grant which is deemed to be the five day volume weighted average share price at the date of grant. For the purposes of these shares granted in 2008 and 2009, the material assumptions used were:

- Share price of \$0.73 to \$1.04
- An expected dividend yield of 0%

The financial impact of the grant of shares above was estimated at \$206k for the financial year ended 30 June 2009 and \$1,209k in aggregate over the exercise period of the shares.

Information with respect to the number of shares granted under the DESP is as follows:

	2009		2008	
	Number of Shares	Weighted average issue price	Number of Shares	Weighted average issue price
Balance at beginning of year	-	-	-	-
- granted	1,498,762	\$0.81	-	-
Balance at end of year	<b>1,498,762</b>	<b>\$0.81</b>	-	-
Vested & Exercisable at end of year	-	-	-	-

#### Total Shares held at the end of the reporting period

The following table summarises information about shares held by employees under the DESP as at 30 June 2009:

Grant Date	Number Shares	Type	Vesting Date	Issue Price
05/11/08	1,126,647	Deferred Employee Share Plan 2008	05/11/11	\$0.73
31/03/09	221,970	Deferred Employee Share Plan 2008	30/03/12	\$1.04
11/05/09	150,145	Deferred Employee Share Plan 2008	10/05/12	\$1.04
<b>TOTAL</b>		<b>\$0.81</b>		

### NOTE 16 - EARNINGS PER SHARE

Basic and diluted earnings/(loss) per share attributable to the equity holders (cents per share)

The following reflects the income and share data used in the calculations of basic and diluted earnings per share:

Net loss attributable to equity shareholders

Weighted average number of ordinary shares used in calculation of basic earnings per share

The share options of 9,614,392 (2008 – 4,251,501) are not dilutive and therefore have not been included in the calculation of diluted earnings per share.

2009	2008
\$	\$
<b>(5.42)</b>	<b>(3.63)</b>
<b>(15,307,432)</b>	<b>(7,380,740)</b>
<b>282,545,381</b>	<b>203,521,679</b>

## NOTE 17 - SEGMENT INFORMATION

The Company operates in one geographical segment – namely Australia. The Company operated in one business segment being the activity of Hot Fractured Rock geothermal energy exploration & development.

Hot Fractured Rock geothermal energy development is the Company's primary focus and business activity and it remains committed to commercialising its geothermal project in the Cooper Basin of South Australia. Geodynamics aims to become the largest renewable energy producer in Australia by developing emission-free, baseload electricity generation from known Hot Fractured Rock geothermal resources.

The Company's three-stage business plan is based on the development of the known HFR geothermal resource in the Cooper Basin as follows:

### ***Stage 1 - Demonstration of economic heat extraction (Proof of Concept)***

Stage One of the Company's business plan is the demonstration of economic heat extraction from a two well circulation test via a developed underground heat exchanger. This stage was completed on 31 March 2009 following the successful completion and validation of a closed loop circulation test. A 1 MW power plant has been constructed, which is awaiting hot commissioning, to demonstrate the production of power from HFR.

### ***Stage 2 - Commercial demonstration of power plant***

Design and construction of a 25-50 MW Commercial Demonstration Plant (CDP) to demonstrate the commercial viability of production of power from HFR.

### ***Stage 3 - Large scale commercial power plant***

Expansion of production to large scale commercial HFR geothermal power generation (100s of MWe) for long term sale of emission free electricity to the national grid.

	<b>2009</b> \$	<b>2008</b> \$
An audit or review of the financial report of the entity	162,739	97,025
Other Services in relation to the entity		
- tax compliance	6,300	20,000
- assurance related	11,000	4,500
	<b>180,039</b>	<b>121,525</b>

## NOTE 18 – REMUNERATION OF AUDITORS

Amounts received or due and receivable by Ernst & Young Australia for:

An audit or review of the financial report of the entity	162,739	97,025
Other Services in relation to the entity		
- tax compliance	6,300	20,000
- assurance related	11,000	4,500
	<b>180,039</b>	<b>121,525</b>

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 19 – KEY MANAGEMENT PERSONNEL

#### Details of Key Management Personnel

<b>Directors</b>	
M. Albrecht	Chairman (non-executive)
G. Grove-White	Managing Director
B. Agrawala	Director (non-executive)
P. Britz	Director (non-executive)
P. Chopra	Director (non-executive)
R. Davies	Director (non-executive)
J. Hamilton	Director (non-executive)
K. Spence	Director (non-executive)
A. Stock	Director (non-executive)

<b>Executives</b>	
D. Anthony	Sub-Surface Manager
K. Coates	Human Resources Manager (commenced 13 July 2009)
P. Frederiks	Company Secretary and Chief Financial Officer
M. Manton	Information & Communications Technology Manager
P. Schmidt	Power Engineering Manager
R. Smith	Project Manager South Australia
A. Webb	Commercial Manager
D. Wyborn	Chief Scientific Officer

#### Compensation of Key Management Personnel

	<b>2009</b>	<b>2008</b>
	\$	\$
Short-term employee benefits	2,907,894	1,976,609
Post Employment benefits	276,810	208,512
Share based payment	394,059	237,745
	<b>3,578,763</b>	<b>2,422,866</b>

Further information on remuneration of Key Management Personnel is shown in the Remuneration Report contained within the Directors Report.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 19 – KEY MANAGEMENT PERSONNEL (Continued)

#### Employee Share Plan Option holdings of Key Management Personnel

	Balance at beginning of period 01/07/08	Granted as Remuner-ation	Options Exercised	Options Lapsed	Balance at end of period 30/06/09	Total Vested and Exercisable 30/06/09
<b>Directors</b>						
M. Albrecht	-	-	-	-	-	-
G. Grove-White	300,000	-	-	-	300,000	-
B. Agrawala	-	-	-	-	-	-
P. Britz	-	-	-	-	-	-
P. Chopra	-	-	-	-	-	-
R. Davies	-	-	-	-	-	-
J. Hamilton	-	-	-	-	-	-
K. Spence	-	-	-	-	-	-
A. Stock	-	-	-	-	-	-
<b>Executives</b>						
D. Anthony	-	405,356	-	-	405,356	-
P. Frederiks	350,000	390,297	-	(266,666)	473,631	-
M. Manton	-	291,856	-	-	291,856	-
P. Schmidt	-	265,218	-	-	265,218	-
R. Smith	275,000	341,657	-	(275,000)	341,657	-
A. Webb	230,000	281,433	-	(230,000)	281,433	-
D. Wyborn	146,666	240,896	-	(73,332)	314,230	-
<b>Total</b>	<b>1,301,666</b>	<b>2,216,713</b>	<b>-</b>	<b>(844,998)</b>	<b>2,673,381</b>	<b>-</b>

#### Listed Option holdings of Key Management Personnel (quoted options expiring 8 December 2009 and exercisable at \$1.50 per share)

	Balance at beginning of period 01/07/08	Options issued	Balance at end of period 30/06/09	Total Exercisable 30/06/09
<b>Directors</b>				
M. Albrecht	-	487,660	487,660	487,660
G. Grove-White	-	10,575	10,575	10,575
B. Agrawala	-	-	-	-
P. Britz	-	-	-	-
P. Chopra	-	199,604	199,604	199,604
R. Davies	-	-	-	-
J. Hamilton	-	19,780	19,780	19,780
K. Spence	-	-	-	-
A. Stock	-	3,334	3,334	3,334
<b>Executives</b>				
D. Anthony	-	2,625	2,625	2,625
P. Frederiks	-	2,084	2,084	2,084
M. Manton	-	-	-	-
P. Schmidt	-	3,334	3,334	3,334
R. Smith	-	-	-	-
A. Webb	-	2,750	2,750	2,750
D. Wyborn	-	174,259	174,259	174,259
<b>Total</b>	<b>-</b>	<b>906,005</b>	<b>906,005</b>	<b>906,005</b>

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 19 – KEY MANAGEMENT PERSONNEL (Continued)

#### Listed Option holdings of Key Management Personnel (quoted options expired 28 February 2009 and exercisable at \$2.00 per share)

	Balance at beginning of period 01/07/09	Options Lapsed	Balance at end of period 30/06/09
<b>Directors</b>			
M. Albrecht	3,334	(3,334)	-
G. Grove-White	4,334	(4,334)	-
B. Agrawala	-	-	-
P. Britz	-	-	-
P. Chopra	1,667	(1,667)	-
R. Davies	-	-	-
J. Hamilton	3,334	(3,334)	-
K. Spence	-	-	-
A. Stock	1,667	(1,667)	-
<b>Executives</b>			
D. Anthony	-	-	-
P. Frederiks	-	-	-
M. Manton	-	-	-
P. Schmidt	-	-	-
R. Smith	-	-	-
A. Webb	-	-	-
D. Wyborn	-	-	-
<b>Total</b>	<b>14,336</b>	<b>(14,336)</b>	<b>-</b>

#### Shareholdings of Key Management Personnel

	Balance at beginning of period 01/07/08	Appointments Resignations, purchased on market	Granted as Remuneration*	Issued on Exercise of Options	Disposed of/other	Balance at end of period 30/06/09
<b>Directors</b>						
M. Albrecht	1,950,635	-	-	-	-	1,950,635
G. Grove-White	29,296	13,000	-	-	-	42,296
B. Agrawala	-	-	-	-	-	-
P. Britz	-	-	-	-	-	-
P. Chopra	798,414	-	-	-	-	798,414
R. Davies	-	-	-	-	-	-
J. Hamilton	79,116	-	-	-	-	79,116
K. Spence	-	-	-	-	-	-
A. Stock	13,333	-	-	-	-	13,333
<b>Executives</b>						
D. Anthony	-	10,500	71,918	-	-	82,418
P. Frederiks	8,334	-	69,247	-	-	77,581
M. Manton	-	-	51,781	-	-	51,781
P. Schmidt	13,334	-	47,055	-	-	60,389
R. Smith	-	-	60,616	-	-	60,616
A. Webb	11,000	-	49,932	-	-	60,932
D. Wyborn	797,036	-	42,740	-	-	839,776
<b>Total</b>	<b>3,700,498</b>	<b>23,500</b>	<b>393,289</b>	<b>-</b>	<b>-</b>	<b>4,117,287</b>

\* Shares granted as remuneration were issued under the Geodynamics Deferred Employee Share Plan and are held in escrow on behalf of the Executive. The Executive is required to remain employed by Geodynamics for 36 months from the date of allocation for the shares to vest.

## NOTE 20 - RELATED PARTY DISCLOSURES

### Services rendered during the year

During the year, services were provided by Origin Energy (one of the Company's substantial shareholders) under normal commercial terms and conditions for an aggregate amount of \$102,772 (2008 – \$106,426). This amount comprises fees for a Non-Executive Director, travel costs and electricity costs for the Brisbane head office.

Also during the year, consulting services were provided by Dr Prame Chopra under normal commercial terms and conditions for an aggregate sum of \$130,900 (2008 – \$7,500).

### The Metasource (Woodside) environmental credits off take rights

In 2002 Metasource committed by an Agreement to subscribe for 10,443,392 fully paid ordinary shares as a pre-IPO investor in the Company's August 2002 Prospectus. Under the terms of that Agreement Metasource has the right to participate pro rata to its then current shareholding in any further issue of equity in Geodynamics at the price payable by other parties at the time and Metasource has a right to nominate a person to be appointed as a director of Geodynamics.

On 31 March 2004 the Company announced that it had executed an Environmental Credits Off take Deed with Metasource which formalises Metasource's rights to Environmental Credits. Metasource or its nominee has the right to procure all of the environmental credits which arise from 50% (capped at 1,300 GWh/year) of the power generated by Geodynamics power plant(s). 37.5% of the Environmental Credits can be sold to Metasource at full market price with the balance of 12.5% of the Environmental Credits assigned to Metasource without separate consideration. The term for the purchase of Environmental Credits commenced on 8 April 2004 and ends on the earlier of:

- a) 10 years after the commissioning of the first commercial power plant with capacity exceeding 250 megawatts;
- b) 20 years after the Company achieves commissioning of HDR plants with a combined sales capacity exceeding 250 megawatts; or
- c) 80 years after the date of the contract.

### The Origin Energy environmental credits and power off take rights

On 5 August 2003, Geodynamics executed an Investment Deed with Origin Energy Limited wherein the parties agreed to enter into a strategic alliance under which Origin would subscribe for 10,000,000 shares in Geodynamics. Under the terms of the Investment Deed, Origin Energy has a right of participation in future share issues pro rata to its then percentage shareholding in Geodynamics and Origin has a right to nominate a person to be appointed as a director of Geodynamics.

On 29 April 2005, Geodynamics executed a Heads of Agreement (HOA) with Origin Energy Electricity Limited (Origin) under which, at the time final contracts are entered into, the parties will enter into a power purchase agreement (PPA) and Renewable Energy Certificate purchase agreement (RPA). Under the terms of the PPA, Origin will have the right to purchase 50% of the power generated by Geodynamics (capped at 1300 GWh/year) from any power plant that is connected to a transmission system at a discount of 5% to the then market price. The term of the PPA will commence on the first generation of power by Geodynamics from any power plant that is connected to a transmission system and end 10 years after the commissioning of Geodynamics' first large commercial power plant (being a power plant which has a nominal rated capacity of 200 MW or more);

Under the terms of the RPA, Origin will have the right to purchase any Renewable Energy Certificates (RECs) and/or environmental credits (ECs) arising from 47.5% of all power generated by Geodynamics at market price (up to a maximum of the number of RECs and ECs arising from the generation of 1300 GWh of power which qualify for the issue of RECs or ECs in each year). In addition a further 2.5% of the RECs and/or ECs will be assigned to Origin without separate consideration. The RPA will start on the first generation of power by Geodynamics and will end 10 years after the commissioning date of Geodynamics first large commercial power plant.

### The Origin Energy farmin

On 29 October 2007, Geodynamics announced that it has executed a binding Heads of Agreement with Origin Energy Limited (Origin) wherein Origin would farmin to 30% of Geodynamics South Australian geothermal tenements together with 30% of the Company's Cooper Basin assets including the Lightning drilling rig. In addition to its 30% share of on-going project expenditure, Origin will contribute up to \$105.6 million towards all project cash costs comprising \$96 million plus an additional \$9.6 million should Geodynamics, as Operator, complete its Stage One 'proof of concept' phase by 31 March 2008 within a defined budget.

The conditionality of the additional \$9.6 million was confirmed as having been satisfied by a joint Geodynamics/Origin announcement made on 15 July 2008. Origin's total commitment under the farmin is therefore approximately \$150 million. At 30 June 2009, Origin had paid \$148 million of this amount.

As a condition of the farmin, the South Australian tenements and drilling rig were placed into an unincorporated joint venture structure and Geodynamics is the operator of the joint venture with a 70% participating interest. In addition, Origin has agreed to provide technical support and secondments to assist in project development and Origin intends to retain its current equity interest of approximately 10% in Geodynamics. On 19 December 2007, shareholders approved the farmin by Origin Energy by overwhelming majority.

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### **NOTE 20 - RELATED PARTY DISCLOSURES (Continued)**

#### **The Sentient/Sunsuper cornerstone investment**

On 10 April 2008, Geodynamics announced that The Sentient Group (Sentient) and Sunsuper Pty Ltd had agreed to become joint cornerstone investors in Geodynamics. It had been agreed that Sentient and Sunsuper would collectively subscribe for 11.8% of the Company's then current issued share capital or 25 million fully paid ordinary shares in Geodynamics at an issue price of \$1.50 per share. In addition, one attaching unquoted placement option exercisable at \$2.00 per share for every two Shares issued (i.e. 12.5 million options) and expiring 28 February 2009 would be issued. An extraordinary general meeting of shareholders was convened on 29 May 2008 and unanimously approved the placement.

As part of the investment, Sentient and Sunsuper have the right to collectively appoint a non-executive director to the Board of Geodynamics. Sentient and Sunsuper are collectively required to maintain a 10% shareholding in Geodynamics to maintain this Board representation. Mr Pieter Britz was appointed to the Board on 25 June 2008 as the director representative under this condition.

#### **The Tata Power investment**

On 4 September 2008, Geodynamics announced that The Tata Power Company Limited (Tata Power) had agreed to become a cornerstone investor in the Company. It had been agreed that Tata Power would subscribe for 11.4% of the Company's then current issued share capital or 29.4 million fully paid ordinary shares in Geodynamics at an issue price of \$1.50 per share. In addition, one attaching unquoted placement option exercisable at \$2.25 per share for every two Shares issued (i.e. 14.7 million options) and expiring 28 February 2009 would be issued. At the Annual General Meeting held on 20 November 2008 shareholders approved the placement and attaching options issue.

As part of the investment, Tata Power has the right to appoint a non-executive director to the Board of Geodynamics. Tata Power is required to maintain a 10% shareholding in Geodynamics to maintain this Board representation. Mr Banmali Agrawala was appointed to the Board on 20 November 2008 as the director representative under this condition.

**NOTE 21 - NOTES TO THE STATEMENT OF CASH FLOWS**

(A) Reconciliation of Cash

Cash is defined in Note 2 to this financial report.

Cash balance comprises:

	<b>2009</b> \$	<b>2008</b> \$
Cash on Hand	250	250
Cash at Bank	33,669,482	7,901,128
Bank Bills and Term Deposits	81,297,155	92,000,000
<b>Total Cash</b>	<b>114,966,887</b>	<b>99,901,378</b>

(B) Reconciliation of the operating loss after tax with the net cash flows used in operations

Operating loss after income tax	(15,307,432)	(7,380,740)
Depreciation and amortisation	827,440	212,244
Net (profit)/loss on disposal of property, plant & equipment	9,827	10,373
Share Option Valuation Expense	726,281	464,763
Shares issued in lieu of services	28,800	116,550
Shares issued under Deferred Employee Share Plan	206,344	-
Share of associate's loss accounted for using equity method	-	2,565,082
Impairment of Available for Sale financial asset	5,603,760	-
Realised gain on sale of investment	-	(1,182,012)
<b>Changes in Assets &amp; Liabilities</b>		
(Increase)/decrease in receivables and prepayments	(5,042,788)	(1,591,670)
Increase/(decrease) in other creditors and accruals	-	-
(Increase)/decrease in inventories	(503,024)	(1,019,198)
Increase in general provisions	370,350	1,490,371
Increase in provision for employee benefits	421,124	108,831
<b>Net Cash Flow used in Operating Activities</b>	<b>(12,659,318)</b>	<b>(6,205,406)</b>

(C) Non-Cash Financing and Investing Activities

During the year, a total of 34,400 (2008 – 63,844) fully paid ordinary shares were issued in consideration of professional services rendered by external consultants to the Company in the ordinary course of business. The shares were valued at a weighted average price of \$0.84 per share which reflects the weighted average share price at the time the services were rendered.

**NOTE 22 – AVAILABLE FOR SALE FINANCIAL ASSETS**

Geysir Green Energy (GGE) is an unlisted public company headquartered in Iceland with an extensive portfolio of assets in the geothermal sector. The Company's investment in GGE is classified as an investment in an Available for sale Financial Asset. The fair value of the unlisted available for sale investment has been estimated using the valuation techniques based on assumptions, which are outlined in Note 2. For the valuation of GGE at 30 June 2009, a recently announced sale of a 10.8% share in a GGE subsidiary in July 2009 was used to support the valuation. Management believes the estimated fair value resulting from the valuation techniques and recorded in the balance sheet are reasonable and the most appropriate at the balance sheet date. The 3% interest held does not allow Geodynamics to exercise significant influence.

	<b>2009</b> \$	<b>2008</b> \$
<b>Unlisted Available for sale</b>		
Shares in Geysir Green Energy – an Icelandic unlisted public company	2,936,204	8,539,964

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 23 - CONTINGENT LIABILITIES

Geodynamics Limited has been advised that the South Australian Geothermal Exploration Licences No. 211 (GEL) and Geothermal Retention Licences (GRL) No. 3 through to 12 and 20 to 24 have been granted by the Department of Primary Industries and Resources South Australia on the basis that the grant of a GEL or GRL is not an act which creates a 'right to mine' and therefore 'the right to negotiate' process in the relevant native title legislation does not apply and the grant of the GELs and GRLs are valid for native title purposes. The Company's legal advice is that this is a sustainable position although it would be open to a Court to reach a different conclusion. Any substantiated claim may have a financial ramification for the Company.

The Company has also been advised that none of the New South Wales tenements are invalid for native title purposes or attract the relevant right to negotiate provisions in the applicable native title legislation.

Bank guarantees totalling \$150,000 and \$80,000 are held respectively by the South Australian and New South Wales governments to secure tenement rehabilitation obligations. A bank guarantee totalling \$203,099 is held by the landlord for the lease of the Brisbane office premises and for \$8,500 for lease of Perth office premises.

### NOTE 24 - SUBSEQUENT EVENTS

On 21 August 2009, the Company announced that it had now obtained technical data relevant to its investigation into the well incident at Habanero 3 on 24 April 2009. This data showed that cracking of the casing material was caused by hydrogen embrittlement which itself was caused by dissolved gases in the reservoir fluid. The Company further advised that in light of these findings, the Joint Venture has taken various steps to ensure the security of existing wells that have come into contact with the reservoir fluid including installing cement plugs in Habanero 2 and Habanero 3. Steps to secure Habanero 1 were also underway.

Following the investigation, the Joint Venture parties were now deliberating on the most appropriate way forward for the project. The implications of the findings for future well design, material selection and any revision of operational procedures were complex, but are within the bounds of general operational experience in the geothermal industry. Available options will be critically examined and assessed resulting in a revised work program for the project.

The Company advised the market that these activities will take at least eight weeks, and may lead to a revision of the previously indicated delay of six to nine months in the commissioning of the 1 MW Power Plant. It stated that the revised work program and project delivery timelines will be communicated as they are finalised.

The Company stated that it believes that the incident will not have a material impact on its long term strategy for large scale geothermal power generation in the Cooper Basin. It reported that it has continued to strengthen its resources with key appointments being made in the well design and engineering, drilling operations, reservoir engineering and geosciences disciplines.

Other than the above, there has not arisen between 30 June 2009 and the date of this report any item, transaction or event of a relevant and unusual nature likely, in the opinion of the Directors of the Company, to affect significantly the operations of the Company, the results of those operations, or the state of affairs of the Company, in subsequent financial years.

### NOTE 25 - FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Company's principal financial instruments comprise cash and short-term deposits. The main purpose of these financial instruments is to manage the finances for the Company's operations. The Company has various other financial assets and liabilities such as trade receivables and trade payables, which arise directly from its operations. It is, and has been throughout the period under review, the Company's policy that no trading in financial instruments shall be undertaken. The main risks arising from the Company's financial instruments are cash flow interest rate risk and foreign currency risk.

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset, financial liability and equity instrument are disclosed in Note 2 to the financial statements.

Primary responsibility for identification and control of financial risks rests with the board of directors, however the day-to-day management of these risks is under the control of the Managing Director and Chief Financial Officer. The Board agrees the strategy for managing future cash flow requirements and projections.

**NOTE 25 - FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)**

**(A) Interest rate risk**

The Company's exposure to interest rate risks primarily relates to the Company's funds held on term deposit. The Company has no debt obligations. At balance date, the Company had the following mix of financial assets and liabilities exposed to interest rate risk:

	2009 \$	2008 \$
Cash and cash equivalents	114,966,887	99,901,378

The Company's policy is to place funds in interest-bearing deposits that are surplus to immediate requirements. The Company's interest rate exposure is reviewed near the maturity date of term deposits to assess whether more attractive interest rates are available without increasing risk.

At 30 June 2009, if interest rates had moved, as illustrated in the table below, with all other variables held constant, the post tax loss and equity would have been affected as follows:

	Post tax profit Higher/(lower)		Equity Higher/(lower)	
	2009 \$	2008 \$	2009 \$	2008 \$
+1%	(1,089,231)	(243,039)	1,089,231	243,039
-0.5%	544,616	121,520	(544,616)	(121,520)

The movements in the loss and equity are due to higher/(lower) interest income from cash balances.

**(B) Credit Risk**

The Company's maximum exposures to credit risk at balance date in relation to financial assets, is the carrying amount of those assets as recognised on the balance sheet. There are no derivative financial instruments currently being used by the Company to offset its credit exposure.

The Company trades only with recognised, creditworthy third parties, and as such collateral is not requested nor is it the Company's policy to securitise its trade and other receivables. It is noted that the only trade debtor at balance date is Origin Energy, the Company's farmin partner.

**(C) Foreign Currency Risk**

During the course of its business activities, the Company has had some transactional currency exposures, principally to the US dollar. Such exposure arises from purchases in currencies other than the Company's functional currency. The Company has entered into forward currency contracts to hedge some of these exposures due to the length and size of the currency exposure. They generally relate to the purchase of capital assets such as the Company's second drilling rig. Conversely, the purchase of foreign currency operational supplies and services are generally not hedged due to the short time frame associated with the currency exposure and the relatively modest overall exposure at any one point in time.

Approved foreign exchange derivatives are limited to foreign exchange forward contracts and foreign exchange swaps (i.e. simultaneous purchase and forward sale) with tenors of less than 12 months except for long lead time capital items where the tenor shall be as specified under the contract.

Contractually agreed or committed (i.e. Board approval received) foreign currency exposures in excess of the equivalent of AUD500,000 payable within 12 months are to be fully covered. In addition, contracted capital items with a foreign currency exposure in excess of the equivalent of AUD500,000 payable beyond 12 months are to be fully covered.

Exposures of less than the equivalent of AUD500,000 will not normally be covered, as the business risk of not covering these is considered negligible (due to the short time between supply and payment).

It is the Company's policy not to enter into forward contracts until a firm commitment is in place and to negotiate the terms of the hedge derivatives to exactly match the terms of the hedged item to maximise hedge effectiveness.

At 30 June 2009, the Company had the following exposures to foreign currency that is not designated in cash flow hedges:

	2009 \$	2008 \$
<b>Financial Assets</b>		
Available for sale financial asset	2,936,204	8,539,964
<b>Financial Liabilities</b>		
Trade and other payables	2,792,138	961,574

## NOTES TO THE FINANCIAL STATEMENTS (Continued)

### NOTE 25 - FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

At 30 June 2009, had the Australian Dollar moved, as illustrated in the table below, with all other variables held constant, the post tax loss and equity would have been affected as follows:

	Post tax profit Higher/(lower)		Equity Higher/(lower)	
	2009 \$	2008 \$	2009 \$	2008 \$
+10%	(266,926)	(766,360)	(13,097)	(688,945)
-5%	146,810	426,998	7,203	378,920

The movements in profit in 2009 are less sensitive than in 2008 due to the lower carrying value of the available for sale financial asset. Equity is also less sensitive in 2009 because of the increased use of hedges of foreign currency purchases and the natural foreign currency hedge arising from the offset of the financial asset and financial liability.

Significant assumptions used in the foreign currency exposure sensitivity analysis include:

- Reasonably possible movements in foreign exchange rates were determined based on a review of the last years historical movements.
- The reasonably possible movement of 10% was calculated by taking the relevant foreign currency spot rates as at balance date, moving those spot rates by 10% and then re-converting back into AUD with the 'new spot-rate'.
- This methodology reflects the translation methodology undertaken by the Company.

#### (D) Liquidity Risk

The Company's objective is to maintain sufficient funds to finance its current operations with additional funds to ensure its long-term survival in the event of a business downturn. The Company's policy is that it is dependent on shareholder funds until such time it commences generating revenue from operations. It has no finance facilities in place and no borrowings.

The contractual maturity of the Company's financial liabilities are:

	2009 \$	2008 \$
6 months or less	11,310,793	12,566,915

#### (E) Available for Sale Securities Risk

The Company's exposure to available for sale assets which are unlisted securities relates to the movements in the pricing of those securities from one period to the next. That in turn is measured in the first instance by the pricing of those securities when share allotments of those securities are made on or around balance date to independent third parties and in the second instance by the fair value of those assets.

At 30 June 2009, if the price of the securities in the available for sale asset (Geysir Green Energy) had moved, as illustrated in the table below, with all other variable held constant, the post tax loss and equity would have been affected as follows:

	Post tax profit Higher/(lower)		Equity Higher/(lower)	
	2009 \$	2008 \$	2009 \$	2008 \$
+10%	(293,620)	(853,996)	293,620	853,996
-5%	146,810	426,998	(146,810)	(426,998)

# **DIRECTORS' DECLARATION**

In accordance with a resolution of the Directors of Geodynamics Limited, I state that:

- 1) In the opinion of the Directors:
  - (a) the financial statements, notes and additional disclosures included in the Directors' Report designated as audited of the Company are in accordance with the *Corporations Act 2001*, including:
    - (i) giving a true and fair view of the Company's financial position as at 30 June 2009 and of their performance for the period ended on that date; and
    - (ii) complying with Accounting Standards and Corporations Regulations 2001; and
  - (b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- 2) This declaration has been made after receiving the declarations required to be made to the directors in accordance with section 295A of the *Corporations Act 2001* for the financial period ending 30 June 2009.

On behalf of the Board.



**M. Albrecht**  
Chairman

Brisbane, 26 August 2009

## **Independent auditor's report to the members of Geodynamics Limited**

### **Report on the Financial Report**

We have audited the accompanying financial report of Geodynamics Limited, which comprises the balance sheet as at 30 June 2009, and the income statement, statement of changes in equity and cash flow statement for the year ended on that date, a summary of significant accounting policies, other explanatory notes and the directors' declaration.

#### **Directors' Responsibility for the Financial Report**

The directors of the company are responsible for the preparation and fair presentation of the financial report in accordance with the Australian Accounting Standards (including the Australian Accounting Interpretations) and the Corporations Act 2001. This responsibility includes establishing and maintaining internal controls relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances. In Note 2 (B), the directors also state that the financial report, comprising the financial statements and complies with International Financial Reporting Standards as issued by the International Accounting Standards Board.

#### **Auditor's Responsibility**

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, we consider internal controls relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Independence**

In conducting our audit we have met the independence requirements of the Corporations Act 2001. We have given to the directors of the company a written Auditor's Independence Declaration, a copy of which is included in the directors' report. In addition to our audit of the financial report, we were engaged to undertake the services disclosed in the notes to the financial statements. The provision of these services has not impaired our independence.

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### **Auditor's Opinion**

In our opinion:

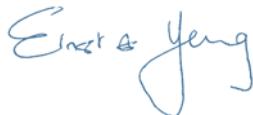
1. the financial report of Geodynamics Limited is in accordance with the Corporations Act 2001, including:
  - (i) giving a true and fair view of the financial position of Geodynamics Limited at 30 June 2009 and of its performance for the year ended on that date; and
  - (ii) complying with Australian Accounting Standards (including the Australian Accounting Interpretations); and the Corporations Regulations 2001.
2. the financial report also complies with International Financial Reporting Standards as issued by the International Accounting Standards Board.

### **Report on the Remuneration Report**

We have audited the Remuneration Report included in pages 10 to 17 of the directors' report for the year ended 30 June 2009. The directors of the company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration report, based on our audit conducted in accordance with Australian Auditing Standards.

### **Auditor's Opinion**

In our opinion the Remuneration Report of Geodynamics Limited for the year ended 30 June 2009 complies with section 300A of the Corporations Act 2001.

A handwritten signature in blue ink that reads 'Ernst & Young'.

Ernst & Young

Mike Reid  
Partner  
Brisbane

26 August 2009

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# OFFTAKE AGREEMENTS

## **The Metasource Agreement (2002)**

Metasource Pty Ltd (a wholly owned subsidiary of Woodside Energy Limited) was at the time of listing in 2002 the Company's largest shareholder. Metasource committed by an Agreement to subscribe for 10,443,392 fully paid ordinary shares as a pre-IPO investor in the Company's August 2002 Prospectus and was therefore a substantial shareholder at the time the Company was admitted to the official list of the Australian Stock Exchange (ASX) on 11 September 2002. At that time, Metasource's shareholding represented 31.6% of the issued share capital of the Company. Metasource subsequently subscribed for a further 1,111,111 fully paid ordinary shares at an issue price of 90¢ per share on 31 March 2004 to support the Company's working capital requirement for the Cooper Basin Stage One project. In 2008, Metasource sold all of its shares in Geodynamics.

The Metasource Agreement of 2002 contains the following material conditions which remain current:

- Metasource or its nominee has the right to purchase Environmental Credits from Geodynamics and the parties agreed to negotiate and enter into a formal purchase contract. Environmental Credits is defined broadly and includes renewable energy certificates, carbon credits and any other legal, commercial or other benefit (whether present or future) from any use of renewable energy arising directly or indirectly from the use of thermal energy or the generation of power from power plants developed by Geodynamics. On 31 March 2004 the Company announced that in conjunction with Metasource's subscription for a further 1,111,111 fully paid ordinary shares at 90 cents, that it had executed an Environmental Credits Off-take Deed with Metasource which formalises Metasource's rights to Environmental Credits.
- Metasource or its nominee has the right to buy all of the environmental credits which arise from 50% (capped at 1,300 GWh/year) of the power generated by Geodynamics' power plant(s). Metasource is, however, not entitled to purchase Environmental Credits in the form of renewable energy certificates, unless either renewable energy certificates become an instrument which is used for purposes other than those currently prescribed in the Renewable Energy (Electricity) Act 2000 or Geodynamics does not claim the benefit of the environmental credits which Metasource is entitled to buy under the purchase contract other than by reason of there being no legal framework within which such benefits can reasonably be claimed.
- The price of environmental credits will be the lower of 75% of the then market price in Australia or the then market price minus \$5/tonne. The purchase price of environmental credits cannot be less than zero. Subsequently, this condition has been varied following execution of an Environmental Credits Off-take Deed with Metasource on 31 March 2004 such that 12.5% of the Environmental Credits will be assigned to Metasource without separate consideration and the balance of 37.5% of credits can be sold to Metasource at full market value (therefore the weighted average effective discount for the credits remains unchanged at 25%).

ASX agreed to grant a waiver from ASX listing rule 10.1 to the extent necessary to permit the Company to enter into an agreement for the purchase of Environmental Credits which arise from 50% of the power generated by power plants developed by the Company for a period commencing on the date of commissioning the first power station developed by the Company and terminating 10 years after the commissioning of the first commercial power plant with capacity exceeding 250 megawatts. Subsequently, following execution of an Environmental Credits Off-take Deed with Metasource on 31 March 2004, the Company agreed that the term for the purchase of Environmental Credits shall commence on 8 April 2004 and end on the earlier of:

- a) 10 years after the commissioning of the first commercial power plant with capacity exceeding 250 megawatts;
- b) 20 years after the Company achieves commissioning of HDR plants with a combined sales capacity exceeding 250 megawatts; or
- c) 80 years after the date of the contract.

The waiver from ASX listing rule 10.1 was granted on the following conditions:

- The Company makes full disclosure of the Environmental Credit purchase agreement to any person who may subscribe for the Company's securities under a prospectus issued by the Company during the life of the Environmental Credit purchase agreement;
- The Company includes the following information in each annual report during the life of the Environmental Credit purchase agreement:
  - A statement that Metasource was a substantial holder of the Company at the time that the Company was admitted to the official list of ASX together with details as to Metasource's relevant interest in the total votes attaching to the voting securities of the Company at the time that the Company was admitted to the official list.
  - An explanation of the circumstances under which Metasource first became a substantial holder of the Company.
  - A summary of the terms of the Environmental Credit purchase agreement.
  - The terms of the waiver.

## The Origin Agreement (2003)

Origin Energy Limited (Origin) is the Company's second largest shareholder and currently holds 19,788,404 fully paid ordinary shares representing 6.9% of the issued capital of the Company.

Geodynamics executed an Investment Deed with Origin on 5 August 2003 wherein the parties agreed to enter into a strategic alliance under which Origin would subscribe for 10,000,000 shares in Geodynamics for a subscription price of \$0.50 cents per share and also provide technical assistance and Geodynamics will sell to Origin power generated from any power plant that is or could be connected to a transmission system and renewable energy certificates arising from the generation of any power generated by Geodynamics.

Under the terms of the Investment Deed, Origin agreed to subscribe for the said shares subject to Geodynamics shareholder approval being obtained by 30 September 2003. Shareholder approval was obtained at a general meeting held on 29 September 2003 and 10,000,000 fully paid ordinary shares were issued and allotted to Origin on 30 September 2003.

Geodynamics was required to apply the subscription monies towards the development of a two well HDR program in the Cooper Basin to produce 20 MWt of thermal energy and for the conduct a full bankable economic feasibility study in relation to the generation of power using HDR geothermal energy from Geodynamics Cooper Basin HDR resource.

The Origin Investment Deed also contains the following material conditions:

- Origin will have the right to appoint a non-executive director to the Board of Geodynamics;
- The parties will proceed to negotiate in good faith a heads of agreement (subject to final contracts) under which as long as Origin holds not less than 10,000,000 shares at the time the final contracts are entered into, the parties will enter into a power purchase agreement (PPA) and Renewable Energy Certificate (REC) purchase agreement. Subsequently, on 4 May 2005, Geodynamics announced that it had executed a Heads of Agreement with Origin;
- Under the terms of the PPA, Origin will have the right to purchase 50% of the power generated by Geodynamics up to a maximum of 1300 GWh per annum from any power plant that is or could be connected to a transmission system at a discount of 5% to the then market price. The term of the PPA will commence on the first generation of power by Geodynamics from any power plant that is or could be connected to a transmission system and end 10 years after the commissioning of Geodynamics' first large commercial power plant (being a power plant which has a nominal rated capacity of 200 MW or more);
- Under the terms of the REC purchase agreement, Origin will have the right to purchase any RECs and/or environmental credits arising from 50% of all power generated by Geodynamics (up to a maximum of the number of RECs and environmental credits arising from the generation of 1300 GWh of power which qualifies for the issue of RECs or environmental credits in each year) at a discount of 5% to the then market price. The REC purchase agreement will start on the first generation of power by Geodynamics and will end 10 years after the commissioning date of Geodynamics' first large commercial power plant. Subsequently as part of the Heads of Agreement executed on 3 May 2005, the Company has agreed to vary this condition such that 2.5% of the environmental credits will be assigned to Origin without separate consideration and the balance of 47.5% of credits can be sold to Origin at full market value (therefore the weighted average effective discount for the credits remains unchanged at 5%);
- Geodynamics can terminate either or both agreements if at any time during those agreements Origin holds less than 10,000,000 shares in Geodynamics;
- Origin has a right of participation in future share issues pro rata to its then percentage shareholding in Geodynamics;
- Origin can be involved in the exploration, development, use or generation of HDR geothermal energy without the consent of Geodynamics.

Under the terms of a waiver granted by the ASX on 25 August 2003, ASX agreed to grant a waiver from listing rule 6.18 to the extent necessary to permit the Company to enter into the above Investment Deed which would enable Origin to maintain its shareholding in the event of further equity issues by the Company (the 'Top-Up Right'). The waiver was granted by ASX on the following conditions:

- The Top-Up right lapses if the strategic relationship between the Company and Origin ceases;
- The Top-Up Right may only be transferred to a wholly owned subsidiary of Origin;
- Any securities issued under the Top-Up Right are issued on the same terms and conditions as are offered to third parties; and
- The Company discloses in each annual report a summary of the terms of the agreement with Origin.

## The Origin Energy farm-in (2007)

On 19 December 2007, shareholders approved a farm-in with Origin Energy Limited (Origin) wherein Origin would farm-in to 30% of Geodynamics South Australian geothermal tenements together with 30% of the Lightning drilling rig. In addition to its 30% share of on-going project expenditure, Origin will contribute up to \$105.6 million towards all project cash costs comprising \$96 million plus an additional \$9.6 million should Geodynamics, as Operator, complete its Stage One 'proof of concept' phase by 31 March 2008 within a defined budget.

The conditionality of the additional \$9.6 million was confirmed as having been satisfied by a joint Geodynamics/Origin announcement made on 15 July 2008. Origin's total commitment under the farmin is therefore approximately \$150 million. At 30 June 2009, Origin had paid approximately \$148 million of this amount.

As a condition of the farmin, the South Australian tenements and drilling rig were placed into an unincorporated joint venture structure and Geodynamics is the operator of the joint venture with a 70% participating interest. In addition, Origin has agreed to provide technical support and secondments to assist in project development and Origin intends to retain its current equity interest of approximately 10% in Geodynamics.

On 20 July 2009, Geodynamics and Origin (including relevant Origin subsidiary entities) executed formal agreements relating to the farmin agreement outlined above. These comprised an Amendment and Restatement Deed – Heads of Agreement, the Farmin Agreement and the Joint Operating Agreement.

#### **Summary of the Metasource and Origin off-take rights**

<b>Party</b>	<b>Electricity off-take rights</b>	<b>Renewable Energy Certificates (RECs) and Environmental Credits (ECs) off-take rights</b>
Metasource	–	12.5% free to a maximum of those RECs or ECs arising from 325GWh per year.
Metasource	–	37.5% market price – right but not obligation to a maximum of those RECs or ECs arising from 975GWh per year
Origin	–	2.5% free to a maximum of those RECs or ECs arising from 65GWh per year
Origin	30% attributable to its 30% interest in the JV	30% attributable to its 30% interest in the JV
Origin	50% of export electricity produced to a maximum amount of 1300GWh per calendar year - 95% of forward electricity contract market price	17.5% market price – right but not the obligation to a maximum of those RECs or ECs arising from 455GWh per year
<b>Total off-take obligations of Geodynamics based on a generated capacity of 2,600 GWh per calendar year</b>	<b>80%</b>	<b>100%</b>
Origin	–	For subsequent plants (defined as any other plant other than the first plant), Origin has a right but not the obligation to purchase up to 70% of the REC volume generated from those plants but such quantity cannot exceed more than 30% of the equivalents RECs or ECs capable of being generated at the first plant.
Tenure*	10 years after commissioning of first plant	10 years after commissioning of first plant

\* refer to specific detail in the agreements outlined above.

# SHAREHOLDER INFORMATION

The shareholder information set out below was applicable as at 30 September 2009.

## ***Distribution of fully paid ordinary shares***

Analysis of numbers of equity security holders by size of holding:

<b>Ordinary shares</b>		
	<b>Number of Share Holders</b>	<b>Number of Shares</b>
1	– 1,000	3,246
1,001	– 5,000	6,693
5,001	– 10,000	3,416
10,001	– 100,000	3,610
100,001	And over	153
	<hr/>	<hr/>
	17,118	290,288,804

There were 538 holders of less than a marketable parcel of ordinary fully paid shares

## ***Distribution of share options***

Analysis of numbers of equity security holders by size of holding:

	<b>Listed Options exercisable at \$1.50</b>		<b>Unlisted options</b>	
	<b>Number of Option Holders</b>	<b>Number of Options</b>	<b>Number of Option Holders</b>	<b>Number of Options</b>
1	– 1,000	7,554	3,368,041	–
1,001	– 5,000	6,325	14,461,754	–
5,001	– 10,000	948	6,578,511	–
10,001	– 100,000	559	14,009,709	73
100,001	And over	47	33,855,776	36
	<hr/>	<hr/>	<hr/>	<hr/>
	15,433	72,273,791	109	9,614,392

## ***Twenty largest holders – Ordinary Fully Paid Shares***

The names of the twenty largest holders of fully paid ordinary shares are listed below:

	<b>Name</b>	<b>Ordinary shares</b>	
		<b>Number held</b>	<b>Percentage of issued shares</b>
1	Trust Energy Resources Pte Limited	29,400,000	10.13
2	National Nominees Limited	21,486,222	7.40
3	Origin Energy Limited	19,788,404	6.82
4	Mr Robert Anthony Healy	16,015,618	5.51
5	J P Morgan Nominees Australia Limited	9,417,741	3.24
6	Sentient Executive GP II Ltd <Global Resources Fund II>	6,250,000	2.15
7	Sentient Executive GP III Ltd <Global Resources Fund III>	6,250,000	2.15
8	ANZ Nominees Limited <cash income a/c>	4,359,704	1.50
9	Pondcote Pty Limited	3,173,476	1.09
10	HSBC Custody Nominees (Australia) Limited	2,694,919	0.93
11	Citicorp Nominess Pty Limited	2,634,455	0.91
12	Australian Investors Pty Limited	2,072,000	0.71
13	Martin Albrecht	1,950,635	0.67
14	Geodynamics Share Plans Pty Ltd	1,498,759	0.52
15	Mr Richard Norman Gibson & Mrs Ingrid Margareta Gibson <Wattle Hill Super Fund A/C>	1,250,000	0.43
16	RBC Dexia Investor Services Australia Nominees Pty Limited <MLCI A/C>	1,213,857	0.42
17	Instil Enterprises Pty Ltd	1,053,500	0.36
18	Sandhurst Trustees Ltd <JM Asset Management A/C>	1,027,844	0.35
19	Citicorp Nominees Pty Limited <Cwlth Bank off Super A/C>	930,333	0.32
20	RPG Management Pty Limited	891,084	0.31
		<hr/>	<hr/>
		133,358,551	45.92

## SHAREHOLDER INFORMATION (Continued)

### Twenty largest holders – Listed Options exercisable at \$1.50 expiring 8 December 2009

The names of the twenty largest holders of listed share options are listed below:

		Listed Options	
	Name	Number held	Percentage of issued options
1	Trust Energy Resources Pte Limited	7,350,000	10.17
2	National Nominees Limited	5,049,931	6.99
3	Origin Energy Limited	4,947,101	6.84
4	Mr Robert Anthony Healy	4,003,905	5.54
5	Sentient Executive Gp II Ltd <Global Resources Fund II>	1,562,500	2.16
6	Sentient Executive Gp III Ltd <Global Resources Fund III Ac>	1,562,500	2.16
7	Pondcote Pty Ltd	793,369	1.10
8	ANZ Nominees Limited <Cash Income A/C>	785,965	1.09
9	J P Morgan Nominees Australia Limited	657,220	0.91
10	Australian Investors Pty Ltd	518,000	0.72
11	Martin Albrecht	487,660	0.67
12	Troon Securities Pty Ltd	400,000	0.55
13	RPG Management Pty Limited	372,771	0.52
14	Mr Richard Norman Gibson + Mrs Ingrid Margareta Gibson <Wattle Hill Super Fund A/C>	315,000	0.44
15	Vermont Properties Pty Ltd <Investment A/C>	288,932	0.40
16	Geodynamics Share Plans Pty Ltd	281,661	0.39
17	HSBC Custody Nominees (Australia) Limited	255,368	0.35
18	Mr David Joseph Murphy + Mrs Elizabeth Ann Murphy <Dj & Ea Murphy Super Fd A/C>	240,560	0.33
19	Mrs Gaylene Sue McLean	240,357	0.33
20	Sandhurst Trustees Ltd <JM Asset Management A/C>	233,976	0.33
		30,346,776	41.99

### Unquoted Share Options

	Number on issue	Number of holders
Options issued under the 2004 Geodynamics Employees Incentive Option Plan to take up ordinary shares	1,121,002	13
Options issued under the 2008 Geodynamics Employees Option Plan to take up ordinary shares	8,493,390	96
	9,614,392	109

### Substantial shareholders

The names of substantial shareholders who have notified the Company in accordance with section 671B of the *Corporations Act 2001* are:

		Ordinary shares	
	Name	Number held	Percentage of issued shares
1	The Tata Power Company Limited	29,400,000	10.19
2	Origin Energy Limited	19,788,404	6.86
3	Robert Anthony Healy	15,500,000	8.36

\*represents holding percentage at the time of notification

## **SHAREHOLDER INFORMATION (Continued)**

### **Voting rights**

The voting rights attaching to each class of equity securities are set out below:

- (a) Ordinary shares  
On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.
- (b) Options  
No voting rights.

### **Securities Exchange Listing**

The shares of the Company are listed under the symbol GDY on the Australian Securities Exchange Limited. The Company's home branch is Brisbane.

### **Shareholder Enquiries**

Shareholders with queries about their shareholdings should contact the Company's Share Registry as follows:

Computershare Investor Services Pty Ltd  
GPO Box 523  
BRISBANE QLD 4001  
Telephone Australia: 1300 552 270  
Telephone International: (+61 3) 9415 4000  
Fax: (+61 7) 3237 2152  
Email: web.queries@computershare.com.au

### **Change of Address**

Issuer sponsored shareholders should notify the share registry immediately upon any change in their address quoting their Securityholder Reference Number (SRN). This can be done by phoning the share registry, by writing to them, or through their web portal at [www.computershare.com.au](http://www.computershare.com.au). Changes in addresses for broker sponsored holders should be directed to the sponsoring brokers with the appropriate Holder Identification Number (HIN).

### **Annual Report**

The Company's Annual Report is posted on its web site immediately upon release to ASX. Shareholders will not be mailed a copy of the Annual Report unless they have specifically opted in to request one.

### **Notice of Meeting and Proxy Voting**

The Company offers online voting and shareholders may elect to receive the Company's notice of meeting and proxy form via email. The Company encourages this form of electronic communication.

Voting can be undertaken through the portal [www.investorvote.com.au](http://www.investorvote.com.au). Shareholders who do not register for online access will continue to receive these documents by post. Shareholder who would like to opt in to receive these documents by email should register their communication preferences at the share registry's web portal at [www.computershare.com.au](http://www.computershare.com.au).

### **Consolidation of Multiple Shareholdings**

If you have multiple shareholding accounts that you wish to consolidate into a single account, please advise the Share Registry in writing. If your holdings are broker sponsored, please contact the sponsoring broker directly.

### **Register for Email Alerts**

Please note, that as a shareholder you can register through the 'Email Alerts' section of our web site to receive electronic communications from the Company. To do so, you should select the 'Shareholder Information' tab on our web site at [www.geodynamics.com.au](http://www.geodynamics.com.au).

Registration will provide you with an email advice with a link to [www.geodynamics.com.au](http://www.geodynamics.com.au) each time a relevant announcement is made by the company and posted on this site.

At [www.geodynamics.com.au](http://www.geodynamics.com.au) shareholders can view:

- Annual and half-year Reports
- Quarterly Reports
- Securities Exchange Announcements
- Geodynamics Share Price Information
- General Shareholder Information

# MILESTONES

<b>Date</b>	<b>Milestone</b>
<b>September 2002</b>	Listed on the Australian Securities Exchange as a renewable energy developer raising \$11.5 million.
<b>September 2002</b>	Conditions for AusIndustry's \$5 million R&D Start grant met.
<b>February 2003</b>	Habanero 1 (injection well) spudded.
<b>September 2003</b>	Habanero 1 completed to a depth of 4,421 metres.
<b>October 2003</b>	Origin Energy became a cornerstone investor.
<b>December 2003</b>	Completion of hydraulic stimulation with stimulated zone seven times larger than expected – this created an underground reservoir or heat exchanger and is the largest developed in the world to date.
<b>July 2004</b>	Habanero 2 (production well) spudded.
<b>December 2004</b>	Habanero 2, the first deep geothermal production well completed to a depth of 4,359 metres. Managed pressure drilling used for the first time.
<b>May 2005</b>	Produced first high temperature geothermal flows in Australia.
<b>May 2005</b>	Acquired GEL99 in the Cooper Basin, the only other remaining known HFR geothermal resource in Australia at that time.
<b>October 2005</b>	Further hydraulic stimulation through Habanero 1 resulted in a 52% enlargement of the underground reservoir.
<b>March 2006</b>	Habanero 2 well intervention program commenced to drill a side track from a depth of 3,852 metres using a snubbing unit. The objective of the intervention was to restore the connection with the previously developed underground heat exchanger caused by a dropped completion plug on Habanero 2. Fully under balanced drilling used for the first time.
<b>June 2006</b>	Habanero 2 well intervention program terminated due to drill stem failure with 436 metres of pipe left in hole. It was determined that fully under balanced drilling was an unsuitable drilling methodology.
<b>August 2006</b>	The way forward determined following completion of an independent technical review. A key determination was the conclusion to drill a new commercial scale well Habanero 3 with a larger diameter 8.5" hole as opposed to the previous 6" holes on Habanero 1 and 2.
<b>January 2007</b>	Long lead items for Habanero 3 ordered and announcement that the Company was exploring the acquisition of its own rig.
<b>February 2007</b>	Deposit paid on new \$32 million LeTourneau Lightning drilling rig scheduled to arrive in Australia in June 2007.
<b>June 2007</b>	New LeTourneau Lightning drilling rig arrives into Port of Brisbane.
<b>August 2007</b>	Rig Commissioning completed and Habanero 3 spudded.
<b>October 2007</b>	Binding Heads of Agreement with Origin Energy Limited executed wherein Origin will farm-in to 30% of Geodynamics' South Australian geothermal tenements together with 30% of the Lightning drilling rig.
<b>December 2007</b>	Shareholders approve Origin Energy Farm in.
<b>February 2008</b>	Habanero 3 completed to a depth of 4,200 metres.
<b>March 2008</b>	Open Flow test between Habanero 1 and Habanero 3 successfully completed.
<b>March 2008</b>	Jolokia 1 spudded, this well was the first 'step out' well located 9 km from the three Habanero wells.

<b>April 2008</b>	Sunsuper Pty Ltd and The Sentient Group agree to become joint cornerstone investors taking a 10% stake in the company for \$37.5 million.
<b>September 2008</b>	Jolokia 1 completed to a depth of 4,911 metres.
<b>September 2008</b>	The Tata Power Company Limited agrees to become the third cornerstone investor in Geodynamics by taking a 10% stake in the company for \$44.1 million.
<b>September 2008</b>	Purchase of second heavy duty drilling rig announced – contract let with National Oilwell Varco with 22 month delivery construction and delivery schedule.
<b>October 2008</b>	Statement of estimated geothermal resources
<b>October 2008</b>	Savina 1 (5th well) spud
<b>December 2008</b>	Closed loop circulation test between Habanero 1 and 3 wells commenced
<b>December 2008</b>	Practical completion of the Visitor Centre and Turbine Hall for the Innamincka 1 MW Power Plant and continued construction of plant
<b>February 2009</b>	Circulation of 50,000 tonnes of brine under test conditions marked completion of the closed loop testing
<b>February 2009</b>	Bonus Options rights issue
<b>February 2009</b>	Construction of the transmission line between 1 MW Power Plant and the township of Innamincka
<b>March 2009</b>	Savina 1 well secured with a cement plug at 2,640 m after a program of actions to recover stuck drill pipe was unsuccessful. (Return to well in future to continue sidetrack drilling)
<b>March 2009</b>	'Proof of Concept' announced marking the completion of Stage One of the business plan
<b>April 2009</b>	Habanero 3 well control incident
<b>April 2009</b>	Application for \$90 million in funding submitted to the federal government's Renewable Energy Demonstration Program
<b>April 2009</b>	Redeployment of Rig 100 from Savina 1 to Jolokia 1 and program of works to re-enter and clean the well commenced
<b>April 2009</b>	Geothermal Technology Plan initiative launched requiring investment of \$5 million over 5 years to develop geothermal technology
<b>May 2009</b>	Habanero 3 well controlled and secured and independent investigation into the cause commenced
<b>May 2009</b>	Co-located Data Centre feasibility study commenced
<b>August 2009</b>	Habanero 3 investigation complete
<b>September 2009</b>	Re-validation of proof of concept by GeothermEx

# USEFUL DATA

## AUSTRALIA'S ANNUAL ELECTRICITY PRODUCTION

- 228 million MWh (228 Twh)
- 81% coal
- 5% hydro
- 13% gas
- 1% other

(ESAA – Electricity Gas Australia 2009)

## AUSTRALIA'S CONSUMPTION PER CAPITA

- 28.6 kWh/day
- 10,435 kWh/year

(Australian Bureau of Statistics, 2009)

## CONVERSION FACTOR FOR ENERGY

- 1000 PJ = EJ =  $10^{18}$  J =  $2.35 \times 10^7$  toe (tonnes of oil equivalent)
- 1 MWh = 3.6 GJ = 0.62 bbl =  $8.5 \times 10^2$  toe
- 1 barrel of oil = 5.8 GJ = 1.6 megawatt hour (MWh)
- 1 million barrels of oil = 5.8 peta joule (PJ) = 1.61 million MWh

## OIL RESERVES

- Australia's proven oil reserves = 4 billion barrels
- USA known oil reserves = 21 billion barrels
- World's proven oil reserves = 1.295 billion barrels

(OPEC Annual Statistical Bulletin, 2008, p. 41)

## ENHANCED GEOTHERMAL SYSTEM (EGS)

This term is now being used more and more internationally to describe what Geodynamics has been calling hot fractured rock (HFR) geothermal developments.

## 1 CUBIC KILOMETRE OF GRANITE

has the thermal energy equivalent of 2.2 PJ for every degree celsius that it can be cooled. This equals 0.38 million barrels of oil (heat equivalent). So if 1 cubic kilometre of rock is cooled by 100°C then 220 PJ of energy is released equivalent to 38 million barrels of oil.

## GEODYNAMICS MAIN GEOTHERMAL TENEMENTS (GRLs 3 to 12) OF 1,000 SQUARE KMS

in the Cooper Basin at an average temperature of 250°C and a thickness of 1.5 km (from 3.5 km – 5 km depths) has the energy potential of 60 billion barrels of oil. This is based on lowering its temperature by 100°C.

## CARBON DIOXIDE EMISSION EQUIVALENTS (per KWh)

- Brown Coal 1.20kg CO<sub>2</sub>
- Black Coal 0.85kg CO<sub>2</sub>
- Oil 0.80kg CO<sub>2</sub>
- Natural Gas 0.55kg CO<sub>2</sub>

## ESTIMATED ELECTRICITY COSTS FOR NEW PLANTS IN AUSTRALIA

(\$ per MWh, including a \$35/tCO<sub>2</sub> carbon impost)

- Brown Coal = 78
- Black Coal = 76
- Natural gas = 77
- Future clean coal = 92
- Nuclear = 73 (without waste disposal and de-commissioning)
- HFR = 72
- Wind = 90
- Solar = 150

# GLOSSARY

## **Brine/geofluid**

Water containing dissolved inorganic salts, mainly sodium chloride. Brine from Innamincka granite has salinity 2/3 of sea water.

## **Casing**

Large-diameter steel pipe with threaded connections lowered into an open hole to line the wall of the well and cemented in place to provide structural integrity.

## **Commissioning – cold**

Cold commissioning is testing all components and systems prior to brine flowing through the plant.

## **Commissioning - hot**

Hot commissioning is the final stage of commissioning and involves flowing hot brine through the plant in a series of test runs to demonstrate that the plant meets its operational specifications including the operation of all plant protective systems and devices.

## **Completion**

The assembly of downhole tubulars and equipment required to enable safe and efficient production from a geothermal well.

## **Dissolved gases**

Our granite brine contains mainly carbon dioxide, methane, and nitrogen with small amounts of hydrogen sulphide.

## **Doublet**

The injection and production wells used in a circulation test.

## **Drill pipe (string)**

Drill pipe is hollow, thick-walled, steel tubing used for the drilling of a wellbore and comes in a wide range of sizes, strengths and weights. Drill pipes are hollow to enable drilling fluids to be pumped through them down into the hole and back up the annulus.

## **Drilling mud**

Provides lubrication and cooling at the drill bit and carries the cuttings back to surface. Its high density holds back overpressures in fractures during drilling.

## **Heat exchanger**

Plant equipment used to take heat from one fluid and transfer it to a secondary fluid such as demineralised water.

## **High pressure pipeline**

Special grade high strength pipe to suit high pressure and temperature brine circulation from production well to re-injection well.

## **Hydraulic stimulation**

In the sense of EGS development, a treatment involving the action of fluid pressure on existing natural fractures to enhance fluid pathways in the granite. It is achieved by pumping water down a well at high pressure.

## **Hydrogen embrittlement**

Cracking of the casing material due to dissolved gases reacting with the high strength steel casing material thereby releasing free hydrogen, which in turn is absorbed by the steel casing materials in the low temperature zone of the well under shut-in conditions.

## **Managed pressure drilling**

Using a combination of heavy weight drilling fluid and back pressure to drill through overpressured fractures and maintain desired bottom hole pressures.

## **Multi-fracture drilling**

Drilling through multiple-overpressured fractures which is challenging if the overpressures are high.

## **Permeable**

A rock property pertaining to the transmission of fluid through well-connected fractures or pores.

## **Porosity**

The space within a rock that contains a fluid such as water, oil or gas.

## **Re-injection pump**

Multi stage centrifugal pump to pump brine back to hot granite structure.

## **Reserve**

A measured resource for which commercial production can be forecast with some confidence with existing technology and prevailing market conditions.

## **Reservoir/Underground heat exchanger**

A particular subsurface body of rock having sufficient porosity and permeability to store and transmit fluids.

## **Resource**

An area/volume of rock that has demonstrated character or dimensions to indicate that a body of thermal energy exists. Commerciality not yet established.

## **Sidetrack**

A well or borehole that runs to one side of the original wellbore or line of drilling. It is possible to have multiple sidetracks away from an original hole, each of which might be drilled to a different subsurface location and/or for a different reason. A sidetracking operation may be done intentionally or may occur accidentally. An intentional sidetrack might bypass an unusable section of the original wellbore or explore a deeper geologic feature.

## **Stibnite**

A mineral composed of antimony and sulphur derived from small quantities of these substances in the reservoir fluid.

## **Stimulation**

See Hydraulic stimulation.

## **Well head**

The surface termination of a well bore that incorporates facilities for installing casing hangers during the well construction phase.



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