

# *ASX Announcement*

25 June 2013

## **1 MWe Habanero Pilot Plant Trial Update**

Geodynamics Limited (ASX:GDY) is pleased to provide an update on the 1MWe Habanero Pilot Plant trial being conducted near Innamincka in South Australia. The first half of an approximate 100 day planned test program has successfully been completed. Tests performed to date include:

- **Turbine test run** - Initial steam generation and turbine runs have been successful. Following some minor adjustments, the Distributed Control System has been functioning well, integrating the brine loop and steam loop to establish stable plant operations.
- **Brine reinjection loop reliability and performance testing** - Key areas monitored include the performance of the reinjection pump and seal. The closed loop performance over the first month has been in line with expectations with closed loop system flows achieved in line with modelled predictions.
- **Initiation of tracer testing** - A tracer test has been initiated to measure reservoir size and other characteristics. Results of the test are expected over the coming months as the brine passes through the reservoir.

As part of this initial testing phase the plant has been operating at closed loop flows of 15 – 16 kg/s and has achieved a well-head temperature of 200°C. A significant milestone was achieved on 24 June with the power plant operating in stand-alone mode generating net power.

The test program will now focus on step rate performance testing, which will involve operating the plant at different flow rates. The step rate performance tests are expected to occur over approximately the next 30 days. Following the completion of the step rate tests, power and reliability trials are planned to be conducted in the final month of the test program.

For further information, please check our website ([www.geodynamics.com.au](http://www.geodynamics.com.au)) or contact Mr Geoff Ward on + 61 7 3721 7500. Media and investor inquiries may also be directed to Friederike Graser, Marketing Communications Officer on +61 7 3721 7588.



**Geoff Ward**  
**Managing Director and Chief Executive Officer**

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## **About Geodynamics**

*Geodynamics is the leading Australian geothermal exploration and development company. Geodynamics possesses some of the best geothermal resources in the world and is rapidly developing technology to exploit the resource. Geothermal energy has the potential to be a critical element of Australia's future power generation and Geodynamics is at the forefront of development.*

## **About geothermal energy**

*Geothermal energy offers the prospect of zero carbon, base-load energy generation. "Zero carbon" means that no carbon dioxide (CO<sub>2</sub>) will be emitted when generating energy. This is different from some other forms of 'renewable' energy, which still result in significant CO<sub>2</sub> emissions. "Base-load" means that power is available 24 hours a day, 7 days a week, all year round, and therefore can be used to meet energy needs at any time. This is a significant advantage compared to a number of other zero-carbon technologies that are more intermittent (such as wind, wave and solar power).*

*Geothermal energy produced from hot fractured rocks, also known as Engineered or Enhanced Geothermal Systems (EGS), is generated by special high heat producing granites located 3km or more below the Earth's surface. The heat inside these granites is trapped by overlying rocks which act as an insulating blanket. The heat is extracted from these granites by pumping water through fractures in the granite and bringing the hot water to surface. Geodynamics believes that energy produced using EGS technology is capable of generating base-load power at a cost that will be very competitive with other energy sources (both low carbon and otherwise).*