

CLEAN ENERGY FOR FUTURE GENERATIONS

Quarterly Report
30 September 2011

Quarter one highlights

Paralana

- > Two major project milestones were achieved, namely the successful fracture stimulation of the Paralana 2 well and the subsequent flow testing of the well

Spain

- > \$1.07 million in Spanish Federal government subsidies awarded to a consortia of five parties led by Petratherm España for Canary Islands geothermal exploration

Corporate & Regulatory

- > Placement of shares undertaken by Patersons Securities Ltd raises \$2.3 million in funds before costs
- > Share Purchase Plan raised gross amount of \$458,500
- > \$1.2 million Geothermal Drilling Program grant monies brought forward to assist with preparatory work for the Paralana 3 well
- > \$126 million Emerging Renewables Energy Fund announced by Federal Minister for Resources and Energy, Hon Martin Ferguson AM MP

Review of Operations

During the quarter the Company continued with its planned work at the Paralana geothermal joint venture project site. The primary activity was undertaking the main fracture stimulation of the Paralana 2 deep injector well. The fracture stimulation process, conducted over a two week period, achieved its planned outcome with micro-seismic events being detected as far as 900 metres from the well

bore, beyond the 500 metre target set by the joint venture. This represents a major milestone in the Company's and project's development.

[Post the reporting period a flow test of the well was successfully undertaken and data collected for the test will be incorporated into the design of the next stage of the project.](#)

Quarterly exploration and evaluation expenditure amounted to \$0.547 million. Funding by our JV partners (Beach Energy and TRUenergy Geothermal) under the Paralana JV amounted to \$0.224 million.

The Company had ongoing administration costs of \$0.424 million during the quarter.

At the end of the quarter, the Company held \$3.274 million in cash.

Hot fluids (water and steam) from the Paralana 2 well flowing into a containment pond



Corporate and Regulatory

Placement of Shares and Share Purchase Plan Offer

During the quarter a gross sum of \$2.3 million was raised in a Placement of shares undertaken by Patersons Securities and was supported by substantial shareholder Australian Ethical Ltd. Funds were raised at a price of \$0.125 per share. In the post reporting period a Share Purchase Plan (SPP) that closed on 14 October 2011 raised \$458,500 before costs, also at a price of \$0.125 per share.

The amounts raised are encouraging considering the challenging market conditions. The monies raised in the Placement and SPP will be applied to fund ongoing working capital and exploration and development of the Company's projects, in particular, the Company's flagship Paralana Project in South Australia.

\$1.2 million GDP monies brought forward

During the period the Commonwealth Government agreed to bring forward \$1.2 million of Geothermal Drilling Program (GDP) grant monies for preparatory work for the Paralana 3 well.

A total of \$4.2 million has been spent under the GDP grant towards the drilling and fracture stimulation of the Paralana 2 well. The remaining \$2.8 million was originally allocated to be paid for activities once spudding had commenced of the Paralana 3 well.

The Company's 69% share of the grant monies will complement the \$2.75 million in funds raised under the recent Placement and SPP.

\$126 million Emerging Renewables Energy Fund

The Federal Minister for Resources and Energy, Hon Martin Ferguson AM MP launched the new \$126 million Emerging Renewables Energy Fund during the quarter.

The announcement complements the government's recent Carbon Pricing Initiatives referred to below.

Carbon pricing legislation passes through Federal Parliament

Carbon pricing legislation passed through the lower house of Federal Parliament. The legislation includes a package of carbon pricing initiatives that are aimed at commencing in July 2012.

The key points from those carbon pricing initiatives are summarised as follows:

- > The introduction of a price on carbon creates the investment framework and certainty needed to enable significant renewable energy development;
- > The \$13 billion investment through the new Clean Energy Finance Corporation and the Australian Renewable Energy Agency will provide funding to the development of renewable energy projects;
- > The carbon pricing initiatives will commence from July next year at a price of \$23 per tonne of CO₂ and will be replaced with a market based Emissions Trading Scheme by July 2015.

Projects

Paralana

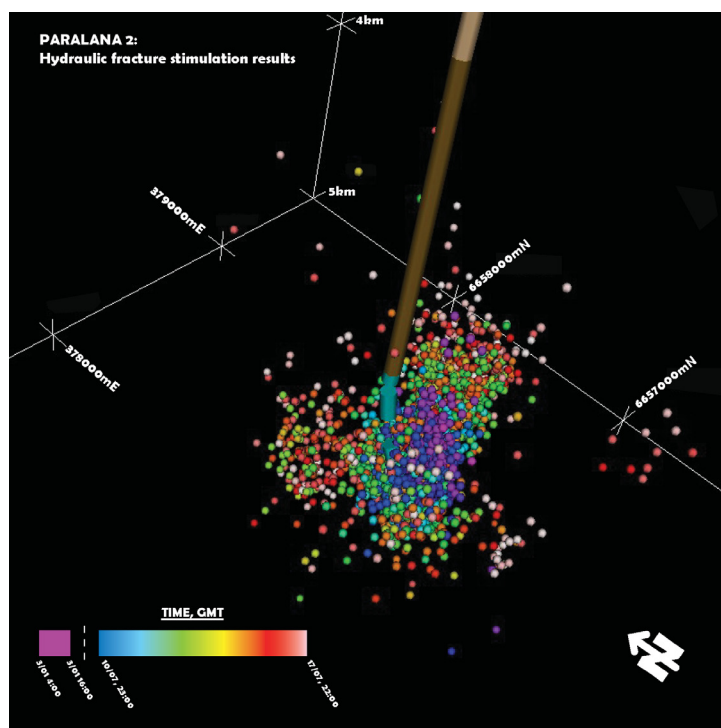
Paralana Fracture Stimulation

During the quarter the Paralana JV partners were delighted to advise that the fracture stimulation undertaken on the Paralana 2 well has been successfully completed.

The primary aim of the fracture stimulation, which was to create fractures in the subsurface at least 500 metres from the Paralana 2 well, was achieved and preliminary analysis suggests that the stimulated zone extends approximately 900 metres to the east of the Paralana 2 well at a depth of 3,500 to 4,000 metres.

The successful stimulation of the Paralana 2 well represents another major milestone achievement in the Company's and JV's development and a significant further de-risking of the Paralana geothermal energy project.

Over the five day period a total of 3.1 million litres of water was pumped into the Paralana 2 well at pressures up to 9,000 psi with sustained pump rates of up to 1,600 litres per minute. The water under high pressure which was injected into the geological formation created a zone of subsurface



Projects cont'd

Paralana cont'd

Paralana Fracture Stimulation

micro-fracturing that extends approximately 900 metres from the well in a predominantly easterly direction between 3,500 and 4,000 metres in depth.

The creation of fractures in the subsurface due to the injection of high pressure water creates micro-seismic events that can be detected and located using a seismic monitoring array. Figures show a preliminary analysis of the location of the induced micro-seismic events, based on approximately 750 micro-seismic events of more than 4,000 events detected by the extensive passive seismic array installed across the Paralana site.

The two key preliminary observations from the fracture stimulation were:

- > the stimulated zone extends beyond the injected depth of approximately 3,700 metres down to around 4,000 metres depth, and

- > there is strong directionality to the stimulated zone which will greatly assist the JV's understanding of the sub-surface geothermal reservoir for geothermal power production, notably to determine the optimum site for the drilling of Paralana 3, the planned deep geothermal production well which constitutes the next stage of the project.

Paralana Flow Test

The flow test operation for the Paralana 2 deep geothermal well was successfully completed during the post reporting period. The Paralana 2 well was flowed continuously over a seven day period and a total of 1.28 million litres of fluid was produced.

The flow test was designed to assess the extent of the naturally overpressured zone and to collect brine samples for geochemical analysis. An understanding of the brine chemistry is critical in managing future production flows and plant design.

The naturally overpressured system will, if extensive, assist later circulation of fluids between wells, reducing the amount of pumping that will be required, and may influence the configuration of injector and producer wells during later planned expansion of the field.

Heliotherm

The Company was informed that its Heliotherm project successfully passed through the Expression of Interest stage of the Australian Solar Institute's (ASI) Round Three grant funding program. The project being undertaken in conjunction with the University of Adelaide was recently awarded a \$750,000 Australian Research Council grant.

A full application on the Heliotherm project has been requested by the ASI and was submitted in late October 2011. Successful applicants are expected to be announced prior to Christmas.

Main Fracture Stimulation at Paralana 2



Projects cont'd

Spain

Geothermal Project Subsidies

A consortia led by Petratherm España has been awarded over AUD \$1 million (or €796,000) in subsidies to be used in major geothermal exploration programs across Spain's Canary Islands.

The consortia successfully applied to the Federal government of Spain with a project entitled "GeotherCan" - which is the development of 3D models for the characterization of geothermal resources in the sub-surface of the Canary Islands, through the use and combined applications of geophysical, geochemical and geological methods.

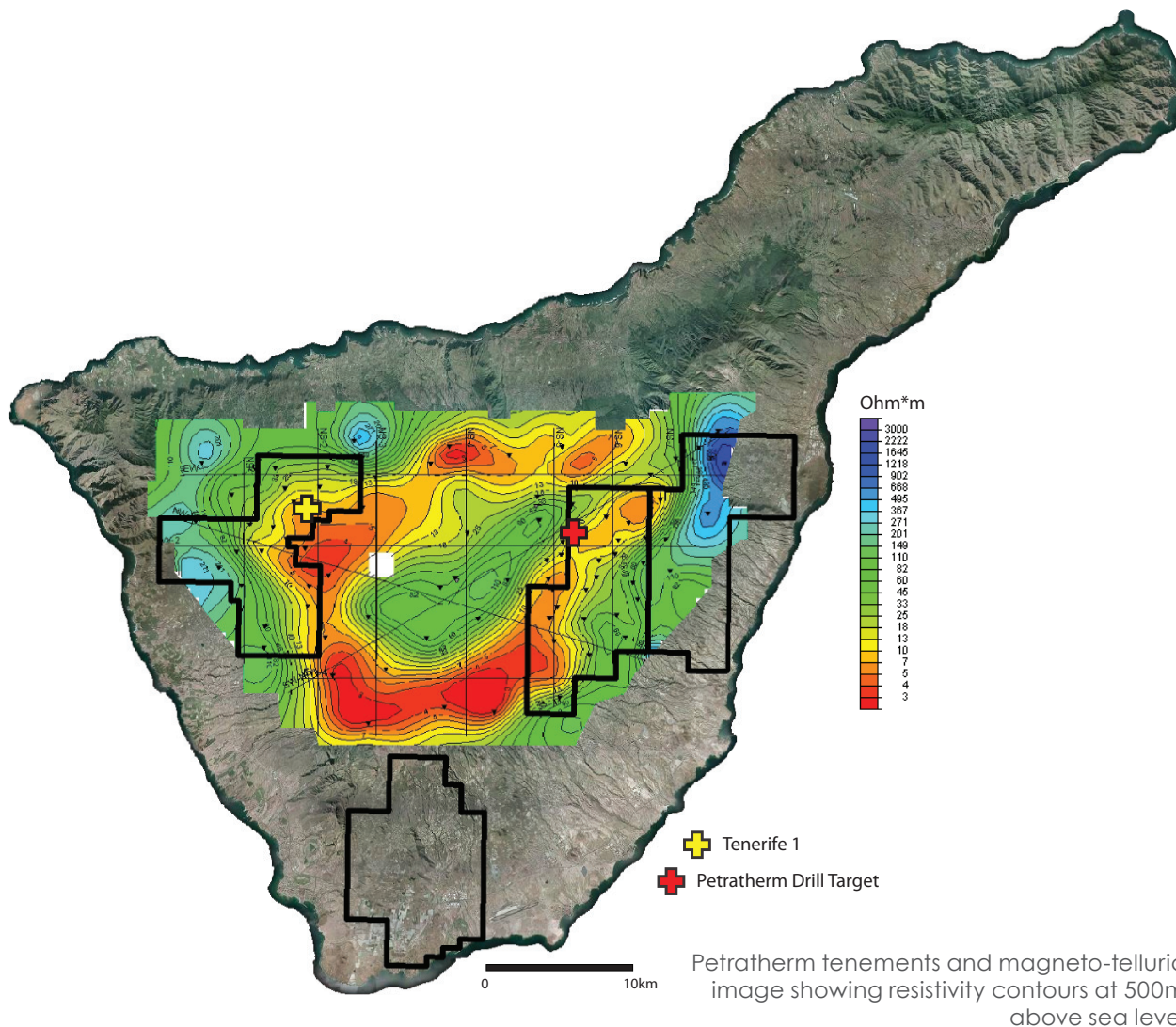
The other parties involved in the GeotherCan consortia are:

- > Institute of Technology and Renewable Energy (ITER)
- > University of Barcelona
- > University of Laguna
- > Institute of Volcanology, Canaries (IVC)

Most of the work will be conducted on the islands of Tenerife and Gran Canaria, and in the areas where Petratherm España holds geothermal exploration tenements.

The work to be conducted by the five parties will be guided through a coordinated work program integrating various results from different studies.

The direct benefit to Petratherm is that the work has been agreed to be targeted to our priority needs and has in a number of areas, such as MT work being undertaken by the University of Barcelona, avoided the need for previously planned expenditure by Petratherm.



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Competent Person Statement

The information in this report that relates to Exploration Results, Geothermal Resources or Geothermal Reserves is based on information compiled by Peter Reid, who appears on the Register of Practising Geothermal Professionals maintained by the Australian Geothermal Energy Group Incorporated at the time of the publication of this report. Peter Reid is a full time employee of the Company. Peter Reid has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Second Edition (2010) of the Australian Code for Reporting Exploration Results, Geothermal Resources and Geothermal Reserves. Peter Reid has consented in writing to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Upcoming events

Industry events

For further information on forthcoming events in the geothermal sector visit the PIRSA website at <http://geothermal.pirsa.gov.au/news/events>

Website

Petratherm's website delivers regular information updates to shareholders and stakeholders

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