

ASX

ANNOUNCEMENT

20 July 2012

ASX : EHR

Well Planning and Review

Earth Heat Resources Limited ('Earth Heat' or 'the Company') is pleased to provide the following update for its shareholders and stakeholders on the geoscience progress, at the Company's key geothermal project, Copahue in Argentina. As announced to the market previously, an abridged geoscientific field survey was completed by Sinclair Knight Merz ('SKM') in March/April of this year. Completed results for all major facets of geology & geochemistry have now been received and have been integrated into the drilling program for the initial Stage 1 development.

HIGHLIGHTS

- Preliminary design work on a future drilling program to deliver required steam to a power plant has been completed;
- Deliverability to a power plant could support an approximate 15MWe power station;
- Each well would be standard diameter with 9-5/8" production casing and a 7" slotted liner within an 8-1/2" diameter production hole;
- Each production well drilled would be deviated from sites of minimal physical and environmental disturbance, and target a 1500mVD end of hole;
- A conservative approach to well design will be applied by assuming Boiling Point for Depth (BPD) temperature and pressure conditions could continue from 1400m to 2000mVD if a deep liquid dominated resource is found below 1,400mVD. soon this basis it may be possible for the new wells to attain 290°C and 1090 psi (75bars) at the planned total depth;
- Detailed drilling programs and geological prognoses to be completed for each well and submitted for approval prior to the commencement of any drilling operation.

EHR and its consultants have recently completed a production well design program which reflects the excellent results obtained by the geoscience program, and is being integrated with the power plant proposal received from Alstom.

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Critically for the program, supply of steam for a stage 1 plant could be satisfied by 3 wells, drilled directionally, with a fourth optional well which could be either used for condensate disposal or potentially as an additional production well. The very high quality resource at Copahue is amenable to optimal drilling procedures, without the necessity of well stimulation techniques based on information presently available.

Completion of the well design document enables the Company to seek formal tenders for critical long lead items such as casing and wellheads from third parties, which will enable the proper commencement of any drilling operation, and allow for a firm costing of well construction including all associated services.

As noted above, the design is for a deviated production well to be drilled to a total vertical depth of 1500 m. The existing deep geothermal wells produced steam from the upper vapour dominated reservoir. The standard hole design is assumed to be directional for the production wells and vertical for the condensate well (if used for that purpose).

The well bore is assumed to be deviated with the kick off and build directional work confined to the cooler formations before the vapour dominated reservoir is intercepted. For wells drilled in the COP-3 area, this will involve kicking off from 500 m with a build up rate of 3° per 30 m and a hole inclination of 35 degrees from the vertical. With a total vertical depth of 1500 m, the equivalent total measured depth produced is about 1800 m with a total throw of 750 m.

For any well drilled in the COP-2 area, this will involve kicking off from 250 m with a build up rate of 3° per 30 m and a hole inclination of 35 degrees from the vertical. With a total vertical depth of 1500 m, the equivalent total measured depth to be drilled is about 1800 m with a total throw of 750 m.

Various sizes of blowout preventer equipment will be utilized to control and contain the high formation pressures that may be possibly encountered in the well bore namely:

1. 21-1/4" x 2000 psi BOP – to be used in drilling the 17-1/2" diameter hole: after running and cementing the 18-5/8" OD surface casing.
2. 13-5/8" x 2000 psi or 3000 psi BOP - to be used in the drilling the 12-1/4" diameter production hole after running and cementing the 13-3/8" OD anchor casing and 8-1/2" diameter holes, after running and cementing the 9-5/8" OD production casing.

Any program is subject to the final designs of each individual well in addition to environmental, administrative and community consents.

Earth Heat Managing Director Torey Marshall commented, "The well design document is a massive step in the integration of the engineering proposal received and the geoscientific realities of the field.

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Most importantly for our shareholders, it confirms the potential to drill conventional standard diameter wells, which will produce at a rate needed to support a phase 1 power plant. It also allows us to be able to reach out to critical suppliers to properly integrate costing as well as their delivery times into the final feasibility study for the Copahue program."

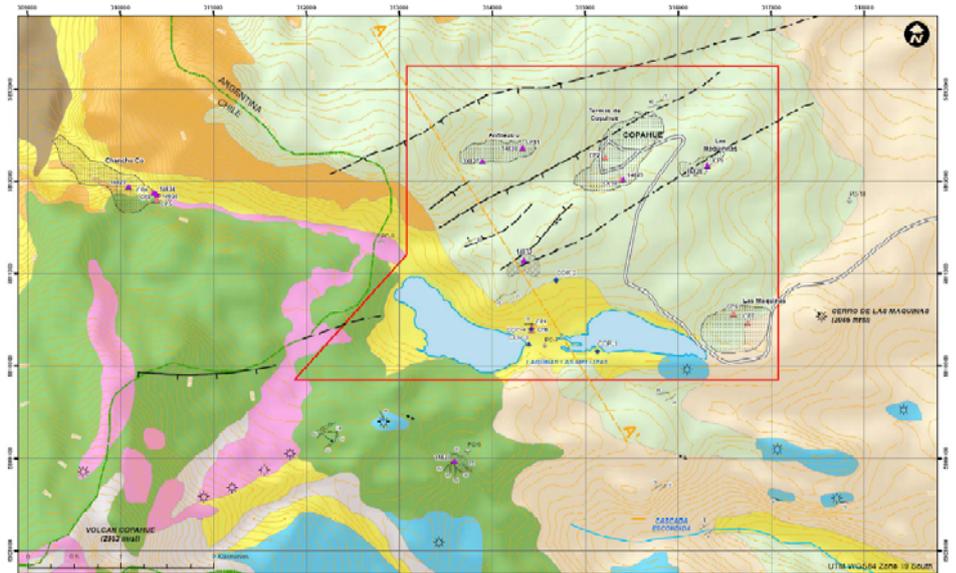


Figure 1- Simplified geological map showing the Copahue concession, of particular interest are the interpreted NE trending faults and their relationship to surface manifestations shown as hatched shapes.



Figure 2- One of the many high quality surface manifestations in the Copahue concession, in this case a Las Maquinas.

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Figure 3- More imagery from the Las Maquinas area, showing the historic relationship between man and geothermal activity.

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About Copahue

Earth Heat signed a Heads of Agreement to farm-in to the Copahue Geothermal Development Project in Argentina in May 2010, which comprises an identified initial 30 MW geothermal development with the potential for significant expansion. Development of Copahue is anticipated to provide first power production and revenue within four years and Earth Heat has the right to earn up to 87.5% of the Project by funding various stages of development.

The Copahue project area is located in the western part of Neuquén Province, approximately 300 km from the provincial capital and just a few kilometres from the Chilean border. The geothermal resource on which the project is based occurs on the North-East flank of the Copahue volcano a young, historically active stratovolcano whose summit is on the international border. It is also situated within a broad caldera that is inferred to have formed by activity that pre-dates that of the Copahue volcano.

The project area has been the site of geothermal exploration and development activities since the 1970s. This work has included a number of superficial and shallow exploratory surveys (geology, geochemistry, geophysics and temperature gradient drilling).

Four deep wells, reaching depths of as much as 1,414m have also been drilled in the area. These wells have demonstrated the presence of a commercially exploitable, vapor-dominated geothermal reservoir within at least a part of the project area.

Since acquiring an interest in the project EHR has increased the resources by 150%, completed an EIA, a pre-feasibility study and most recently signed Letters of Intent for offtake of the power to be produced well in excess of stage 1 and 2 development.

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