



**Company Announcements Office
Australian Stock Exchange**

By e- Lodgement

16 January 2008

Olympic Dam – Hydraulic Fracture Testing

- **Leading German contractors and CSIRO to commence hydraulic fracture testing at Olympic Dam**
- **First geothermal company in Australia to measure in-situ rock stresses with a slim-hole testing system**
- **Low cost, high reward, exercise to eliminate a further level of project risk**

Green Rock Energy Limited (ASX: "GRK"), a geothermal energy company with activities in Australia and Europe, is pleased to advise details of the hydraulic fracture testing to be undertaken at the Company's geothermal leases at Olympic Dam, South Australia.

Having proven the existence of the heat anomaly at Olympic Dam through the drilling of Blanche No 1 well to a depth of 1.935km, Green Rock Energy is undertaking a hydraulic fracturing of the granites within Blanche No 1 to determine the pressure required to fracture the hot granites. This information will be used in the design of the two deeper wells and the associated water circulation testing. These two wells will be used to drive a 3 to 5 MWe pilot plant which will complete the evaluation stage of the project. The design and development of the commercial power plant operation will then occur.

GEO-Meß-Systeme GmbH, a German company specialising in measurement of rock stresses in conjunction with CSIRO, is undertaking the hydraulic fracture testing with equipment imported from Germany. Green Rock Energy is the first geothermal company in Australia to measure in-situ rock stresses with a slim-hole testing system of this type prior to drilling and fracture stimulation to create the underground fractured reservoir. Green Rock Energy's Managing Director, Adrian Larking said "this hydraulic fracture testing is a low cost, high reward, exercise to eliminate a further level of project risk, and will provide the Company with valuable information to design the two deep

wells and fracture stimulation, before the Company embarks upon the major drilling exercise.”

Water will be injected into sealed-off intervals of Blanche No 1 well to induce tensile fractures in the rock, at various depths down to the bottom of the well at 1.935 km. The existing fractures within the rock will open when the water pressure pumped into the sealed-off zone in the hot granites exceeds the in-situ stresses.

Green Rock Energy is using slim-hole, wire-line hydraulic fracturing technology developed at Ruhr-University, Germany. This technology enables “stress logging” without the need for a drill-rig and associated crew and has the added benefit of significant cost savings. The hydraulic fracture testing will be carried out in early February.

To monitor the hydraulic fracturing in Blanche No 1 the Company is also importing from Europe a special high temperature slim hole acoustic televiewer which is the first time such a slim hole tool has been used in Australia in geothermal energy wells.

The Olympic Dam Geothermal Energy Project, owned 100% by Green Rock Energy, is located within 10 kms of BHP Billiton’s Olympic Dam mine and only 5 kms from a 275kV and a 132 kV power transmission lines connected to the Eastern Australian power grid. The Company is undertaking the evaluation of an engineered geothermal system (“EGS”) within the hot granites at Olympic Dam to establish a 3 to 5 MWe pilot power plant. This is in preparation for the construction of a series of EGS reservoirs at Olympic Dam to provide the heat energy to power a large base load power plant with a capacity in excess of 400 MW of electricity.



Nigel Hodder
Company Secretary

For more information contact:

Adrian Larking, Managing Director
+61 (0) 8 9482 0401
alarking@greenrock.com.au