OTHER INFORMATION

Budapest, 17 February 2012

The drilling of the production well in Mályi (MAL-PE-02) has been closed

It has taken PannErgy just over a month to close the drilling works of the second (MAL-PE-02), last production well of the Geothermal Project of Miskolc with results that have come to exceed the expectations. The fissured water-bearing layer has been reached faster and at a smaller, 1,494-meter depth.

At the beginning of January, after the completion of the reinjection well of Kistokaj, PannErgy (Kuala Kft.) launched the drilling works of the production well in Mályi (MAL-PE-02). Relying on our experience earned in the previous drilling operations, owing to the diligent preparations, we have succeeded in performing the drilling works more efficiently, and reaching the necessary depth in a significantly shorter period of time than before.

It was in the early days of February when the drill hit the target zone of drilling, i.e. the Triadic limestone formation of the Bükk Plateau at 1,420 meters. After entering this layer with the drill, we were to provide the given hole section with pipe casing and cement lining. Following the secure pipe casing of the hole and the setting of the cement mantle, the drilling operation was continued until partial, and then full fluid loss was experienced at a depth of 1,494 meters, which indicated that the drill found the fissured, karstic layer bearing the geothermal fluid in the Triadic limestone. In order to open this fissured layer to a larger extent, PannErgy went some 20 meters further down with the drill. The operation was followed by preliminary production with the use of compression, and the obtained results have showed that the well has outstanding, nearly 8,000 liters/minute water output, and what is even more promising is that this huge water yield is available with free outflow, that is without the operation of compressors or pumps.
In the light of the preliminary data, the pressure measured at the well head is cc. 2.8 bars, and the temperature of the exploited fluid at the well head exceeds 90 degrees Celsius with an extremely high temperature gradient. The fissure system brings up the fluid from deeper layers, and it may have been formed by a so-called layer crosscut to generate upward streams in the system.

On the basis of the initial evaluation made by hydrogeologists, temperatures that are considerably higher than the values of the preliminary measurements (the currently available, preliminary data result from just a few hours of testing, which may be negligible in the case of such a huge karst system) can be expected on the long run, because the well and its environment will be heated up by the warmer, bottom-up water flow until the emergence of an equilibrium.
The next few days will witness the examination of the fissures of the Triadic limestone.

Subsequently, the well will be subjected to long-term testing and test production during which much more parameters can be measured and recorded. In the course of the test production, supplementary measurements (registration of water levels and pressure values at various depths) will be carried out in the two wells that were drilled earlier by the Company in this region in order to obtain more accurate data in relation to the behaviour, extent and location of the karstic rocks of Bükk.

The fact that the water base has been reached at a smaller depth than it was planned results in lower drilling costs for the establishment of the production wells.

ñThis success concludes probably the most important and most risky phase of the development, the ñproductionò of energy. We are gradually nearing the completion of the Geothermal Development Project of Miskolc, as just now we have successfully executed the drilling works of the third, and at the same time last production well of the planned system consisting of five wells. In spite of the rigorously cold weather, our experts were able to perform the drilling very efficiently after the preparatory activities launched in the period between Christmas and New Year. In addition to the two production wells and one reinjection well established so far, we have started the preparations for the drilling of a fourth well. Sticking to its original plans, PannErgy will be able to offer an inexpensive and environmentally friendly heating option to Miskolc as early as in the 2012 heating season ï announced Balázs Bokorovics, Chairman of PannErgy Plcôs Board of Directors.ò

PannErgy Plcôs Board of Directors