OTHER INFORMATION

Budapest, 18 December 2012

The submergible pumps and wellheads to be used at the Mályi production wells have been installed ï with the performance of the pressure tests on the pipe sections between the wells and the district heating center

Probably the most important elements of the technological system known as the Geothermal Project of Miskolc, i.e. the submergible wells lowered to depths of 300 and 200 meters in well 1 and 2 of Mályi, respectively, were craned into the system, and concurrently, under real operating conditions the partial pressure tests of the heat transmission lines between the production wells and heat district system were conducted.

In the two production wells, the 666 and 292 HP pumps were installed to bring the heat-carrying thermal water to the surface by exploiting the endowments of the wells in an optimal way. The installation of the large-capacity submergible pumps at production well 1 and 2 of Mályi was executed by a specifically prepared and highly experienced contractor under the supervision of the experts of the manufacturing company. Upon the completion of these works, the wellheads and their assemblies were also integrated.

The installation works were somewhat encumbered by the fact that the implementation works coincided with the coldest day of this yearôs winter so far, followed by freezing rain, but in spite of the extreme weather conditions the colleagues performing the works successfully executed the installation of the individual pumps.

These pumps forming one of the essential elements of the geothermal system of Miskolc have been designed specifically in view of the parameters of the pumps to allow them secure and long-term operations without any intervention. To run the expected, long operating lifetime safely, the pumps have been built from special materials ï not only resistant to thermal water ï , and as a result they do not call for regular mechanical engineering maintenance. The very selection of these pumps for commissioning reflects the efforts to operate with the fewest possible number of system stoppages in order to supply heat to the Avas housing estate of Miskolc City of County Rank.

Owing to the successful installation of the submergible pumps, the pressure tests of the approx. 6.6 km line section connecting production well 1 and 2 of Mályi with the district heating center of Kistokaj, and then the district heating center with the reinjection wells were performed under realistic operating circumstances, without any fault or malfunctioning detected.
From the 18-kilometer transmission line laid from the district heating center of Kistokaj, 2.3 km was rated with x-ray studies (Avas), as the working pit was to be restored quickly from section to section. The line sections were subjected to pressure tests and rated at 35 bar pressure.

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