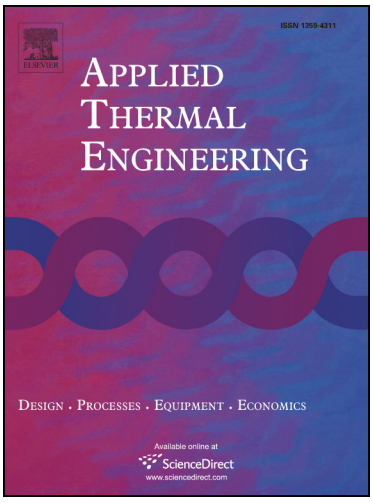

Research Paper

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PII: S1359-4311(17)32326-8
DOI: http://dx.doi.org/10.1016/j.applthermaleng.2017.08.148
Reference: ATE 11031

To appear in: *Applied Thermal Engineering*

Received Date: 7 April 2017
Revised Date: 12 June 2017
Accepted Date: 30 August 2017

Please cite this article as: J. Luo, J. Tuo, W. Huang, Y. Zhu, Y. Jiao, W. Xiang, J. Rohn, Influence of groundwater levels on effective thermal conductivity of the ground and heat transfer rate of borehole heat exchangers, *Applied Thermal Engineering* (2017), doi: http://dx.doi.org/10.1016/j.applthermaleng.2017.08.148

Influence of groundwater levels on effective thermal conductivity of the ground and heat transfer rate of borehole heat exchangers

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ABSTRACT

Effective thermal conductivity of the ground and heat transfer rate of Borehole Heat Exchanger (BHE) are two key parameters for an optimum design and planning of Ground Source Heat Pump (GSHP) systems. In general, these parameters are determined via Thermal Response Tests (TRT) in the field. Many previous studies reported that groundwater flow has positive effects on TRT to estimate ground