Fort Jingan area in Damintun Sag Dynamic analysis and prediction of geothermal resources development and utilization

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The reservoir of Jingan depression area of the three Fort Damingtun fine anatomy, combined with area 501 water wells, water Shen Shen 502 well pumping test results, the study area Jingan Bao Sha 3 section layer (S32) geothermal and hydro geological parameters. On the basis of these key parameters, using Visual Modflow model on the flow field and temperature field simulation, prediction of current and expanding mining conditions (enlarged 30%) over the next 20 years mining area of flow field and temperature field evolution trend, results show that both the current conditions of mining or enlarging the mining capacity of 30% that will cause the water level dropped, but soon reached the equilibrium state, and the temperature fluctuation is very little. Therefore, the Damintun Sag current geothermal development in Jingan fort area increased by 30%, Fort Jingan can meet the region's growing production and living with hot water demand, it will not cause significant change of groundwater flow field and temperature field.

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