



Status of hot spring water development in Korea 2014

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As of 2014, a number of Oncheon (hot spring) sites in Korea is 447. 207 sites among the total sites are located in the south-east part of Korea, because geothermal gradient in the region is higher than the average geothermal gradient of 25 [U+2103]/km in Korea. The higher gradient leads to reduced drilling cost. 50% of the Oncheon sites are alkaline and their pH is higher than 8.5. pH for other 43% is between 7.5 and 8.5. As for the ion-type of Oncheon, 55% is primarily the type of Na-HCO₃. 20 % of Oncheon is the type of Na-Cl secondarily. 9% of Oncheon is the type of Na-SO₄. While the well drilled deepest is 2,003 m from the surface, the average depth is 747 m. The highest temperature of hot spring is 78 [U+2103], while the average temperature is 30 [U+2103]. The area of Oncheon development was big until year 2000. Since then, the development area has shrunk to less than 20,000m² to reduce risks for initial investment and stabilize the Oncheon management.

Keywords : Hot spring, Geothermal gradient, Temperature