

Method for use of geothermal water where 1 m<sup>3</sup> of it includes 1 m<sup>3</sup> of free and dissolved inflammable gas includes extraction of geothermal water, with its purification and supply to inter-pipe space of surface film deaerator, with separation of gas component from geo-thermal water, with cooling the gas separated and condensation of water vapor included to it; feeding dry gas to diesel-generator for electric energy production; additional heating of deaerated geothermal water by heat of exhaust gas of diesel-generator and combustion heat of part of separated gas, feeding heated deaerated geothermal water to pipe space of deaerator, with heating the flow-off film of not deaerated geothermal water to temperature providing evaporation of 0.2 ... 0.5 % of its quantity, feeding deaerated geothermal water to heat the network water of heat supply system and pumping in cooled geothermal water to absorbing well. Deaerated geothermal water is recycled, and two thirds of it are returned back for heating.