ABSTRACT

PRODUCTION TEST ANALYSIS USING LIP PRESSURE METHOD ON ULB-02 WELL IN ULUMBU GEOTHERMAL FIELD

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Ulumbu Geothermal Power Plant is one of the geothermal power plants l°Cated on the island of Flores, East Nusa Tenggara and has a capacity of 10 MW. Ulumbu Geothermal Field has 3 wells, which the wells are ULB-01, ULB-02, and ULB-03. Of these only the ULB-02 well is producing. Wells ULB-01 and ULB-03 are not producing due to problems and lack of steam supply from these wells for power plant needs. The production test of the ULB-02 well was carried out as monitoring due to a decrease in production.

The lip pressure method is used to find the enthhalpy, flowrate, and electricity capacity . The Lip pressure method is also divided into two methods, namely Horizontal Lip pressure and Vertical Lip pressure. The production test on the ULB-02 well is used to identify the deliverability of a well to develop the production capacity, which is very important for the operation of a well.

Based on the results, the ULB-02 well produces 5.6 MW of electricity at a pressure of 10 bara with a flowrate of 45.1 t/h. The enthalpy test sample at 100% throttle valve opening was found to be 2668.97 kj/kg, total mass flow was 60.589 t/h, and brine flow was 0.302 t/h.

Keywords: *lip pressure, enthhalpy, flowrate, deliverability.*