

SARI

Komplek Mata Air Pablengan merupakan kompleks mata air dengan anggota mata air berjumlah tujuh, yaitu MA1-1 (Mata Air Bleng), MA1-2 (Mata Air Hangat), MA1-3 (Mata Air Kasekten), MA1-4 (Mata Air Hidup), MA1-5 (Mata Air Mati), MA1-6 (Mata Air Soda), MA1-7 (Mata Air Urus-urus), dimana anggota mata air ini terletak berdekatan satu sama lain, yaitu berjarak 1 – 30 meter. Namun, sifat fisis dan kimia airtanah antar mata air berbeda, misalnya nilai daya hantar listrik paling tinggi mencapai 64045 $\mu\text{S}/\text{cm}$ pada MA1-1 (Mata Air Bleng), sedangkan nilai paling rendah hanya 4268 $\mu\text{S}/\text{cm}$ pada MA1-5 (Mata Air Mati).

Hasil penelitian menunjukkan bahwa daerah penelitian terbagi menjadi dua sistem hidrogeologi, yaitu sistem hidrogeologi I (Komplek Mata Air Pablengan) dan sistem hidrogeologi II (akuifer dangkal). Komplek Mata Air Pablengan memiliki airtanah bertipe alkali klorida, sedangkan airtanah bertipe alkali klorida-bikarbonat dijumpai pada MA1-5 (Mata Air Mati). Adanya perbedaan sifat fisis dan kimia antar anggota mata air terjadi akibat adanya pencampuran atau dilusi terhadap akuifer dangkal, yaitu MA1-5 (Mata Air Mati) dengan pencampuran airtanah paling intensif terhadap akuifer dangkal dan MA1-1 (Mata Air Bleng) dengan pencampuran airtanah paling rendah terhadap akuifer dangkal. Airtanah pada Komplek Mata Air Pablengan berasal dari akuifer dalam atau batuan sedimen Tersier, dimana airtanah naik ke permukaan melalui bidang kontak antara intrusi dasit dan batuan penyusun Formasi Batuan Gunungapi Lawu (Qvl). Komplek Mata Air Pablengan termasuk dalam jenis mata air kontak.

Kata kunci: airtanah, mata air, Pablengan

ABSTRACT

Spring site of Pablengan is a spring site that has seven springs, they are MA1-1 (Spring Bleng), MA1-2 (Spring Hangat), MA1-3 (Spring Kasekten), MA1-4 (Spring Hidup), MA1-5 (Spring Mati), MA1-6 (Spring Soda), MA1-7 (Spring Urus-urus), which each member of these springs are located close each other around 1 – 30 meters. But, the physical and chemical characteristics of these springs are different, such as the highest electric conductance value of one of the springs can achieve 64045 $\mu\text{S}/\text{cm}$ in MA1-1 (Spring Bleng), while the lowest just achieve 4268 $\mu\text{S}/\text{cm}$ in MA1-5 (Spring Mati).

The research result shows that spring site of Pablengan is divided into two hydrogeological systems, they are hydrogeological system I (spring site of Pablengan) and hydrogeological system II (shallow aquifer). Spring site of Pablengan has groundwater type of alkali chloride, while groundwater type of alkali chloride-bicarbonate is located in MA1-5 (Spring Mati). Differences the physical and chemical characteristic among spring members occurred by mixing or dilution of shallow aquifer, which MA1-5 (Water Mati) is the most intensive groundwater dilution, and MA1-1 (Water Bleng) is the lowest groundwater dilution. Groundwater of spring site of Pablengan is from deep aquifer or tertiary sedimentary rocks, which go up to the surface through contact plane between dacite intrusion and Formation of Batuan Gunungapi Lawu (Qvl). So that, the spring site of Pablengan is kind of contact spring.

Key words: groundwater, spring, Pablengan