

## Seepage Modelling of Jatigede Dam Towards Cisampih Village Based on Analysis Soil Characteristic Using Method Soil Reaction to Water, West Java Indonesia

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**Abstract :** Development of Jatigede Dam that was the mega project in Indonesia, since 1963. Area of around Jatigede Dam is complex, it has structural geology active fault, and as possible can occur landslide. This research focus on soil test. The purpose of this research to know soil quality Jatigede Dam which caused by water seepage of Jatigede Dam, then can be made seepage modelling around Jatigede Dam including Cisampih Village. Method of this research is SRW (Soil Reaction to Water). There are three samples are taken nearby Jatigede Dam. Four paramaters to determine water seepage such as : V ( velocity of soil to release water), D1 (Ability of soil to release water), Ds (Ability of soil to absorb water), Dt (Ability of soil to hold water). meanwhile, another proccess of interaction beetween water and soil are produced angle, which is made of water flow and vertikal line. Called name SIAT. SIAT has two type is na1 and na2. Each samples has a value from the first sample is 280,333(degree), the second 270 (degree) and the third 270 (degree). The difference na1 is, water interaction towards Dt value angle, while na2 is water interaction towards D1 and Ds value angle. Result of calculating SRW method, first till third sample has a value 7, 11,5 and 9. Based on data, interpreted in around territory of Jatigede Dam, will get easier impact from water seepage because, condition soil reaction too bad so, it can not hold water.

**Keywords :** Jatigede Dam, Cisampih village, water seepage, soil quality

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