ABSTRACT

Pracimantoro, Giritontro and Giriwoyo Districts are including into Wonogiri Region, Central Java Province. In generally or partly the whole areas are karst. Karst landform is process lanscape of solutional that have characteristic of relief and specific of drainage, especially because degree of the solutional rock in the water, higher than the other place. Process the condensation also cause characteristic of springs in karst area become very specific. Main characteristic of karst landform is existence of vertical drainage system and underground drainage system, or more knowledgeable as underground river. Process condensation that happened in karst area was influenced water as solver, and rock compiler of litology as dissolve media.

Water input which in the form of rainwater which fall in karst area enter by percolation into underground river, and periodically will emerge the springs. That springs which become objec study in this research entitling ***"Study an Springs Characteristic at the Wonogiri Karst Area in Wonogiri Region, Central Java"****. The aim of this research is to know variation of discharge characteristic, womb of dissolve elements, total dissolve solid and total suspended solid as respond to rainfall in research area. Dissolve elements in the form of Bicarbonate, Calcium, and Magnesium; and also total dissolve solid and total suspended solid analysed in laboratory with period of intake of sampel during one week, start from final month of August till mid of month; moon of October, year 2004.*

Discharge of springs measured by volumetric, float, and weir; while dissolve elements content, dissolve solid amount and total suspended solid analysed with titration method and gravimetry. Method used to know that variation is by using hydrograph of discharge and dissolve elements chemograph. which is always attributed to graph of average daily rain at the same time and before all.

Result which got in this research is the Beton spring have respond which quickly and high variation of discharge and also highest average of discharge is 22,2 l/s. High variation of discharge also happened the Karanglo Spring, Praci, Suci, while Nangsri Spings, Ngreboh, Losari, and the Bamban discharge variation of lowering. Dissolve elements and total solid which implied in springs altogether have high variation. Drainage system expanding at karst springs in research area have immeasurable stream type. The Karanglo springs have type drainage system of fissure which the stream of passing fractures system; The Beton Springs, Nangsri, Praci, Belik, Suci, and the Losari drainage system of pertained type of conduit with stream of turbulen; while drainage system with stream type of diffuse there are at spring of Ngreboh, Kakap, Bamban, Ngubalan, having stream which was laminer.

Keywords: Karst – Water – Characteristic of Springs