

Abstract

Location research administration in the area Pule Village, District Pule, Trenggalek, East Java Province. Seacara geographic study area at UTM N 555000 mE - 56 000 mE mE and N 9096000 - 9101000 mE. The area of research with an area of 5 km x 7 km to the scale of 1: 20.000.

The study area consists of two formations of origin and four landform. Notching structural origin consisting of structural units hills (S1) and the structural valleys (S2). Formation of fluvial origin composed of a body unit streams (F1) and the unit affluent flood plains (F2). Drainage pattern that developed in the unit geomorphology, namely sub-dendritic and parallel.

Stratigraphy in the study area based on the unity of the dominant lithology characteristics can be grouped into 4 units unofficial. From old to young is tuff Arjosari Unit (Late Oligocene - Early Miocene), Unit breccia Arjosari (Late Oligocene - Early Miocene), Intrusion andesite (Late Oligocene), alluvial Deposition (Holocene). Depositional environment land with volcanic facies proximal - medial.

Developing structure, fault Tall go to the left in the form of fault, fault time Pule, Semunglung fault, and the fault Pringapus, faults are heading to the form of fault Dongko, Siki fault, and the fault Mojo. From the data obtained cesarean go to the left truncated by faults are heading.

Alteration types that develop in areas of research that argillic, and propilitik. With the set of minerals such as clay minerals, kaolin, quartz, chlorite in argillic, and chlorite, calcite, quartz, epidote, clay minerals, in propylitic. Metallic minerals that are formed are pyrite, chalcopyrite, and pirolusit.

Deployment zone of alteration is controlled by structures evolve, and the type of intrusion, the rock side, and the fluid type controllers. Type approach that is the type ephitermal mineral deposits.

Keywords: Geology, structure, and alteration.