

ABSTRAK

IDENTIFIKASI PENINGGALAN ARKEOLOGI MENGGUNAKAN METODE GEOLISTRIK KONFIGURASI DIPOLE DIPOLE DI SITUS LIYANGAN JAWA TENGAH

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Candi Liyangan ditemukan pada saat kegiatan penambangan pasir dan dalam kondisi terkubur. Balai Arkeologi Provinsi Daerah Istimewa Yogyakarta telah meneliti dan mengungkapkan bahwa Situs Liyangan merupakan sebuah pemukiman kuno yang dihuni oleh masyarakat dari abad ke-Masehi. Permukiman Liyangan terkubur akibat letusan Gunung Sindoro, dan ditemukan peninggalan berupa candi, talus, petirtaan, batur, dan arca yang terbuat dari batu andesit. Material vulkanik yang mengubur Candi Liyangan adalah batuan piroklastik, sehingga mudah untuk memahami perbedaan antara peninggalan arkeologi yang terbuat dari batu andesit dan batuan piroklastik karena perbedaan material penyusun litologi batuan. Perbedaan material penyusun litologi batuan dapat diketahui menggunakan metode geolistrik. Metode geolistrik resistivitas merupakan salah satu metode geofisika yang dapat menggambarkan keadaan bawah permukaan bumi dengan cara mempelajari sifat aliran listrik batuan di bawah permukaan bumi berdasarkan perbedaan nilai resistivitas batuan. Penelitian ini dilakukan dengan menggunakan metode geolistrik resistivitas untuk dapat mengetahui sebaran peninggalan Candi Liyangan sehingga dapat menjadi acuan dalam pengembangan Candi Liyangan berdasarkan aspek kepariwisataan, geoarkeologi, dan pendidikan. Pengukuran data menggunakan 9 lintasan yang tersebar di area Situs Liyangan. Hasil pengolahan data dan interpretasi data menunjukkan bahwa 6 lintasan memiliki anomali nilai resistivitas yang tinggi ($>2000 \Omega.m$) dan terletak di permukaan bumihingga kedalaman 4 meter sehingga diduga merupakan peninggalan Candi Liyangan.

Kata kunci: Candi Liyangan, Resistivitas, Geolistrik, Dipole-Dipole

ABSTRACT

IDENTIFICATION OF ARCHEOLOGICAL USING DIPOLE-DIPOLE CONFIGURATION GEOELECTRI METHODS AT LIYANGAN SITE, CENTRAL JAVA

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Liyangan Temple was discovered during sand mining activities and in a buried condition. The Archaeology Agency of Yogyakarta Special Region Province has researched and revealed that Liyangan Site is an ancient settlement inhabited by people from the 2nd century AD. The Liyangan settlement was buried due to the eruption of Mount Sindoro, and relics were found in the form of temples, talus, petition, batur, and statues made from andesite stone. The volcanic material that buried Liyangan Temple is pyroclastic rock, so it is easy to understand the difference between archaeological relics made from andesite stone and pyroclastic rock because of the difference in the material that makes up the rock lithology. Differences in the materials that make up rock lithology can be determined using geoelectric methods. Resistivity geoelectric method is one of the geophysical methods that can describe the state of the earth's subsurface by studying the electrical flow properties of rocks below the earth's surface based on differences in rock resistivity values. This research was conducted using the resistivity geoelectric method to determine the distribution of Liyangan Temple relics so that it can be a reference in the development of Liyangan Temple based on tourism, geoarchaeological, and educational aspects. Data measurements using 9 lines scattered in the Liyangan Site area. The results of data processing and data interpretation show that 6 passes hgave very high resistivity value anomalies ($> 2000 \Omega.m$) and are located on the earth's surface to a depth of 4 meters so they are suspected of being relics of Liyangan Temple.

Keywords: *Liyangan Temple, Resistivity, Geoelectric, Dipole-Dipole*