

Thunnawut Viwatthavonwong 2012: Data Logger and Data Transmission System over Wireless Networks for Measuring Geotechnical Data in Area 4.1 of Mae Moh Mine, Electricity Generating Authority of Thailand, Lampang. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Associate Professor Peerayot Sanposh, D.Sc.
99 pages.

The aim of this thesis is to develop an equipment that is used to monitor the movement of the mine's wall at Mae Moe free-zone-mine, Area 4.1, in Lumpang Province by using prototypes of geotechnical instruments developed by the Department of Civil Engineering, Faculty of Engineering, Kasetsart University. The instrument are wire extersometer and borehole jointmeter. The prototype equipments that are used to analyze the slope stability of the wall by monitoring the bending angle. The instruments must be able to withstand the field environment and must be reliable. The scope of this thesis is to develop a wirelss data logger system that can send data back to the Department of Soil Engineering Mae Moh Mine for analyzing and unusual event warning to the system administrator via E-mail and SMS message.

Student's signature

Thesis Advisor's signature