**EXPLORING GROUNDWATER POTENTIAL EVALUATION AT IFEWARA PRISON, ATAKUMOSA LOCAL GOVERNMENT, ILE-IFE, SOUTHWESTERN NIGERIA THROUGH RESISTIVITY AND MAGNETICS DATA ANALYSIS**

**CHAPTER ONE**

**INTRODUCTION**

* 1. **BACKGROUND**

Water is a vital resource for most basic human needs which cannot be over-estimated. The distribution of groundwater is a critical factor in exploration, hence the need for prospecting of groundwater aquifers in the subsurface.

However , groundwater prospecting in complex basement terrain can be challenging due to complex nature of the geological formations(Sunmonu et al, 2018; Wannamaker et all, 2016). Prospecting for groundwater in basement complex terrains requires in-depth understanding of the geology, hydrogeology, and groundwater flow dynamics, as well as the use of appropriate geophysical and drilling techniques(Olobaniyi et al, 2016).

Exploration of groundwater in complex basement environments necessitates meticulous mapping of lineaments, such as fractures, fault zones, and joints, which serve as crucial groundwater pathways and storage locations(Hasan et al., 2018).

**REFERENCE**

Sunmonu, L.A., Adagunodo, T.A., Adeniji, A.A., Ajani, O.O., 2018. Geoimaging of subsurface fabric in Awgbagba, Southwestern Nigeria using geomagnetic and geoelectrical techniques. Malaysian J. Fundam. Appl. Sci. 14 (2),Pp: 312 - 324.

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