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PREVAILING GEOTECHNICAL HAZARDS AT LETŠENG DIAMOND MINE AND THEIR MITIGATION

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Letšeng Open Pit Mine, like all other open pits in the world is faced with a number of hazardous challenges. The mine is situated at 3100 m above sea level in the Maluti Mountains of Lesotho and the country rock is basalt which has been intruded by a significant number of dolerite dykes and some kimberlite pipes. The paper discusses the prevailing hazards and their probable impacts on the safe production in general as well as the role of the geotechnical challenges to make predictions and mitigating measures so that a safe operations environment is maintained on the mine at all times. The paper makes a conclusion that it is of utmost importance to monitor and manage geotechnical hazards to safeguard the smooth and safe production as well as identifying possible hazardous areas and learning from historical hazards and apply the knowledge gathered as a way forward to successfully managing the geotechnical hazards and improving operations in such areas.

