Seismic refraction method and its use in quarry site investigation: case history

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Seismic refraction method is commonly used in site investigation for large project such as highways and dams. In small scale development such as in the site investigation for potential quarry site, water tank or reservoir and small housing development, the geophysical or seismic surveys are seldom used. They are used

Warta Geologi (Newsletter of the Geological Society of Malaysia), Vol. 29, No. 5, September-October 2003

only when problem exist. In potential granite quarry site, core boulders are often prominent. When using borehole for investigation, these core boulders need to be cored through otherwise a pseudo bedrock may be inferred. The seismic refraction can be used to determined the true bedrock depth. The boring will be necessary for obtaining the bedrock samples to test the rock quality. Beside this the seismic refraction is rapid and more mobile, where the area is large and terrain is rugged. Example from two quarry site are used to emphasise the importance of seismic refraction survey in quarry site investigation.