

LITHOLOGIC VARIATION AND VIBRATION EFFECTS

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ABSTRACT

Vibration control is affected by many factors which are difficult to isolate and evaluate. Occasionally a circumstance occurs in which one factor appears to predominate and its effects can be evaluated. Changing rock characteristic or lithologic variation is one of these factors or parameters. In a recent seismic monitoring project, lithologic variation in the form of hard lenses occurring suddenly and randomly in the rock to be excavated caused sudden and large increases in vibration level. Data are presented to illustrate these effects, and procedures used to control these effects are described.