Detection and Characterization of Pipe Using Time-Domain Reflection Wave

Saiful Wazlan Wahab, Muhammad Nur Hidayat Zahari, Aziman Madun, Mohd Noor Isa and Azlim Khan (Malaysia)

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SUMMARY

Recent technologies in engineering views have brought the significant improvement in terms of performance and precision. One of those improvements is in geophysics studies for underground detection. Reflection method has been demonstrated to able to detect and locate subsurface anomalies in previous studies, including water pipe. Other geophysical method merely involves penetrating radar not suitable for saturated ground. This may lead to undiscovered of the pipe position. To estimate and characterize the anomalies signal in a better way, an attempt has been made to test at control site. Robust detection and characterization of pipe through inexpensive cost using reflection method are proposed to improve the detectability and characterization of the pipe. The result shows 2-Dimensional and 3-Dimensional analyses of pipe based on Primary waves reflection.

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