

Modern Technique for Leakage Detection at Dams

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SYNOPSIS. This paper describes a technique called Controlled Source Audio Frequency Domain Magnetics to track map and monitor leakage through dams. The problem most dam engineers face is that leakage can often be traced at the toe of a dam or downstream of it, and in some cases upstream within the reservoir basin, but it is usually very difficult to track the leakage through or under the dam. The 'Willowstick' technique described in this paper allows individual leakage patterns to be mapped through or under dams.