

**MAPPING COMPLEX GROUNDWATER FLOW PATHS: UNDERSTANDING PREFERENTIAL FLOW
PATHS IN AQUIFER MATERIALS WITH DIFFERING POROSITIES**

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Accurately characterizing groundwater can be a very difficult proposition when dealing with contaminated sites. Often, the preferential flow of groundwater is a primary transport mechanism for contaminants. Trying to characterize these flow paths is difficult with traditional techniques, which often result in drilling wells. This can be very difficult and expensive, especially in complex geology such as fractured rock. This paper will discuss an innovative geophysical technology that specializes in the mapping of preferential flow-paths in complex geologies. The paper will discuss the technology and three case studies of the technology applied to three different complex geologies.

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