

Plume Behaviour in Sedimentary Rock Aquifers: Using Chlorinated Solvent Contaminants as Long-Term, Natural-Gradient Tracers to Understand Complex Flow Systems

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High resolution characterization methods honed for sedimentary rock aquifer and chlorinated solvent contamination conditions applied at numerous sites across North America have provided insights regarding groundwater flow and contaminant transport conditions pertinent to improved hydrologic knowledge and prediction. Multiple, complementary data sets are used to inform and constrain quantitation of processes and their interactions so that contaminant hydrogeologists can better predict the risks associated with various physical and contaminant threats to groundwater resources for protection of human and environmental health. This presentation aims to overview the insights gained from various novel field methods and laboratory measurements in complex sedimentary rock environments and insights to the profession at large used by industry to improved site management and remediation decisions.