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One Dimensional Solute Transport Originating from a Exponentially Decay Type Point Source Along Unsteady Flow Through Heterogeneous Medium

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ABSTRACT
One dimensional advection dispersion equation is analytically solved initially in solute free domain by considering uniform exponential decay input condition at origin. Heterogeneous medium of semi infinite extent is considered. Due to heterogeneity velocity and dispersivity coefficient of the advection dispersion equation are considered functions of space variable and time variable. Analytical solution is obtained using Laplace transform technique when dispersivity depended on velocity. The effects of first order decay term and adsorption are studied. The graphical representations are made using MATLAB

KEYWORDS

Cite this paper

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