

LNAPL Body Additional Migration Tool Example

Example Description

Inputs and Outputs in Toolbox

Site Description

Leaking gasoline has created an LNAPL lens.

At several wells located within the LNAPL lens, the LNAPL transmissivity has been measured or estimated using the Concawe transmissivity calculator. The average transmissivity is determined to be **0.5 m²/d**.

The LNAPL elevation has also been measured at each location. Using the LNAPL elevations, the average LNAPL gradient from the centre of the lens to the edge has been calculated to be **0.001**.

The radius of the LNAPL lens has been determined to be **50 m**.

LNAPL Transmissivity (m ² /day)	0.5
LNAPL Gradient (m/m)	0.001
Current LNAPL Body Radius (m)	50

Output and Interpretation

The nomograph will determine the additional radial migration of the LNAPL. The LNAPL flux per unit width ($T \times i$) is **5×10^{-4} m²/d**, and that the additional distance that the plume will migrate is **95 m**, resulting in a maximum LNAPL lens radius of **145 m**.

