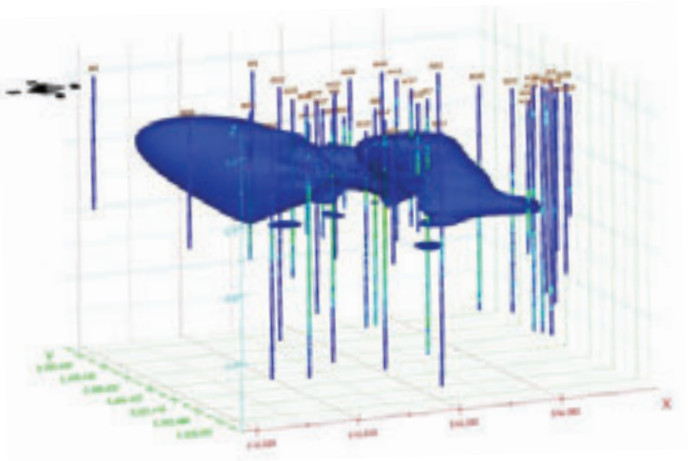
PHC High Resolution Site Characterization Survey

Historic Leak from an Underground Storage Tank

Background

A historic leak from a UST released over 19,000 L of gasoline directly into the subsurface over a five year period. Extensive borehole drilling and monitoring well installations were completed. A downgradient area of high PHC concentrations was discovered extending up to 26 meters below ground surface. Traditionally, this would serve as delineation of impacted zones however many data gaps were present for the Site. A new, innovative and cost efficient approach to delineation, both vertically and horizontally, was required to close the data gaps on-Site.



Solution

Vertex mobilized two high resolution characterization tools to the Site for rapid in-situ delineation. The first tool deployed was the Laser Induced Fluorescence (LIF) probe to identify any pockets or residual light non-aqueous phase liquid (LNAPL) that may still be present on-Site. The second tool, the Membrane Interface Probe (MIP), was deployed to delineate the vertical and horizontal extents of the dissolved-phase impacts. The MIP was able to rapidly and efficiently delineate where the data gaps existed on-Site.

Benefit

High resolution characterization tools were deployed by Vertex for multiple days. Without the added data from the high resolution characterization many impacted zones and depths would have been missed. The results were used to better design the subsequent remedial program, resulting in better treatment of soil and groundwater impacts at the Site.

VERTEX Environmental Inc.

Below the surface
Beyond the science

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