

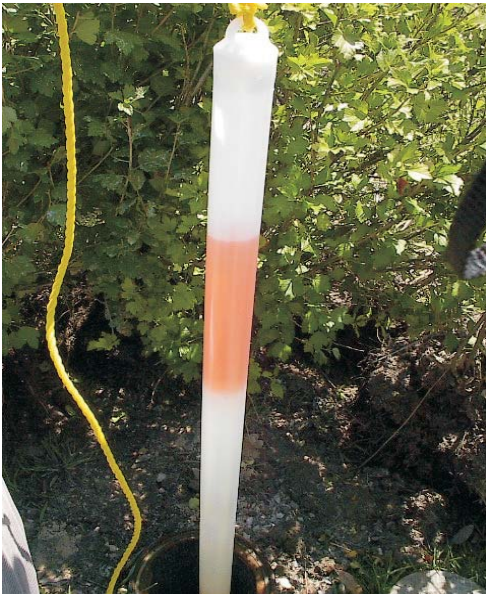


OVERVIEW

Vertex staff were retained to remediate a former fuel transfer facility that was impacted by free product petroleum hydrocarbons. The hydrocarbons had a specific gravity less than water (i.e. LNAPL) and was characterized as being a weathered gasoline product with ethanol additives.

SCOPE OF WORK

- Acquired all relevant permits to complete the remediation program
- Complete a mass balance calculation to estimate volume of mobile and residue free product within subsurface
- Designed and optimized a free product removal program based on utilizing pneumatic skimmers
- Aid in the completion of a risk assessment for the site



THE VERTEX APPROACH

- Complete estimation of free product in ground
- Review water and product level relationship
- Install pneumatic skimmer array
- Simulated product distribution and movement using numerical methods
- Optimized placement of skimmers depending on seasonal fluctuations in water level



OUTCOME

- Greater than 1,600 L removed over a 13-month time frame
- Worked with consultant to design and implement a comprehensive remedial plan
- Operations on site not interrupted
- Remediation objectives meant which allowed risk assessment to be developed and submitted