

Former Gasoline Station BTEX Remediation

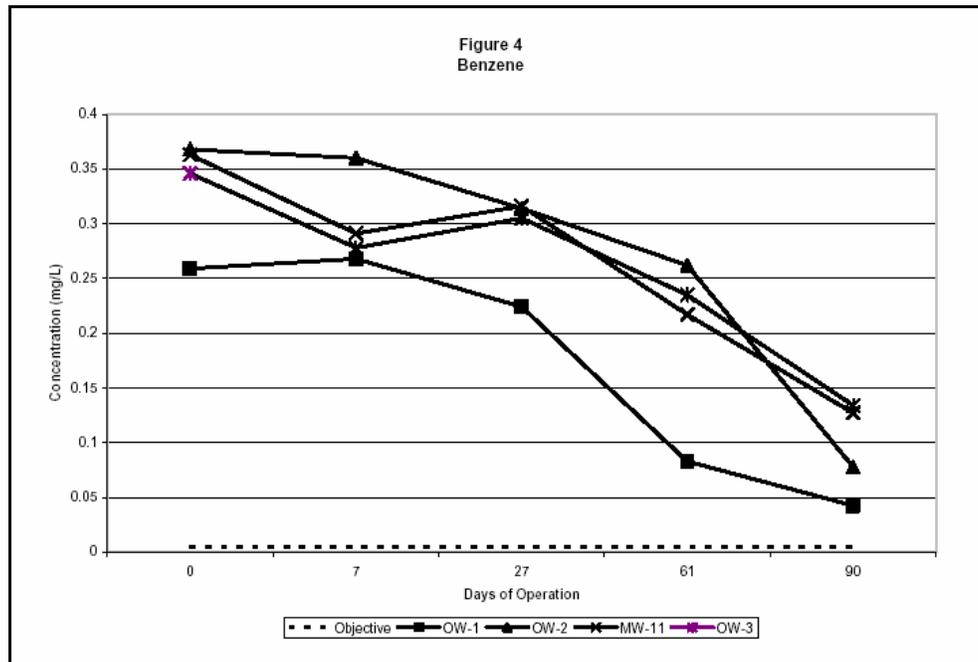
"Pilot Study" Case History

Accelerated Remediation Technologies, LLC (ART) recently installed one ART Demonstration Well at a UST site in DeKalb, Illinois. The Illinois Environmental Protection Agency (Illinois EPA) approved the ART Technology for the Pilot Study, and a report was submitted to the Petroleum Storage Tank Insurance Fund (PSTIF) after the pilot study was completed. Full scale implementation of the ART technology is planned for this site.

Contaminants of Concern: Benzene and Ethylbenzene

Site Description: The site is located in DeKalb, Illinois at a former gasoline station. Five underground storage tanks (USTs) and three pump islands were removed from the site. Other remedial measures were implemented at the site prior to the ART Technology but failed to achieve objectives.

Pilot Study November 2005 – February 2006: One ART Demonstration Well was installed on the site, along with three new observation wells, OW-1, OW-2, and OW-3. A previously installed monitoring well MW-11 was also sampled during the pilot study. The four wells were spaced approximately 10 feet apart, so that the monitored wells would be approximately 10, 20, 30 and 40 feet from the ART well. The benzene concentrations in OW-1, OW-2, MW-11, and OW-3 were reduced by 84%, 79%, 65%, and 61% respectively. The significant decrease in benzene concentrations, as shown in the figure below, indicates that the radius of influence for this site is **greater than 40 feet**. During the 90-day pilot study, total VOC removal **exceeded 1400 lbs**.



Summary: The ART technology has proven to be successful at this former gasoline station site, where other technologies have failed. As a result of the pilot study, full-scale implementation of the ART technology is planned for this site.

The full report, prepared by Free Flow Technologies, Ltd. and submitted to the Petroleum Insurance Fund, is available upon request.

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