



E-REDOX[®] CASE STUDY: *IN SITU* GROUNDWATER PETROLEUM HYDROCARBON BIODEGRADATION ENHANCEMENT AT LEAKING UNDERGROUND STORAGE TANK SITE IN SOUTH DAKOTA

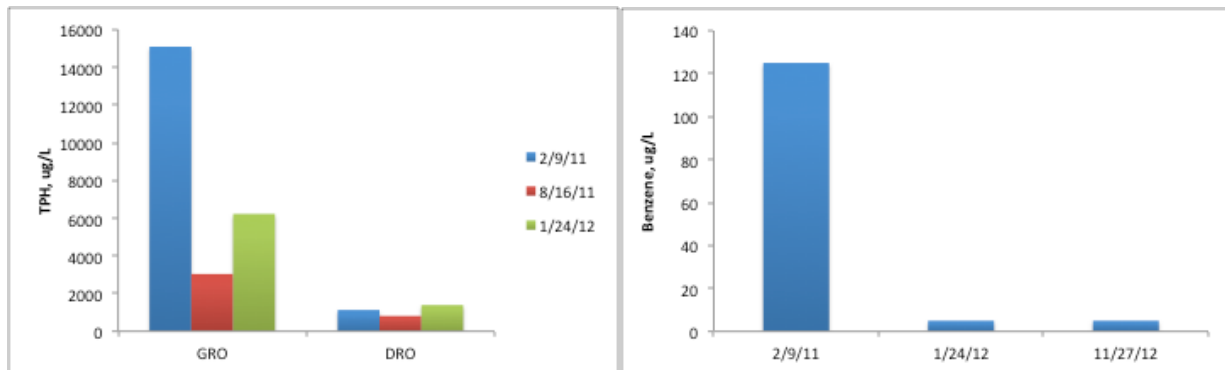
Location: Former fuel station in Batesland, SD

Contaminated Matrix: Groundwater

Primary Contaminants of Concern: Petroleum hydrocarbons, benzene

Project Objective: Demonstration of *in situ* contaminant degradation enhancement by E-Redox[®] technology

Case Study: An E-Redox[®] unit was installed at a former gas station in South Dakota, where a leaking underground storage tank impacted the groundwater with petroleum hydrocarbons (approximately 3 ft thick free product was present in two monitoring wells). After less than one year since the installation of the E-Redox[®] unit, over 60% of the GRO-TPH was degraded while over 90% of the benzene was degraded. Voltage production was observed, which indicated the processes of biodegradation.



Concentration changes of GRO- and DRO-TPH (left) and benzene (right) in a treated well