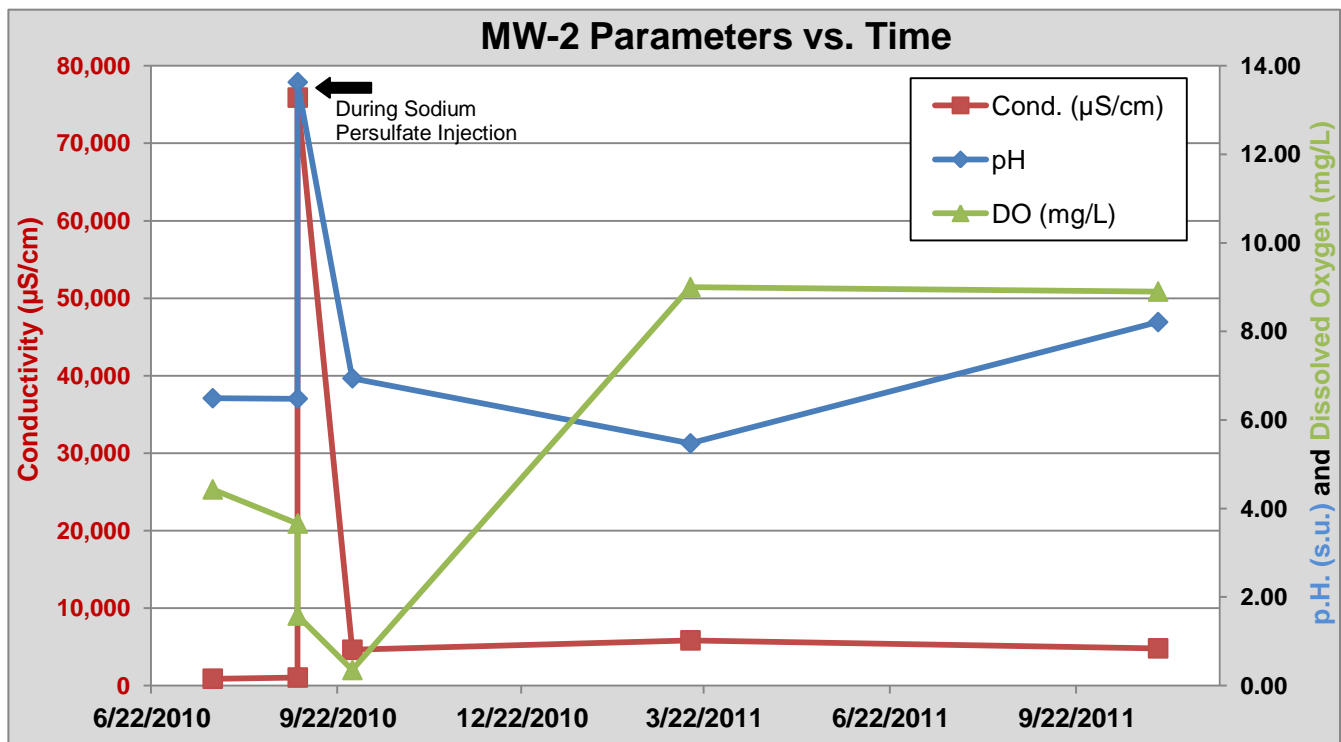


The site was an active gas station located in Plant City, Florida. The purpose of the remedial treatment was to reduce dissolved BTEX (namely Benzene) and naphthalene in the groundwater with the goal of reaching state target levels (NADCs or GCTLs). Soils at the site consisted of clay rich sands in the upper horizon followed by fine sands, and the water table was located 5-10 feet below ground surface. In-Situ Chemical Oxidation (ISCO) was chosen as a low cost alternative to air sparging/soil vapor extraction, or similar technology. Based on the contaminants detected, close proximity of the UST system, and low treatment thresholds, Exo Tech recommended a two-stage treatment or treatment train approach using high base activated sodium persulfate (Klozur®) followed by a second injection of Klozur CR® to allow for additional chemical oxidation combined with aerobic bioremediation.

Exo Tech injected approximately 2,200 pounds of alkaline activate persulfate into -10- delivery points surrounding key well MW-2. Approximately three months following, Exo Tech injected 1,800 pounds of Klozur CR® into an additional -10- delivery points. The Klozur CR® provided additional chemical oxidation followed by long term oxygen release using a buffered formulation of calcium peroxide (PermeOx Plus) to facilitate aerobic bioremediation. Results indicated a significant reduction in dissolved BTEX, FL-PRO (TPH), and naphthalenes. Currently the only constituent exceeding the Natural Attenuation Default Concentrations (NADCs) is naphthalene at 160 ppb with a NADC of 140 ppb (see graph on next page). In addition, results showed a sustained release of oxygen over a year following injection, which aided aerobic biodegradation (see graph below).



*Nov. 30-Dec. 1, 2010 Klozur CR Injection

