



## CASE STUDY

### FORMER GAS STATION

### PANAMA CITY BEACH, FL

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#### SITE OVERVIEW

- Former gas station in Panama City Beach, FL
- Cleanup is still ongoing at the site.
- 14,400 sq. ft. contamination plume
- Gasoline contamination in soil and groundwater

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#### HISTORY

- Contamination discovered during tank closure.
- Small source removal performed around former tank pit.
- Plume is approximately 33,896-sq. ft.

#### SITE CONDITIONS

- Groundwater starts at 2- to 15-foot bls based on location at site.
- Groundwater contamination from 2- to 25-ft
- Soil contamination begins at approximately 2-ft and continues to the water table at 15-ft.
- Soil consisted of fine to medium grain silty sands with some organic layers intermixed.
- Groundwater plume under highway and hotel buildings.
- Free product was found on the site at system startup.
- Groundwater contamination levels as high as 27,700 ug/mL BTEX.
- Soil contamination levels as high as 390 mg/Kg total xylene.

#### REMEDIATION ACTIVITIES

- Twenty-two (22) injection wells and twelve (12) recovery wells were installed.
- The mobile Clenzsoil Injection System was used to treat the recovered groundwater and then reinject the groundwater with BioBlend additive. A powdered oxidant was used on the south side of the highway instead of air to provide oxygen to the groundwater due to concerns for vapor intrusion into the hotel.
- System is proposed to be on site for four months.

#### RESULTS

- Cleanup resulted in 99% removal of soil contamination after the first month. The site showed a total decrease of contamination of 50%.