



**Project Name:** Site Investigation of Gasoline Impacted Soils from Pipeline Leak

**Client:** Confidential

**Agency:** California Regional Water Quality Control Board

**Location:** Northwest Brea Oil Field, California

**Chemicals of Concern:** Gasoline Compounds



## Project Goal

In this project, Waterstone aimed to characterize the impacts of a leak from a subsurface petroleum product pipeline valve beneath a booster station facility. The site was planned for residential development and a thorough investigation was requested by the land owner and the local regional water quality control board to determine the vertical and lateral extent of the contamination and identify a cost effective and feasible cleanup option.

## Waterstone's Role

Waterstone's oversaw the field investigation, which included soil borings, well installations, continuous rock coring, surface geologic mapping and interpretation, and subsurface stratigraphic interpretations. Waterstone also interfaced continuously with the regulatory agencies and prepared a comprehensive investigation report.

## Project Challenges and Successes

The site is located within the Whittier fault zone, which is a geologically diverse area underlain by highly dipping beds of very hard and interbedded sedimentary rock. This geology required advanced drilling and sampling methods and, since the groundwater zones are located within complex fractured siltstone lenses, the characterization of the extent of the gasoline leak was difficult and revealed several gasoline-affected groundwater zones beneath the site. Despite these physical parameters, Waterstone successfully characterized the leak area in an effective and cost minimizing manner and is currently reviewing applicable treatment options.