MONTGOMERY & ANDREWS, PA

Southeast New Mexico

Environmental Consulting and Litigation Support

Montgomery & Andrews, PA retained Geolex, Inc. (Geolex) and Alberto A. Gutiérrez as principal in charge, on behalf of their client Duke Energy Field Services to assist in the defense of a groundwater contamination case involving pipeline leaks at a facility in southeast New Mexico.

This project involved the detailed investigation of historical operations of a gathering system and the associated wells and pipelines. In addition, this effort involved the analysis of historical aerial photography to evaluate the potential surface sources of contamination at the site. Geolex also performed groundwater modeling to evaluate the migration paths and potential sources for contamination observed in irrigation and domestic wells in the area. Geolex performed chemical fingerprinting of product and groundwater to evaluate and segregate the impacts associated with various different pipelines owned by separate companies that affected groundwater in the area. Through the modeling of suspected releases and known contamination, Geolex was able to determine that certain pipelines were more likely to have affected the contaminated wells than others. Based on this information and the detailed fingerprinting of product samples, the client was able to successfully settle this litigation.

Major Project Elements:

- Chemical fingerprinting of hydrocarbons
- Soil and groundwater contamination assessment
- Groundwater contamination fate & transport modeling
- Hydrogeology
- Petroleum exploration and production

