

*Thousands of successful  
environmental projects  
and three decades  
of serving the  
oil & gas industry*



## OIL FIELD AQUIFER CONTAMINATION SERVICES FOR THE OIL & GAS INDUSTRY

Leggette, Brashears & Graham, Inc. (LBG), and its LBG-Guyton Associates division, have a long history in investigating groundwater contamination associated with oil field operations. The firm has accumulated a broad range of expertise having worked on approximately 100 such projects. Aquifers impacted with produced water are often characterized by elevated salinities, dissolved petroleum hydrocarbons and/or the presence of radioactive/NORM species. Well blowouts or leaking production wells can introduce natural gas and its associated liquids into aquifers.

LBG is very experienced in the characterization of aquifers and differentiating between naturally occurring compounds and “contamination” introduced by oil and gas production. LBG uses its extensive hydrogeological skills in conjunction with detailed geochemical analyses determine whether specific sources of “contamination” can be identified and differentiated. Close cooperation is maintained by LBG-Guyton hydrogeologists with their clients and attorneys to ensure the necessary information is developed in an expeditious manner and properly presented in reports and/or expert testimony. LBG has represented their clients before regulatory agencies and within the courtroom.

### **LBG SERVICES RELATED TO OIL FIELD AQUIFER CONTAMINATION INCLUDE:**

- Identification of possible sources
- Geological and Hydrogeological Site Characterization
- Geochemical sampling, analysis and modeling
- Differentiation of Biogenic and Thermogenic Gasses
- Differentiation of Background and Produced Water Salinity
- Determination of effects of contamination on present groundwater supplies and prediction of future effects
- Preparation of expert reports and exhibits
- Expert witness testimony

