



Unconventional Natural Gas and Oil Exploration

As unconventional oil and gas exploration activity continues to expand across the United States, there is a concern over the potential environmental impact to groundwater and soil among both the general public and regulatory agencies. With increasing regulatory activity from Federal and State agencies, the long-term exposure for operators also becomes a critical focus for the industry.

Solutions to Oil and Gas Exploration and Production Chemical Testing Challenges

In 2008, TestAmerica gained experience through extensive support to oil and gas exploration and production in the Marcellus Shale Play. Since then, we have expanded our support to the industry in all of the unconventional regions of activity in the U.S. The delivery of quality, reliable data for our clients requires a keen understanding of the impact the exploration and production process has on environmental testing. Issues can stem from naturally occurring constituents of concern or chemicals introduced through the drilling process, as well as the high level of dissolved salts and turbidity from formation waters which, if not addressed appropriately, can negatively affect data results.

Environmental Responsibility

Since 2008, TestAmerica has been the industry leader assisting the oil and gas industry in this rapidly evolving energy segment. We have provided critical and timely environmental testing services for over 2 million tests associated with hydraulic fracturing, oil and gas exploration and production. TestAmerica is uniquely qualified and committed to providing turnkey support for Exploration and Production clients.

- **Comprehensive environmental testing support**
- **High quality and legally defensible data**
- **Fast and reliable turnaround times**
- **Secure access to real-time information via TotalAccess data portal**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica's Shale Sustainability Program is a turnkey solution providing environmental testing and associated tools to manage environmental risks throughout the life cycle of the well.

TestAmerica follows U.S. EPA, ASTM, Standard Methods and other approved methods in support of oil and gas exploration and production projects. TestAmerica is committed to consistently providing timely, accurate and complete data for the critical paths of all oil and gas exploration projects.



Water

Drilling and stimulation of oil or gas wells involves multiple operations, and the potential for a claim of impact to groundwater is a reality faced by the industry. TestAmerica routinely provides pre-drill analytical suites for all shale plays and state requirements.



Gas

Light hydrocarbon and dissolved gas testing is of particular importance both in ambient air monitoring and in water testing. TestAmerica supports the analysis through comparison of results to background or pre and post-drill levels.



Produced and Flowback Water

The composition of produced and flowback waters recovered from exploration and production activities introduces challenging problems in the analytical processes. TestAmerica possesses experience in handling the complex matrices encountered in produced waters and flow-back waters.



Drilling Residuals/Drill Cutting Disposal

Solid residuals from drilling operations must often be disposed of at an off-site approved disposal facility. Prior to disposal, the characterization of the residuals must be conducted including the potential for the presence of technologically enhanced naturally occurring radioactive materials (TENORM). TestAmerica can provide the determination of TENORM even in complex matrices.



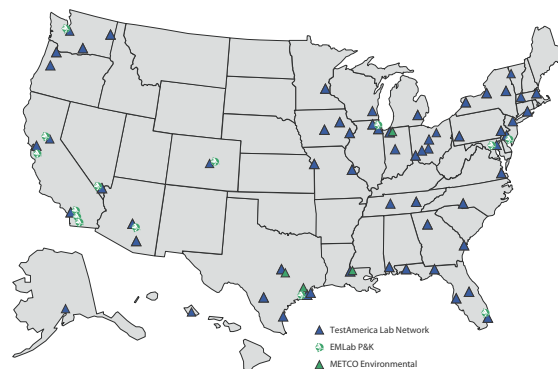
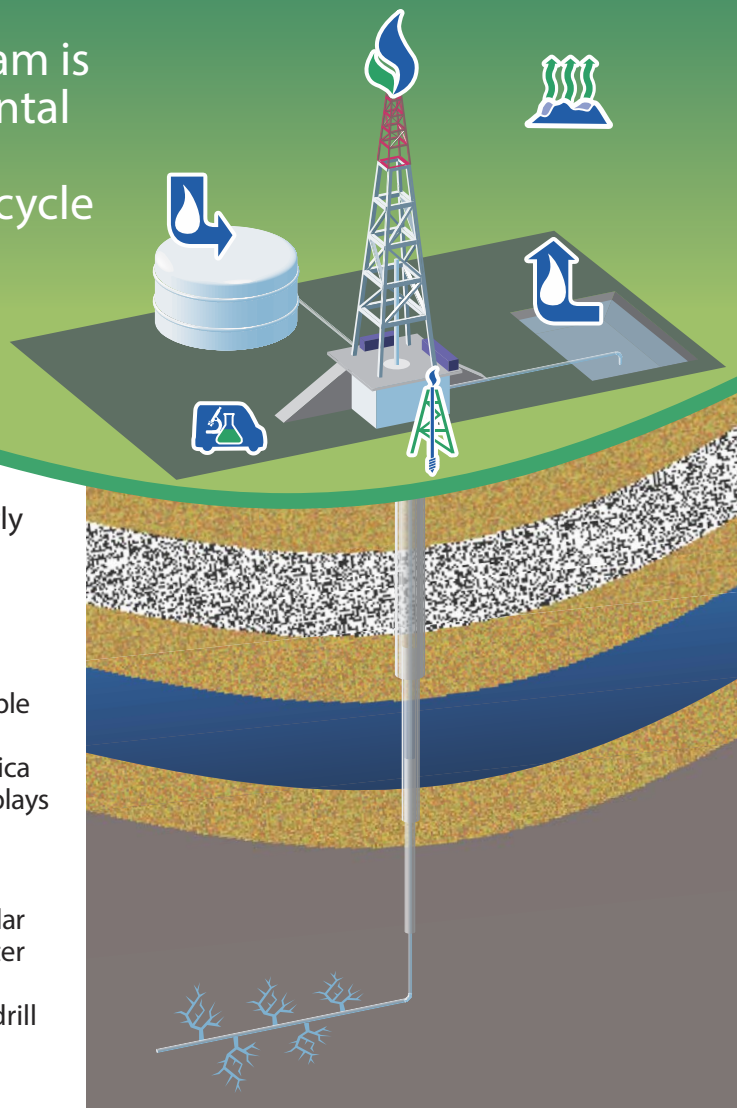
Environmental Testing Emergency

Concerns related to surface spills, well control, and lost containment of production and flowback water on the surface can be potential threats to both surface and groundwater resources. TestAmerica can provide emergency response services to any incident 24 hours a day, 7 days a week.



Ambient & Source Air Emissions

Addressing fugitive emissions and compressor engines are critical. TestAmerica has the capability to provide media and analyze samples containing high concentration of carbon compounds and a variety of Hazardous Air Pollutants.



For additional information on TestAmerica's Shale Sustainability Program, visit:
www.testamericainc.com

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