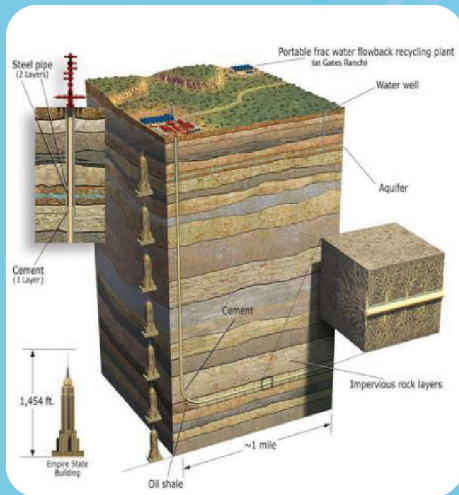


THE FACTS ABOUT HORIZONTAL DRILLING & HYDRAULIC FRACTURING



Deep Horizontal Wells

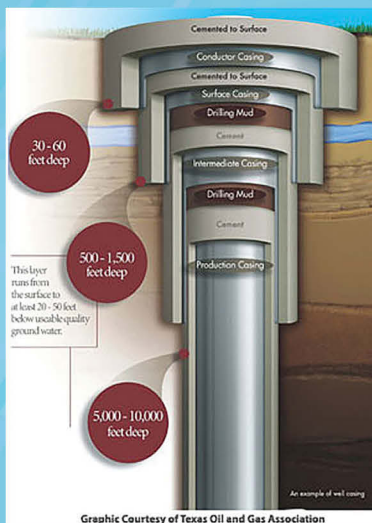
A deep-shale well in Kentucky will be nearly 10,000 feet deep. That's equal to eight Empire State Buildings stacked end to end, more than 1½ times deeper than the deepest part of the the Grand Canyon, and more than 30 football fields long.

Concrete and Steel Casing Protects Fresh Water Aquifers

"Well casing acts as a protective barrier between hydraulic fracturing fluid, oil and natural gas that flows through the well and the fresh water aquifers. The process involves sealing the drilling well bore in multiple layers of cylindrical steel pipes encased in multiple layers of cement.

The casing layers extend underground with the surface casing reaching anywhere from 50-1,500 feet below fresh water aquifers. Production casing can extend from 5,000-10,000 feet underground."

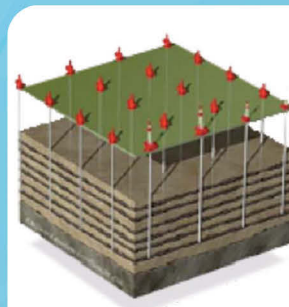
-- Groundwater Protection Council



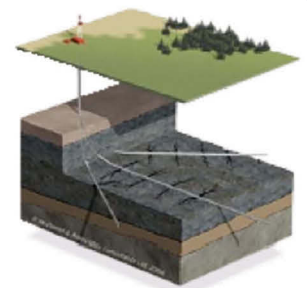
Graphic Courtesy of Texas Oil and Gas Association

Reduces Surface Disturbance

Horizontal drilling reduces surface disturbance. Prior to horizontal drilling, multiple wells were drilled to produce the same volume of oil and gas that today can be produced from one horizontal well.



Traditional Wells



Horizontal Drilling



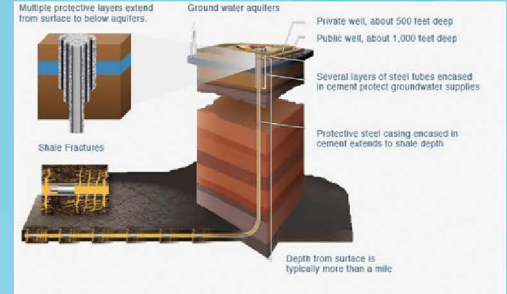
Every Well Site is Reclaimed

Drilling and fracturing a well takes a month to complete. After that, the well site is reclaimed, grass seed is sown, and nature takes its course.



What is Hydraulic Fracturing?

Hydraulic fracturing injects a high volume of water and fine sands to “fracture” a deep geological formation and enhance the amount of oil and natural gas produced from a horizontal well. Tens of thousands of wells have been hydraulically fractured in the United States in the last decade. The technology has moved the United States closer than ever to energy independence and greatly reduced our dependence on foreign oil.



Shale Development Drives Gas Prices below \$2

“Over the past week alone, gasoline prices in Ohio have fallen 14.4 cents per gallon, while prices nationwide fell at an average of 9.6 cents per gallon. The data is undeniable. There is simply no greater example of shale development improving the lives of working families.”

- Excerpts from Akron Beacon Journal 1/23/2015

For more information
please contact:

Kentucky Oil and Gas Association
502-226-1955
www.kyoilgas.org

Jobs and Economic Impact of the Kentucky Oil & Gas Industry



- Last year, the total value of oil and gas production in Kentucky was \$664 million.
- 63 Kentucky counties produced oil and 34 Kentucky counties produced natural gas.
- Approximately 98 percent of Kentucky’s natural gas production is in eastern Kentucky.
- Oil production in the state has grown by 21 percent in the last three years.
- Oil and natural gas contributes more than \$40 million in tax revenues to Kentucky’s state and local governments.



Kentucky’s oil and gas industry employs 3,200 Kentuckians, pays an average annual salary between \$50,000-\$70,000, and contributes \$1.1 billion to the state’s economy.

