

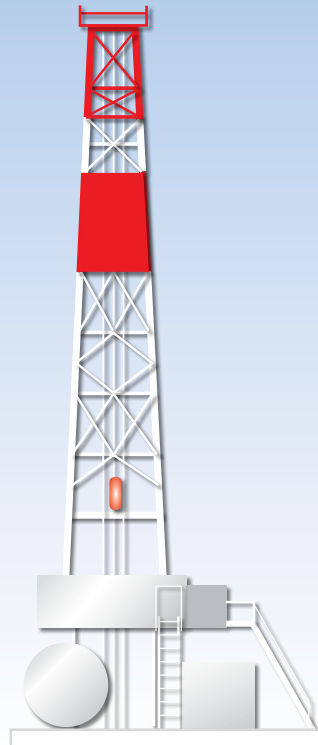
drilling for natural gas near your neighborhood



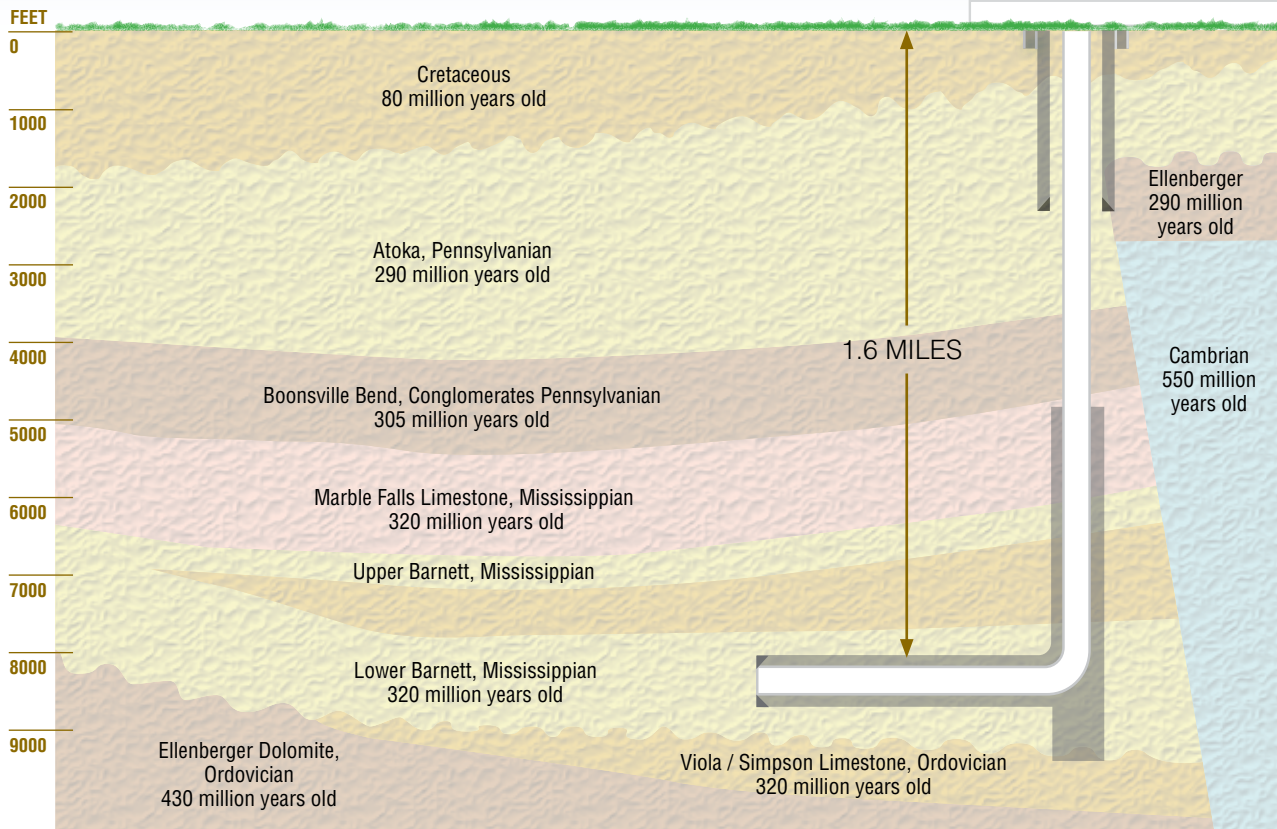
Why are energy companies drilling for natural gas near your neighborhood?

This region of Texas sits atop a geological formation called the Barnett Shale, which contains a large amount of natural gas.

The Barnett Shale is a valuable asset for America's energy future because natural gas, which is used to generate electricity and heat for homes and businesses, is a clean-burning fuel. And the fact that so much of it can be found in and around Dallas and Fort Worth means new jobs and new opportunities for local residents, as well as economic development for the region.



Fort Worth basin formations



In addition to operating a private natural gas pipeline in the Dallas Fort Worth area, Metroplex Barnett Shale LLC currently produces natural gas wells in the area, with plans to drill additional wells in the future.

Gas Well

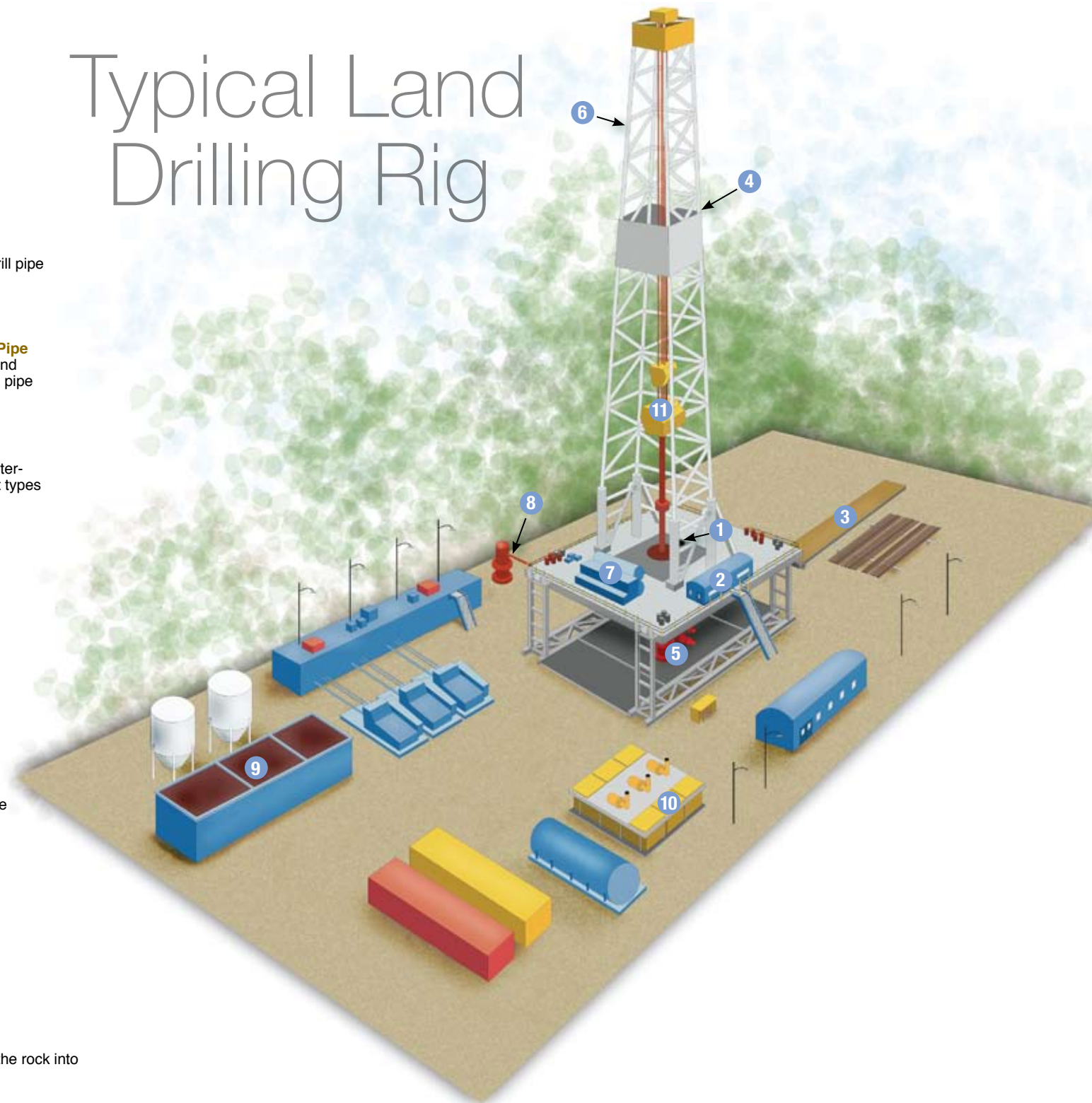
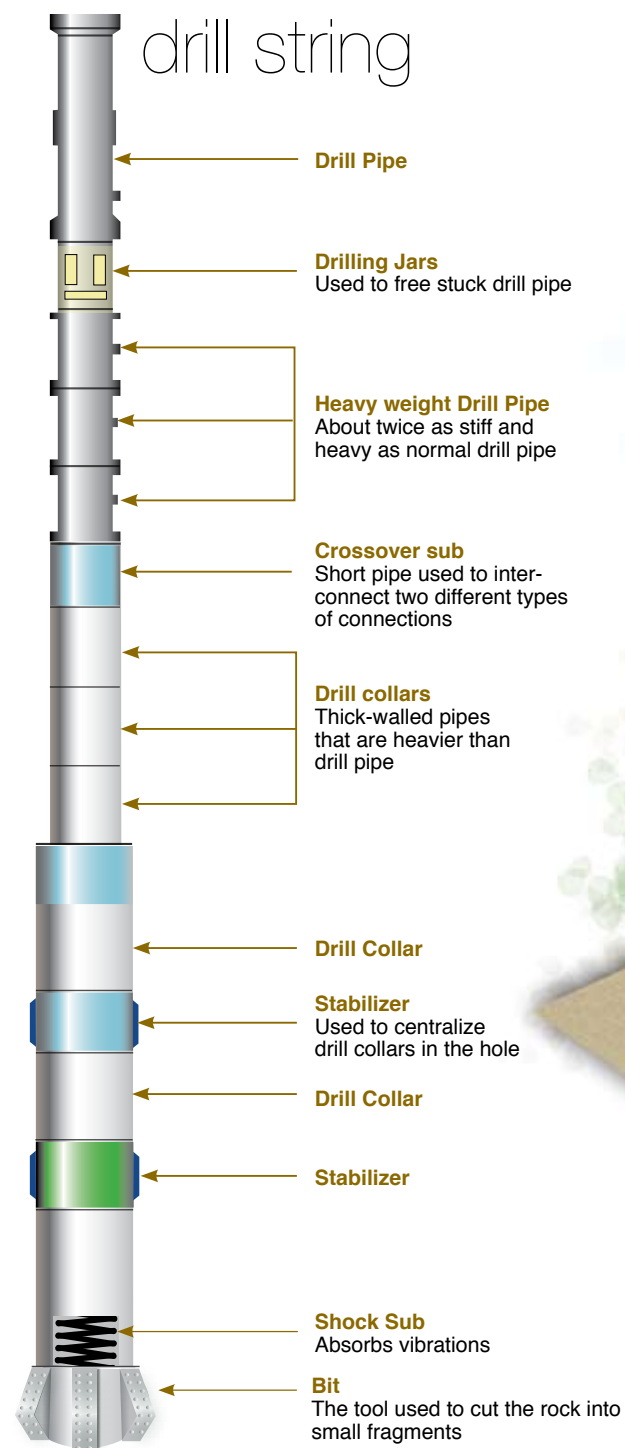
Gas Processing Plant

Natural Gas Companies

Consumers

Gas flow from well to consumer

Typical Land Drilling Rig



drilling zoo

- 1 Mousehole:** Opening in the rig floor used to temporarily hold the next section of drill pipe to be added to the drill string
- 2 Doghouse:** Small enclosure on the rig floor used as an office for the driller
- 3 Catwalk:** Ramp where pipe is laid to be lifted to rig floor
- 4 Monkeyboard:** Platform high in the derrick for derrickman to use while handling pipe

drilling equipment

- 5 Blowout Preventer (BOP):** Series of large valves installed at the wellhead to prevent the escape of hydrocarbons to the surface
- 6 Mast / Derrick:** Tall load-bearing structure used to manage the long sections of drill pipe or casing
- 7 Drawworks:** Hoisting mechanism with steel cables and pulley systems to raise and lower the drill string
- 8 Gas Flare:** An arrangement of piping and burners used to safely dispose of gas encountered while drilling
- 9 Mud Tanks:** Tanks where drilling mud is cleansed and treated
Drilling Fluid or Mud: Viscous liquid circulated through the wellbore to remove cuttings, cool the bit and control pressure
- 10 Generators:** Machines used to produce electricity to power the drilling rig
- 11 Top Drive:** Device with a built-in hydraulic motor to rotate the drill string



you may be wondering

What is a Shale?

Shale is a fine grained sedimentary rock.

How did gas form in the Barnett Shale?

The widely accepted theory maintains that remains of plants and animals fell to the ocean floor and were buried by sediments. As time passed, more layers were deposited and heat and pressure converted the organic material into hydrocarbons, in this case, natural gas.

When did this happen?

The Barnett Shale was deposited about 300 million years ago, even before dinosaurs roamed the earth, during the Late Mississippian Period.

How do we get to the gas?

The Barnett Shale formation lies approximately 8,700 feet below ground.

- A hole less than a foot in diameter is drilled using a top drive rig which rotates the drill string.
- A bit attached to the bottom of the drill string cuts the rock.
- The rock cuttings are carried back to the surface by circulating drilling mud.
- After the hole is drilled, special pipe called casing is installed and cemented in the well to protect ground water and prevent the drill hole from caving in.

How do we get the gas out of the ground?

The rock in the Barnett Shale has very low permeability, meaning natural gas cannot flow easily in the rock. Therefore, in order to produce gas, the rock must be fractured. Water is forced into the rock to form small cracks and fissures. Sand pumped with the water is used to hold the fractures open, enabling the gas to migrate to the surface and into the pipelines.

What happens to the gas?

The natural gas produced from the well is transported through underground pipelines. After separation and treatment in gas plants, the gas can generate electricity and be used by consumers right here in the Dallas Fort Worth area.

Where can I learn more?

If you have questions or would like to learn more, please contact Metroplex Barnett Shale LLC at 817-779-6770.

Metroplex Barnett Shale LLC is a subsidiary of Exxon Mobil Corporation. We are committed to operating in a safe, environmentally aware manner, and we strive to be a good corporate citizen in all our operations.

