Oil and gas wells in shale formations are drilled to reach far below the earth’s surface. These wells are built with redundant layers of steel casing that are cemented into place.

Operators pump a mixture of water, sand and chemicals down the well at high pressure to create paper-thin cracks in dense shale rock, freeing oil and natural gas trapped inside. This process is called hydraulic fracturing, or fracking for short.

When a well is complete, reclamation efforts reduce the work area to about the size of a two car garage. The well will supply energy to consumers for decades.