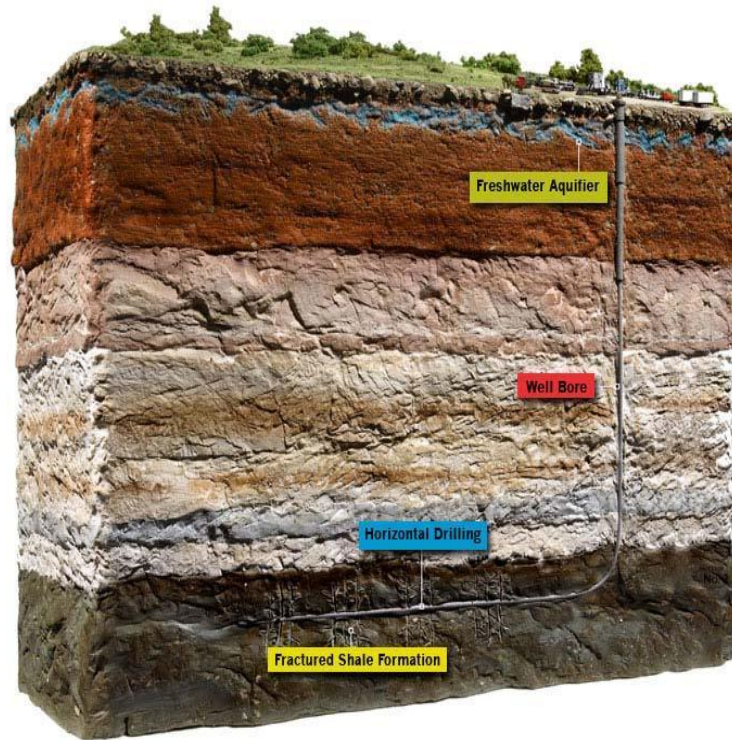


# Fracking

BEC 4th Week Energy Lesson



# What is fracking?



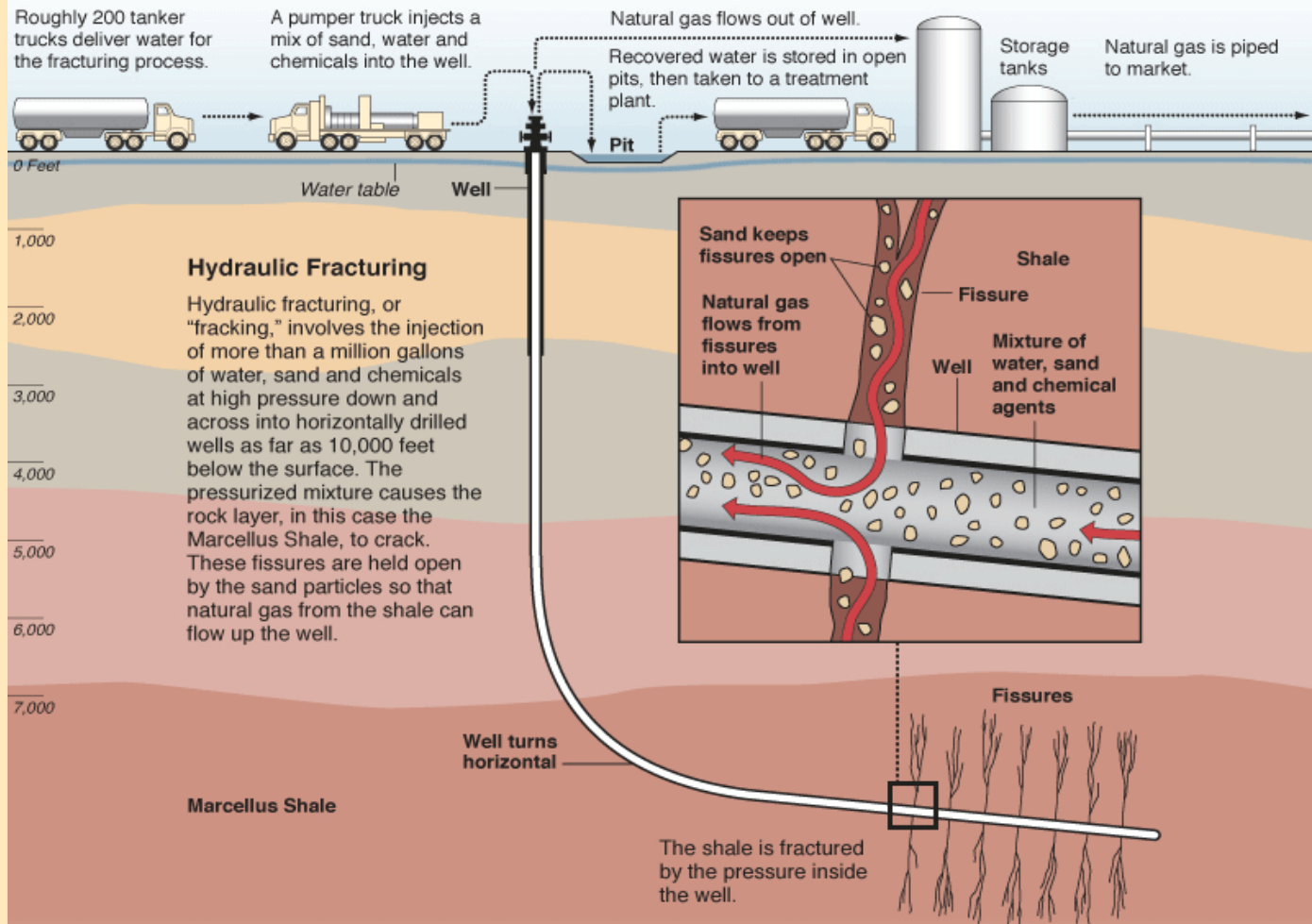
*Fracking (also known as Hydraulic Fracturing)* is extracting natural gas from shale rock layers deep within the earth.

Makes it possible to produce natural gas extraction in shale plays that were once unreachable with conventional technologies.

The U.S., has estimated 35,000 wells are processed with the hydraulic fracturing method; it's estimated that over one million wells have been hydraulically fractured since the first well in the late 1940s.

# How does fracking work?

<https://www.youtube.com/watch?v=LAXsTJd7VCA>



# Advantages of fracking

Generating electricity with natural gas is now approximately the same cost of generating electricity with coal.

Natural gas releases two to three times less carbon into the atmosphere than coal.

The improvements provided by natural gas can slow the progression of global warming.

Natural gas plants are also relatively cheap to build, and they can be scaled easily to meet energy demands.

# Disadvantages of fracking?

Studies have shown that fracking does cause small earthquakes, which can damage homes.

Fracking also uses a tremendous amount of water that contains chemicals and other environmentally damaging materials.

Runoff from fracking operations can cause tremendous environmental harm.

Fracking brings up a number of land rights issues.

# How does fracking affect Maryland?

“The Marcellus Shale is probably the best known gas basin in the nation. It’s an enormous underground rock formation that spans areas from New York to Virginia, including Maryland’s Garrett and Allegany counties. But that’s not all: Maryland sits atop not one, but five gas basins that the natural gas industry could frack.”-Chesapeake Climate Action Network

On August 1st, 2014, Maryland’s temporary protections against fracking will expire. When the executive order expires, Maryland will have no legal protections against fracking.

# Let's Debate!

The class will divide into two groups: for facturing and against facturing.

(student will get 10-12 minutes to prepare, materials will be given)

Each person from each group will have 60-90 second to state their position.

A winner will be picked from each debate to face off in the next round.

**Speakers will be judge on:**

*Delivery*

*Language*

*Content*

*Creativeness*