https://www.crossroadstoday.com/news/what-are-texas-earthquakes/article_942edf5e-649b-11ee-b229-4fcd1b457663.html

What are Texas Earthquakes?

Maclovio Perez - 25 News Now Oct 6, 2023

Texas Earthquakes

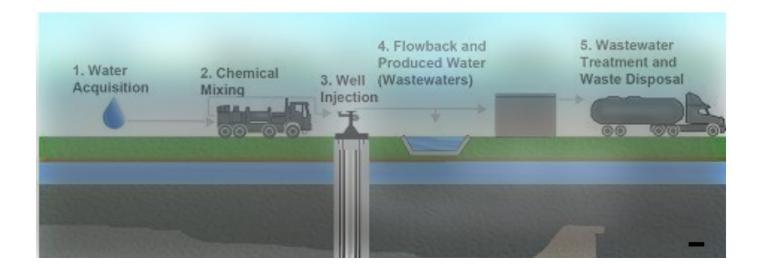
By Maclovio Perez

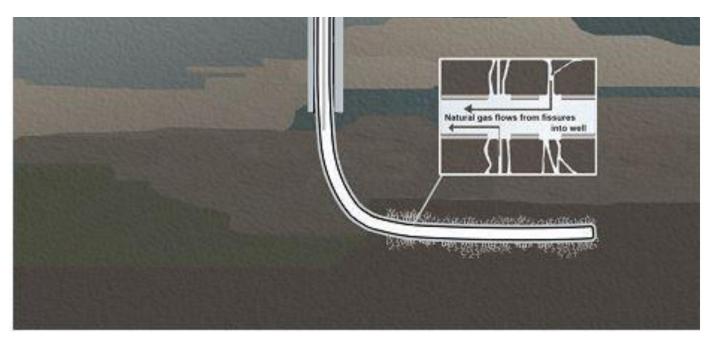
The recent talk of earthquakes in Texas requires a bit of clarification.

While there are millions of fissures and faults in the earth's crust, in order to get an honest-to-goodness earthquake, you need a fault line and plate tectonics. The crust of the earth is always moving, but where those plates collide is where earthquakes are common.

We now know that most of the "earthquakes" reported in Texas are not a natural occurrence but as a result of oil and gas production.

In the early 2000's hydraulic fracturing became the way to remove from the shale layers beneath the earth. As it says in the name, fracking requires some sort of fluid. The process involved injecting large quantities of water and other chemicals into a well bore. High pressure is applied to the fluid to spread the rock formation and release the trapped gas and oil. Notice the graphic.





maxuser

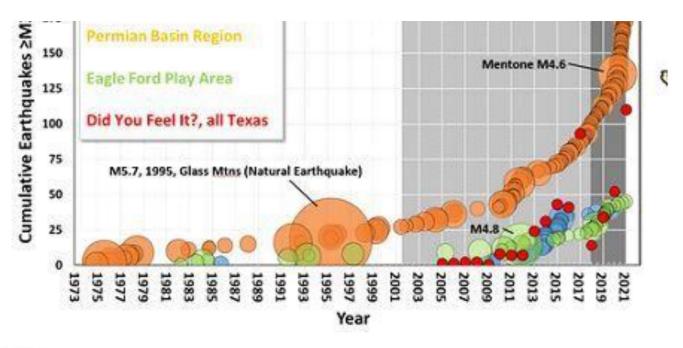
Upon release the combined fluids are siphoned out through the well head. The oil, gas and water are separated at the surface. But here is the rub, the "produced" fluids are full of toxic chemicals, so the fluids are usually pumped back into the ground.

The procedure creates fluids coming in and out of underground caverns that become stable after thousands of years. Eventually, there is a collapse of the rock formations, and we get a Texas "earthquake". The key phrase here is that the earthquake is being "induced" by man's activities.

Because the seismic shacking is reported by the U.S. Geological, people assume that it is a natural earthquake not something triggered by humans. On this graph you can see how the number of "quakes" has skyrocketed since the development of fracking.

We have been drilling for oil in Texas since the 1930's, but only recently have "earthquakes" become an issue. A bit of research will show that earthquakes have become more numerous since the development of hydraulic fracturing.





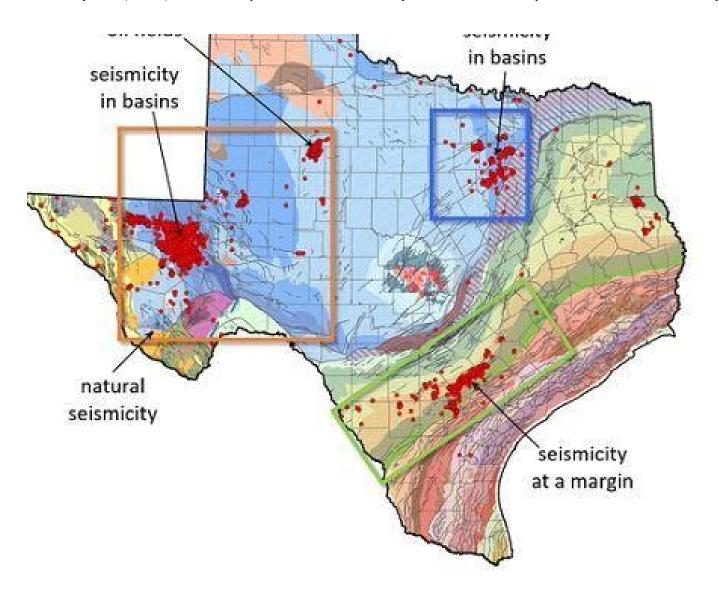
maxuser

Because of the concern about the seismic activity to buildings above ground the University of Texas at Austin created a research lab call the "Bureau of Economic Geology". It is funded by the oil industry, and they do an enormous amount of work tracking all the shaking going on. The lab has a section called "The Center for Injection and Seismicity" which developed the TEXNET, an extensive network of seismographs to monitor the issue. The project will provide the necessary information for the state and industry to make plans to mitigate the problem. In Oklahoma, research like this had already let to rules and regulations on the amount of fluid that can be injected into the ground.

In 2022, Texas recorded more than 220 earthquakes of 3.0 magnitude or higher. That is the agreed level of magnitude where you can feel the shaking on the surface. That number is way up from the 26 quakes that were reported in 2017. That is when the University started monitoring the problem.

In this graphic you can see the correlation between where the drilling occurs and where the "earthquakes" occur.





maxuser

An earthquake of 2.0 to 3.0 magnitude can be felt at the surface but will not usually cause any damage. A shaker in the 4.0 to 5.0 will very likely cause damage at the surface.

The problem here is liability. If a Texas earthquake occurs and your home's foundation cracks in half, who is on the hook?

To access the TEX-NET monitoring system go to: https://www.beg.utexas.edu/texnet-cisr/texnet/earthquake-catalog

COPYRIGHT 2023 BY CROSSROADS TODAY. ALL RIGHTS RESERVED. THIS MATERIAL MAY NOT BE PUBLISHED, BROADCAST, REWRITTEN OR REDISTRIBUTED.

4 of 5 12/12/2023, 1:45 PM

Maclovio Perez

Chief Meteorologist