

## video transcript

## microseismic monitoring

## human energy\*

Today, Chevron is using surface, near-surface, and downhole real-time monitoring of stimulated rock to more effectively identify the productive areas in unconventional shale. Here we see geophones installed across a field.

As reservoir rock breaks during the hydraulic fracturing process, it makes a popping sound. That sound is detected and recorded by the geophones to locate its origin – the initial pop location.

The monitoring technology uses the pop locations to create a map of the fractures in the reservoir rock. The results of the mapping help operators make better decisions about well spacing, that can save money and reduce our environmental footprint.

Another benefit of the technology is that it provides better insight into the hydraulic fracturing process to ensure that it is being done effectively and safely.