

video transcript

horizontal steam injection in action

human energy*

Voiceover

Our engineers are using horizontal steam injection to safely and cost-effectively increase recovery from new and existing reservoirs. First, we drill wells down hundreds of feet before turning the bit horizontally to drill out thousands of feet in the targeted production zone.

Once the well is complete, an injection well pumps steam into the reservoir. As the injected steam makes contact with oil, heat is transferred to the cold heavy oil, reducing its viscosity and making it flow more easily to the producer well.

This approach efficiently recovers more resources with a smaller environmental footprint than drilling multiple vertical injection wells. It also enables Chevron to develop thin reservoirs, lowers costs by eliminating the need for multiple vertical wells and increases oil response with higher injection rates.