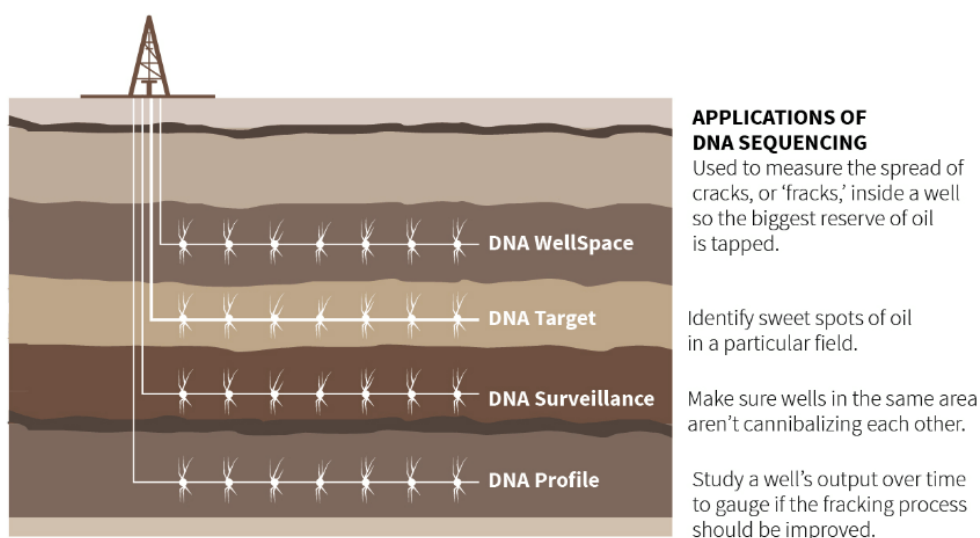


DNA 'rock science' helps wring more crude oil from shale rock, boosting supply

A small group of U.S. oil producers has been trying to exploit advances in DNA science to wring more crude from shale rock, as the domestic energy industry keeps pushing relentlessly to cut costs and compete with the world's top exporters.

The technique involves testing DNA extracts from microbes found in rock samples and comparing them to DNA extracted from oil. Similarities or differences can pinpoint areas with the biggest potential. The process can help cut the time needed to begin pumping, shaving production costs as much as 10 percent, said Ajay Kshatriya, chief executive and co-founder of Biota Technology, the company that developed this application of DNA science for use in oilfields.



Source: Biota

The information can help drillers avoid missteps that prevent maximum production, such as applying insufficient pressure to reach oil trapped in rocks, or drilling wells too closely together, Kshatriya said.

"I don't doubt that with enough information (Biota) could find a signature, a DNA fingerprint, of microbial genomes that can substantially improve the accuracy and speed of a number of diagnostic applications in the oil industry," said Preethi Gunaratne, a professor of biology and chemistry at the University of Houston.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [The DNA of oil wells: U.S. shale enlists genetics to boost output](#)

For more background on the Genetic Literacy Project, read [GLP on Wikipedia](#)