

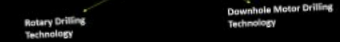
## Types of drilling



## Drilling Methods

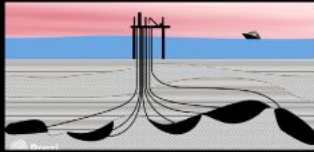
- 1) Method of Typical Routes Multilateral drilling
- 2) Directional deflection of wells
- 3) Well deflection control through the use of various drill tool compounds

## Drilling technology



## Directional drilling

A method of constructing wells in which they have a complex spatial profile, including a vertical upper interval, followed by sections with specified deviations from the vertical



## History

**Directional Drilling Challenges**  
 United States  
 First application: 1934, Corcoran, Texas  
 Founders: John Eastman, Roman Hines, and George Felling

**USSR**  
 First application: onshore - 1941, Bishkebat, offshore - 1946-1947, Caspian Sea  
 Founder: Agha Neimatullah

Ara Hedwarynne



## Directional Drilling Challenges

Efficient development of oil fields with low reservoir properties of the productive formation, horizontal orientation  
 Significant reduction in the number of wells required for oil and gas field development  
 Extraction of high viscosity oil from great depths, construction of geothermal plants in areas with low temperatures of rock layers

## Conclusion

Despite the numerous disadvantages of this method, it is used by some companies due to its advantages, according to which we use this technique not only as a method of drilling, but also as a way to prevent accidents, as well as for the study of hard-to-reach deposits

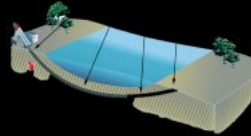
## Disadvantages

1. The Need for Frequent Stops and Explorations
2. Slow Rock Drilling
3. The need for more sophisticated measurement tools
4. Complicating the prevention of sand ingress into the well

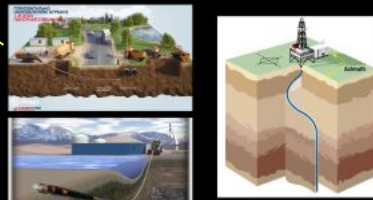
## Advantages

1. Possibility of drilling into deposits (deposits under cities, lakes, etc.)
2. Possibility of cluster drilling with one rig
3. Creation of killing wells in the prevention of accidents: disadvantages

## Directional drilling

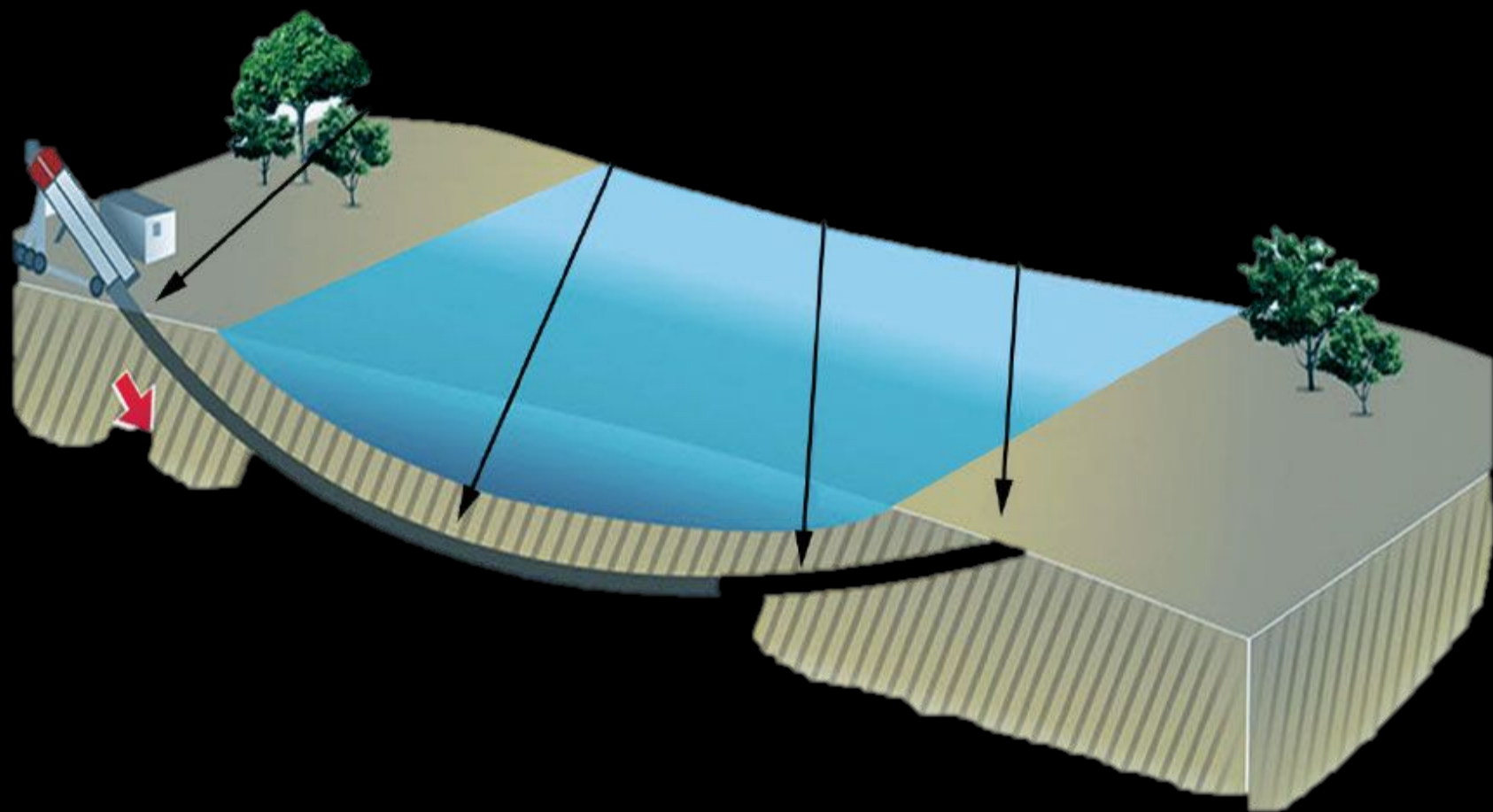


## Applications



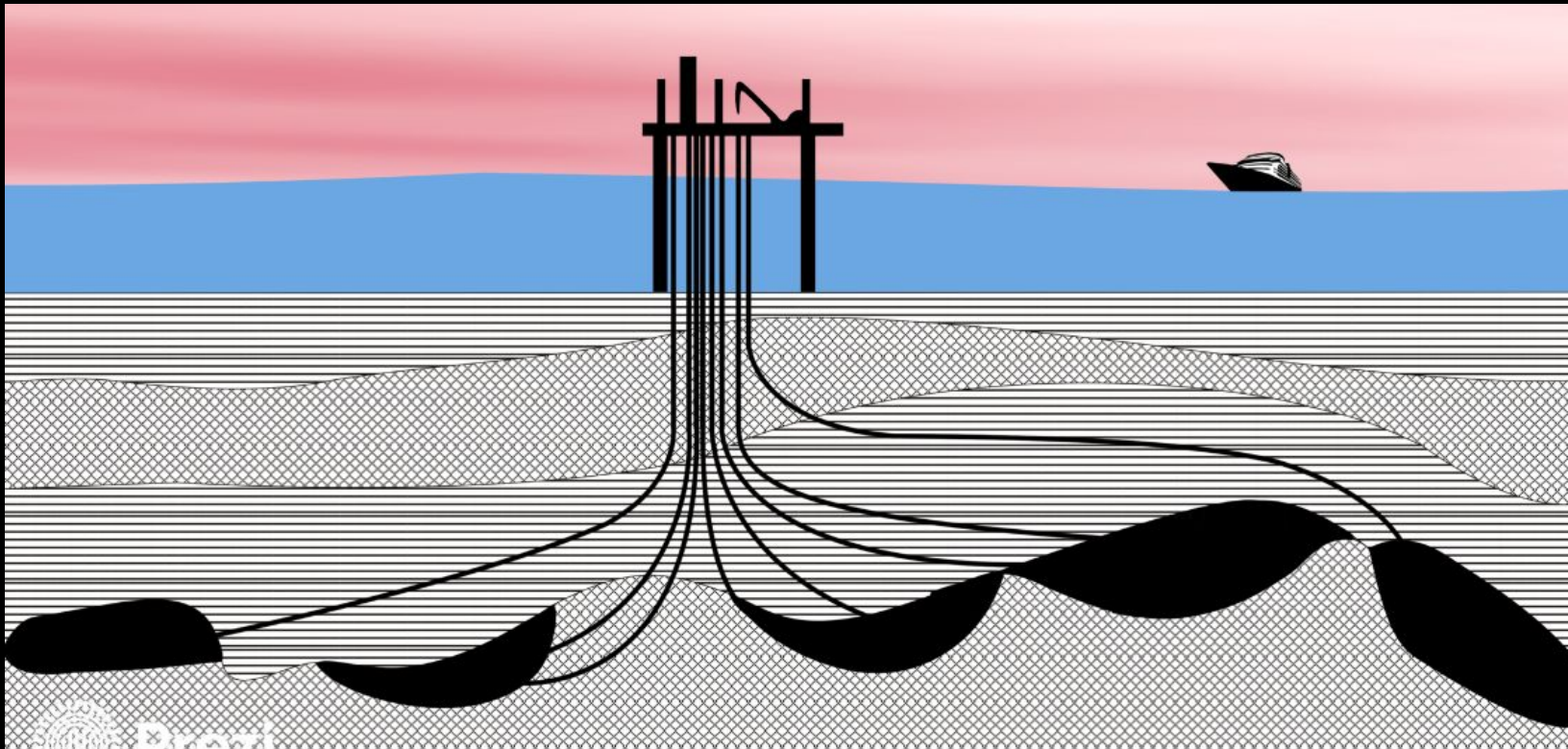
## Company





# Directional drilling

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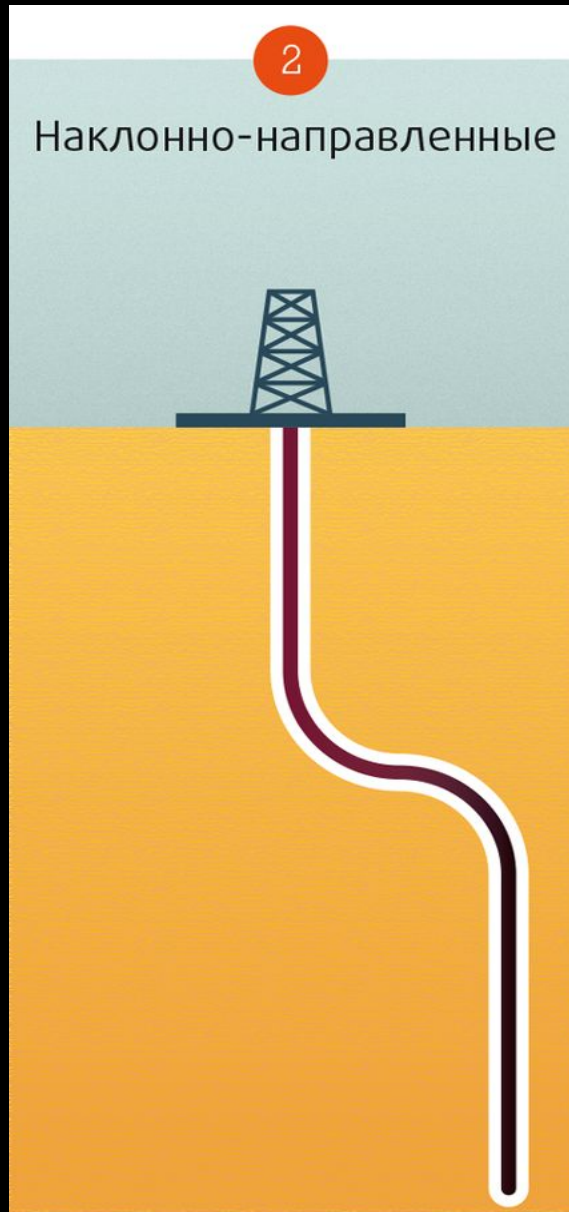
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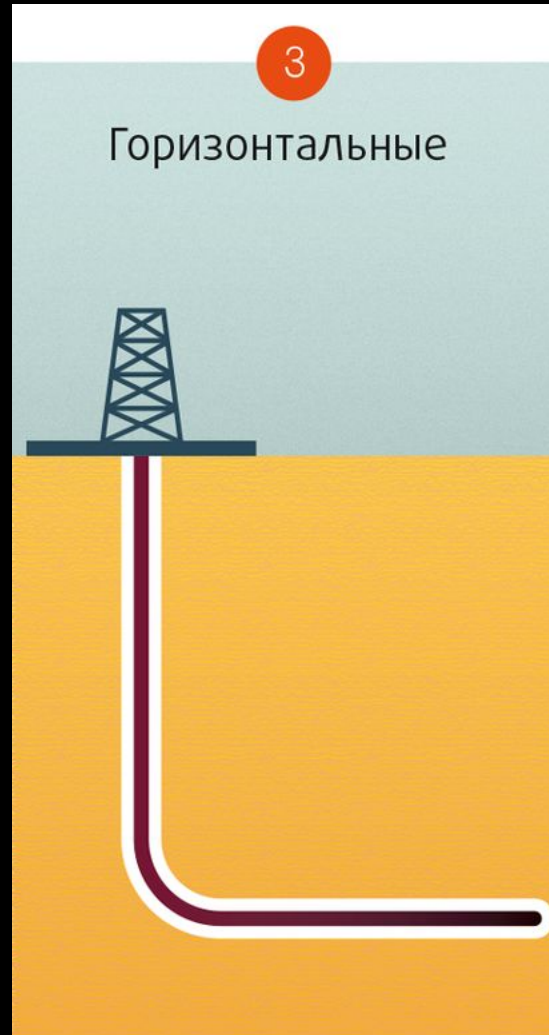


# Types of drilling

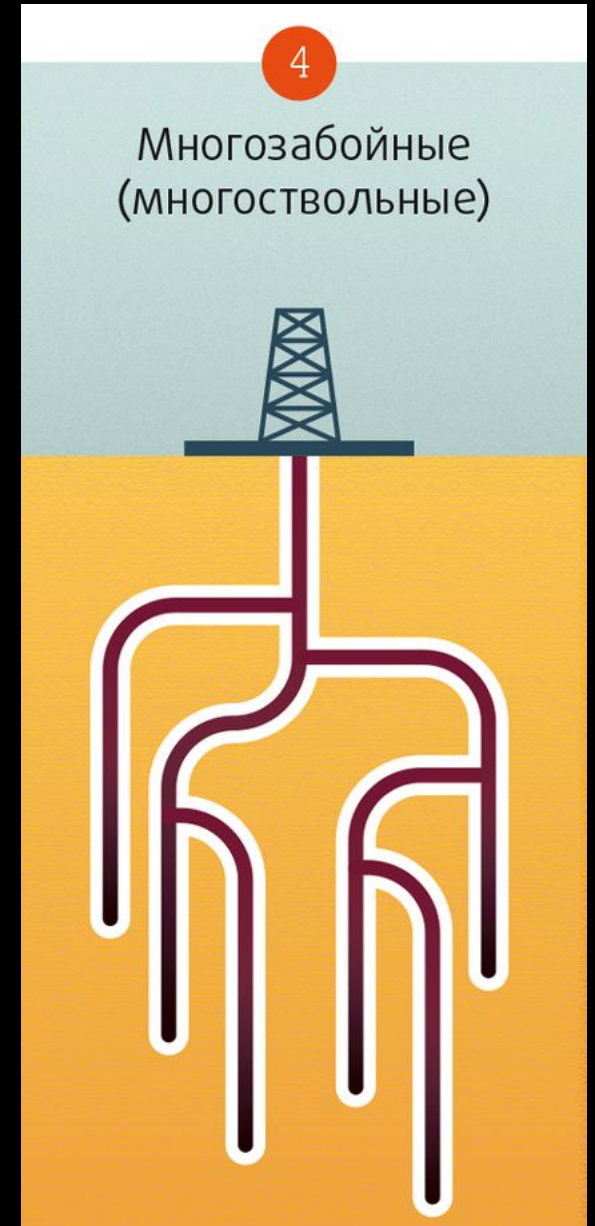
Slant drilling



Horizontal drilling



Multilateral drilling



# Drilling Methods

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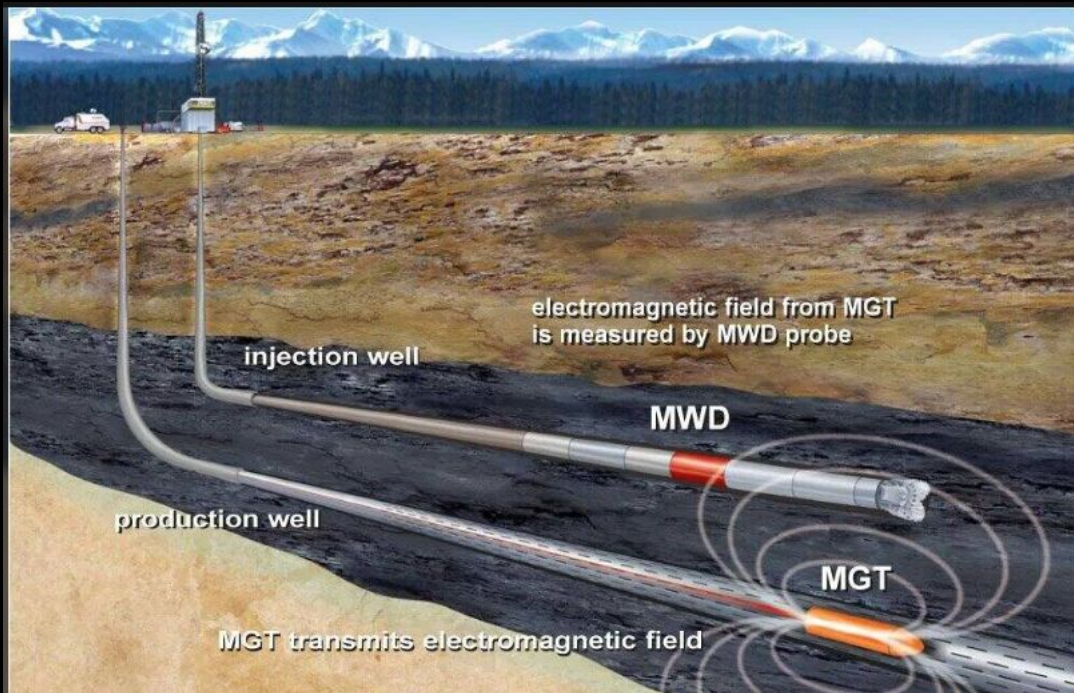
# Drilling technology



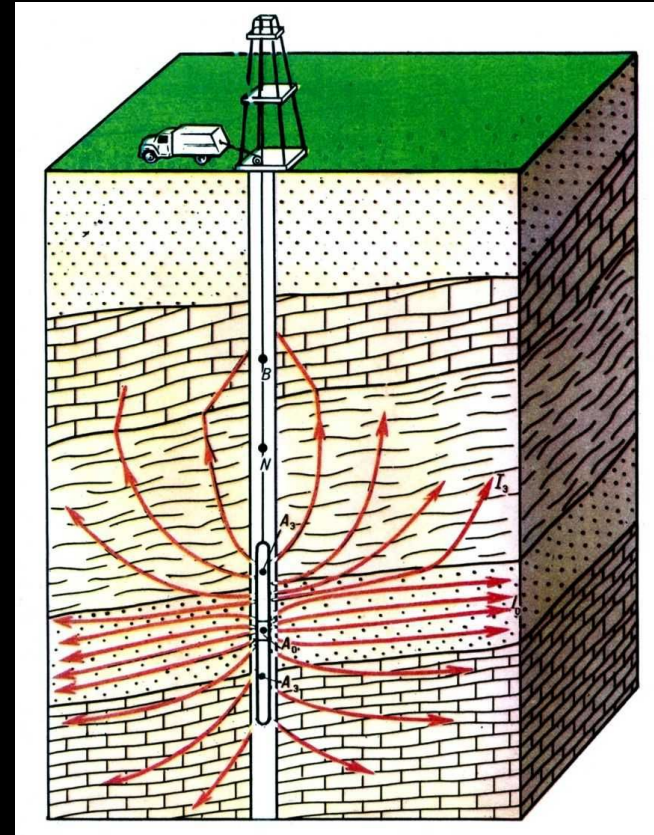


# Grading system directional wells

Telemetry



Inclinometry



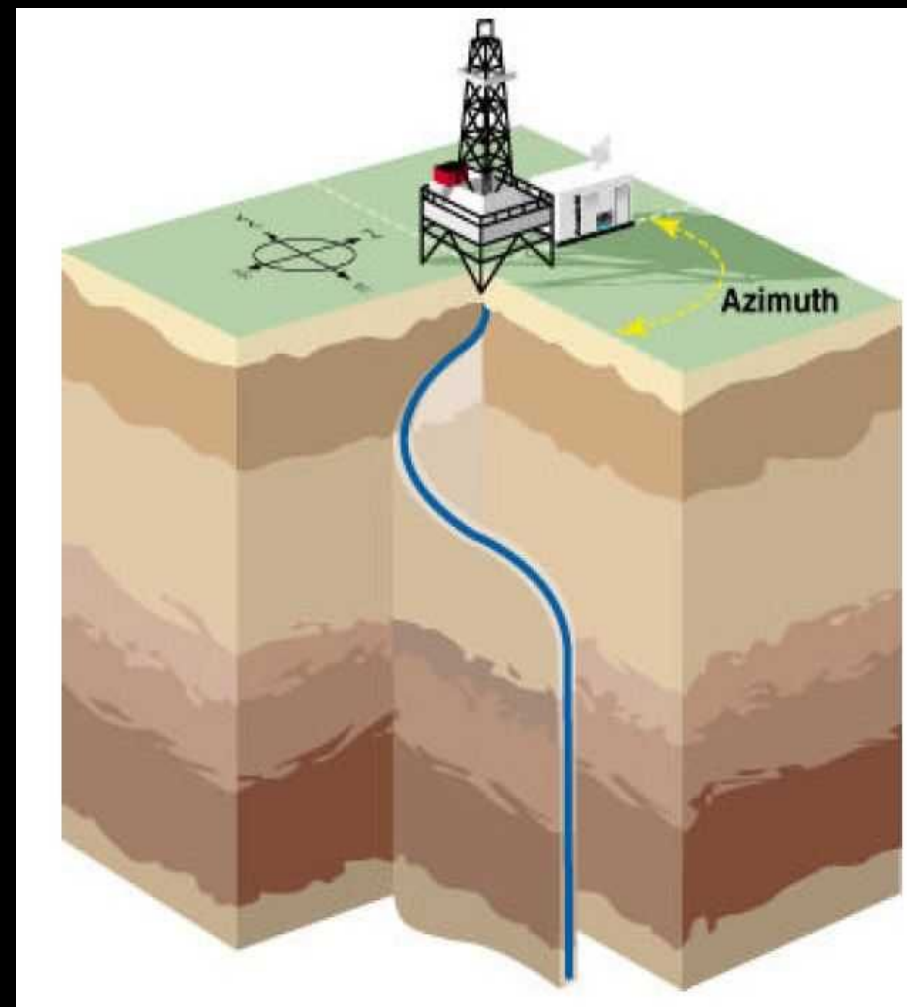
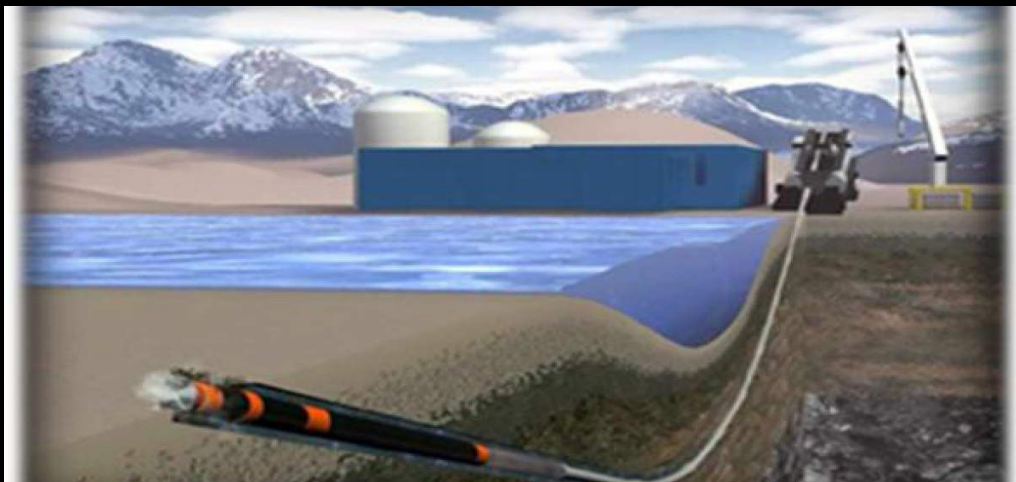
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# Company





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