

Pecha Kucha Drilling Terms and Definitions: Deviated Well

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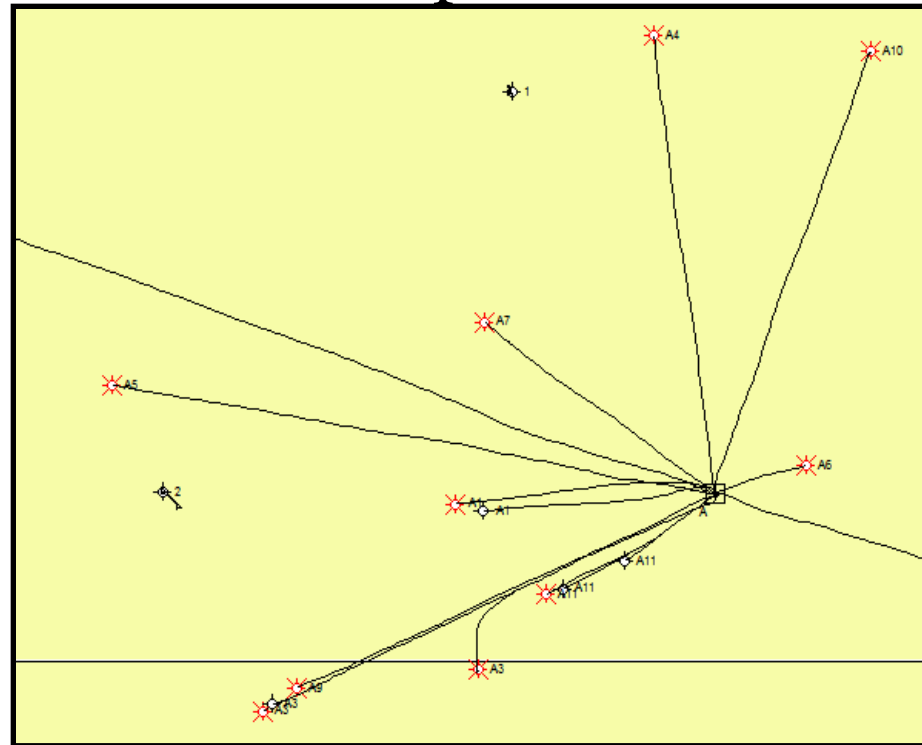
Deviated Well

- ❑ Definition: A well purposely deviated from the vertical, using controlled angles to reach an objective location other than directly below the surface location

Deviated Well

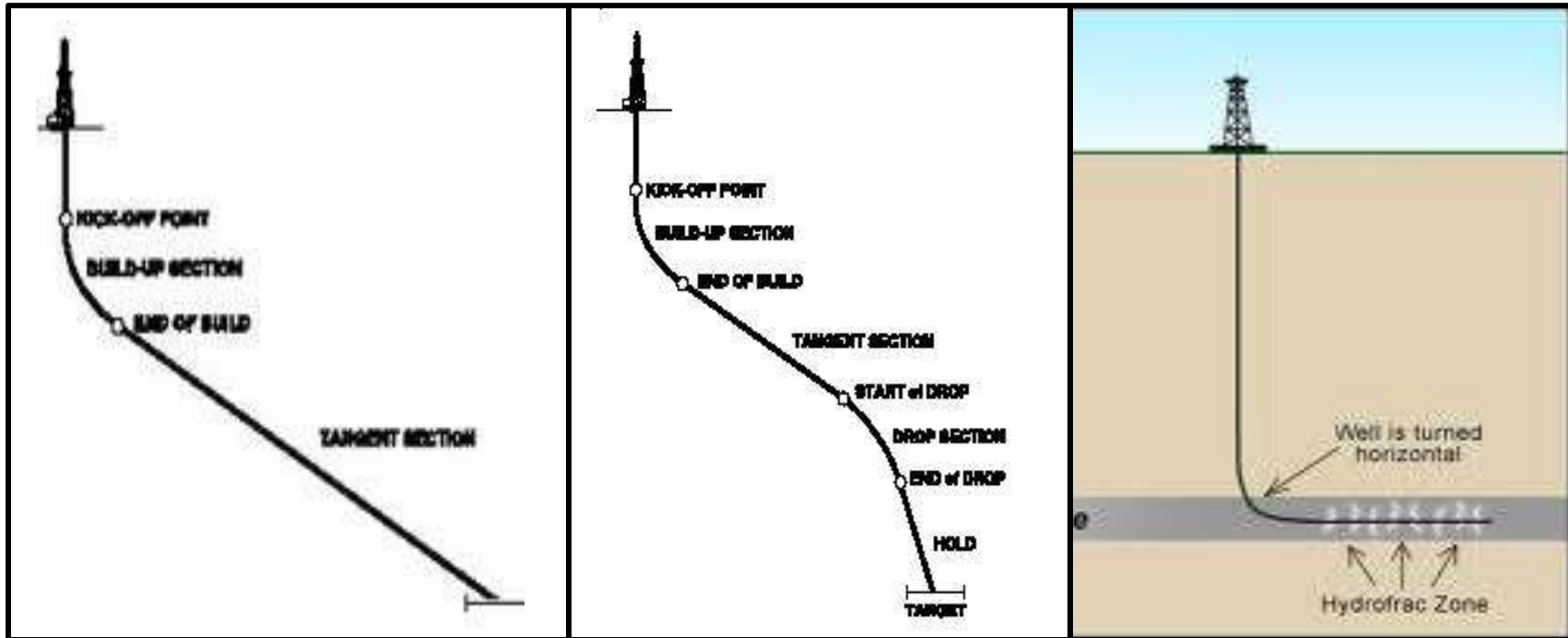
□ Reasons to drill a Deviated Well:

- Surface above the objective is not suitable for a drilling rig or production facilities
- Maximize the amount of formation exposed to the wellbore
- Able to reduce the amount of production installations required



Deviated Well

Types of Wells



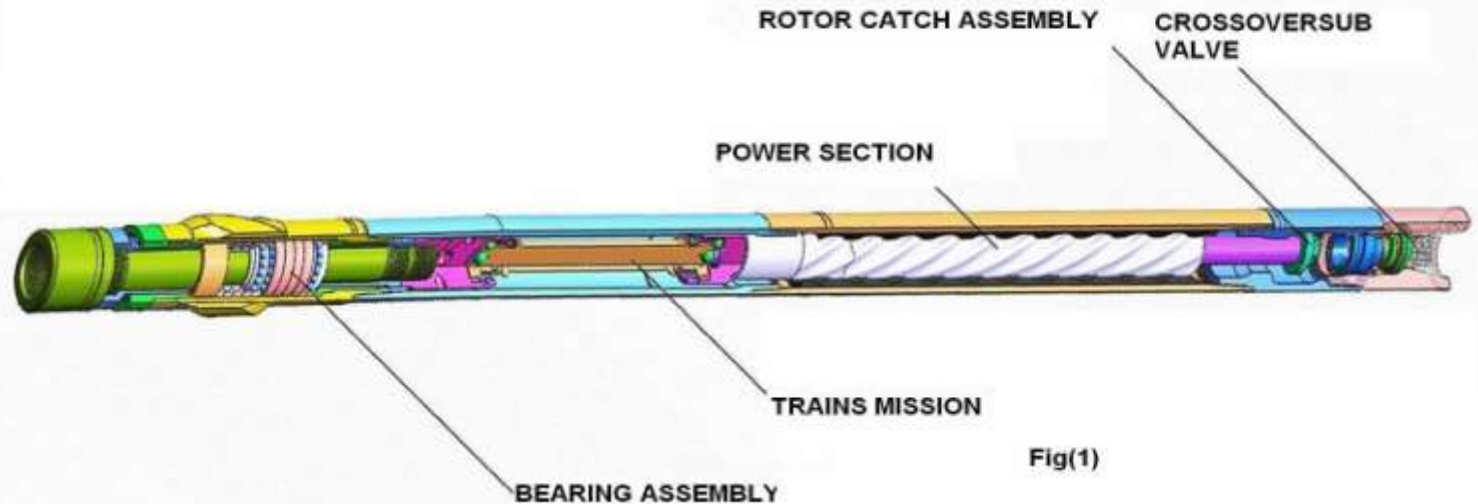
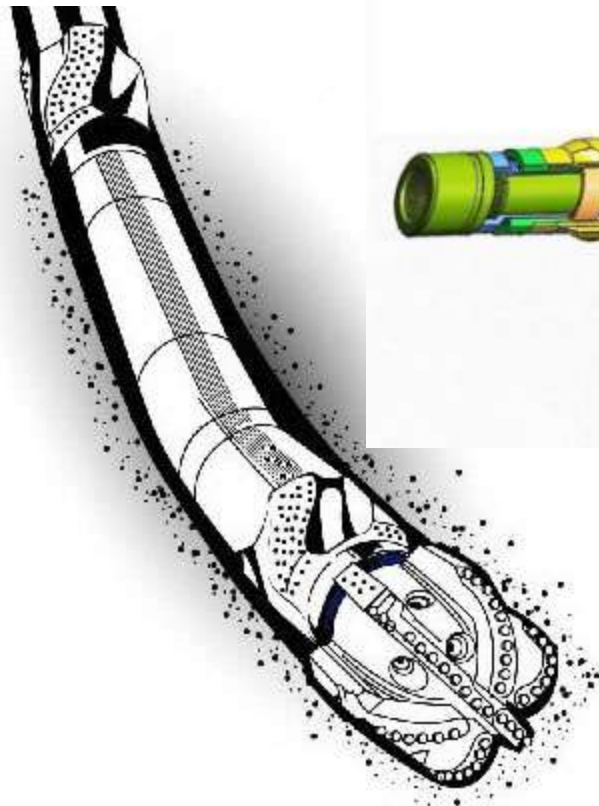
Build and Hold

Build and Drop

Horizontal

Deviated Well

- ❑ Equipment Utilized to drill Deviated Wells
 - Mud Motor



Deviated Well

□ Equipment Utilized to drill Deviated Wells

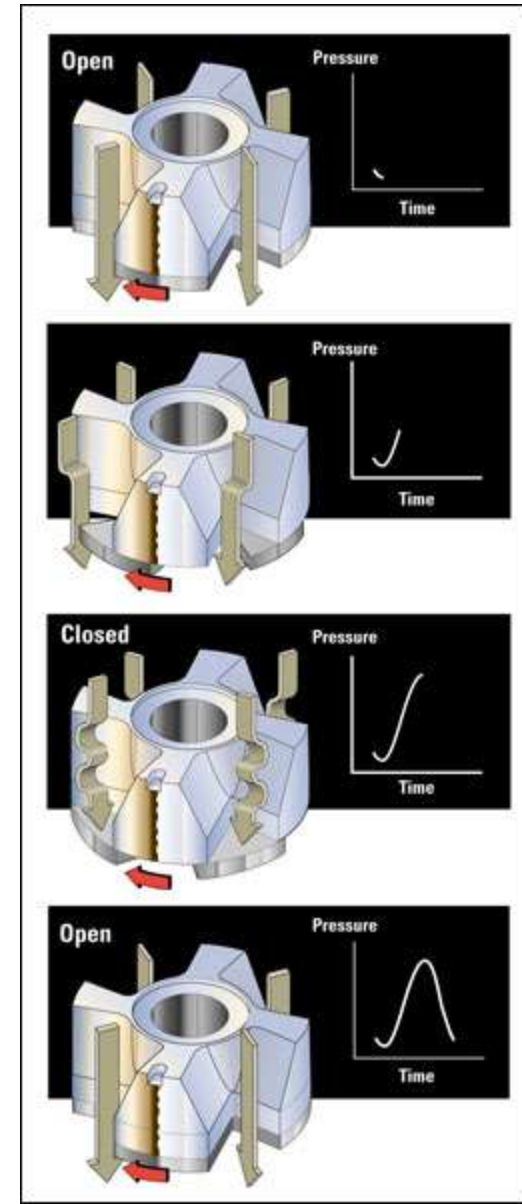
- Measurement While Drilling
- Logging While Drilling



Deviated Well

□ Methods to Transfer Data from the MWD to the Surface

- Mud Pulse Telemetry
- Wired Drillpipe
- Electromagnetic Telemetry



Deviated Well

Questions?

Pecha Kucha Drilling Terms and Definitions:

Relief Well Intercept

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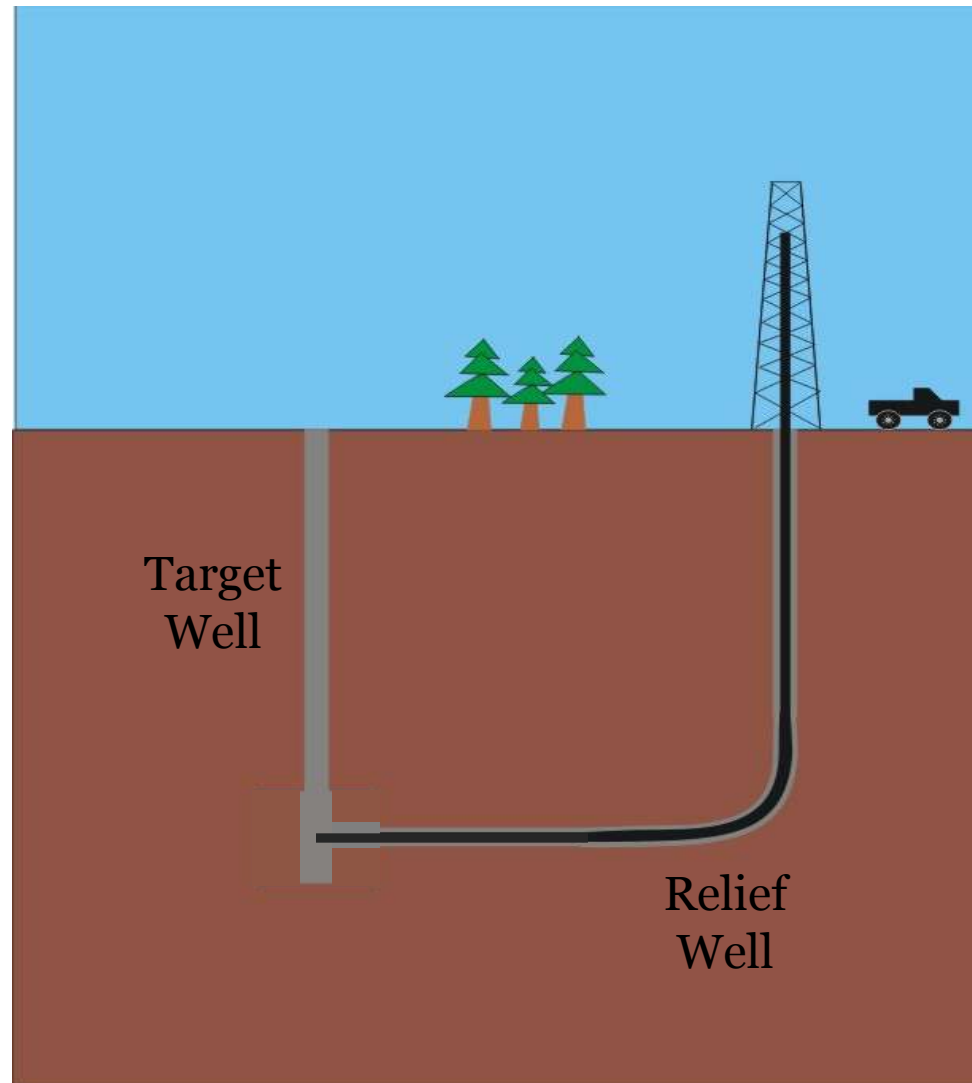
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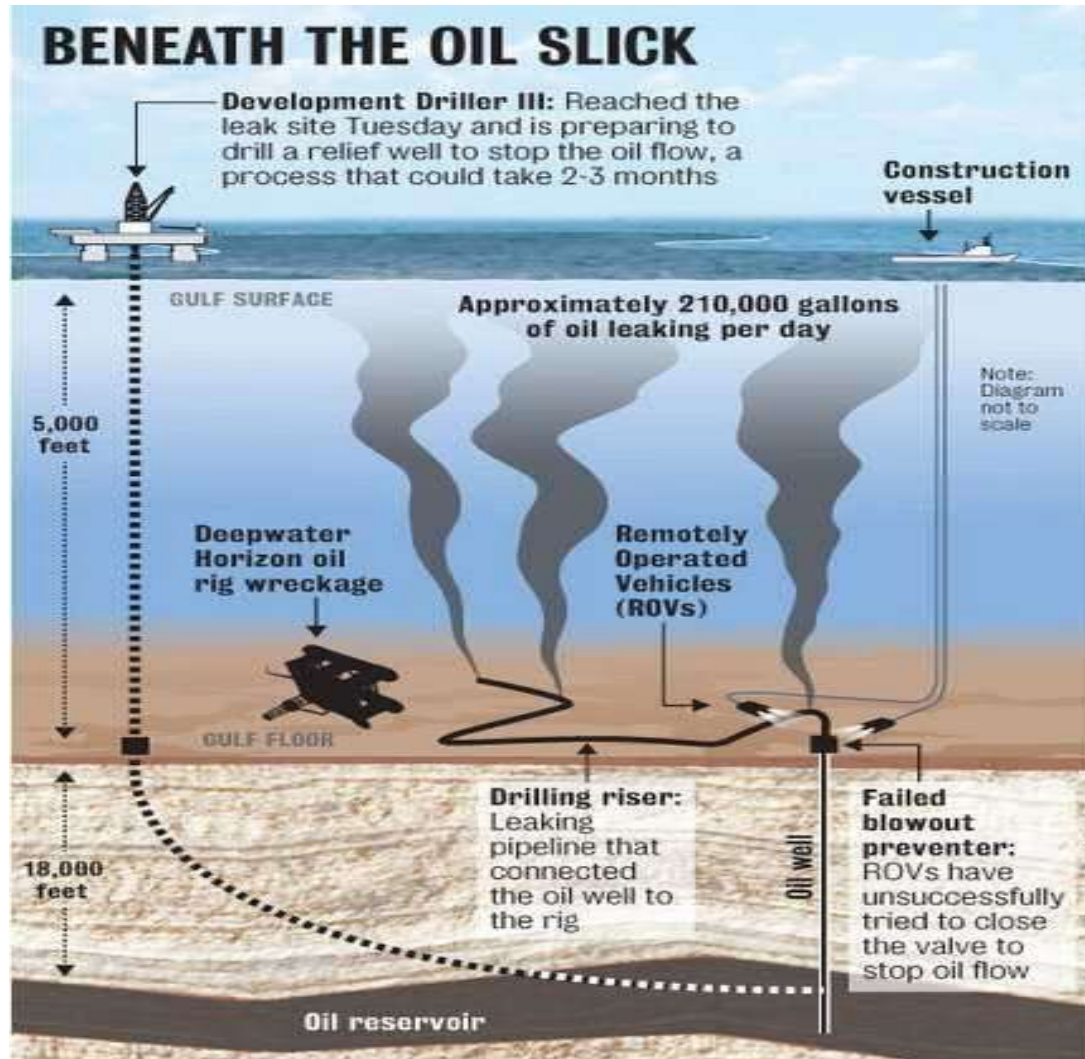
Relief Well Intercept

- Definition: The point where a relief well intersects the target well.

Relief Well Intercept



Relief Well Intercept



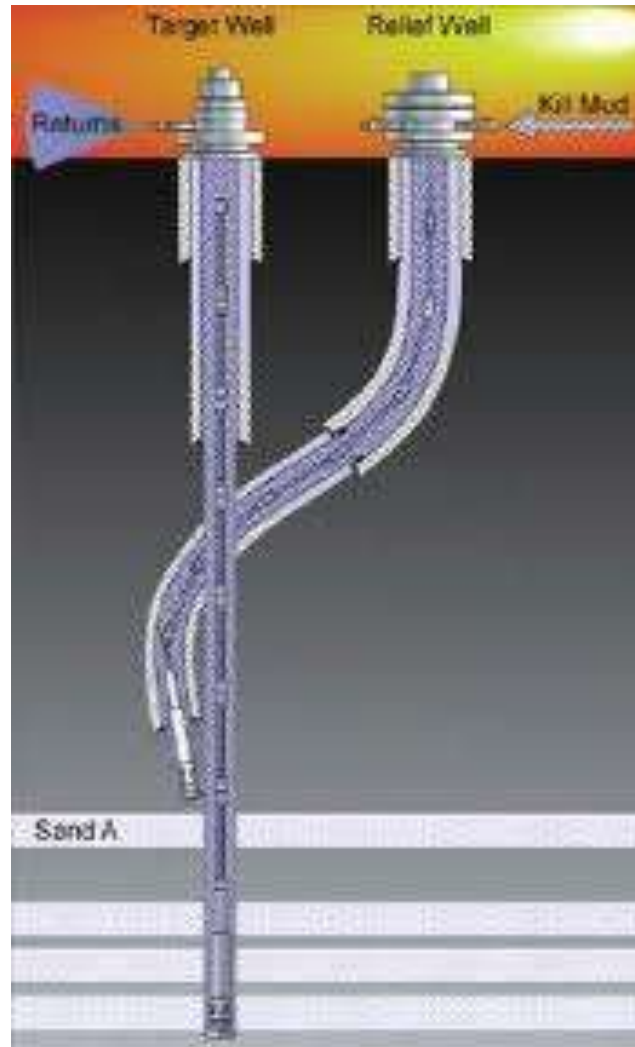
Source: U.S. Coast Guard, NOAA, BP, Transocean

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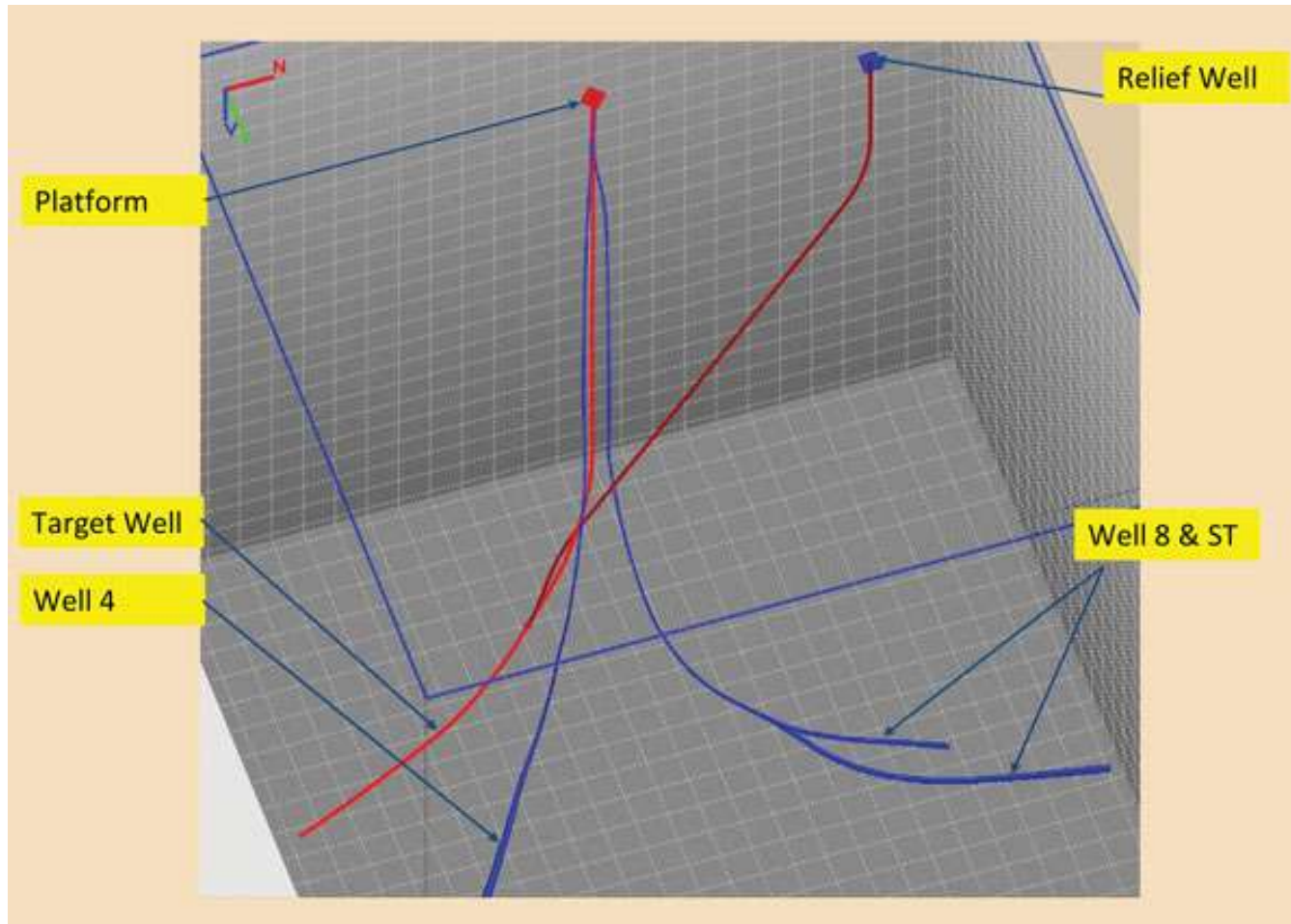
Relief Well Intercept

- ❑ A relief well is basically a build and drop deviated well
- ❑ The lower portion of the relief well is brought close to parallel with the target well before the intercept is made
- ❑ The relief well is often times drilled past the target well and then curved back toward the target well (creating a spiral around the well) to allow the target well to be triangulated

Relief Well Intercept

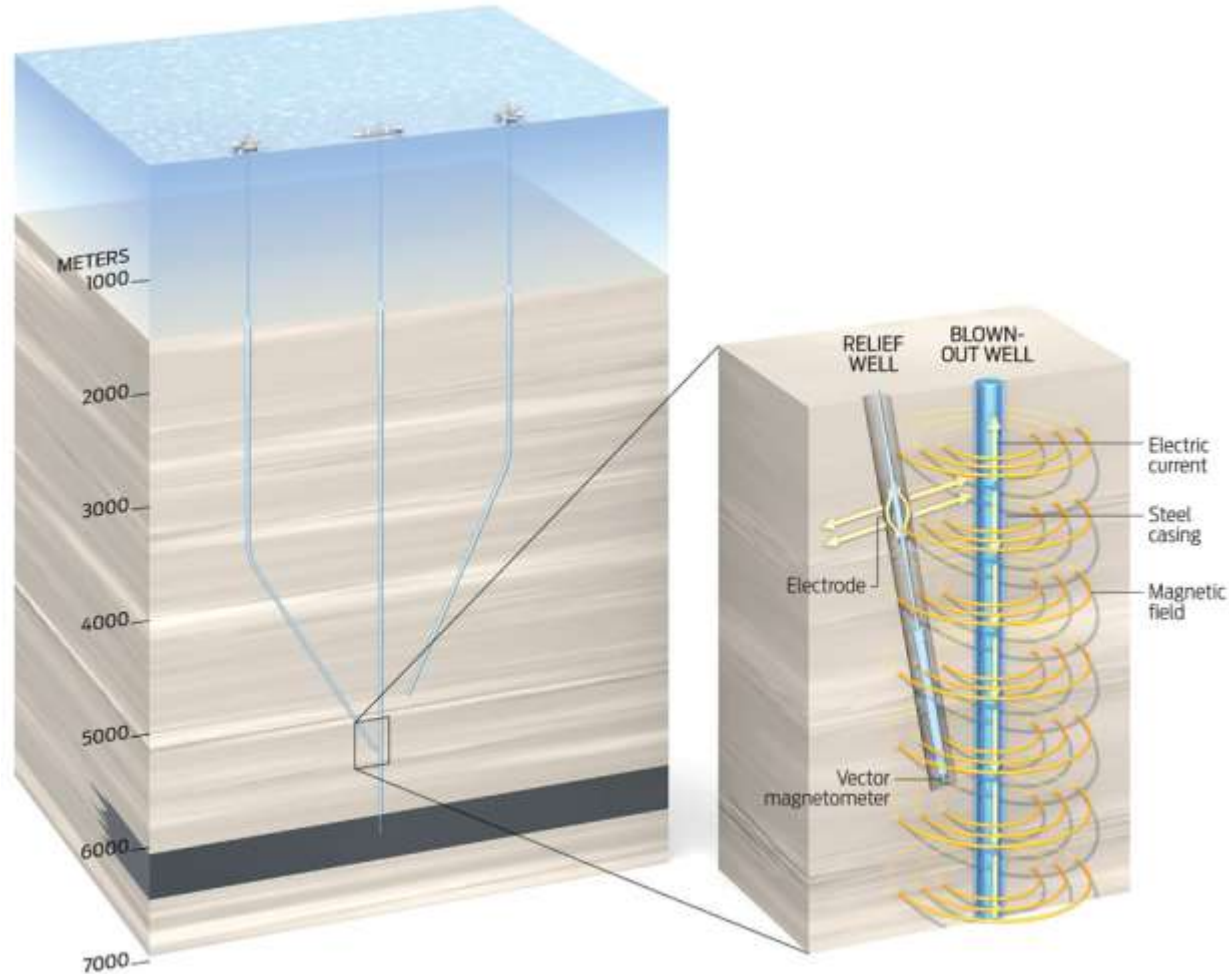


Relief Well Intercept



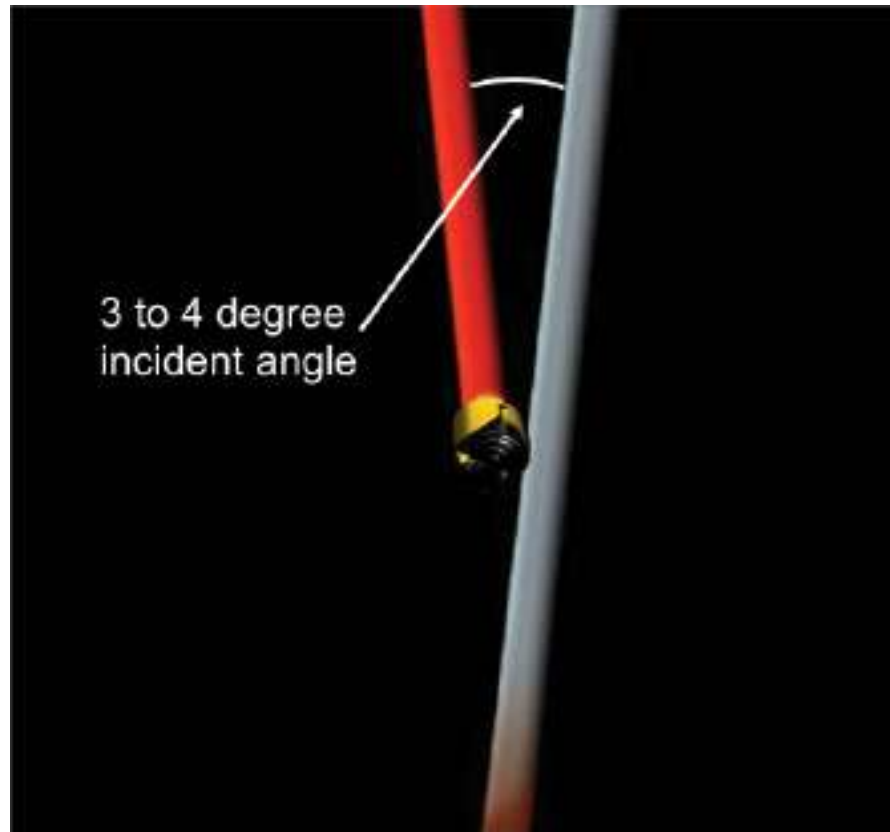
Relief Well Intercept

❑ Equipment Utilized – Ranging Tools



Relief Well Intercept

- Incident angle is usually 1 to 3 degrees if drilling into a wellbore without casing (i.e. a drilling well) or 3 to 5 degrees if drilling into a cased well



Relief Well Intercept

Questions?