

Whipstock System Open Hole "ATLAS™" PL-WSMOH

The Whipstock System Open Hole is a specialized downhole tool designed for sidetracking and lateral drilling operations in open-hole wellbores. The whipstock system is intended for installation in an open-hole section. Anchoring is achieved through a mechanical slip system, followed by cementing to prevent rotation or displacement during milling and drilling operations.

The whipstock system can be installed in open hole sizes ranging from 6" to 13 5/8".

The system provides a reliable and cost-effective solution for:

- initiating a new lateral borehole from the main wellbore;
- establishing controlled directional drilling trajectories;
- bypassing obstructions or problematic well intervals;
- straightening a deviated or crooked well section;
- improving reservoir access through multi-lateral drilling.

Equipment set includes:

- Whipstock with mechanical anchor
- Setting tool
- Filter pipe
- Drill pipe plug

Design Advantages

- Ensures proper drilling fluid circulation during operations, maintaining wellbore stability and safe tool setting.
 - The system can be oriented using MWD or GyroTracker systems for accurate azimuthal positioning.
 - Provides reliable fixation of the whipstock.
 - Ensures clear and secure execution of the release and separation from the whipstock after completion of operations.

Operation

- Tool is run into the well as part of the bottom-hole assembly (BHA).
- At the target depth, axial set-down weight is applied.
- The axial load activates the mechanical setting mechanism, initiating anchor deployment without the use of hydraulic pressure.
- The Anchor slips expand and securely lock the anchor unit inside the casing string or open hole section.
- Once fixation is confirmed, the whipstock remains precisely oriented for subsequent operations.
- Window milling is then performed, after which the drilling assembly slides along the inclined wedge surface, providing controlled wellbore deviation and sidetrack initiation.

