www.switchfloat.com

— Saving rig time

Switchfloat is a float valve system that is able to be remotely actuated to create a clear path through the valve. The system provides significant rig time savings by allowing well intervention activities without tripping pipe to remove float valves.

Switchfloat for underbalanced and conventional drilling operations:

To reduce bleed off time when breaking connections during underbalanced drilling it is necessary to install string floats close to surface in the drill string.

String float valves may be utilised as an additional barrier in the drill string as part of conventional drilling operations.

In stuck pipe scenarios conventional string float valves are a barrier to wireline operations.

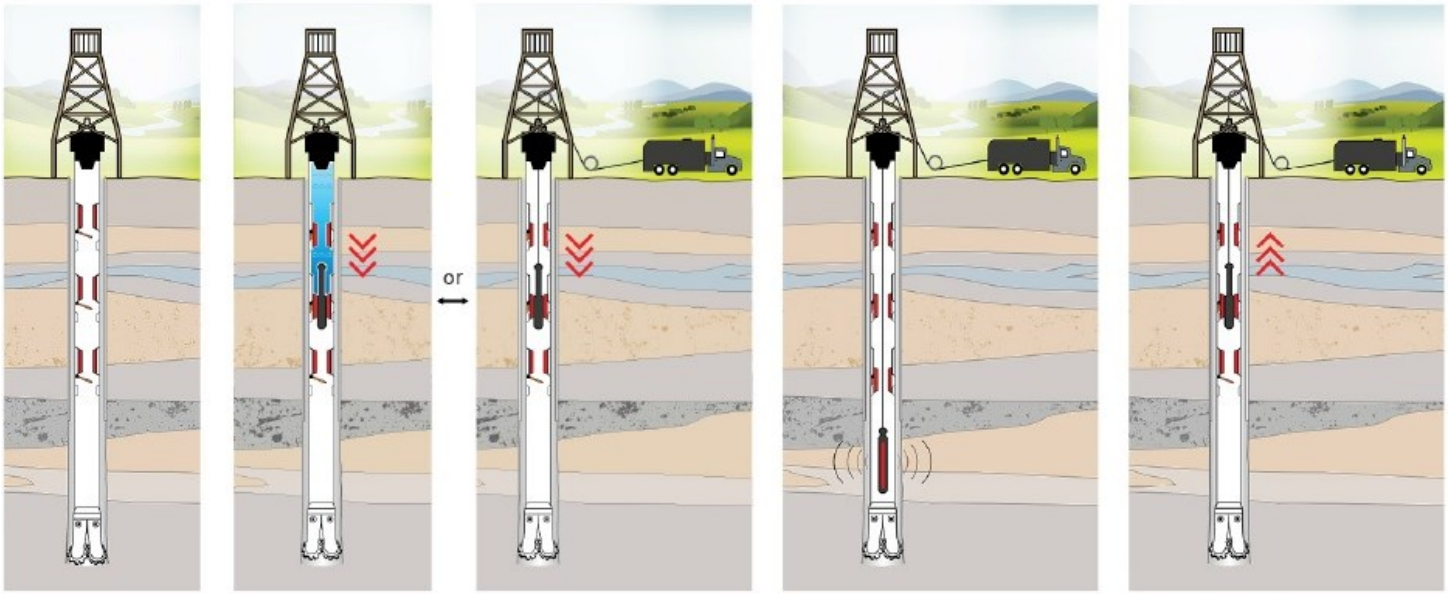
To undertake directional surveys on wireline conventional string float valves must be removed from the drill string. Additional tripping of pipe to achieve this adds significant rig time to directional surveys on wireline.

Switchfloat valves are used in place of conventional string float valves. In stuck pipe and directional survey operations Switchfloat valves are opened with a pump down or slickline tool to allow wireline access through the valves. All Switchfloat valves are able to be opened by pumping a single actuation tool or alternatively with one slickline run in hole. The pumped actuation tool can be retrieved on wireline if required.

Benefits of Switchfloat

- Immediate wireline access to BHA in stuck pipe scenarios.
- Allows surveys in drill pipe without the removal of drill string float valves.
- Reduced tripping saves rig time and wear and tear.
- Reduced make and break cycles on drill string threaded connections.
- Safety benefits associated with reduced drill string movements.
- Provides the ability to reverse circulate through a drill string containing float valves.

Patent pending.



Drilling Ahead:

Switchfloat valves acting as normal flapper type non return valves

Opening Switchfloat valves:

Pumping the actuation tool opens all the Switchfloat valves, or alternatively one slickline run in hole can be utilised to open the Switchfloat valves.

Wireline operations:

Tools safely conveyed through open Switchfloat valves. The pumped actuation tool may be retrieved on wireline at this stage if required.

Closing Switchfloat Valves:

If drilling is to continue following wireline operations it is preferable to install another Switchfloat valve at surface to regain float valve functionality. If necessary it is possible to close the Switchfloat valves downhole utilising a shifting tool conveyed on slickline.