

EQUALIZER LIFT autonomous inflow control device

Maximize oil recovery while minimizing unwanted fluid handling costs and risks

Long horizontal wellbores are susceptible to gas/water coning especially in thin oil rim and heavy oil applications. Wells can quickly become unproductive and increasingly costly as gas/water displaces oil flow. Furthermore produced gas must be compressed or flared at surface, driving up OPEX and increasing HSE exposure and environmental impact.

The **EQUALIZER LIFT™ autonomous inflow control device (AICD)** provides an effective reservoir management solution that enhances oil recovery and reduces water and/or gas production. LIFT devices distributed along the wellbore in heterogeneous formations equalize the inflow pattern to promote uniform formation drainage, improve productivity, and reduce costs associated with surface handling of unwanted fluids.

The EQUALIZER LIFT AICD features a floating disc that autonomously responds to changing flow rates and fluid properties. It functions similar to a passive ICD for single phase production before water/gas breakthrough to promote oil recovery from sections of the reservoir with lower permeability, and aids in the delay of water/gas

coning. However, if water and/or gas do break through, the AICD's floating disc autonomously restricts the valve inlet, creating additional pressure drops in these zones. Such functionalities of the LIFT AICD help balance the production profile across the lateral and preferentially constrain the unwanted production—improving oil recovery while significantly reducing the costs and risks of handling unwanted fluids at surface.

Baker Hughes provides expertise and recommendations on EQUALIZER LIFT completion designs based on steady state and/or dynamic reservoir simulation. LIFT AICDs are compact and modular, so the desired pressure drop can be controlled by adjusting the number of devices working in parallel, even at the rig site using latest log data. For applications in sandstone formations, the LIFT AICD can be easily combined with specific sand screens or our disruptive GeoFORM™ conformable sand management technology.

Contact your local Baker Hughes representative to learn how the EQUALIZER LIFT AICD can improve oil production and reduce water/gas handling costs and risks on your next job.

Applications:

- Conventional and unconventional oil wells with high likelihood of water and/or gas breakthrough
- Long, horizontal wells
- Heterogeneous reservoirs
- Assets with costly challenges of handling surface water and/or gas

Benefits:

- Delays water and/or gas breakthrough
- Reduces water and/or gas influx upon breakthrough
- Delivers autonomous reservoir management with no interaction from surface
- Improves oil recovery and maximizes profit

Technical Specifications

Base pipe sizes	4½ in., 5½ in., 6⅝ in.
Metallurgy	Customer specified
Minimum yield	As ordered
LIFT valve size	0.098 in., 0.197 in., 0.295 in.
LIFT valve quantity per joint	1, 2, 4, or as needed
Screen type	GeoFORM™ conformable sand management system BAKERWELD™ wire-wrap screen VPS™ vector-punched screen BAKERMESH™ sand control screen EXCLUDER™ wire-mesh screen BAKERWRAP™ wrap-on-pipe screen
Screen cartridge length	3 ft for carbonate applications and 16 ft for sandstone applications
Screen metallurgy	Customer specified