

AquaCUT Plus RPM increased oil production by 110%, reduced water cut by more than 18% in a carbonate formation in North Africa

CHALLENGES

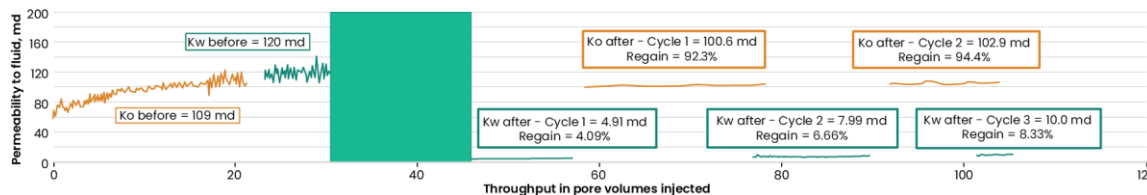
- High water cut (~85%), restricting oil production
- Economical production offset by high volumes of produced water, treatment cost, and disposal cost
- High cost for rig intervention
- Well temperature of 165°F (74°C)
- Artificially producing well using sucker-rod pumping system

SOLUTION

- Baker Hughes bullheaded [AquaCUT™ Plus relative permeability modifier \(RPM\)](#) in a rigless operation. The system successfully:
 - Selectively restricted water, versus shutting off all fluid flow
 - Decreased water production, with minimal impact on hydrocarbon production
- [StimVision™ matrix acidizing software](#) provided a fully-engineered solution
- Thorough matrix testing was performed to optimize the AquaCut Plus RPM formulation for formation characteristics/fluids, and temperature

RESULTS

- Pumped through rigless intervention with zero NPT or HSE incidents
- Reduced water cut by more than 18%
- Increased oil production by more than 110%
- Reduced overall carbon emissions and costs by reducing water cut, requiring less treatment and produced water disposal



AquaCut Plus RPM significantly reduced relative-permeability-to-water by more than 90% with little, if any, change to the relative permeability to oil. Reduction in relative-permeability-to-water remained after three cycles, indicating treatment longevity.