

AccessESP retrievable ESP system successfully installed in challenging Alaskan North Slope methane hydrate test well

CHALLENGES

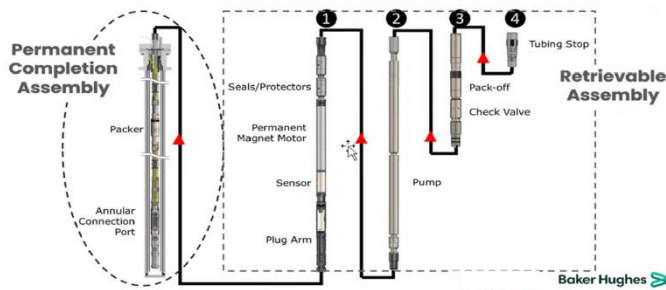
- Remote North Slope location with high intervention and operational costs
- Wide range of possible flowrates
- High sand content leading erosion and plugging ESP completion
- Cold temperatures at ESP setting depth
- High gas content leading to gas locking of the ESP
- High potential for methane hydrate build up

SOLUTION

- [AccessESP™ retrievable ESP system](#) was deployed via slickline, and included:
 - [Centurion™ stabilized extreme duty \(SXD\) pump](#) and stages for enhanced solids capacity
 - Multiple gas handling pump sections and tandem gas separator to prevent gas locking
- [Electrospeed Advantage™ variable speed drive \(VSD\)](#)
- Downhole electric heater powered via [UpCable™ power cable](#) to maintain stability
- [ProductionLink™ Expert](#) for real-time ESP monitoring and surveillance

RESULTS

- Successfully gathered crucial data for understanding reservoir behavior and optimizing methane gas production strategies, potentially saving significant future costs and improving production efficiency
- Optimized ESP performance under challenging conditions (high gas/sand, cold temperatures, high potential for hydrates), minimizing intervention costs and operational risks
- Optimized production through real-time monitoring and adjustments to eliminate gas locking
- Confirmed reservoir deliverability and sustainability for long term production
- Enabled effective operation for ~ one year during production testing, handling flowrates of ~500 BWPD and gas/liquid ratios between 3 to 400 scf/stb



After permanent completion assembly, the AccessESP system can be deployed via wireline in just four runs to reduce intervention risks and costs, maximize well production, and cut carbon emissions by avoiding a heavy workover.