CASE STUDY: FRAC-THRU ELECTRICAL SUBMERSIBLE PUMPING, ALASKA

AccessESP retrievable ESP system delivers industry's first frac job through an ESP completion, saving one week and $2 million USD in rig time

CHALLENGES

- Remote Arctic well required fracture stimulation and artificial lift via electrical submersible pumping (ESP) system for efficient production at target rates
- Following the frac job, running a standard ESP in the well required a separate rig deployment—adding time, cost, and complexity to bring the well onto production
- Application offered the opportunity to trial a first-of-its-kind, rigless ESP system with frac-through capabilities

SOLUTION

Baker Hughes deployed its AccessESP™ retrievable ESP system, the only ESP to withstand a frac job without full removal from the well. The system includes:

- Retrievable pump/permanent magnetic motor (PMM) assembly that deploys easily with light intervention equipment
- An isolatable wet connect during the frac job
- A robust, single-section PMM with power density of up to 1,200 hp
- Modular, lighter components that install riglessly after the frac job—minimizing completion steps and rig costs

RESULTS

- Frac operation with ESP completion in well saved $2 million USD in workover rig costs
- Frac job successfully stimulated 22 stages and pumped more than 4.5 million pounds of proppant without damaging ESP assembly
- Accelerated frac schedule brought well on production one week earlier, producing 7,000 bbl of additional oil
- First frac-through ESP installation allowed operator to drill and complete the well in one deployment with the same rig

"The AccessESP system allowed the customer to install the completion without a workover rig and successfully stimulated the well with minimal intervention—saving millions of dollars in the process."

– **Jeremy Albright**
Lead Sales Specialist

Baker Hughes

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