Baroid Successfully Executes LMP/DBP Operations for Offshore Oilfield Project

IN-COUNTRY FACILITY PROVIDES SUBSTANTIAL EFFICIENCIES AND SAVINGS

AZERBAIJAN

OVERVIEW

Operator Needs Quick Mobilization of Large Amounts of Oil-Based Mud

An operator needed to quickly mobilize large volumes of oil-based mud (OBM) to its platform atop a 6,600-meter (21,654-foot) well off Azerbaijan in the Caspian Sea. The oil company had been using a competitor’s services for the well, but Baroid had been awarded the job for the next well because of its overall service quality rating and ability to mobilize the products, including base oil. Because the well’s plan called for a maximum mud weight at 2.20 specific gravity, it was vital to have a bottomhole temperature of 120°C (248°F), along with large OBM volumes, and a liquid mud plant (LMP) and dry bulk plant (DBP).

HALLIBURTON DUAL FACILITY CUTS DELIVERY TIME OF SUPPLIES

In 2015, Halliburton was not able to win the tender for this same platform because it did not have LMP/DBP services in country, one of the job’s main requirements. That same year, Halliburton designed and built an LMP facility (Phase 1), capable of storing 10,000 barrels (bbl) of drilling fluid, along with two 500-bbl mix tanks with a shearing unit and a 600-square-meter (6,458-square-foot) warehouse. The facility can produce and transfer 1,000 bbl per day of water-based fluids, oil-based fluids, or brine to supply vessels. Phase 2 of the construction project completed the DBP facilities, which are capable of storing 500 cubic meters (17,657 cubic feet) of bulk barite and cutting 120 metric tons (132.3 tons) of barite from large bags per day.

The facility can now provide supplies in 21 days, greatly diminishing the 90-day turnaround of the operator’s previous supplier.

Having the required capabilities and equipment, along with using a proven non-aqueous fluid (NAF) system that provided reduced equivalent circulating densities (ECDs), allowed Halliburton to replace the major competitor as the preferred service company, thus successfully completing the mobilization of products, bulk, and personnel to the platform in September 2017 without any issues. For local customers, this was the first startup using Baroid LMP/DBP services in the country.
By providing the desired fluid specifications, the Halliburton facility optimizes logistics and saves months of rig time, thus giving Halliburton a competitive advantage over other service providers in the region.

FACILITY SHORTENS SUPPLY MOBILIZATION TIME

When the facility was placed into operation, the customer noted that the desired fluid specifications could be achieved prior to shipping the fluids to the platform, which allowed optimizing offshore logistics and well costs considering shearing at the LMP vs. through the drill bit. Since its opening, the facility’s operations have not experienced any nonproductive time (NPT) or any health, safety, or environmental (HSE) incidents.

Savings of two months of rig time were realized due to short base-oil mobilization lead time (21 days compared to the normal 90 days).

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