

Boots & Coots Mobilizes WELLSURE® Blowout Response Process After Client's Well Suffers Major Blowout

WELL CONTROL SPECIALISTS SUCCESSFULLY KILL WELL, SAVING OPERATOR MILLIONS OF DOLLARS

NEAR WAYNESBORO, MISSISSIPPI

CHALLENGES

- » A major blowout posed cash flow issues for a small operator.
- » Because of the presence of H₂S in the blowout stream, residents in a 2.5-mile (4-kilometer) radius around the well had to be evacuated.
- » Capping the well was a high-profile job with media and governmental scrutiny.
- » In an effort to control the high amount of H₂S exiting the well, the well had to be ignited and kept ignited throughout the capping process.
- » The blowout well could not be shut in because of a compromised wellhead.

SOLUTIONS

- » WELLSURE® Pay-on-Behalf coverage protected the customer's cash flow.
- » A specialized capping stack with a Venturi tube allowed the well to be capped while it was still on fire.
- » Full disclosures and daily informational briefings mitigated detrimental media coverage and governmental scrutiny.

RESULTS

- » The well was capped and put on flow lines for snubbing access in 16 days.
- » The capping operation was successfully completed with no injuries to the personnel involved.

OVERVIEW

On a February evening, a well operator called its Boots & Coots WELLSURE contact to report that one of its wells had suffered a blowout. The operator had taken a kick while running 26 joints of 4.5-inch production liner when the well began flowing. As there were no casing rams installed in the BOP, the annular BOP was closed around the casing, recording a shut-in pressure that rapidly increased to 2,200 psi.

While pressure increased, rig personnel attempted to install a 4.5-inch liner x 3.5-inch drillpipe crossover sub, so that the liner could be lowered and the 3.5-inch pipe rams closed. While performing this task, the casing slips unseated at the rotary table and a total of 11 joints of 4.5-inch liner blew back out of the well. The 11 joints of liner became wedged into the rig derrick structure.

In a final effort to control the well, the blind rams were closed in on the 4.5-inch production liner, crimping the liner but failing to stop the blowout. After the mud evacuated the hole, the well began to eject gas that contained more than 25 percent of hydrogen sulfide (H₂S) per volume; the gas was ignited in order to burn off the H₂S escaping the well.

Boots & Coots immediately initiated the WELLSURE blowout response process, and the Boots & Coots WELLSURE representatives were mobilized to location and began logistical support for the operator. As a WELLSURE client, the operator instantly benefited from the program's well control insurance products, which include Pay-on-Behalf coverage and procurement and logistics assistance. For WELLSURE members, in the event of an incident, Boots & Coots can step in to act as the general contractor and to provide project management on the operator's behalf.

After arriving on location, Boots & Coots' well control specialists set up hazard zones, and began the measured and methodical process of debris clearance, including the removal of the drilling rig, which had begun to collapse over the well. Due to the presence of H₂S,



After a blowout, the damaged drilling rig is on fire.



CASE STUDY

This blowout, which resulted in costs exceeding USD 10 million dollars, could have severely disrupted the normal cash flow operations for the operator.

public health and safety officials evacuated nearby residents up to a radius of 2.5 miles (4 kilometers) miles from the well. With the rig removed, Boots & Coots set up a jet cutter in order to cut and remove the BOP from the well.

For companies that are members of the Boots & Coots WELLSURE program, procurement and logistics assistance is provided in emergency blowout situations – and, for companies with limited resources, these are services that may not be available in-house. Since a large majority of the services required for handling a blowout are already under contract with Boots & Coots, last-minute contract negotiations are not necessary and unexpected price increases do not occur.

Due to casing and wellhead damage and the high pressures involved, the blowout could not be shut in and a diverter system was necessary. In addition, the presence of H₂S required the well to be capped while still ignited.

A capping stack with a Venturi tube and diverter system was maneuvered onto the well, and diverter lines were installed to direct the hydrocarbons to burn pits. Once the well was under control, evacuated residents were allowed to return to their homes.

Companies experiencing large well control emergencies may face 6–12 months of cash flow disruption as they wait to be reimbursed by insurance companies. This blowout resulted in costs exceeding USD 10 million dollars. With Pay-on-Behalf coverage, the many different equipment suppliers, services companies, and the well control company could be paid directly by means of the insurance cover avoiding cash flow disruption that would otherwise have been encountered.



The blowout well is capped, and a Venturi tube and diverter system are in place.

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