/ ABSMART SERVICES · BOOSTFLOW™ MULTIPHASE PUMPING

Reducing flaring during well testing in a high-H_2S gas condensate reservoir

01 · SUMMARY

BoostFlow™ multiphase pumping technology enabled a significant flaring reduction during well testing operations in a high-H_2S gas condensate reservoir. By transferring unstable condensate with free gas directly to a remote processing facility, the system allowed the operator to achieve all well-testing objectives while minimising hydrocarbon flaring and recovering valuable production.

02 · OBJECTIVE

A gas condensate appraisal well in a remote field required a comprehensive well-testing programme including flowback clean-up, multi-rate testing, pressure build-up analysis, production logging and fluid sampling. Under conventional practice, produced hydrocarbons, gas and condensate, would be flared because of the absence of pipeline infrastructure and the instability of the produced fluids. The operator aimed to minimise flaring and recover produced condensate while maintaining safe and stable testing operations. However, the unstable condensate contained significant dissolved gas, making transport or storage without stabilisation unsafe, and conventional liquid transfer pumps were unsuitable at high gas volume fractions (GVF) because of gas locking and operational shutdowns. A reliable solution was required to transfer multiphase fluids safely while maintaining stable well-testing operations.

03 · SOLUTION

ABSS integrated BoostFlow™ into the well-testing spread. The multiphase pump was installed upstream of the transfer pipeline to boost the pressure of produced fluids and enable continuous export of unstable condensate to a remote processing facility through a temporary pipeline. BoostFlow handles gas volume fractions from 0% to 100%, so the pump operated reliably through the highly transient flowback and clean-up conditions typical of well testing. The spread included standard pressure-control equipment, choke manifolds, indirect heaters and a three-phase separator. Downstream of the separator, unstable condensate was routed through BoostFlow and pumped through a temporary 3 km pipeline to the central processing facility, allowing testing to proceed normally while flaring was significantly reduced and valuable hydrocarbons were recovered rather than burned.

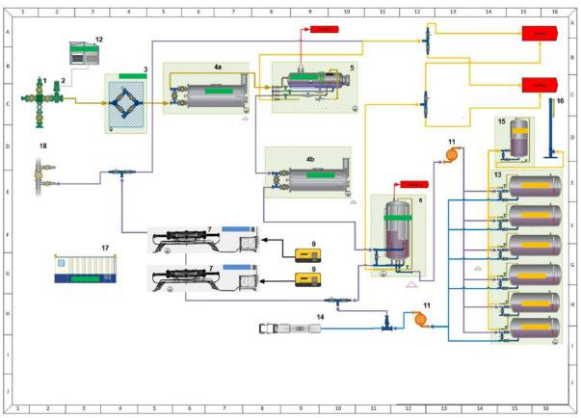


FIG. 01 · WELL-TESTING SPREAD WITH BOOSTFLOW™ EXPORT TO THE CENTRAL PROCESSING FACILITY

04 · RESULTS

The integrated BoostFlow deployment enabled a low-flaring well-testing operation while maintaining stable multiphase transfer under highly dynamic flow conditions. Key results included:

9,400 bbl
Unstable condensate recovered instead of flared

96–100%
GVF sustained for more than 24 hours

0–100%
GVF range pumped during flowback

3 km
Temporary export pipeline to the central facility

- Continuous multiphase pumping under GVF conditions ranging from 0% to 100%
- Sustained operation at 96–100% GVF for more than 24 hours without recirculation systems
- Stable pumping performance despite rapidly changing flow regimes during flowback
- 9,400 barrels of unstable condensate recovered and transferred to the central facility instead of being flared
- Completion of all well-testing objectives including multi-rate testing, PLT logging and fluid sampling

> NOTE
>
> BoostFlow demonstrated high operational stability and reliability in sour gas conditions and in the transient flow regimes typical of well-testing operations.

05 · SUMMARY

This case demonstrates that well-testing operations can be conducted with significantly reduced flaring while maintaining full operational and reservoir-evaluation objectives. By integrating BoostFlow multiphase pumping into the well-test spread, operators can:

- Reduce routine flaring during well testing
- Recover valuable condensate instead of burning hydrocarbons
- Maintain stable flow during highly transient clean-up and testing operations
- Operate reliably across 0–100% gas volume fraction conditions
- Improve environmental performance while preserving test integrity

The deployment proves that low-emission well testing is technically feasible even in remote sour gas fields, providing operators with a practical pathway to align well testing with modern ESG and emissions-reduction targets.







FIG. 02 · BOOSTFLOW™ MULTIPHASE PUMPING SOLUTION INTEGRATED INTO THE WELL-TESTING SPREAD