/ ABSMART SERVICES · BOOSTFLOW™ MULTIPHASE PUMPING

Manifold back-pressure reduction increases production

01 · SUMMARY

BoostFlow™ multiphase pumping technology was deployed at a low-pressure header to reduce gathering-system back-pressure and improve production from connected wells. BoostFlow reduced header pressure from about 150 psi to about 120 psi. This pressure reduction relieved back-pressure on upstream wells and enabled measurable production gains: oil production increased by 3,000 bbl/d. The operation demonstrated that surface multiphase transfer can effectively increase field throughput and unlock production without modifications to existing surface infrastructure.

02 · OBJECTIVE

The low-pressure (LP) gathering network experienced rising back-pressure as additional wells were routed to the LP system after losing the ability to flow into the higher-pressure network. As more wells were tied into the LP header, manifold pressure increased, restricting inflow from upstream wells and limiting production. The objective of the BoostFlow operation was to reduce LP manifold back-pressure by diverting a portion of the multiphase fluids from the LP header into the high-pressure (HP) gathering network, improving well inflow and enabling incremental production without facility modifications.

03 · SOLUTION

ABSS rapidly mobilised the BoostFlow™ multiphase pumping system and installed it on the trunk line connecting to the LP header. The unit was integrated into the existing system without major surface modifications. Once commissioned, BoostFlow began transferring multiphase fluids from the LP manifold into the HP network. The system operated with stable multiphase pumping and 100% operational reliability throughout the operation. By continuously removing a controlled portion of the LP header flow, BoostFlow reduced manifold back-pressure, increased hydraulic capacity within the gathering system and enabled upstream wells to flow more efficiently.



FIG. 01 · BOOSTFLOW™ MULTIPHASE PUMPING TO REDUCE MANIFOLD BACK-PRESSURE

04 · RESULTS

The BoostFlow deployment achieved the objective of reducing manifold back-pressure and improving production performance. Key results included:

~150 psi
LP header pressure before BoostFlow

~120 psi
LP header pressure with BoostFlow

+3,000
bbl/d incremental oil production

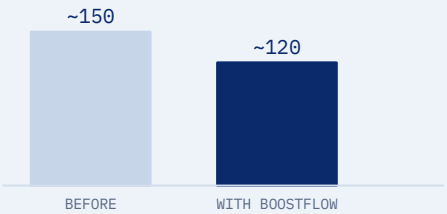
100%
Operational reliability throughout

- LP header pressure reduced from ~150 psi to ~120 psi
- Incremental oil production of 3,000 bbl/d achieved
- No changes to surface facilities

RESULT

The reduced LP header pressure improved well inflow and created additional hydraulic capacity in the gathering system. This resulted in incremental oil production of 3,000 bbl/d, increasing total field throughput without changes to surface facilities.

FIG. 02 · LP HEADER PRESSURE, PSI



05 · SUMMARY

This case demonstrates that BoostFlow can effectively reduce manifold back-pressure and unlock additional production from existing wells. Key benefits include:

- Rapid deployment with no facility modifications
- Immediate reduction of gathering-system back-pressure
- Incremental oil production from existing wells
- Increased field throughput using existing infrastructure

BoostFlow provides a practical and cost-effective production-optimisation solution for mature fields where gathering-system back-pressure limits well performance.