

Case Study

# Gas Compression Systems



## BACKGROUND

CORE used its extensive global experience of mature assets to enhance uptime, meet regulatory requirements and improve production rates by designing and implementing low cost control system modifications.

The main benefits of the modifications were improvements in Compressor performance and Gas Lift flows, with a resultant increase in production rates and improvements in Produced Water quality.

## THE CHALLENGE

CORE was contracted to provide offshore production optimisation expertise to a major production complex offshore Qatar. The aim was to provide high value quick return benefits from uptime improvements, production rate increases and debottlenecking opportunities.

## CORE'S SOLUTION

CORE reviewed the standing alarms in detail to establish the function of the alarm, the time it had been in place and the benefit to the operator. Many alarms were discovered to be on redundant equipment or equipment that had not been returned to service following a major production shutdown or they were secondary/consequential alarms.

Alarms providing no benefit were removed and a procedure developed to allow genuine alarms likely to be present for more than 24 hours to be 'shelved' (removed from alarm list).

## OVERALL BENEFIT

Value of increased production and improved uptime orders of magnitude higher than cost; pay-back time in the order of days/weeks.

## RESULTS



Increased available capacity and improved uptime



Increased Gas Lift rates



Increased overall production



Production bottleneck removed through cooling system review

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