#### CASE STUDY: OFFSHORE NORWAY

Innovative well construction solution achieves new drilling record, substantially reducing rig time and CO<sub>2</sub> emissions

### CHALLENGES

- Drill long lateral with a 270° turn from whipstock exit in a single run
- Reduce high-frequency torsional oscillations to extend bottomhole assembly (BHA)
- Eliminate anticipated whirl in long tangent sections through excellent directional control
- Quickly identify calcite stringers and adjust operational parameters to improve rate of penetration (ROP)
- Reduce time to target depth
- Deliver high-quality wellbore for subsequent completion operations

## SOLUTION

Deployed remote operations service to enhance drilling performance and wellbore quality with solutions that included:

- 6¾-in. Lucida<sup>™</sup> advanced rotary steerable service with automated wellpath trajectory control and continuous proportional steering
- Five-blade <u>Dynamus<sup>™</sup> extended-life drill</u> <u>bit</u>, which optimizes ROP in long laterals containing stringers while reducing trips and BHA vibrations
- Fit-for-purpose <u>PerfFLOW™ DIF system</u> to reduce friction while drilling
- i-Trak<sup>™</sup> automated stringer detection and mitigation service, which quickly adjusts drilling parameters to improve drilling efficiency through stringers

## results 6,624 M

drilled in 8½-in. lateral section in a single run, the world's longest bit run to date

# 43.1 m/hr

average optimized ROP achieved while enhancing performance and wellbore quality

## 67% reduction

in personnel required on the rig

697,261 kg CO<sub>2</sub> eq<sup>\*</sup>

POB reduction



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