

# PowerDrive Orbit G2 RSS Increases Average DLS by 80% in Fractured and Highly Interbedded Carbonate Reservoir

High-performing RSS improves directional control in harsh downhole conditions, East Java Basin

**The PowerDrive Orbit G2\* rotary steerable system drilled the horizontal section of a complex well in one run, delivering greater directional control and higher dogleg severity (DLS) as compared with conventional tools.**

### The operator's concerns

Interbedded and fractured carbonates posed a significant challenge for drilling the horizontal section of wells in the East Java Basin. To successfully drill the horizontal, the operator needed to overcome the constant microdoglegs observed in offset wells that resulted in unstable DLS, severe shock and vibration, and stick/slip conditions, compromising directional control and ROP.

### What was tried first

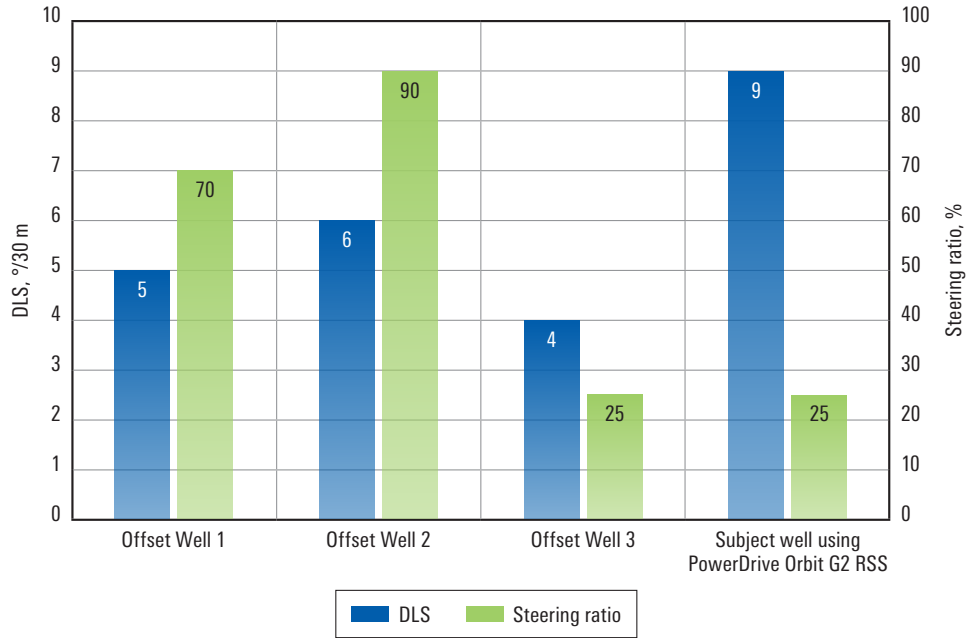
Conventional RSS tools had difficulties precisely and consistently landing offset wells inside the reservoir with sufficient DLS.

### What Schlumberger recommended

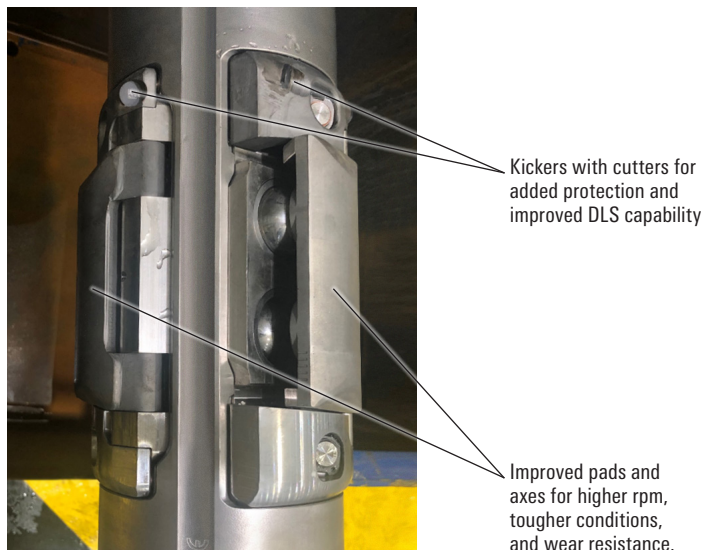
In concert with the MicroScope HD\* resistivity- and high-definition imaging-while-drilling service to better navigate the well trajectory, the PowerDrive Orbit G2 RSS was used to deliver higher DLS and wear resistance in harsh downhole conditions for longer runs with greater trajectory control.

### What the operator achieved

As compared with conventional RSSs used in offset wells, the PowerDrive Orbit G2 RSS increased the maximum DLS by 50% and the average DLS by 80% while maintaining a constant steering ratio and reducing wellbore tortuosity and microdoglegs.



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The PowerDrive Orbit G2 RSS increases abrasion resistance and DLS capability.