

## North West Shelf Project

Chevron required to run and land critical 9<sup>5</sup>/<sub>8</sub>" casing on multiple wells through unstable shales at approximately 3000m TVD. The North West Shelf Project in the Wheatstone field was Australia's first LNG project, which has just celebrated 35 years of domestic gas production, and 30 years of LNG cargoes to Japanese customers..

### THE CHALLENGE

The series of eight wells had notable challenges with unstable shales, creating known issues in deploying the intermediate casing to Target Depth.

There were historical problems with running casing in high angle, long reach wells – a step out of approximately 2500m.

Additionally, the project was globally high profile, with high spread and rig rates. The requirement was to deploy all 9-5/8" casing strings to Target Depth, cement in place, drill out the TurboCaser™, then drill ahead with the 8½" PDC bit.

### THE SOLUTION

After thorough analysis of available solutions, Chevron concluded the Deep Casing Tools TurboCaser™ was the best tool for the project.

The potential efficiencies and cost savings which could be achieved with the TurboCaser™ were clear.

With its unique design, combining turbine powered reaming with low circulating pressures, the TurboCaser™ was capable of running 9<sup>5</sup>/<sub>8</sub>" casings to land at Target Depth.

### THE RESULT

There were eight 9<sup>5</sup>/<sub>8</sub>" TurboCaser™s run on the project and 100% success was achieved in landing the casings at Target Depth.

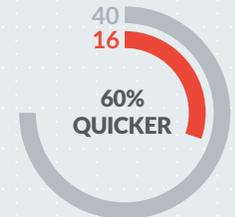
The TurboCaser™ was used on multiple occasions to ream through unstable sections.

When on depth and cemented, they were drilled out in as little as 9 minutes per well, then within the same run, the BHA drilled on to drill the lower section.



### IN NUMBERS

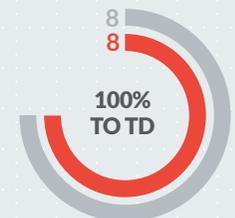
■ Conventional Technology  
■ TurboCaser™



**24 DAYS SAVED**  
Saved a potential of 24 days, removing the need for additional hole cleaning, wiper trips and re-running the completion.



**60% TIME SAVED**  
Up to 72 hours saved per run, avoiding extra costs in case of stuck completion leading to side-tracking, fishing or re-drilling.



**ALL 8 WELLS DELIVERED**  
9-5/8" Casing delivered 100% to Target Depth on all 8 Wells.