

These tools ... equipped the DB16 to perform remarkably on projects never envisioned for this construction workhorse. //

## SUBSEA



## SOLUTION

A major subsea project offshore Vietnam in 361 feet of water is situated in a mature, complex field containing several stacked reservoir sequences and a huge granite reservoir floor. The field consists of 14 wells and a wellhead platform with 12 slots, which all tieback to a floating production unit (FPU) through two flowlines and an umbilical.

McDermott's work scope includes engineering, procurement and installation of two 1.3-mile flexible flowlines, a subsea cable and 3 miles of insulated flexible flowlines; and replacement of two 1.4-mile export flowlines and umbilical for tie-in to production wells and export pipelines.



The engineering project team consisted of our Singapore Engineering office, Batam Island fabrication facility and marine operations. This team achieved a significant milestone with completion of a global dynamic analysis of the flexible line systems. The purpose was to accurately predict movement and optimize a field architecture that ensures the lines withstand the challenging terrain under the most extreme 100-year environment. This involved modeling all the dynamic parts—risers, FPU, CALM buoy and Mid Depth Buoys—and 41 flexible pipes, umbilicals, mooring legs and power cable.

Another milestone was the March delivery of materials at the Batam Island fabrication facility for mobilization to NO102, McDermott's subsea construction vessel for the project. Included in the delivery were reels of flexible risers, flowlines, hydraulic umbilical and power cables, and ancillary equipment.

This delivery was made possible by the McDermott Procurement team's success in overcoming challenges that arose almost a year ago in short-lead times and limited suppliers for some of the products.

Upon arrival at NO102, the products were transpooled into the vessel's carousel in a smoothly run operation. NO102 will install the subsea infrastructure at the offshore site in Vietnam this summer.