Echo-Yodel is a two well subsea satellite development operated by Woodside Energy Limited. The development resides approximately 23 km from the Goodwyn A platform offshore Australia’s North West Shelf. Each of the wells is producing gas / condensate into 12” pipeline back to Goodwyn A. NauticAWT provided the construction and completion design and selection and specification of downhole completion equipment, with particular emphasis on the review, selection and design of the sand control method.

**The Client**
- Woodside Energy Limited

**The Scope**
- Woodside Energy Limited faced a number of technical challenges. Anticipation of immediate sand control problems required sand control as an integral component of initial completion design and 1350 m long horizontal wells were required to develop field with significant shale member separating the productive units (350 – 700 m in length). For economics, high rate, big bore production wells were required. Potentially reactive inter-unit shale section ruled out gravel packing as a sand control technique.
- NauticAWT was contracted to provide a number of services including the well construction and completion design, selection and specification of downhole completion equipment, review and selection of the sand control method and supervision of the subsea completion installation high rate (> 100 MMscfd) flowbacks.

**The Value Added**
- NauticAWT tackled these challenges through the implementation of the many industry FIRSTS:
  - 1st use of sand control by Woodside
  - 1st use of BHI Nexes synthetic EBM horizontal well drill-in fluid.
  - 1st installation of expandable sand screens in Australia.
  - 1st compliant rotary expansion of 51/2” Weatherford ESS.
  - 1st subsea big bore production wells.
- NauticAWT achieved all primary and technical objectives. Field life was originally set at a minimum of 4 years. The field has now been in production since 2002 at up to 120% design rate with no sand production.