

# CASE STUDY



**PROJECT** GORGON GAS PROJECT  
**PRODUCT** Brackish Water Reverse Osmosis Hire Plant  
**INDUSTRY** Oil and Gas  
**LOCATION** Barrow Island, Western Australia

## BACKGROUND

The Gorgon Gas Project is one of the world's largest natural gas projects and the largest single resource development in Australia's history. As construction neared completion, the project had an urgent requirement for temporary hire of two demineralised water systems, each to produce 20 m<sup>3</sup>/hr of high purity water (EC <1 uS/cm, pH 6.5~7.5, silica < 20 ppb) for use in commissioning the main gas plant.

MAK Water operates a large Reverse Osmosis (RO) hire fleet and was able to supply the plants within a very short period of time. Furthermore, MAK Water provided the ancillary equipment (tanks, hoses and pump skids) for turnkey, plug and play installation on site. Remote monitoring and monthly service and maintenance visits ensured maximum reliability.

## SOLUTION

Two x 480 m<sup>3</sup>/day Brackish Water Reverse Osmosis (RO) Hire Plants, with ancillary equipment (tanks, hoses, cables and pump skids), remote monitoring and monthly service and maintenance visits.

## PROCESS SOLUTION

- Pre-RO Sodium Metabisulfite (SMBS) dosing for chlorine neutralisation
- Pre-RO caustic dosing for permeate pH correction
- Single pass RO process
- Post-RO ion exchange resin polishing filters

## PROJECT SOLUTION

- Containerised RO plants provided within four weeks
- Ancillary equipment (tanks, hoses, pump skids and prewired power cables) for plug and play installation
- Monthly service and maintenance, consumable supply

## RESULTS AND BENEFITS

- **Fast lead time.** Innovative process design and an extensive hire fleet enabled the plants to be provided within four weeks.
- **Turnkey solution.** MAK Water was a single point of contact and provided everything required to minimise site installation time.
- **Reliability.** MAK Water provided technical support and monthly site visits for the duration of the hire term, ensuring 100% availability of water.



*The Brackish Water Reverse Osmosis hire plants on site on Barrow Island*



*The two Brackish Water Reverse Osmosis hire plants were customised and delivered within four weeks*