

Apache Van Gogh



Client:
Apache Energy Ltd (AEL)

Location:
Western Australia

Project Type:
SURF

The Van Gogh Development Project was Apache's first FPSO development worldwide and provided a number of opportunities for Subsea 7* to demonstrate its broad range of capabilities.

With a long offshore campaign of in excess of 200 days, the project involved a significant amount of transportation and logistics. Its location, approximately 50km North of Exmouth on the North West Shelf of Australia, meant that works were performed within an extremely environmentally sensitive area, with some works performed during cyclone season. We worked with Apache to develop an innovative riser base system, ensuring all risers were successfully installed without divers.

*Project carried out by Acergy prior to merger with Subsea 7.

Apache Van Gogh Development Project

Project

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Development Project

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Location

Western Australia

Project Type

SURF Subsea
Construction

Date Awarded

2007

Date Completed

2009

Vessel Utilised

Toisa Proteus

Overview

The Van Gogh Project included the transportation and installation of all infrastructure related to the Apache Van Gogh FPSO development in water depths of approximately 390m. Oil is produced from 10 production wells, which feed into two large subsea manifolds connected via flexible flowlines. These transport the oil back to a disconnectable FPSO through a series of flexible risers.

Our scope of works on this project consisted of all major activities including the moorings, structures, flexible installation, spools and pre-commissioning, which was performed from a single vessel.

The main components of the scope were:

- 450t DTM buoy
- Nine leg mooring system (proof loaded to 200t)
- 6 x riser bases/mainfolds of up to 180t
- Flexible risers and flowlines
- Dynamic and static umbilicals
- Metrology and fabrication of 13 rigid spools complete with CVC diverless connections
- Gas lift jumpers, electrical flying leads and hydraulic flying leads
- Pre-commissioning
- As built surveys
- Provision of HLVs to transport 19 flexible flowline/umbilical reels, manifolds, riser bases and DTM buoy
- Logistics support for the entire project with bases at Henderson, Karratha and Exmouth.

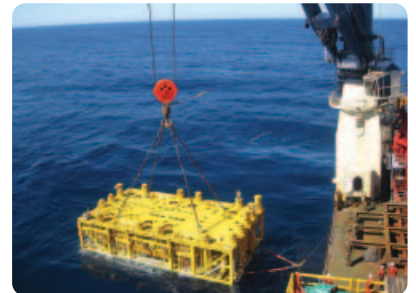
The project was executed without serious injury to our people or impact to the environment. This was achieved through a co-operative team approach from client through to contractor.

Key Facts

- Total operational duration: 213 days
- Mooring system pretensioned via Stevtensioning method using the Toisa Proteus
- Innovative diverless riser base system developed
- Spools fabricated by Subsea 7 in Henderson, Australia
- Four HLVs used on project with loadouts completed in Europe, SE Asia and Australia



The Toisa Proteus Flowline installation



Manifold Installation



The Toisa Proteus Flowline installation