

Chevron Bangka

Operations Assurance



Operator/ Client: Chevron/ PT Meindo
Project/ Location: Bangka Topside Project, East Kalimantan Indonesia
Scope of Services: Operations Assurance Services

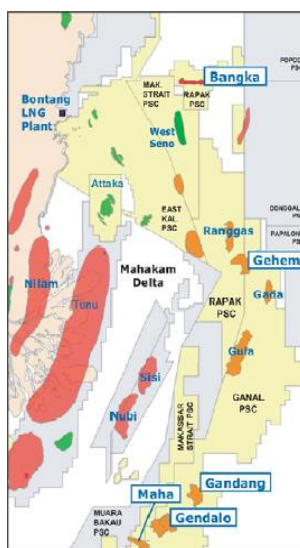
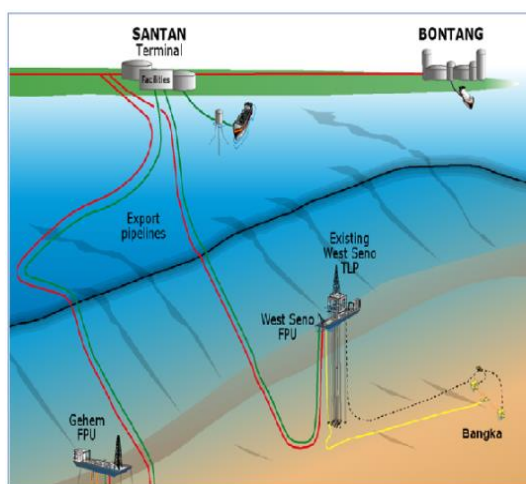
Bangka Project at a glance:

*Bangka project is one of three sections of Chevron's deep sea natural gas development project in East Kalimantan. The project scope includes a **subsea tieback to West Seno FPU**.*

*Chevron Indonesia is implementing a comprehensive **Operations Assurance** process as part of EPCI scope of work awarded to PT Meindo.*

*PT Meindo contracted **Aramis** to perform the required Operations Assurance Services + some Engineering services.*

Location:
East Kalimantan Indonesia



- Gas-condensate field discovered in September, 1999
- Located in Rapak PSC
- Water Depth ~ 3200 ft
- 17 Km north of West Seno
- 5 exploration and appraisal wells
- Two stacked upper slope Miocene channel sands
 - Upper Channel
 - Lower Channel





Aramis' scope of work

Operation Assurance Services

▲ Comprehensive Operability Assurance Plan

- OA roles & responsibilities
- OA implementation plan
- Engineering support resources
- Activities schedule & timing

▲ Operations-related deliverables review

- Operation review
- O&M Design reviews

▲ Human Factor Engineering

▲ Acoustic Analysis

▲ O&M Integration

- O&M procedures updating
- Modification integration

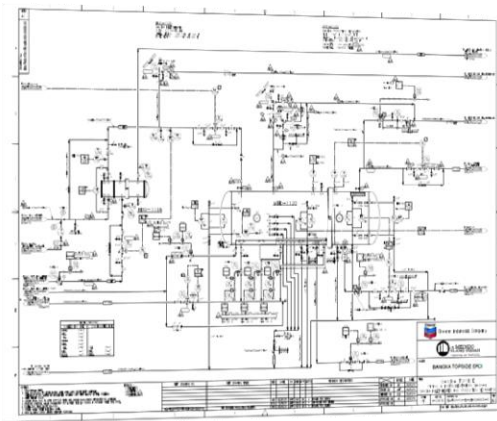
▲ Operation & Maintenance Manuals

▲ Transition & Handover to Company

- Commissioning and Handover Plan
- Start-Up Procedure
- Pre-Start-Up Safety Review

▲ Training Plan

▲ Lessons Learned Review



Maintenance Related Studies

- ▲ RAM Analysis
- ▲ Reliability Centered Maintenance Study (RCM + ECA + RCS)
- ▲ Risk Based Inspection (RBI)
- ▲ Asset Integrity Management (AIM)

Equipment & Material Related Deliverables Review

- ▲ New Materials & Equipment
- ▲ Equipment Standardization
- ▲ Special Tools
- ▲ Spare Parts
- ▲ Lifecycle Cost Evaluation
- ▲ Equipment Identification Documentation & Information

