

# Mator News

2/2008

Mator AS – the separation specialist

## Topside debottlenecking studies

Topside debottlenecking is often required if production rates exceed current design basis or if operational problems make it difficult to achieve contractual targets. Mator, with the aid of Kanfa Aragon, has recently performed a debottlenecking study involving:

- Investigating the feasibility of operating above the current contractual design basis.
- Identifying bottlenecks related to the new design basis including identifying alternative solutions with cost estimates and timescale to implement solutions.

The process systems included in the study were **the gas compression train, the dehydration system (TEG), the oil train, the produced water treatment and reinjection system, heat exchangers, pumps and valves.**

The tools used to perform the study have been:

- HYSYS for process simulations (especially regards to gas compression and energy balances).
- In-house program for evaluation of gas dehydration system.
- In-house program for evaluation of three-phase separators.
- In-house program for evaluation of produced water treatment system.

Mator's comprehensive operational experience from the given installation were further used to classify the possible bottlenecks into high-risk and low-risk, and for some cases to recommend possible operational changes to reduce or remove the bottleneck. The study has shown the value of combining simulation and operational experience, and Mator has gained valuable experience in debottlenecking study activities.

**Mator will be present at ONS 2008 in Stavanger  
26 – 29 Aug on the Sevan Marine stand G 700.**

**We welcome the opportunity to meet with  
old and new contacts.**

### Recent Mator projects:

- ◆ StatoilHydro Snorre A/Vigdis: Verification of liquid carry-over by radioactive tracers.
- ◆ ConocoPhillips Ekofisk 2/4 J: Verification of three-phase separators.
- ◆ Teekay Foinaven: Desander testing.
- ◆ StatoilHydro Åsgard A: Testing of emulsion breakers.



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